

California Influenza and Respiratory Disease Surveillance for Week 12 (March 20–26, 2011)

Note: This report includes data from many different sources of influenza surveillance, including syndromic surveillance, laboratory surveillance, voluntary case-based reporting of severely ill cases and mandatory reporting of influenza deaths for cases ages 0-17 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 jurisdictions.

As a result of the closure of the California Department of Public Health on Cesar Chavez Day (March 31, 2011), data from CDC sentinel providers and the Respiratory Laboratory Network and Sentinel Laboratories are incomplete for this week.

Based on declining influenza-like illness and laboratory detections in southern California, influenza activity in California for Week 12 was downgraded to “regional.”*

Influenza and Other Respiratory Disease Highlights (Week 12)

- Only 60 sentinel providers have reported Week 12 data so far, compared to an average of 128 providers reporting in previous weeks. Based on the limited data available, influenza-like illness (ILI) activity decreased by 1.7% compared to the previous week. This is consistent with complete data in Week 11, which shows a downward trend. The ILI activity in California for Week 12 was “minimal.”**
- Based on the limited data available for Week 12, of 194 specimens tested by polymerase chain reaction (PCR) statewide by the Respiratory Laboratory Network (RLN) during Week 12, 56 (28.9%) were positive for influenza; of these, 48 (85.7%) were influenza A and 8 (14.3%) were influenza B. Of the 48 influenza A specimens, 22 (45.8%) were subtyped as A (H3) and 26 (54.2%) were subtyped as A (2009 H1N1). Some testing data for Week 12 may not yet be reported.
- Based on the limited data available for Week 12, the percentage of influenza detections in sentinel laboratories decreased during Week 12; 237 (15.1%) of 1,570 specimens tested were positive compared to 485 (22.5%) of 2,158 specimens tested during the previous week.
- Of 41 influenza A (2009 H1N1) specimens and 48 influenza A (H3N2) specimens tested by the CDPH Viral and Rickettsial Disease Laboratory (CDPH-VRDL) for neuraminidase-inhibitor resistance, no resistance has been found.
- Based on the limited data available for Week 12, the proportion of specimens tested statewide by RLN and sentinel laboratories that were positive for respiratory syncytial virus (RSV) decreased; 134 (9.4%) of 1,423 specimens tested were positive, compared to 206 (10.8%) of 1,908 specimens tested during the previous week.

*Regional activity is defined by the CDC as “outbreaks of influenza or increases in influenza-like illness (ILI) and recent laboratory-confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions.”

**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.

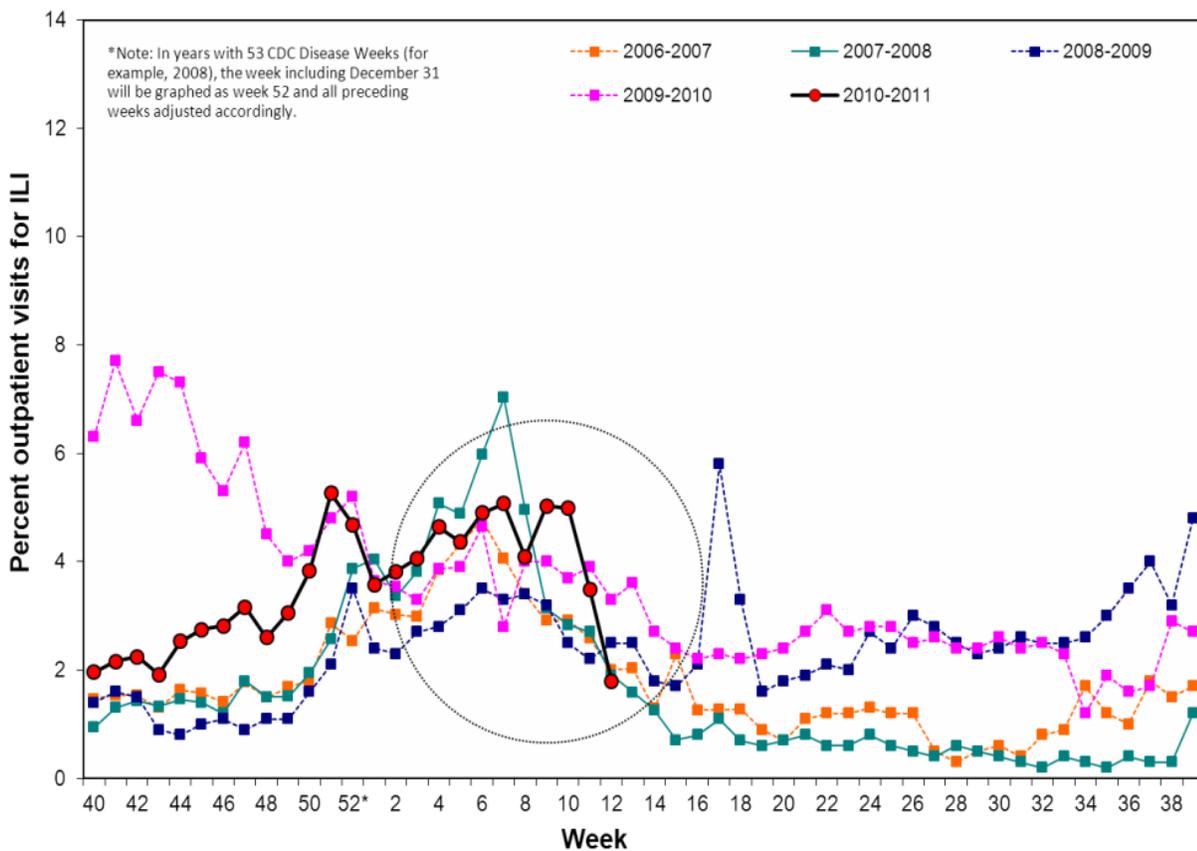
A. Syndromic Surveillance

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.

A total of 60 sentinel providers have reported Week 12 data so far, compared to an average of 128 providers reporting in previous weeks. Based on the limited data available, the percentage of ILI visits decreased during Week 12 (1.8%) compared to the previous week (3.5%). This is consistent with complete data available for Week 11, which shows a downward trend.

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).

Based on the limited data available for Week 12, the percentage of specimens that tested positive for influenza decreased (28.9%) compared to Week 11 (41.9%). Of 194 specimens tested by the RLN during Week 12, 48 (24.7%) were positive for influenza A and 8 (4.1%) were positive for influenza B. Of the 48 specimens that tested positive for influenza A, 22 (45.8%) were subtyped as influenza A (H3) and 26 (54.2%) as influenza A (2009 H1N1) (Table 1). Of 28 specimens tested by R-mix during Week 12, 3 (10.7%) were positive for RSV.

Table 1. Respiratory Laboratory Network (RLN) Surveillance Results from Selected Laboratories*, March 20–26, 2011

	Total RLN* Number (%)	Northern CA Number (%)	Central CA Number (%)	Southern CA Number (%)
Number of specimens tested by PCR	194	104	39	51
Influenza A	48 (24.7) [†]	27 (26.0) [†]	9 (23.1) [†]	12 (23.5) [†]
A (seasonal H1N1)	0 (0.0) [‡]	0 (0.0)	0 (0.0)	0 (0.0)
A (H3)	22 (45.8) [‡]	14 (51.9) [‡]	1 (11.1) [‡]	7 (58.3) [‡]
A (2009 H1N1)	26 (54.2) [‡]	13 (48.1) [‡]	8 (88.9) [‡]	5 (41.7) [‡]
Influenza B	8 (4.1) [†]	5 (4.8) [†]	1 (2.6) [†]	2 (3.9) [†]
Number of specimens tested by R-mix	28	5	23	0
RSV	3 (10.7) [¶]	2 (40.0) [¶]	1 (4.3) [¶]	0 (0.0)
Other respiratory viruses	2 (7.1) ^{¶††}	1 (20.0) [¶]	1 (4.3) [¶]	0 (0.0)

* RLN labs reporting Week 12 data, by region:

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

Central CA: Fresno, Monterey, San Joaquin, Stanislaus, Tulare

Southern CA: Imperial, Kern, Long Beach, Los Angeles, Riverside, 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

†† Adenovirus (2)

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.

Limited data for sentinel laboratories is available for Week 12. Table 2 shows the positive influenza and RSV results reported so far. The percentage of specimens that tested positive for influenza decreased in Week 12 (237 of 1,570; 15.1%) compared to the previous week (485 of 2,158; 22.5%). Of the 237 influenza positive specimens, 140 (59.1%) were positive for influenza A and 97 (40.9%) were positive for influenza B. Of 1,395 specimens tested for RSV during Week 12, 131 (9.4%) were positive.

Table 2. Influenza and other respiratory virus detections from Sentinel Laboratories, March 20–26, 2011

	Number (%)
Number of sites reporting	63
Total specimens tested for influenza	1,570
Influenza	237 (15.1)*
Influenza A	140 (59.1)** †
Influenza B	97 (40.9)** ‡
Total specimens tested for RSV	1,395
RSV	131 (9.4)•¶

* 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 (17), Contra Costa (16), Fresno (21), Kings (1), Long Beach (4), Los Angeles

(5), Madera (1), Marin (1), Placer (3), Riverside (2), Sacramento (10), San Diego (9), San Francisco (4), San Joaquin (2), San Mateo (3), Santa Clara (16), Solano (9), Sonoma (10), Stanislaus (6)

‡ Alameda (20), Contra Costa (6), Fresno (15), Long Beach (2), Los Angeles (2), Madera

(2), Marin (1), Placer (3), Sacramento (12), San Diego (4), San Francisco (3), San Joaquin (2), San Mateo (7), Santa Clara (10), Solano (1), Sonoma (4), Stanislaus (1), Tulare (1), Yolo (1)

¶ Alameda (17), Contra Costa (6), Fresno (23), Kern (6), Long Beach (12), Los Angeles

(8), Madera (2), Marin (1), Orange (2), Placer (8), Riverside (2), Sacramento (14), San Diego (9), San Francisco (4), San Joaquin (3), San Mateo (3), Santa Clara (4), Solano (1), Sonoma (4), Stanislaus (1), Tulare (1)

3. Combined RLN and Sentinel Laboratory Surveillance Results

Using the limited data available for Week 12, 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 12 (16.6%) compared to the previous week (25.1%). A total of 293 samples tested positive for influenza in Week 12, including 188 (64.2%) influenza A and 105 (35.8%) influenza B (Figure 3). Figure 4 shows that the percentage of RSV detections decreased during Week 12, with 134 (9.4%) of 1,423 specimens testing positive for RSV, compared to 206 (10.8%) of 1,908 specimens in Week 11.

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

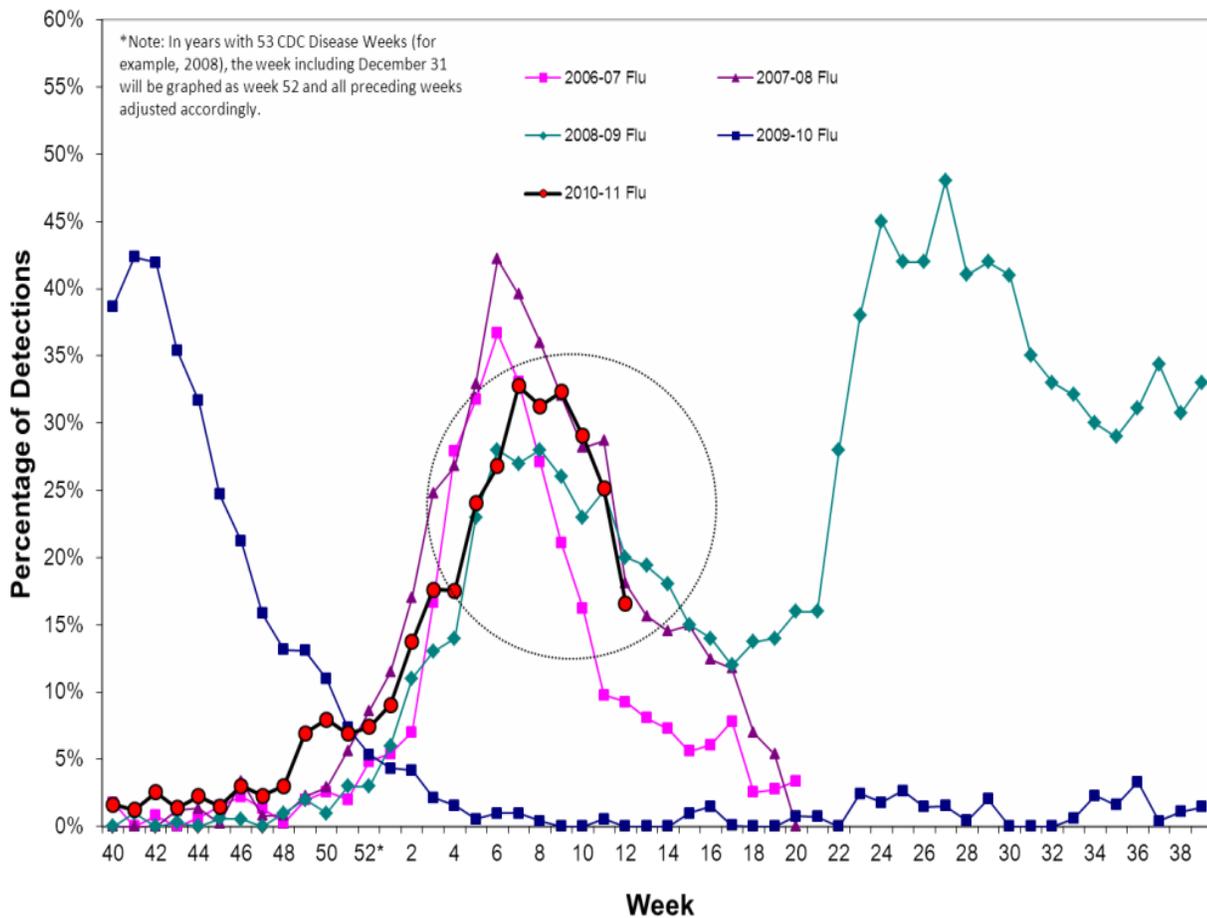


Figure 3. Influenza detections in Respiratory Laboratory Network and Sentinel Laboratories, by Influenza Type

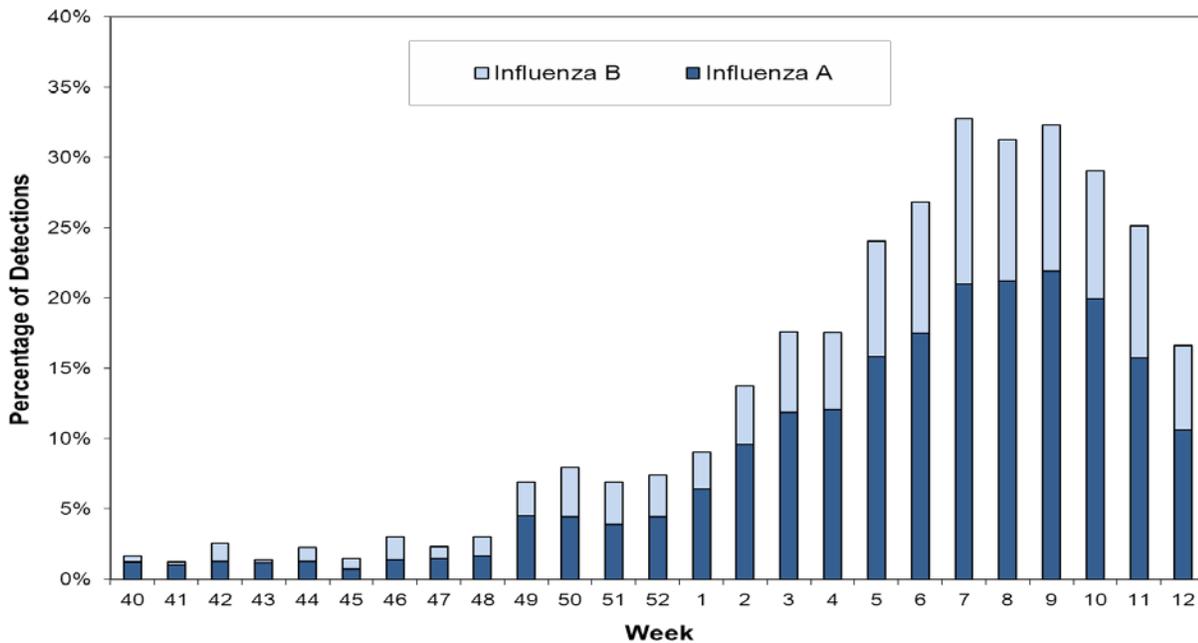
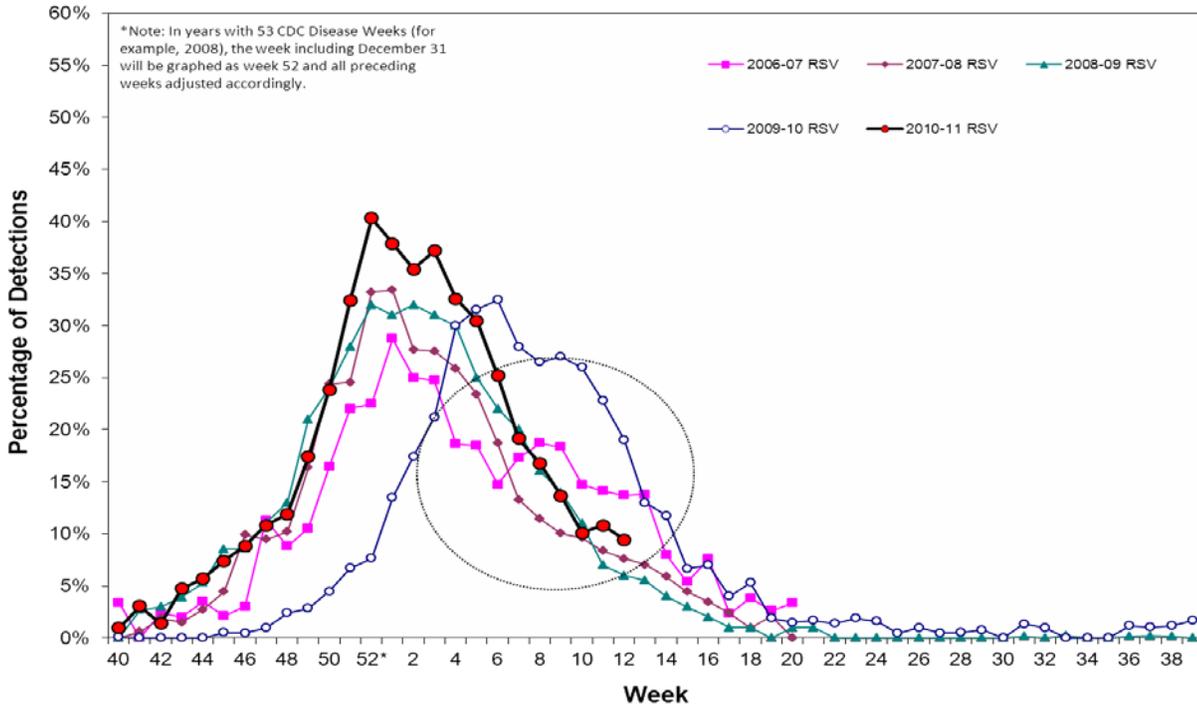


Figure 4. RSV detections in Respiratory Laboratory Network and Sentinel Laboratories, 2006-2011



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