



# Influenza & Other Respiratory Illness Weekly Update

Week 49: December 1 - December 7, 2018

The purpose of this weekly update is to summarize current influenza surveillance indicators prepared by San Bernardino County Department of Public Health Communicable Disease Section. *Please note that the data in this report is provisional and based on preliminary submissions and may change if additional hospital ILI submissions are received.*

## Summary Statistics for Week 49

December 1 - December 7, 2018

**Influenza Activity California: Regional**

**Influenza Activity SB County: Regional**

**ICU Hospitalizations<sup>1</sup>: 1**

**Number of new cases: 2**

**Outpatient ILI: 4.07% (above expected levels)**

**Labs (+) for influenza: 0%**

**Dominant viral subtype this week: N/A**

<sup>1</sup> Voluntary reporting of ICU hospitalizations for 0-64 y.o.



- Flu activity is starting to increase in California.
- Last season, 80,000 Americans died from flu.
- Now is the time to get vaccinated. Flu vaccination can keep you from getting sick with flu and can **reduce the risk of flu-associated hospitalization** for children, working age adults, and older adults.
- Getting vaccinated yourself may also **protect people around you**, including those who are more vulnerable to serious flu illness, like babies and young children, older people, and people with certain chronic health conditions.
- Flu vaccination helps prevent heart attacks among people with existing heart disease.
- **Take preventive measures:** frequent handwashing, covering coughs and sneezes, and staying home when sick can effectively stop the spread of influenza.

# Overview and Indicators

Statewide outpatient Influenza-like illness (ILI) hospitalizations are above expected levels. The average weekly percentage of ILI visits in San Bernardino County Emergency Departments has increased compared to the previous week, seen in Table 1.

The percentage of influenza detections in the San Bernardino Public Health Laboratory is 0% in week 2018-49 compared to 0% in week 2018-48. SBCPH laboratory had 0 influenza detections out of 1 sample this week.

## Weekly Influenza-Like Illness (ILI)

ReddiNet data is used to construct the charts below which contain emergency department data for all participating hospitals in San Bernardino County on select dates. Not all hospitals participate on a daily basis.

Table 1. Average Weekly Percentage of ILI in San Bernardino County Emergency Departments

| Week        | 2016  | 2017  | 2018  |
|-------------|-------|-------|-------|
| 11/30-12/6  | 4.68% | 4.60% | 4.07% |
| 11/23-11/29 | 4.13% | 3.96% | 3.86% |
| 11/16-11/22 | 4.03% | 4.77% | 3.70% |
| 11/9-11/15  | 4.00% | 3.66% | 2.88% |

Figure 1. Percentage of ILI Emergency Department ED Visits in San Bernardino County, years 2015-2018

Average Weekly Percentage of ILI visits in San Bernardino County Emergency Departments, 2015-2018

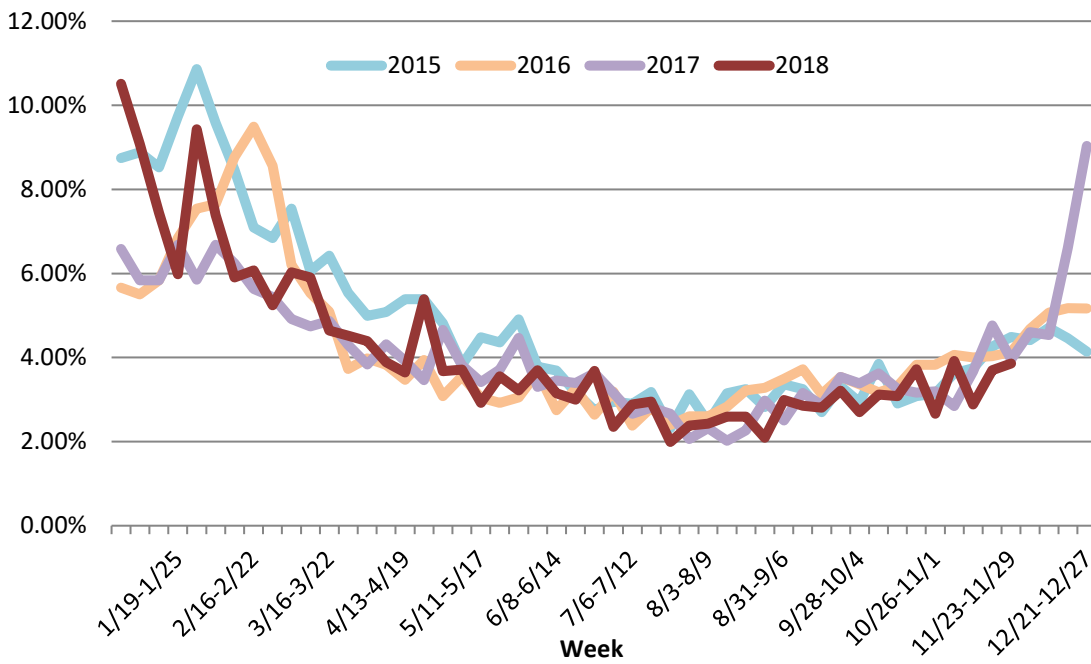
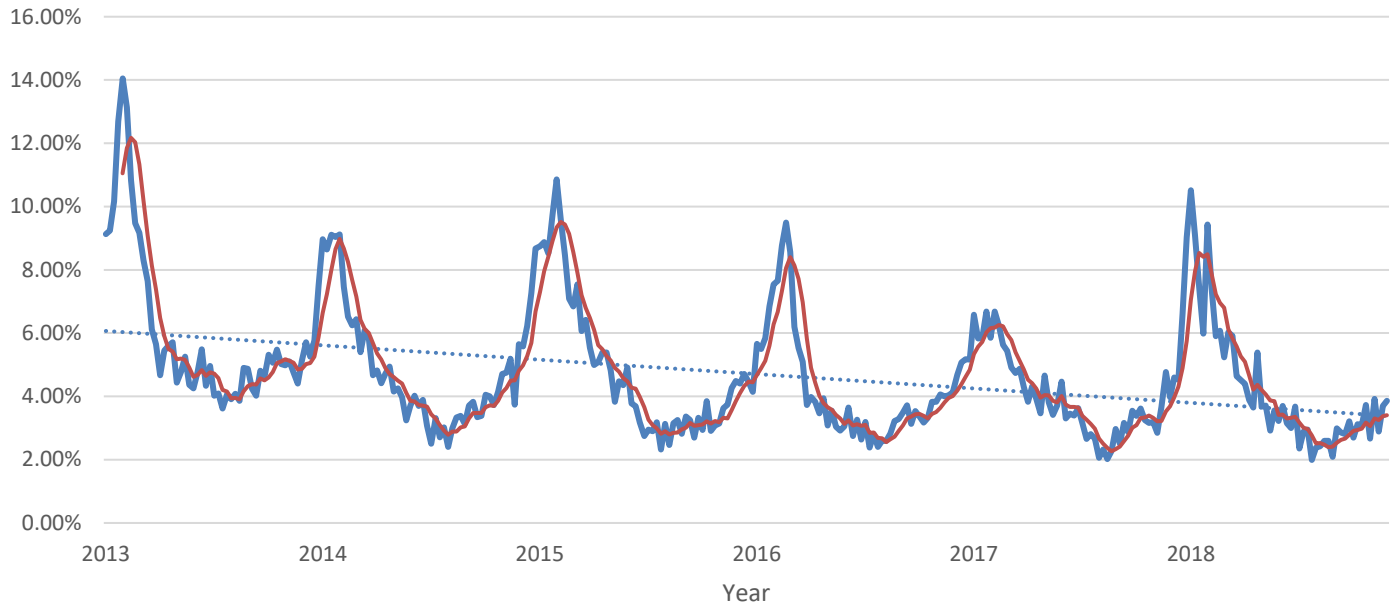


Figure 2. Percentage of Emergency Department (ED) Visits for Influenza-Like Illness (ILI) Trend lines, 2014-2018



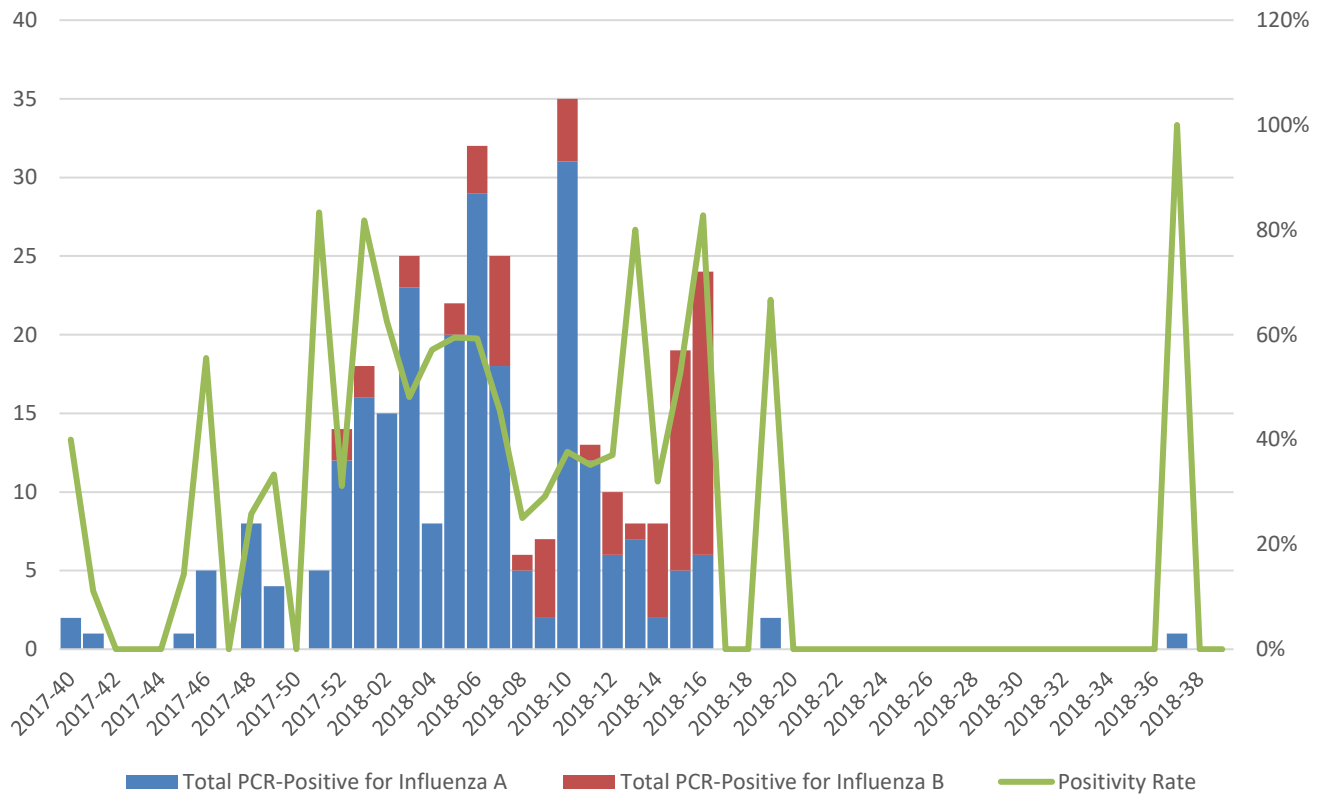
## SBCDPH Laboratory Virological Surveillance Update

San Bernardino Public Health Laboratory participates in virologic surveillance for respiratory illness, assessing weekly total number of positive influenza tests by virus subtype. *Figure 3* displays percentages of detections from Week 2017-40 to current reported week. There was 1 specimen provided to the lab for testing in week 49.

| <b>Table 2. Summary Lab Data for 2018-2019 Season - 49</b> |              |
|--|--------------|
| <b>No. of specimens tested</b>                             | <b>4</b>     |
| <b>No. of positive specimens [n (%)]</b>                   | <b>0 (0)</b> |
| <b>Positive specimens by type/subtype* [n (%)]</b>         |              |
| <b>Influenza A</b>   | <b>0 (0)</b> |
| A/H3   | 0 (0)        |
| 2009 A/H1  | 0 (0)        |
| Unknown subtype  | 0 (0)        |
| <b>Influenza B</b>   | <b>0 (0)</b> |
| Yamagata   | 0 (0)        |
| Victoria   | 0 (0)        |
| Unknown subtype  | 0 (0)        |

\*Subtyping not performed on some specimens

Figure 3. Influenza Detections Reported by San Bernardino County Public Health Laboratory 2017-18 Summary



## SBCDPH Respiratory Disease Surveillance

Table 3. Number of Reported Respiratory-related Diseases in San Bernardino County Reported through CalREDIE (Week 49)

| Disease  | Number of Incidents |
|--|---------------------|
| Coccidioidomycosis                                 | 8                   |
| Influenza - ICU Hospitalization (0-64 years old)   | 1                   |
| Influenza - Initial Report                         | 1                   |
| Pertussis  | 2                   |
| Respiratory Syncytial Virus (RSV) - Initial Report | 0                   |
| Tuberculosis (Clinically Active - TB3)             | 0                   |
| Tuberculosis (Suspect - TB5)                       | 6                   |
| <b>Grand Total</b>                                 | <b>18</b>           |

# National Influenza-Like Illness Activity

The Epidemiology and Prevention Branch in the Influenza Division at CDC collects, compiles and analyzes information on influenza activity year-round in the United States and produces geospatial depictions of national flu trends which informs SBCDPH of regional surveillance efforts.

## 2018-19 Influenza Season Week 48 ending Dec 01, 2018

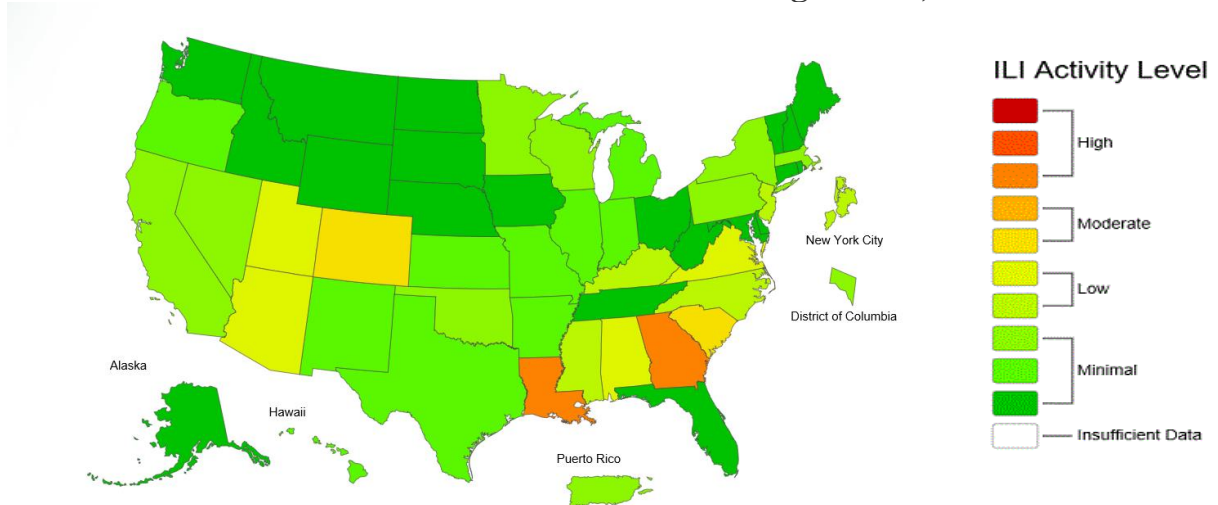


Image source: <https://gis.cdc.gov/grasp/fluview/main.html>

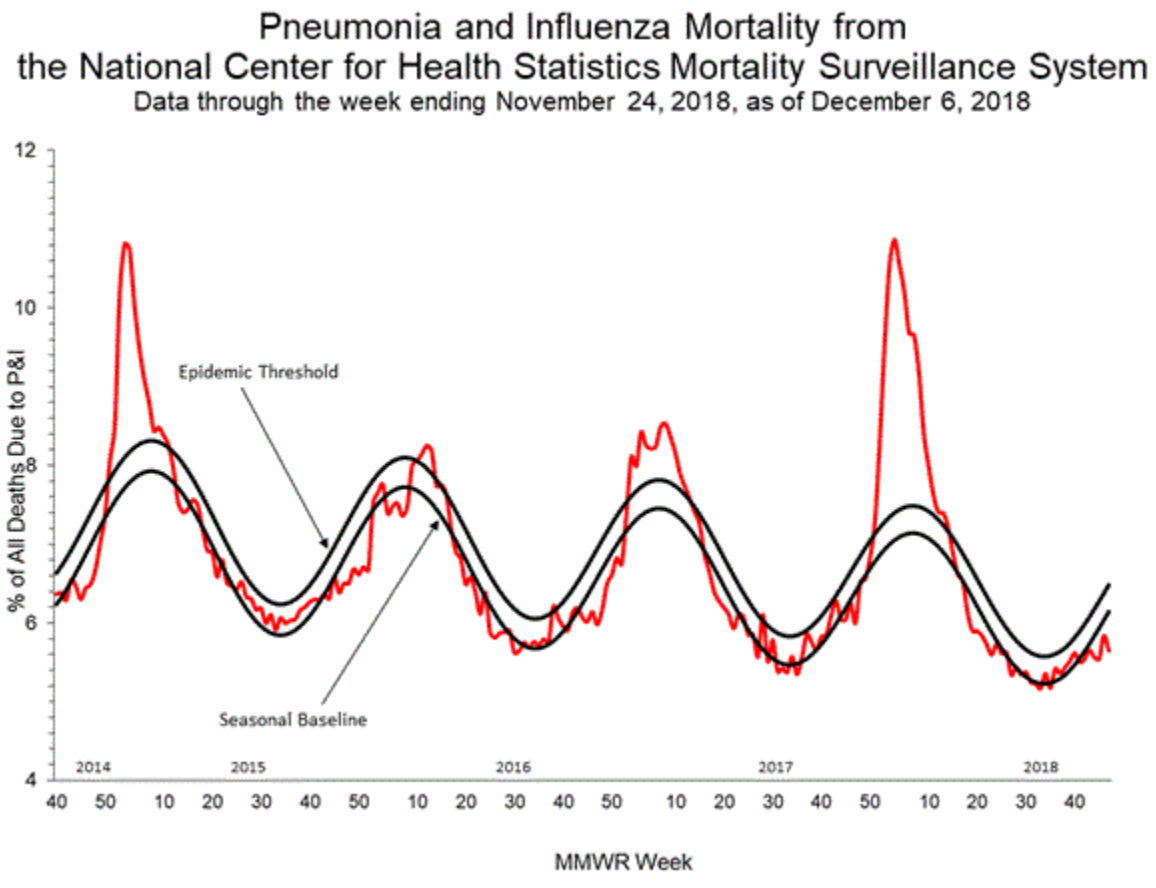


Image source: <https://www.cdc.gov/flu/weekly/>

# Methodology

The San Bernardino County Department of Public Health (SBCDPH) collects and analyzes information on influenza activity year-round through multiple surveillance systems. This initiative is a collaborative effort between the Communicable Disease Section, Preparedness and Response Program, public health and clinical laboratories and regional emergency departments. The data in this report are provisional and based on preliminary submissions. Information in four categories is collected from three key data sources that allow SBCDPH to:

- Track influenza-related illness disease patterns
- Inform and motivate providers and health agencies
- Determine when influenza viruses are circulating
- Measure the impact influenza is having on hospitalizations and deaths in San Bernardino County

Data is collected initially to serve as a surveillance tool to collect primary data and for the prevention and control of influenza. In addition, data can inform conclusions and assess current surveillance modalities.

**ReddiNet Hospital Report** Since 2000, the San Bernardino Department of Public Health (SBCDPH) has employed ReddiNet, a regional electronic surveillance system and emergency medical communications network, for influenza-like illness (ILI) surveillance. ReddiNet facilitates information exchange among hospitals, EMS agencies, paramedics, dispatch centers, public health officials and other health care system professionals in local and regional communities. Additionally, ReddiNet serves as a 24/7 reporting and contact system for information exchange between the SBCDPH and hospital emergency departments throughout San Bernardino County. ReddiNet data is summarized in Table 1, and Figures 2-3.

SBCDPH Communicable Disease Section program conducts syndromic surveillance through analysis of daily hospital polling data collected using the ReddiNet system. ReddiNet gathers information about emergency department patient visits which is categorized using patient symptom criteria and patient chief complaint. Selected data in this report consists of responses for the following hospital daily polling questions for emergency department staff. The percent of patients seen in the emergency department presenting w/Fever>100°F AND Cough and/or sore throat in the reporting timeframe is used to determine ILI. Survey questions are sent daily at 11:59 PM via the ReddiNet system. The reporting timeframe refers to the time-period from 12:00AM to 11:59PM on the day the survey is sent.

**SBCDPH Laboratory Virological Surveillance Update** San Bernardino County Department of Public Health Laboratory participates in virologic surveillance for respiratory illness, assessing weekly total number of positive influenza tests by virus subtype. Data from SBCDPH is summarized in Table 2 and Figure 3.

**SBCDPH Disease Surveillance** The California Reportable Disease Information Exchange (CalREDIE) is a web-based application that is used for the ongoing, systematic collection of reportable disease data. Respiratory disease surveillance through CalREDIE is used to monitor the extent and severity of lung disease and for use in public health response and reporting. Data from here is summarized in Table 3.

**National Influenza-Like Illness Activity** The Epidemiology and Prevention Branch in the Influenza Division at CDC collects, compiles and analyzes information on influenza activity year-round in the United States and produces geospatial depictions of national flu trends which informs SBCDPH of regional surveillance efforts. Data for the National ILI Activity is represented in Figure 4.

