

California Influenza and Respiratory Disease Surveillance for Week 11 (March 13–19, 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 11 remains “widespread.”**

Influenza and Other Respiratory Disease Highlights (Week 11)

- With 86 sentinel providers reporting Week 11 data so far, influenza-like illness (ILI) activity decreased by 2.0% compared to the previous week. The ILI activity in California for Week 11 was “minimal.”***
- Of 333 specimens tested by polymerase chain reaction (PCR) statewide by the Respiratory Laboratory Network (RLN) during Week 11, 140 (42.0%) were positive for influenza; of these, 117 (83.6%) were influenza A and 23 (16.4%) were influenza B. Of the 117 influenza A specimens, 51 (43.6%) were subtyped as A (H3) and 62 (53.0%) were subtyped as A (2009 H1N1); subtyping is pending for the remaining 4 (3.4%) specimens.
- The percentage of influenza detections in sentinel laboratories decreased during Week 11; 473 (22.8%) of 2,074 specimens tested were positive compared to 848 (26.7%) of 3,175 specimens tested during the previous week.
- During Week 11, the proportion of specimens tested statewide by RLN and sentinel laboratories that were positive for respiratory syncytial virus (RSV) increased slightly; 204 (11.2%) of 1,826 specimens tested were positive, compared to 286 (10.1%) of 2,837 specimens tested during the previous week.

*Widespread activity is defined by the CDC as “outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of the state with recent laboratory evidence of influenza in 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.

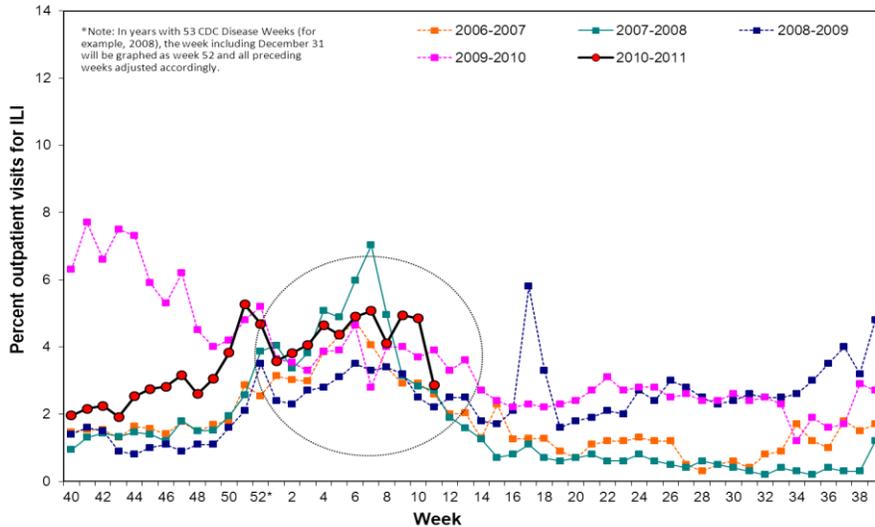
A. Syndromic Surveillance

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 decreased during Week 11 (2.9%) compared to the previous week (4.9%). A total of 86 sentinel providers reported data in Week 11 compared to an average of 128 providers reporting in prior 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 11 (42.0%) compared to Week 10 (50.0%). Of 333 specimens tested by the RLN during Week 11, 117 (35.1%) were positive for influenza A and 23 (6.9%) were positive for influenza B. Of the 117 specimens that tested positive for influenza A, 51 (43.6%) were subtyped as influenza A (H3) and 62 (53.0%) as influenza A (2009 H1N1); subtyping is pending for the remaining 4 (3.4%) specimens (Table 1).

One (1.9%) of 53 specimens tested by R-mix was positive for RSV during Week 11.

Table 1. Respiratory Laboratory Network (RLN) Surveillance Results from Selected Laboratories*, March 13–19, 2011

	Total RLN*	Northern CA	Central CA	Southern CA
	No. (%)	No. (%)	No. (%)	No. (%)
Number of specimens tested by PCR	333	134	36	163
Influenza A	117 (35.1) [†]	46 (34.3) [†]	20 (55.6) [†]	51 (31.3) [†]
A (seasonal H1N1)	0 (0.0) [‡]	0 (0.0)	0 (0.0)	0 (0.0)
A (H3)	51 (43.6) [‡]	21 (45.7) [‡]	7 (35.0) [‡]	23 (45.1) [‡]
A (2009 H1N1)	62 (53.0) [‡]	25 (54.3) [‡]	9 (45.0) [‡]	28 (54.9) [‡]
A (subtyping pending)	4 (3.4) [‡]	0 (0.0)	4 (20.0) [‡]	0 (0.0)
Influenza B	23 (6.9) [†]	12 (9.0) [†]	1 (2.8) [†]	10 (6.1) [†]
Number of specimens tested by R-mix	53	2	33	18
RSV	1 (1.9) [¶]	0 (0.0)	1 (3.0) [¶]	0 (0.0)
Other respiratory viruses	1 (1.9) ^{¶,††}	0 (0.0)	0 (0.0)	1 (5.6) [¶]

* RLN labs reporting Week 11 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, Orange, Riverside, San Bernardino, San Diego, 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 11. The percentage of specimens that tested positive for influenza decreased in Week 11 (473 of 2,074; 22.8%) compared to the previous week (848 of 3,175; 26.7%). Of the 473 influenza positive specimens, 269 (56.9%) were positive for influenza A and 204 (43.1%) were positive for influenza B. Of 1,773 specimens tested for RSV during Week 11, 203 (11.4%) were positive. This was a slight increase from the previous week, when 286 (10.2%) of 2,797 specimens tested positive for RSV.

Table 2. Influenza and other respiratory virus detections from Sentinel Laboratories, March 13–19, 2011

	No. (%)
Number of sites reporting	70
Total specimens tested for influenza	2,074
Influenza	473 (22.8) [*]
Influenza A	269 (56.9) ^{**†}
Influenza B	204 (43.1) ^{**‡}
Total specimens tested for RSV	1,773
RSV	203 (11.4) ^{*†¶}

* 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 (29), Contra Costa (18), Fresno (35), Imperial (2), Kern (4), Kings (3), Long Beach (6), Los Angeles (16), Madera (5), Marin (4), Placer (14), Riverside (3), Sacramento (21), San Diego (12), San Francisco (16), San Joaquin (8), San Mateo (6), Santa Clara (38), Solano (17), Sonoma (4), Stanislaus (7), Tulare (1)

‡ Alameda (33), Contra Costa (15), Fresno (34), Imperial (2), Kern (1), Long Beach (3), Los Angeles (5), Madera (1), Marin (1), Placer (4), Riverside (2), Sacramento (21), San Bernardino (3), San Diego (4), San Francisco (3), San Joaquin (10), San Mateo (5), Santa Clara (34), Solano (7), Sonoma (9), Stanislaus (5), Tulare (1), Yolo (1)

¶ Alameda (14), Contra Costa (14), Fresno (18), Imperial (4), Kern (1), Kings (2), Long Beach (18), Los Angeles (18), Madera (2), Marin (6), Merced (1), Orange (4), Placer (10), Riverside (4), Sacramento (24), San Bernardino (2), San Diego (16), San Francisco (5), San Joaquin (5), San Mateo (6), Santa Clara (10), Solano (8), Sonoma (7), Stanislaus (2), Tulare (2)

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 11 (25.5%) compared to the previous week (29.1%). A total of 613 samples tested positive for influenza in Week 11, including 386 (63.0%) influenza A and 227 (37.0%) influenza B (Figure 3). Figure 4 shows that the percentage of RSV detections remained steady during Week 11, with 204 (11.2%) of 1,826 specimens testing

positive for RSV, compared to 286 (10.1%) of 2,837 specimens in Week 10.

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

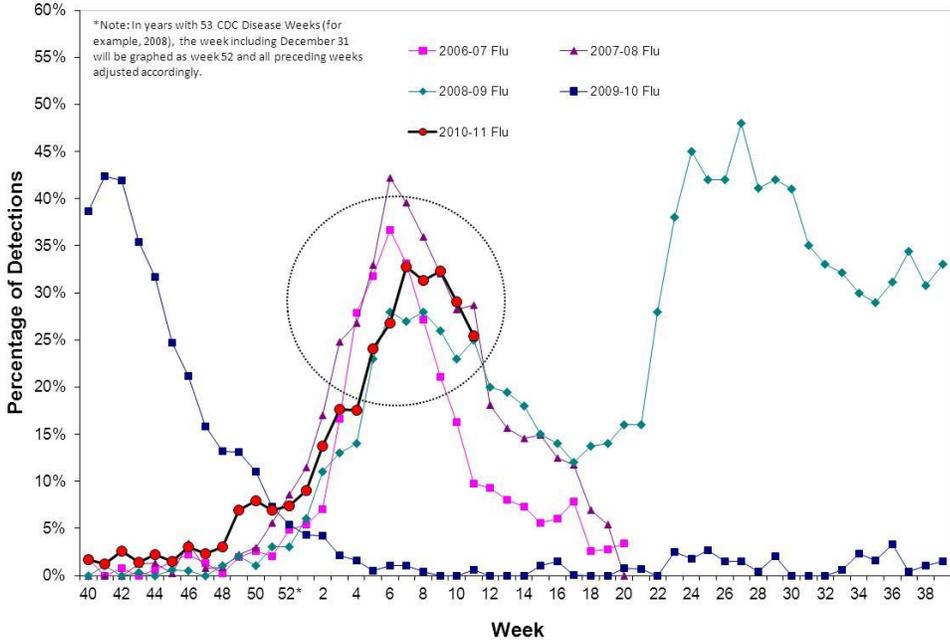


Figure 3. Influenza detections in Respiratory Laboratory Network and Sentinel Laboratories, by Influenza Type

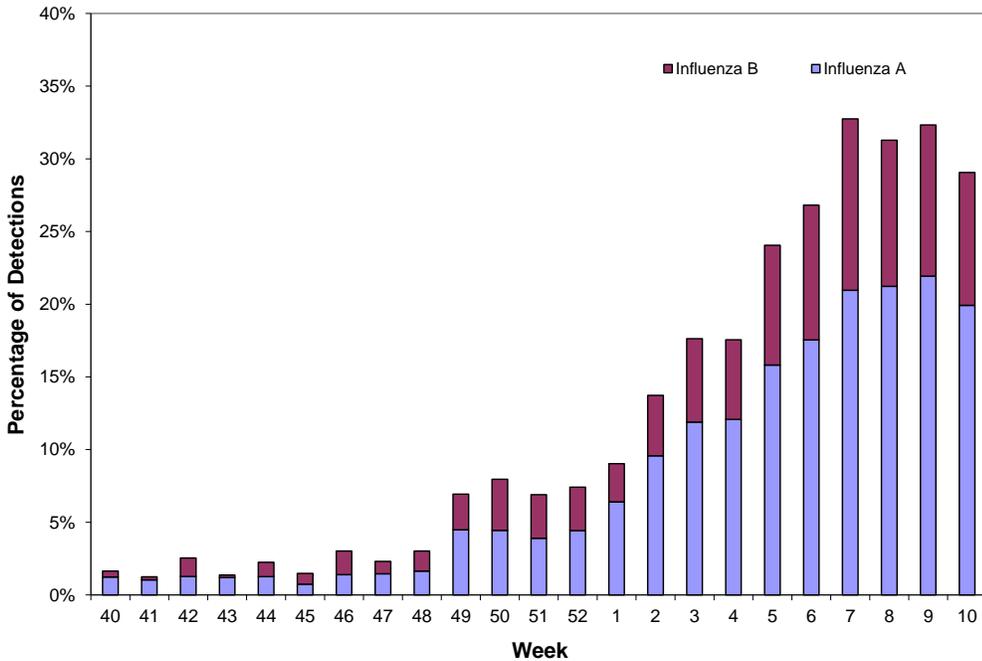
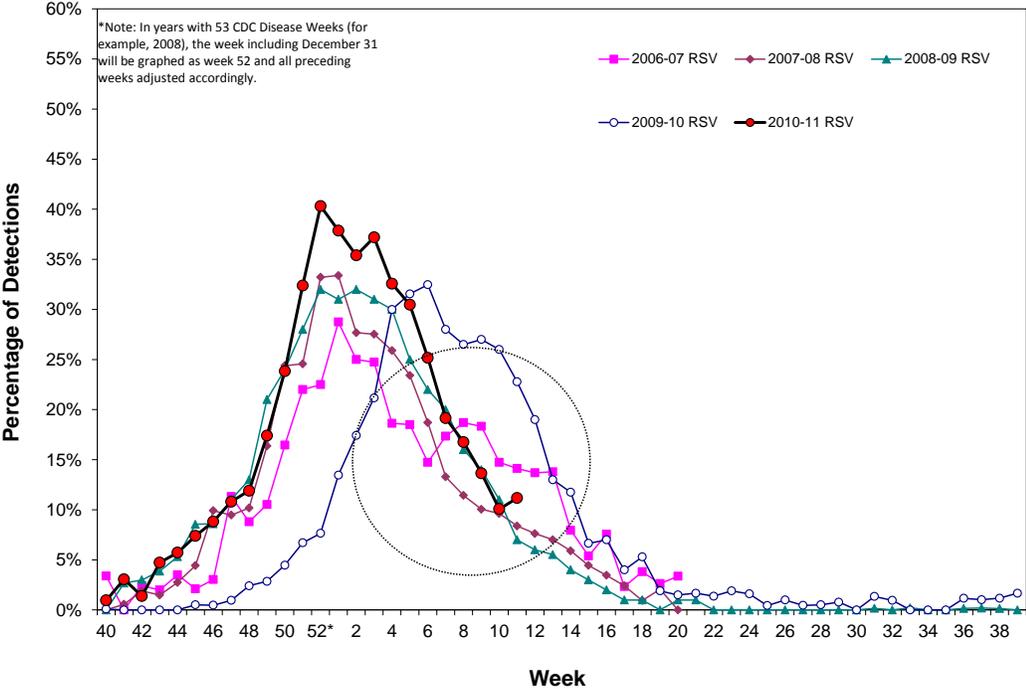


Figure 4. RSV detections in Respiratory Laboratory Network and Sentinel Laboratories, 2006-2011



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).