



Influenza & Other Respiratory Illness Weekly Update

Week 1: December 29, 2019 – January 3, 2020

The purpose of this weekly update is to summarize current influenza surveillance indicators prepared by San Bernardino County Department of Public Health (SBCDPH) 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 1 December 29, 2019 – January 3, 2020



Influenza Activity California: Widespread
Influenza Activity SB County: Widespread
ICU Hospitalizations¹: 0
Number of new cases: 144
Outpatient ILI: 8.8% (Above Expected Levels)
SBCDPH Labs (+) for influenza: 0%

Dominant viral subtype this week: N/A

¹ Voluntary reporting of ICU hospitalizations for 0-64 y.o.

- Flu activity continues to increase in California.
- Influenza B viruses are predominating in California, but influenza A (H1)pdm09 are also circulating.
- With flu reaching levels typically seen later in the season, including widespread influenza activity through California, the SBCDPH is reminding people that now is the time to get vaccinated. Everyone over the age of six months needs a flu shot.
- Pregnant women, children younger than 5 years old, adults 65 years and older, and people with chronic medical conditions are at high-risk for flu-related complications.

Overview and Indicators

Statewide outpatient Influenza-like illness (ILI) hospitalizations are above expected levels for this time of year.

The average weekly percentage of ILI visits in San Bernardino County Emergency Departments has increased compared to the previous week, seen in Table 1.

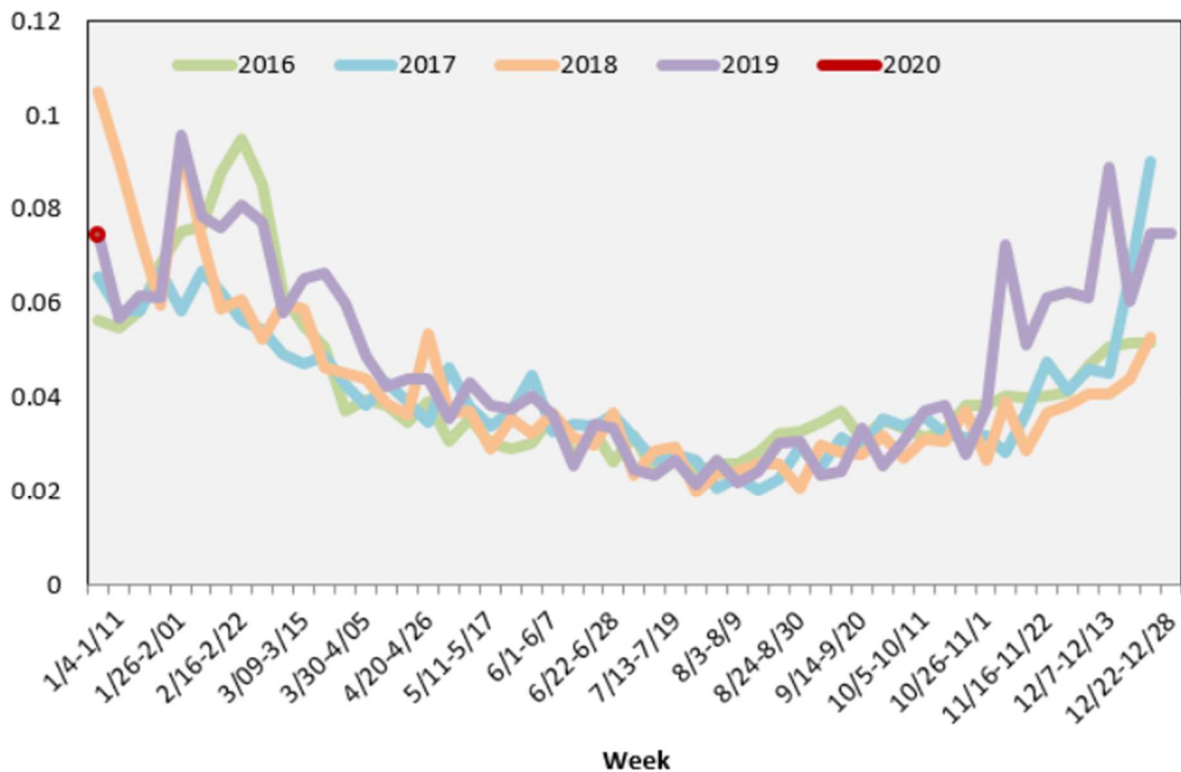
The most frequently identified influenza virus subtype reported by the SBCDPH laboratory in the 2019-2020 influenza season is Influenza B at 100%. The percentage of influenza detections in the San Bernardino Public Health Laboratory is 0% in week 2019-52 compared to 0% in week 2019-51. SBCPH laboratory had 0 influenza detections out of 0 samples this week.

Weekly Influenza-Like Illness (ILI)

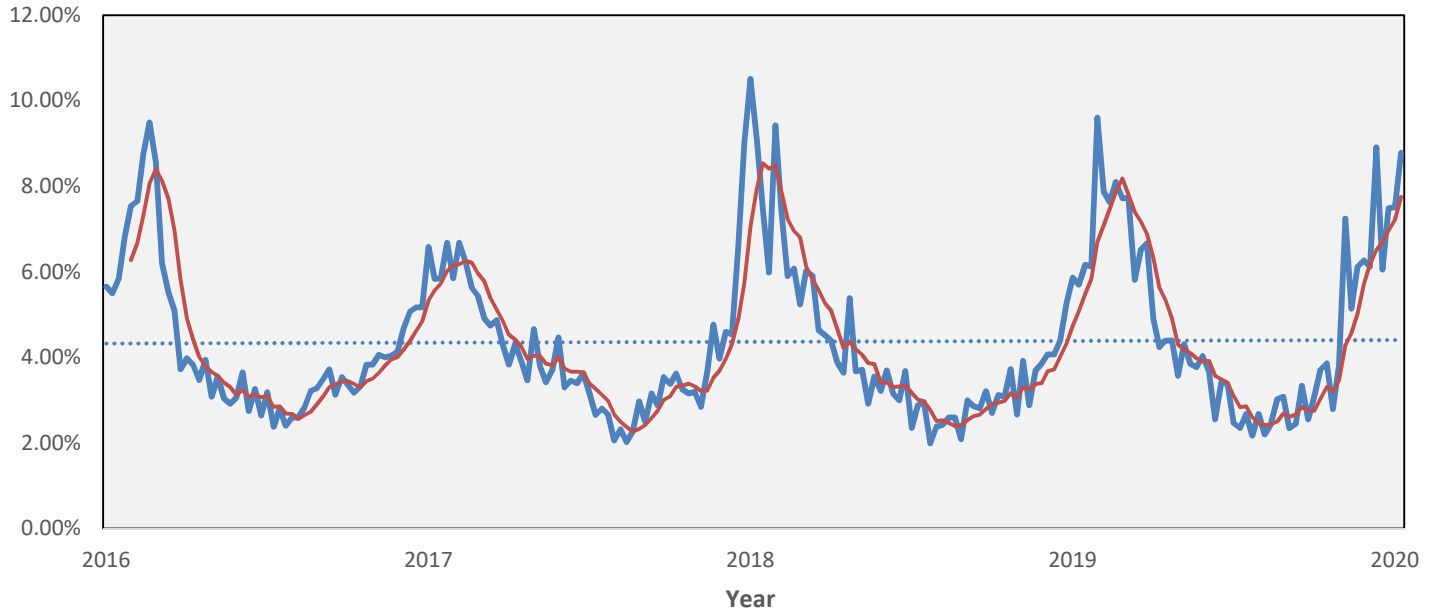
ReddiNet data is used to construct the charts below which contain emergency department data for all participating hospitals in San Bernardino County on select dates. Not all hospitals participate on a daily basis.

MMWR Week	2019-20	2018-19	2017-18
1	8.8%	7.5%	7.5%
52	7.5%	10.5%	6.6%
51	5.7%	9.1%	5.8%
50	6.2%	7.4%	5.8%
49	6.1%	6.0%	6.7%

Figure 1. Average Weekly Percentage of ILI visits in San Bernardino County Emergency Departments, 2015-2020



**Figure 1. Percentage of Emergency Department (ED) Visits for ILI
Trend lines, 2016-2020**



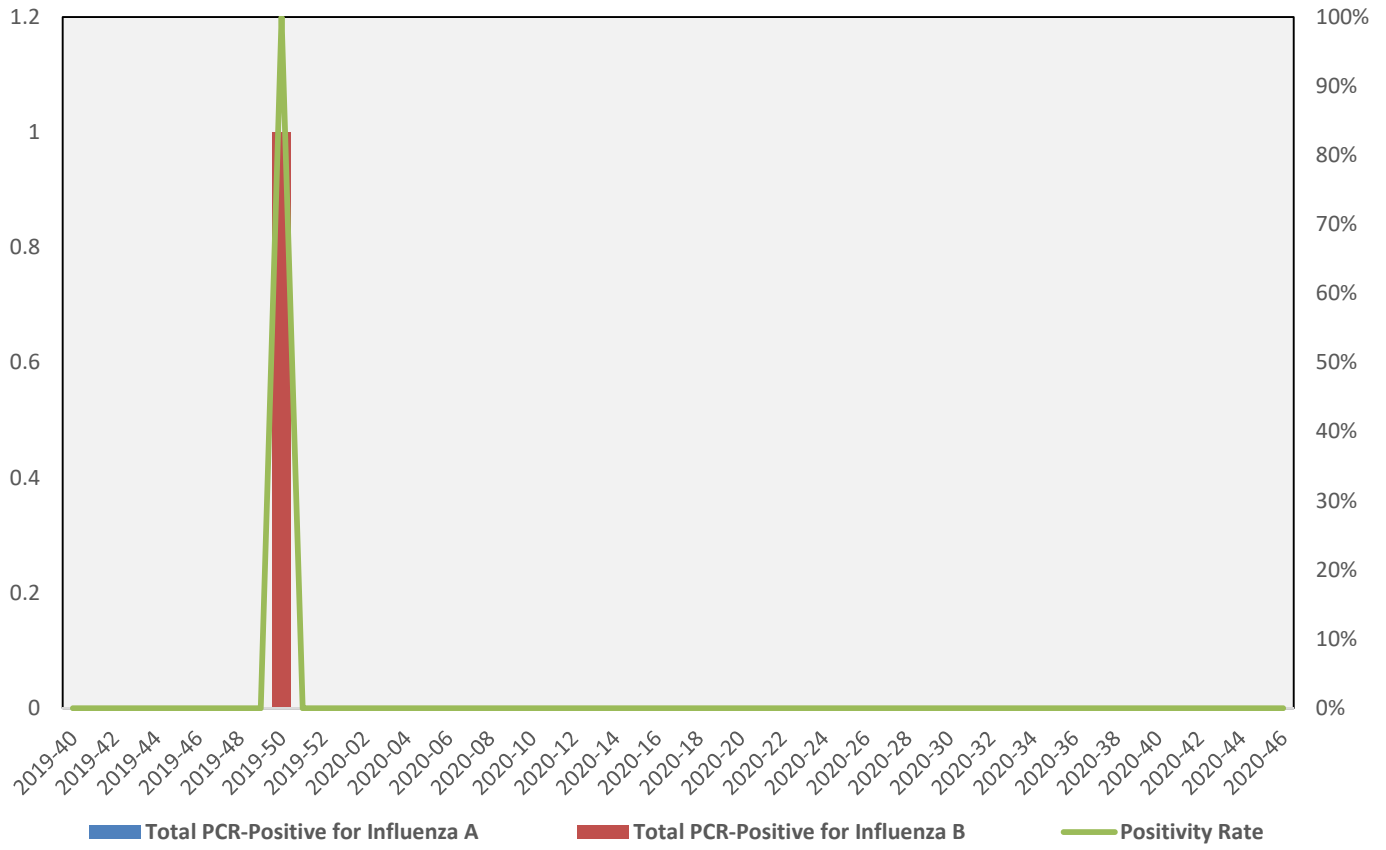
SBCDPH Laboratory Virological Surveillance Update

San Bernardino Public Health Laboratory participates in virological surveillance for respiratory illness, assessing weekly total number of positive influenza tests by virus subtype. *Figure 3* displays percentages of detections from MMW Week 2019-40 to MMWR Week 2020-1.

Table 2. 2019-2020 Season Summary Influenza Lab Results	
Total number of specimens tested	4
Total number of positive specimens [N, %]	1 (25%)
Positive specimens by type/subtype* [N, %]	
<i>Influenza A</i>	0 (0%)
<i>Influenza A (H3)</i>	0 (0%)
<i>Influenza A (H1N1)pdm09</i>	0 (0%)
<i>Unknown subtype</i>	0 (0)
<i>Influenza B</i>	1 (100%)
<i>Yamagata</i>	0 (0)
<i>Victoria</i>	0 (0)
<i>Unknown Subtype</i>	0 (0)

*Subtyping is not performed on some specimens

**Figure 3. San Bernardino County Laboratory Detections
2019-2020 Influenza Season**



SBCDPH Respiratory Disease Surveillance

Disease	Case Count
<i>Coccidioidomycosis</i>	3
<i>Influenza - ICU Hospitalization (0-64 years old)</i>	0
<i>Influenza - Initial Report</i>	144
<i>Pertussis</i>	2
<i>Respiratory Syncytial Virus (RSV) - Initial Report</i>	21
<i>Tuberculosis (Clinically Active - TB3)</i>	0
<i>Tuberculosis (Suspect - TB5)</i>	0
Grand Total	170

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.

2019-20 Influenza Season Week 52 ending December 28, 2019

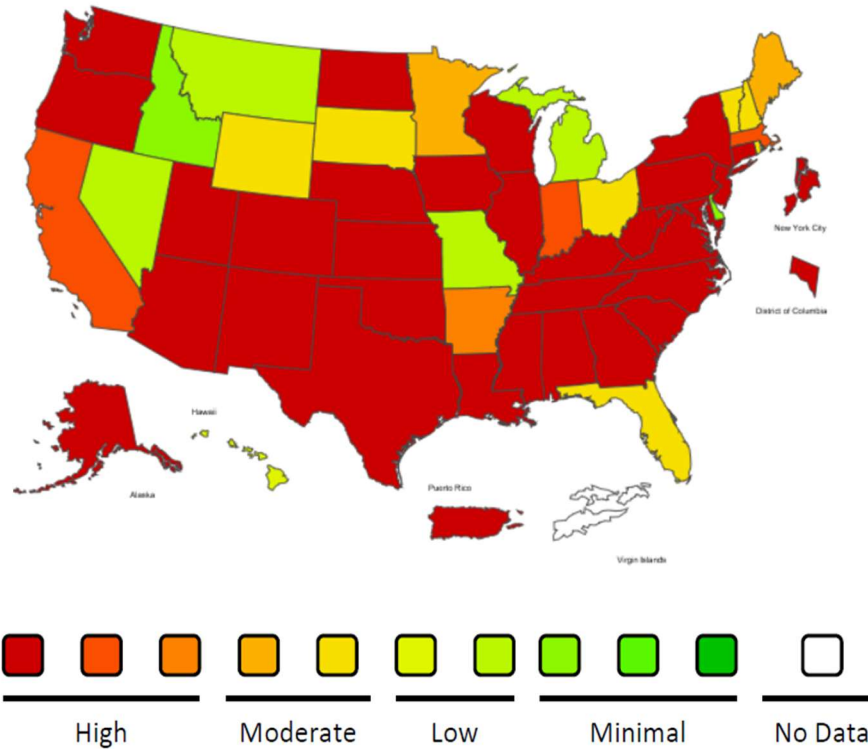


Image source: <https://gis.cdc.gov/grasp/fluview/main.html>

Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System
Data through the week ending December 21, 2019, as of January 2, 2020

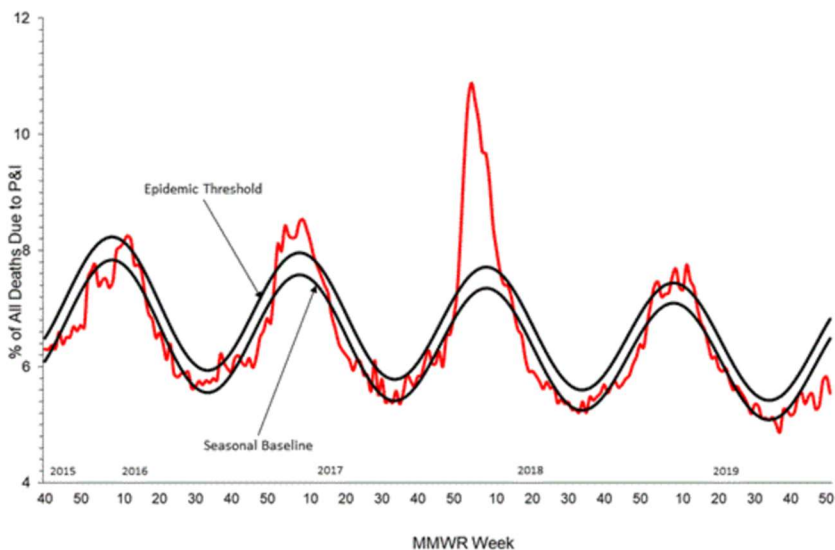


Image source: <https://www.cdc.gov/flu/weekly/>

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 1-2.

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 with a fever greater than 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 this platform 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.

