

California Influenza and Respiratory Disease Surveillance for Week 15 (April 10–16, 2011)

Note: This report includes data from many different sources of influenza surveillance. 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 jurisdictions

Overall influenza activity in California for Week 15 remains “local.”*

Influenza and Other Respiratory Disease Highlights (Week 15)

- With 82 sentinel providers reporting Week 15 data so far, influenza-like illness (ILI) activity remained the same (1.5%) compared to the previous week. The ILI activity in California for Week 15 was “minimal.”**
- Of 132 specimens tested by polymerase chain reaction (PCR) statewide by the Respiratory Laboratory Network (RLN) during Week 15, 19 (14.4%) were positive for influenza; of these, 17 (89.5%) were influenza A and 2 (10.5%) were influenza B. Of the 17 influenza A specimens, 11 (64.7%) were subtyped as A(H3) and 6 (35.3%) were subtyped as A (2009 H1N1).
- The percentage of influenza detections in sentinel laboratories decreased during Week 15; 39 (3.9%) of 1,005 specimens tested were positive, compared to 105 (7.0%) of 1,498 specimens tested during the previous week.
- During Week 15, the proportion of specimens tested statewide by RLN and sentinel laboratories that were positive for respiratory syncytial virus (RSV) continued to decrease; 41 (4.3%) of 949 specimens tested were positive, compared to 64 (4.7%) of 1,374 specimens tested during the previous week.

*Local activity is defined by the CDC as “outbreaks of influenza or increases in influenza-like illness (ILI) cases and recent laboratory- confirmed influenza in a single region of the state.”

**Activity levels range from minimal to high and are based on the percent of outpatient visits due to ILI compared to the average percent of ILI visits that occur during spring and fall weeks with little or no influenza virus circulation.

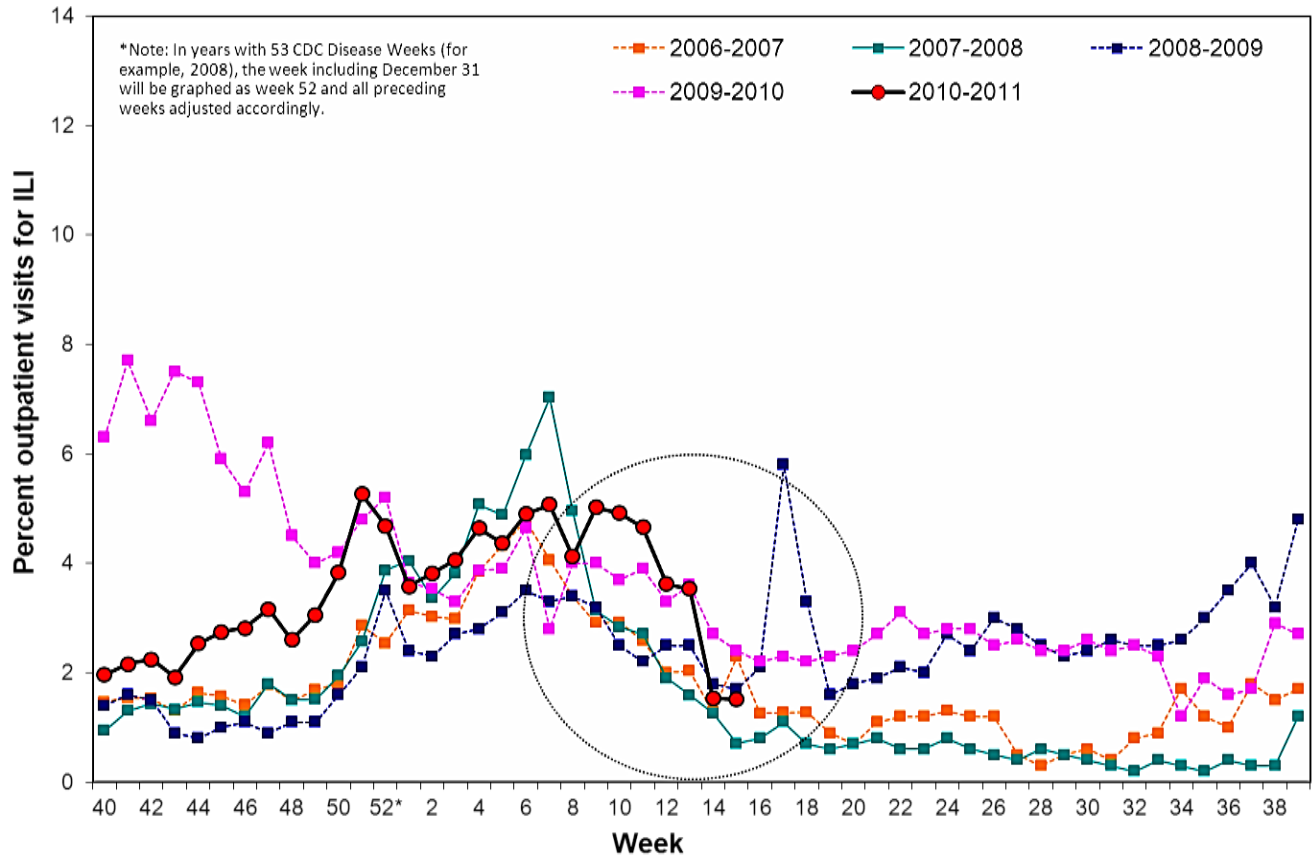
A. Syndromic Surveillance

CDC Influenza Sentinel Providers

Sentinel providers report the number of outpatient visits for ILI and the total number of visits per week. These data are reported weekly as a percentage of total visits due to ILI. The ILI case definition is fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat in the absence of a known cause other than influenza.

The percentage of ILI visits remained the same during Week 15 (1.5%) compared to the previous week (1.5%). A total of 82 sentinel providers have reported Week 15 data so far, compared to an average of 126 providers reporting in previous weeks. Some ILI visits during recent weeks may not yet be reported.

Figure 1. California Sentinel Providers – Influenza-Like Illness Visits, 2006-2011



B. Laboratory Update

1. Respiratory Laboratory Network (RLN) Surveillance Results

The RLN is composed of 28 local public health laboratories that offer PCR testing for influenza A and B and testing using the R-mix shell vial culture system to identify five other common respiratory viruses (RSV, adenovirus, and parainfluenza virus type 1-3).

The percentage of specimens that tested positive for influenza decreased in Week 15 (14.4%) compared to Week 14 (19.8%). Of 132 specimens tested by the RLN during Week 15, 17 (12.9%) were positive for influenza A and 2 (1.5%) were positive for influenza B. Of the 17 specimens that tested positive for influenza A, 11 (64.7%) were subtyped as influenza A (H3) and 6 (35.3%) were subtyped as influenza A (2009 H1N1) (Table 1).

Table 1. Respiratory Laboratory Network (RLN) Surveillance Results from Selected Laboratories*, April 10–16, 2011

	Total RLN* No. (%)	Northern CA (%)No.	Central CA No. (%)	Southern CA No. (%)
Number of specimens tested by PCR	132	58	14	60
Influenza A	17(12.9) [†]	7(12.1) [†]	2 (14.3) [†]	8(13.3) [†]
A (seasonal H1N1)	0(0.0) [‡]	0(0.0)	0(0.0)	0(0.0)
A (H3)	11(64.7) [‡]	4(57.1) [‡]	2(100.0) [‡]	5(62.5) [‡]
A (2009 H1N1)	6(35.3) [‡]	3(42.9) [‡]	0(0.0) [‡]	3(37.5) [‡]
Influenza B	2(1.5) [†]	2(3.4) [†]	0(0.0) [†]	0(0.0) [†]
Number of specimens tested by R-mix	21	0	10	11
RSV	0(0.0) [¶]	0(0.0)	0(0.0)	0(0.0)
Other respiratory viruses	0(0.0) [¶]	0(0.0)	0(0.0)	0(0.0)

* RLN labs reporting Week 15 data, by region:

Northern CA: Alameda, Contra Costa, Humboldt, Placer, Sacramento, San Francisco, Santa Clara, Shasta, Sonoma

Central CA: Fresno, San Joaquin, Stanislaus, Tulare

Southern CA: Imperial, Kern, Long Beach, Los Angeles, Orange, Riverside, San Diego, San Luis Obispo, Santa Barbara

† Percent of total specimens tested for influenza by PCR

‡ Percent of influenza A positives

¶ Percent of total specimens tested by R-mix

2. Sentinel Laboratory Surveillance Results

Sentinel laboratories are a network of clinical, commercial, academic, and hospital laboratories located throughout California that provide weekly data on the number of laboratory-confirmed influenza and other respiratory virus detections and isolations.

Table 2 shows positive influenza and RSV results reported from sentinel laboratories during Week

15. The percentage of specimens that tested positive for influenza decreased in Week 15 (39 of 1,005; 3.9%) compared to the previous week (105 of 1,498; 7.0%). Of the 39 influenza positive specimens, 19 (48.7%) were positive for influenza A and 20 (51.3%) were positive for influenza B. Of 928 specimens tested for RSV during Week 15, 41 (4.4%) were positive.

Table 2. Influenza and other respiratory virus detections from Sentinel Laboratories, April 10–16, 2011

	No. (%)
Number of sites reporting	62
Total specimenstested for influenza	1,005
Influenza	39 (3.9)*
Influenza A	19 (48.7)**,†
Influenza B	20 (51.3)**,‡
Total specimens tested for RSV	928
RSV	41 (4.4)*,¶

* Percent of total specimens tested

** Percent of specimens positive for influenza

Total number of positive lab results reported, by local health jurisdiction of patient's residence and/or site location:

† Alameda (3), Contra Costa (1), Fresno (2), Long Beach (2), Los Angeles (2), Sacramento (1), San Diego (1), San Joaquin (1), San Mateo (2), Santa Clara (2), Sonoma (1), Stanislaus (1)

‡ Alameda (2), Contra Costa (1), Fresno (1), Los Angeles (1), Placer (1), Sacramento (5), San Francisco (1), Santa Clara (4), Santa Cruz (1), Solano (1), Sonoma (2)

¶ Alameda (6), Contra Costa (1), Fresno (5), Long Beach (4), Los Angeles (2), Merced (1), Napa (1), Placer (3), Riverside (1), Sacramento (5), San Diego (4), San Francisco (1), San Mateo (4), Santa Clara (1), Sonoma (1), Yolo (1)

3. Combined RLN and Sentinel Laboratory Surveillance Results

Figures 2 through 4 summarize the combined laboratory data from both the RLN and the sentinel laboratories. Figure 2 shows that influenza detections decreased in Week 15 (5.1%) compared to the previous week (8.3%). A total of 58 samples tested positive for influenza in Week 15, including 36 (62.1%) influenza A and 22 (37.9%) influenza B (Figure 3). Figure 4 shows that the percentage of RSV detections continued to decrease during Week 15, with 41 (4.3%) of 949 specimens testing positive for RSV, compared to 64 (4.7%) of 1,374 specimens in Week 14.

Figure 2. Influenza detections in Respiratory Laboratory Network and Sentinel Laboratories, 2006-2011

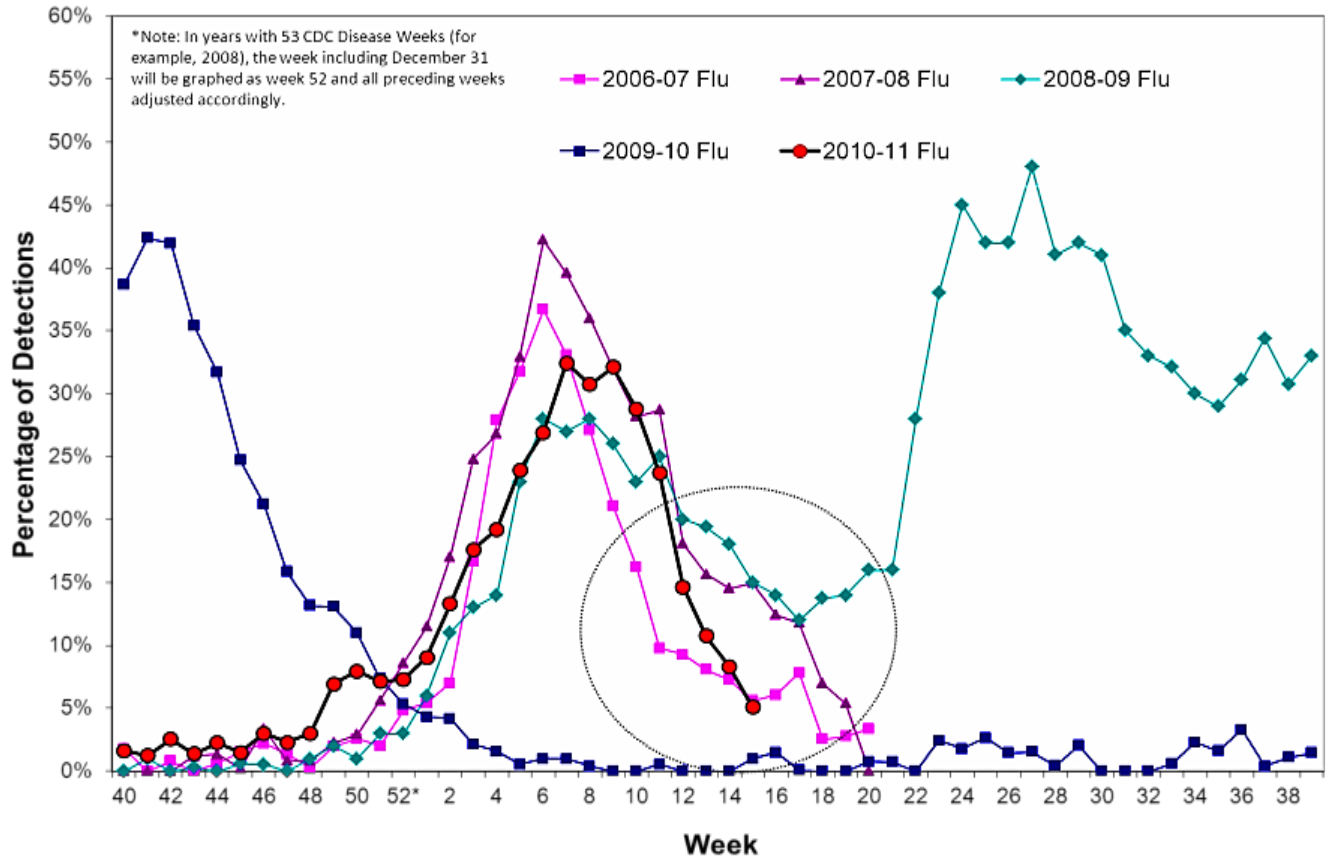


Figure 3. Influenza detections in Respiratory Laboratory Network and Sentinel Laboratories, by Influenza Type

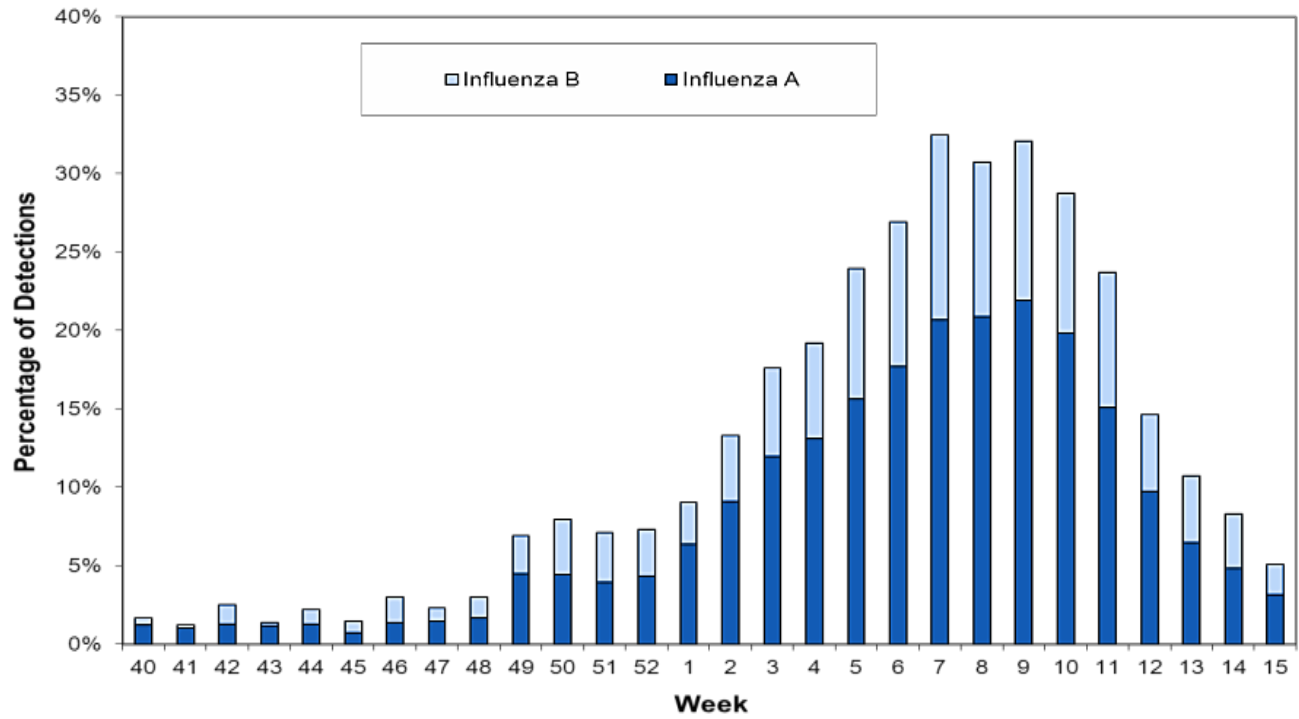
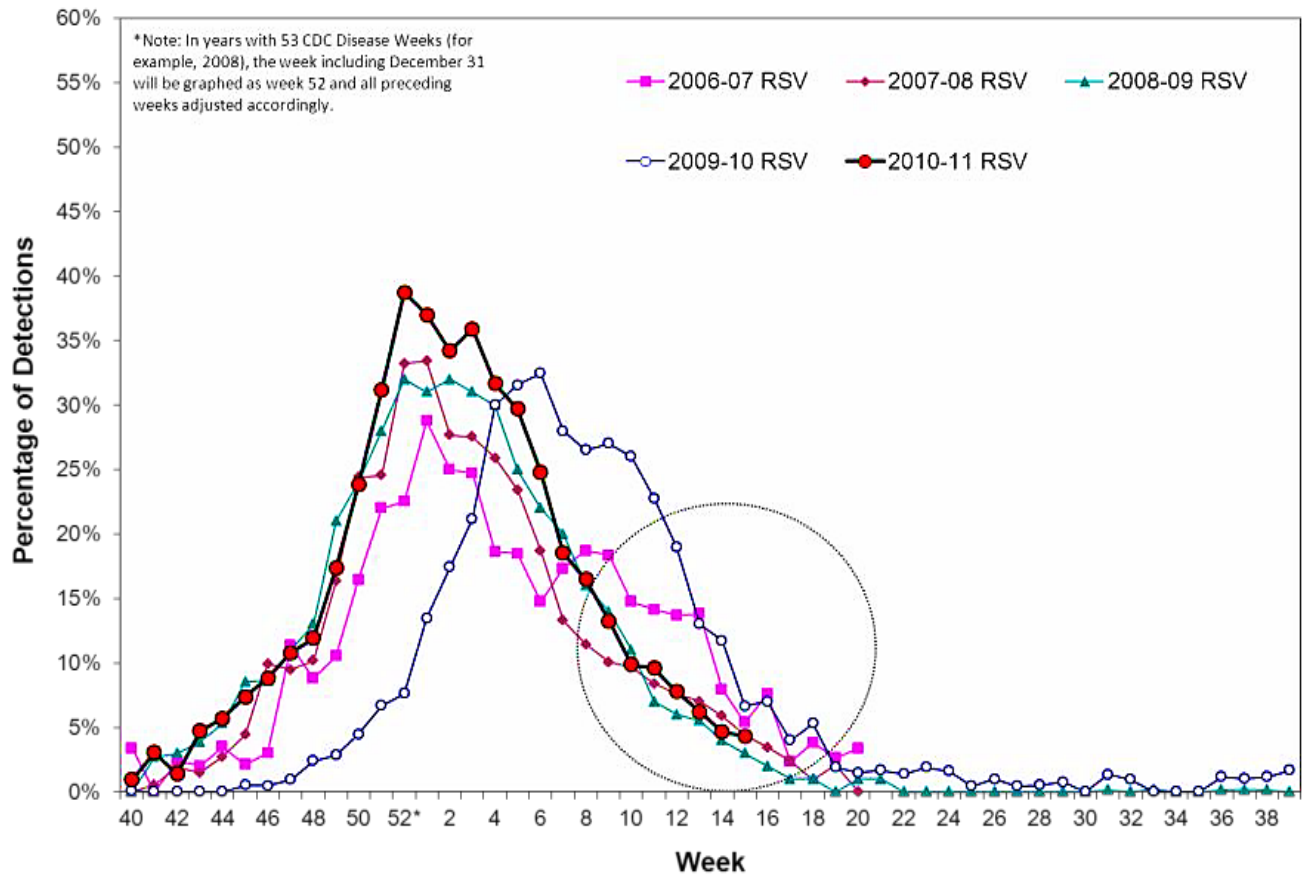


Figure 4. RSV detections in Respiratory Laboratory Network and Sentinel Laboratories, 2006-2011



For questions regarding this report or influenza surveillance and reporting in California, please email InfluenzaSurveillance@cdph.ca.gov. This account is monitored daily by several epidemiologists.

To obtain additional information regarding influenza, please visit the CDPH influenza website at [Influenza \(Flu\) and Other Respiratory Diseases](#).