

California Influenza and Respiratory Disease Surveillance for Week 13 (March 27–April 2, 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.

Overall influenza activity in California for Week 13 remains “regional.”*

Influenza and Other Respiratory Disease Highlights (Week 13)

- With 80 sentinel providers reporting Week 13 data so far, influenza-like illness (ILI) activity decreased by 1.5% compared to the previous week. The ILI activity in California for Week 13 was “minimal.”**
- Of 175 specimens tested by polymerase chain reaction (PCR) statewide by the Respiratory Laboratory Network (RLN) during Week 13, 46 (26.3%) were positive for influenza; of these, 33 (71.7%) were influenza A and 13 (28.3%) were influenza B. Of the 33 influenza A specimens, 19 (57.6%) were subtyped as A (H3) and 13 (39.4%) were subtyped as A (2009 H1N1); subtyping is pending for the remaining specimen.
- The percentage of influenza detections in sentinel laboratories decreased during Week 13; 128 (9.7%) of 1,314 specimens tested were positive compared to 252 (13.4%) of 1,874 specimens tested during the previous week.
- During Week 13, the proportion of specimens tested statewide by RLN and sentinel laboratories that were positive for respiratory syncytial virus (RSV) continued to decrease; 71 (5.9%) of 1,207 specimens tested were positive, compared to 141 (8.1%) of 1,735 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.

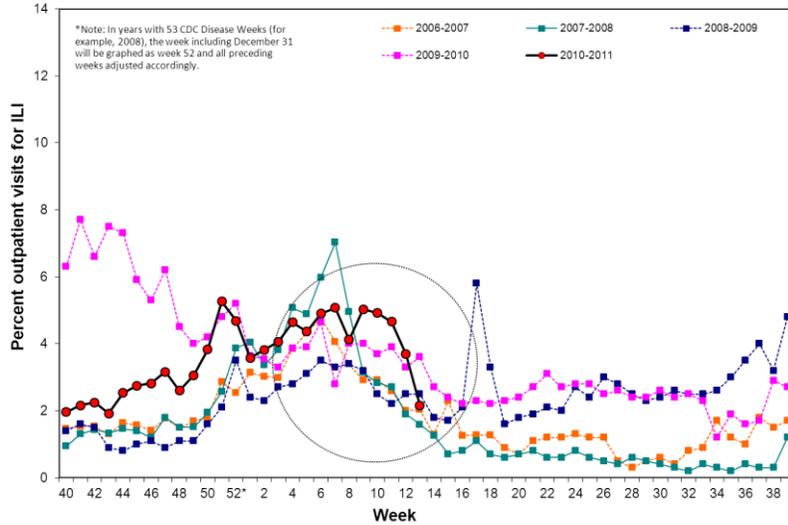
A. Syndromic Surveillance

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.

The percentage of ILI visits decreased during Week 13 (2.2%) compared to the previous week (3.7%). A total of 80 sentinel providers have reported Week 13 data so far, compared to an average of 127 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 13 (26.3%) compared to Week 12 (29.3%). Of 175 specimens tested by the RLN during Week 13, 33 (18.9%) were positive for influenza A and 13 (7.4%) were positive for influenza B. Of the 33 specimens that tested positive for influenza A, 19 (57.6%) were subtyped as influenza A (H3) and 13 (39.4%) were subtyped as influenza A (2009 H1N1) (Table 1); subtyping is pending for the remaining specimen. Of 26 specimens tested by R-mix during Week 13, 1 (3.8%) was positive for RSV.

Table 1. Respiratory Laboratory Network (RLN) Surveillance Results from Selected Laboratories*, March 27–April 2, 2011

	Total RLN*	Northern CA	Central CA	Southern CA
	No. (%)	No. (%)	No. (%)	No. (%)
Number of specimens tested by PCR	175	54	37	84
Influenza A	33 (18.9) [†]	12 (22.2) [†]	8 (21.6) [†]	13 (15.5) [†]
A (seasonal H1N1)	0 (0.0) [‡]	0 (0.0)	0 (0.0)	0 (0.0)
A (H3)	19 (57.6) [‡]	9 (75.0) [‡]	4 (50.0) [‡]	6 (46.2) [‡]
A (2009 H1N1)	13 (39.4) [‡]	3 (25.0) [‡]	3 (37.5) [‡]	7 (53.8) [‡]
A (subtyping pending)	1 (3.0) [‡]	0 (0.0)	1 (12.5) [‡]	0 (0.0)
Influenza B	13 (7.4) [†]	1 (1.9) [†]	5 (13.5) [†]	7 (8.3) [†]
Number of specimens tested by R-mix	26	0	19	7
RSV	1 (3.8) [¶]	0 (0.0)	1 (5.3) [¶]	0 (0.0)
Other respiratory viruses	1 (3.8) ^{¶,††}	0 (0.0)	1 (5.3) [¶]	0 (0.0)

* RLN labs reporting Week 13 data, by region:
 Northern CA: Contra Costa, Humboldt, Placer, Sacramento, San Francisco, Santa Clara, Shasta, Sonoma
 Central CA: Fresno, Monterey, San Joaquin, Stanislaus, Tulare
 Southern CA: Imperial, Kern, Long Beach, Los Angeles, Orange, 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
^{††} Adenovirus (1)

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 13. The percentage of specimens that tested positive for influenza decreased in Week 13 (128 of 1,314; 9.7%) compared to the previous week (252 of 1,874; 13.4%). Of the 128 influenza positive specimens, 72 (56.3%) were positive for influenza A and 56 (43.8%) were positive for influenza B. Of 1,181 specimens tested for RSV during Week 13, 70 (5.9%) were positive.

Table 2. Influenza and other respiratory virus detections from Sentinel Laboratories, March 27–April 2, 2011

	No. (%)
Number of sites reporting	64
Total specimens tested for influenza	1,314
Influenza	128 (9.7) [*]
Influenza A	72 (56.3) ^{**†}
Influenza B	56 (43.8) ^{**‡}
Total specimens tested for RSV	1,181
RSV	70 (5.9) ^{*¶}

* 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 (6), Contra Costa (13), Fresno (5), Los Angeles (7), Monterey (1), Placer (5), Riverside (1), Sacramento (8), San Bernardino (1), San Diego (3), San Francisco (1), San Joaquin (2), San Mateo (3), Santa Clara (8), Solano (4), Sonoma (3), Stanislaus (1)

‡ Alameda (11), Contra Costa (4), Fresno (8), Los Angeles (2), Marin (1), Merced (1), Placer (2), Riverside (1), Sacramento (4), San Diego (1), San Francisco (2), San Mateo (1), Santa Clara (10), Solano (2), Sonoma (4), Stanislaus (2)

¶ Alameda (9), Contra Costa (4), Fresno (12), Kern (2), Los Angeles (5), Marin (2), Placer (7), Sacramento (5), San Diego (11), San Francisco (1), San Joaquin (3), San Mateo (3), Santa Clara (2), Solano (3), Tulare (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 13 (11.7%) compared to the previous week (15.1%). A total of 174 samples tested positive for influenza in Week 13, including 105 (60.3%) influenza A and 69 (39.7%) influenza B (Figure 3). Figure 4 shows that the percentage of RSV detections continued to decrease during Week 13, with 71 (5.9%) of 1,207 specimens testing positive for RSV, compared to 141 (8.1%) of 1,735 specimens in Week 12.

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

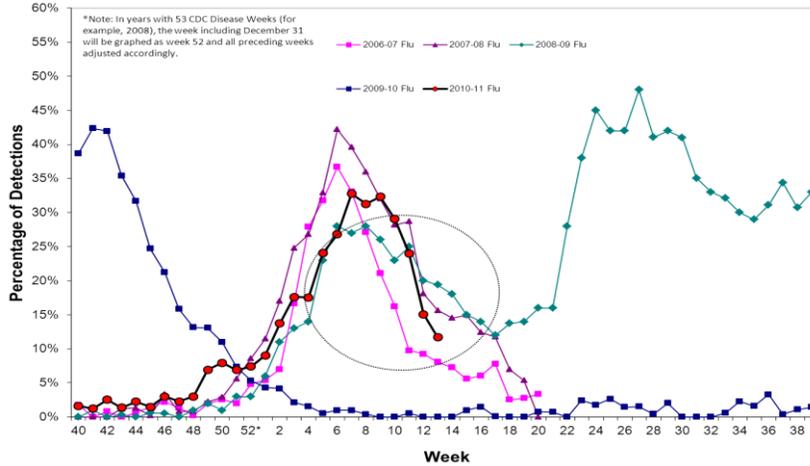


Figure 3. Influenza detections in Respiratory Laboratory Network and Sentinel Laboratories, by Influenza Type

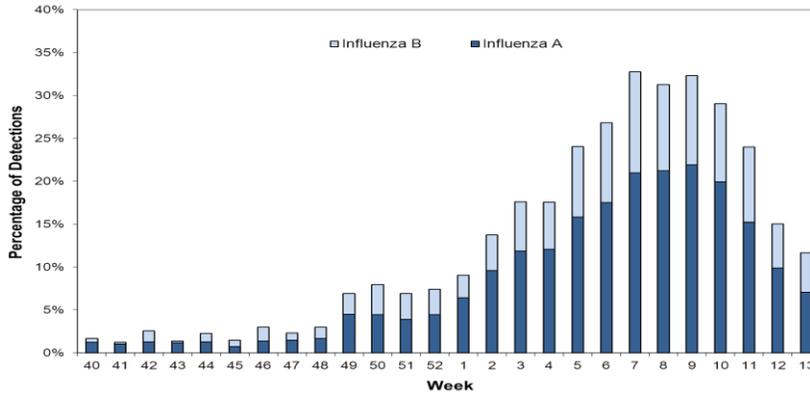
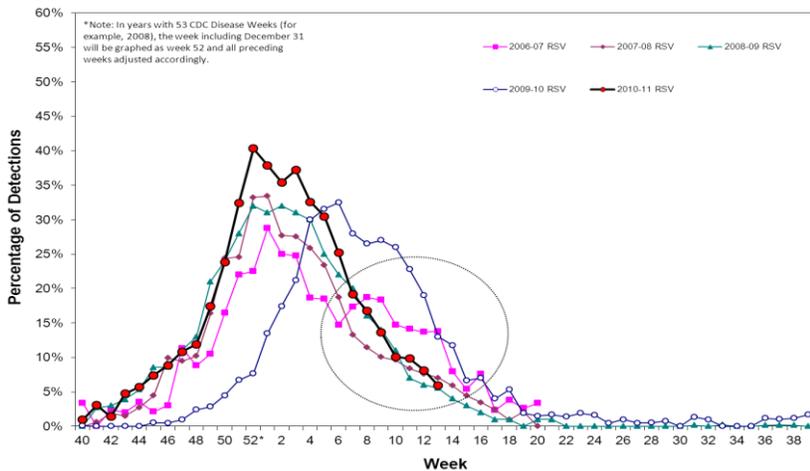


Figure 4. RSV detections in Respiratory Laboratory Network and Sentinel Laboratories, 2006-2011



For questions regarding this influenza 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 [http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza\(FIU\).aspx](http://www.cdph.ca.gov/HealthInfo/discond/Pages/Influenza(FIU).aspx).