California Influenza and Other Respiratory Disease Surveillance for Weeks 46 & 47 (November 13–26, 2011)

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.

Based on low levels of influenza-like illness and laboratory detections, overall influenza activity in California for Weeks 46 and 47 remained "sporadic*."

Influenza Report Highlights

- Outpatient influenza-like illness (ILI) activity as a percentage of total visits to sentinel providers was lowfor Weeks 46 (1.4%) and 47 (1.4%).
- Of 1788 specimens tested by the Respiratory Laboratory Network (RLN) and sentinel laboratories during Weeks 46 and 47, 9 (0.5%) were positive for influenza A and 5 (0.3%) were positive for influenza B.
- The California Department of Public Health Viral and Rickettsial Disease Laboratory (CDPH-VRDL) has not tested any specimens for antiviral resistance to date.
- No California specimens have been strain-typed to date.
- CDPH has received no reports of laboratory-confirmed influenza-associated deaths among persons less than 65 years of age.
- There were no reports of acute respiratory outbreaks due to laboratory-confirmed influenza in Weeks 46 and 47.

*Sporadic activity is defined by the CDC as "small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI."

A. Syndromic Surveillance Update

1. CDC Influenza Sentinel Providers

Sentinel providers (physicians, nurse practitioners, and physician assistants) situated throughout California report the number of outpatient visits for ILI and the total number of visits per week. ILI is defined as any illness with 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. Data are reported weekly as a percentage of total visits. At present, over 200 sentinel providers have indicated their willingness to report ILI data and submit specimens to CDPH-VRDL for further testing this season, allowing CDPH to attain the CDC goal of 1 sentinel provider per 250,000 population.

A total of 84 (40.6%) and 69 (33.3%) out of 207 enrolled sentinel providers have reported data for Weeks 46 and 47, respectively. Based on available data, the percentage of ILI visits for Weeks 46 (1.4%) and 47 (1.4%) remained below baseline (Figure 1).

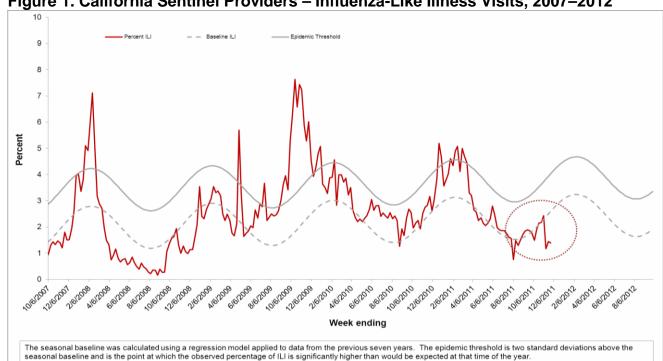


Figure 1. California Sentinel Providers – Influenza-Like Illness Visits, 2007–2012

Kaiser Permanente Hospitalization Data ("Flu Admissions")

"Flu Admissions" are defined as a diagnosis of "flu," "pneumonia," or "influenza" recorded in text fields at time of admission to the hospital. Influenza activity is tracked by dividing the number of "Flu Admissions" by the total number of hospital admissions for the same day to obtain a percentage of pneumonia and influenza (P&I) admissions.

The percentages of Kaiser Hospitalizations for P&I in northern California were similar in Weeks 46 (4.7%) and 47 (5.2%) compared to Week 45 (5.0%). In Southern California, the percentages of Kaiser Hospitalizations for P&I increased in Weeks 46 (4.4%) and 47 (4.9%) compared to Week 45 (3.6%).

B. Laboratory Update

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

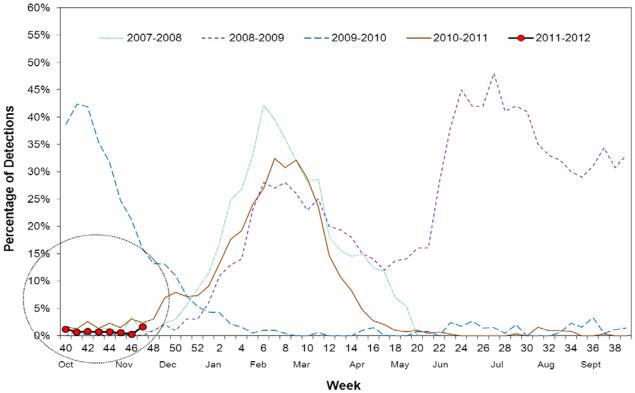
The RLN is composed of 29 local public health laboratories that offer PCR testing for influenza A and B. Sentinel laboratories are a network of clinical, commercial, academic, and hospital laboratories located throughout California that provide weekly data on the number of laboratory-confirmed influenza and other respiratory virus detections and isolations. These laboratories use various testing methods, including rapid test, direct fluorescent assay, viral culture, and PCR.

The percentage of influenza detections in the RLN and sentinel laboratories remained low during Weeks 46 (0.2%) and 47 (1.4%), (Figure 2).

In week 46, of 956 specimens tested by the Respiratory Laboratory Network (RLN) and sentinel laboratories, 2 (0.2%) were positive for influenza A. The influenza-positive specimens were reported from the Bay Area region (Contra Costa and Santa Clara counties); no further subtyping was performed.

In week 47, of 832 specimens tested by the Respiratory Laboratory Network (RLN) and sentinel laboratories, 7 (0.8%) were positive for influenza A and 5 (0.6%) were positive for influenza B. The influenza-positive specimens were reported from Los Angeles, Orange, Sacramento, San Diego, and Stanislaus counties; no further subtyping was performed.

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



Sentinel laboratories reported continued circulation of parainfluenza virus in both northern and southern California (Table 1). Additionally, there was a slight increase in detections of respiratory syncytial virus (RSV) during Week 47 (2.3%) compared to Weeks 45 (2.0%) and 46 (1.9%).

Table 1. Other Respiratory Pathogen Detections in Respiratory Laboratory Network and Sentinel Laboratories*, Week 46 and Week 47

	Positive/Total Tested (%) in Week 46 (November 13, 2011 -November 19, 2011)	Positive/Total Tested (%) in Week 47 (November 20, 2011 -November 26, 2011)
Respiratory syncytial virus	17/893 (1.9)	18/800 (2.3)
Parainfluenza type 1	19/535 (3.6)	11/399 (2.8)
Parainfluenza type 2	0/535 (0.0)	0/399 (0.0)
Parainfluenza type 3	1/535 (0.2)	0/399 (0.0)
Adenovirus	6/535 (1.1)	4/399 (1.0)
Human metapneumovirus	5/526 (1.0)	5/386 (1.3)
Rhinovirus	11/526 (2.1)	3/386 (0.8)

* These data are collected from laboratories that perform testing for non-influenza respiratory viruses, including select Respiratory Laboratory Network laboratories, Children's Hospital Central California, Children's Hospital Los Angeles, Children's Hospital Oakland, Kaiser Permanente regional laboratories, Long Beach Memorial Medical Center, Rady Children's Hospital San Diego, San Francisco General Hospital, Stanford, UCLA, and UCSF.

2. Antiviral Resistance Testing

CDPH-VRDL has not tested any influenza specimens to date during the 2011-2012 influenza season.

3. Influenza Virus Strain Characterization

No California specimens have been strain-typed to date during the 2011–2012 influenza season.

c. Laboratory-confirmed Case Reports

Currently, as mandated under Section 2500 of the California Code of Regulations, deaths among cases age 0- 64 years with laboratory-confirmed influenza are reportable to CDPH.

CDPH has received no reports of influenza-associated deaths among persons less than 65 years of age to date this season.

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

To obtain additional information regarding influenza, please visit the <u>CDPH influenza</u> <u>website</u> 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 at

https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph9070.pd f