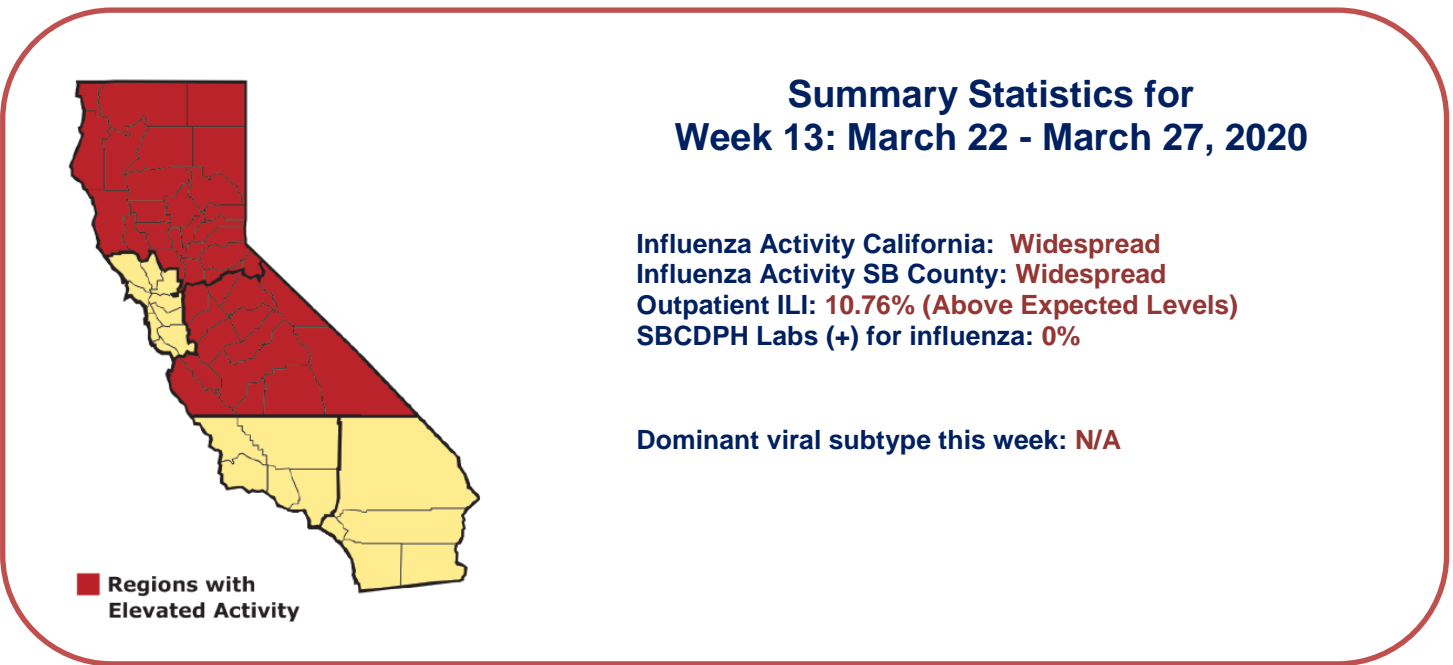




Influenza & Other Respiratory Illness Weekly Update

Week 13: March 22 - March 27, 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.*



- Flu activity is decreasing in California.
- Flu A (H1)pdm09 viruses are predominating in California.
- Since September 29, 2019, 18 influenza-associated pediatric deaths have been reported.
- Several more weeks of influenza activity are expected.
- It's not too late to get vaccinated – vaccination is the best protection against this potentially serious disease.

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 A at 80%. SBCDPH laboratory had 0 influenza detections out of 2 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.

Table 1. Percentage of ILI Emergency Department Visits, San Bernardino County			
MMWR Week	2019-20	2018-19	2017-18
13	10.8%	3.1%	2.7%
12	10.9%	3.7%	3.1%
11	8.5%	3.9%	3.1%
10	7.4%	2.8%	3.7%
9	6.9%	3.8%	2.7%
8	8.3%	7.2%	3.9%
7	8.6%	5.1%	2.9%
6	9.0%	6.1%	3.7%
5	11.7%	6.3%	3.9%
4	9.4%	6.1%	4.1%
3	9.9%	8.9%	4.1%
2	8.3%	6.1%	4.4%
1	8.8%	7.5%	5.3%

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

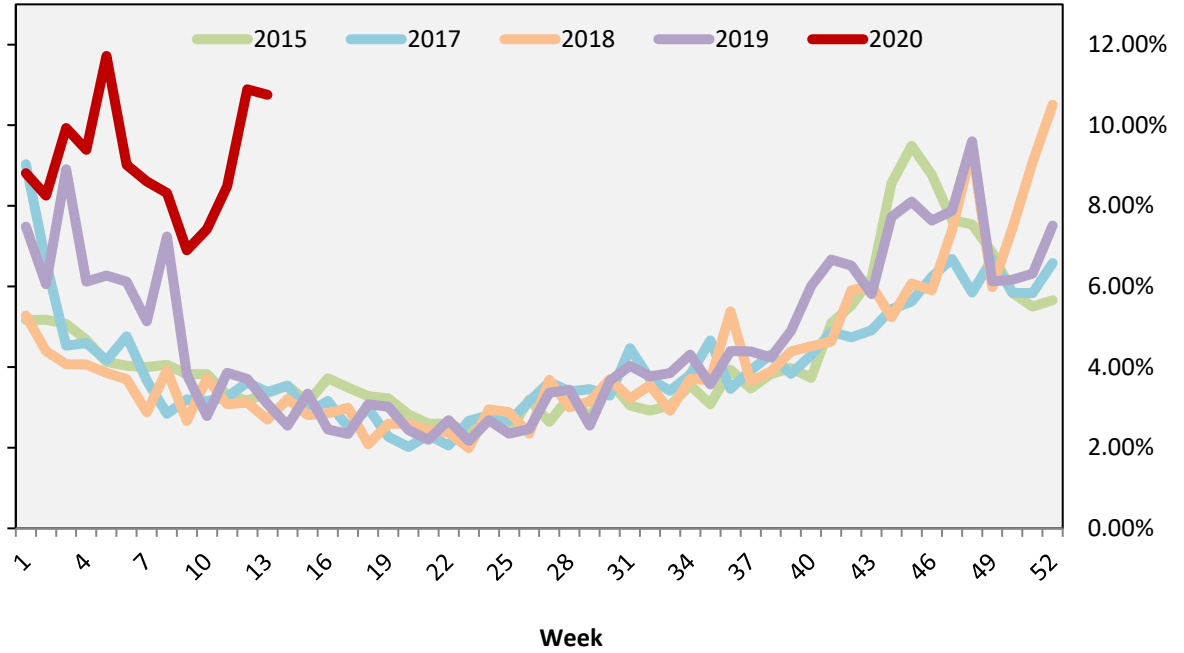
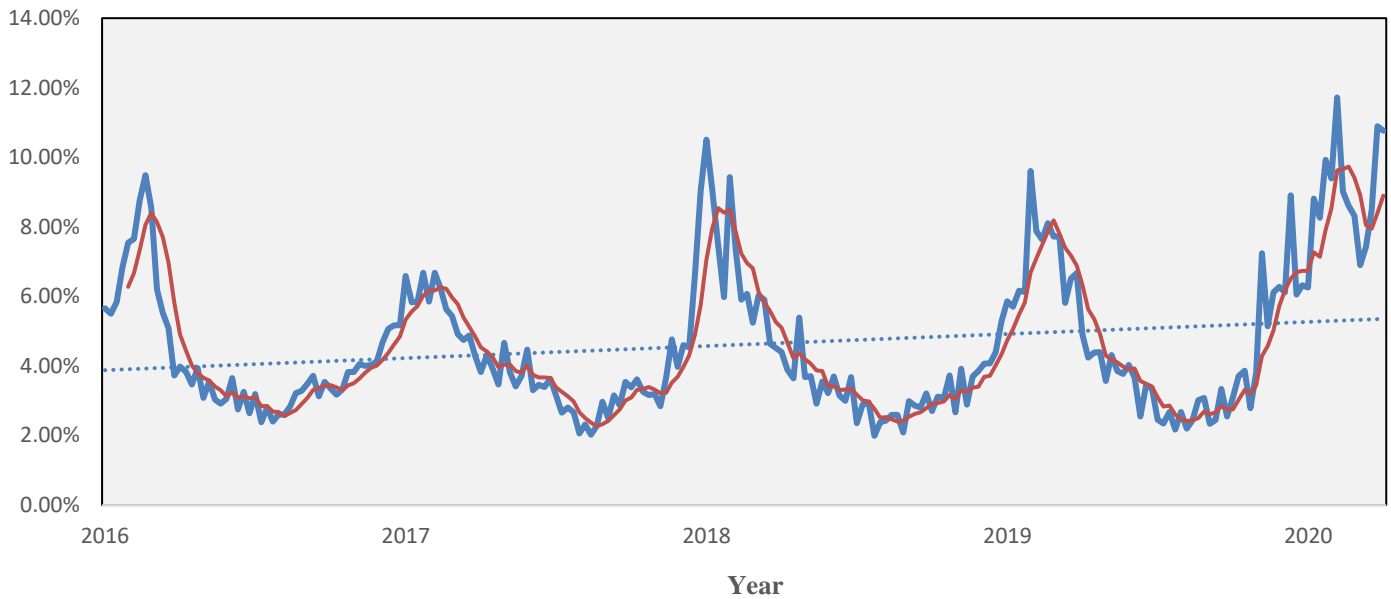


Figure 2. Percentage of Emergency Department (ED) Visits for ILI Trend lines, 2016-2020



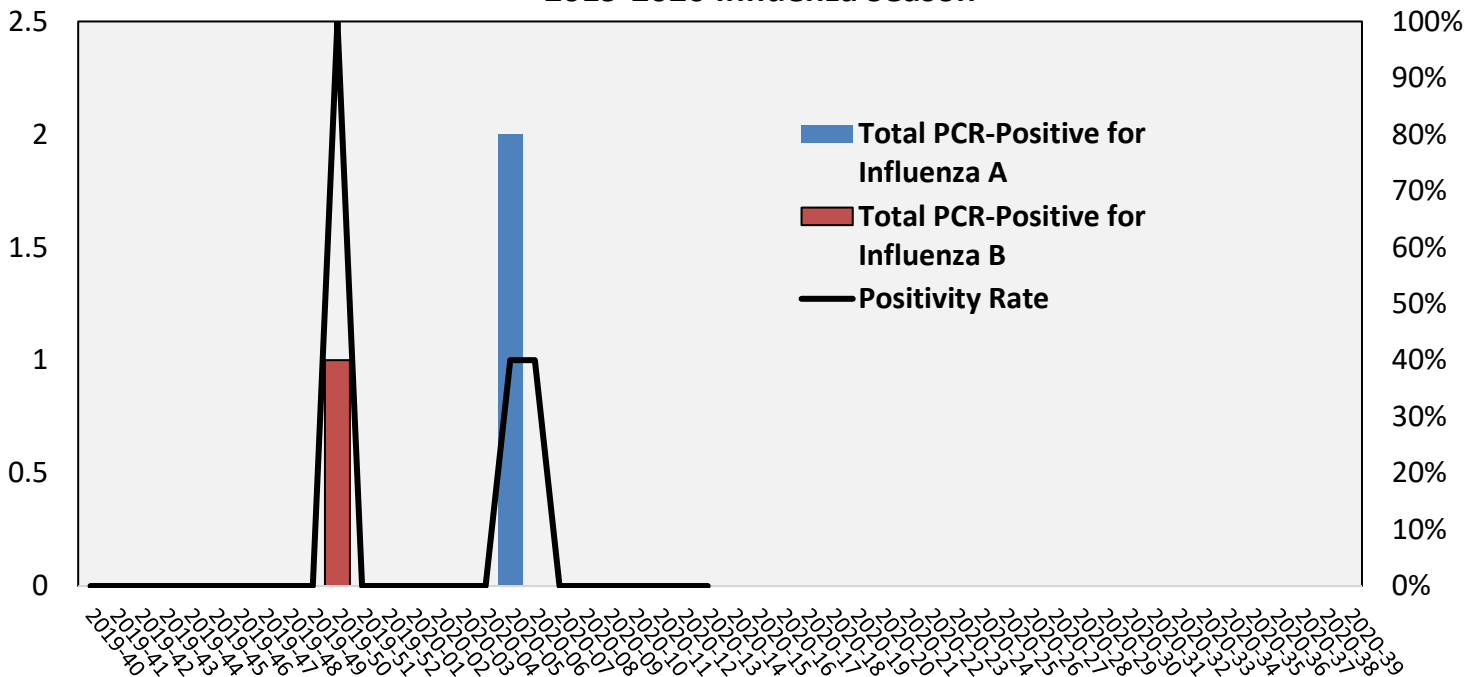
SBCDPH Laboratory Virological Surveillance Update

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 MMWR Week 2019-40 to MMWR Week 2020-13.

Table 2. Summary Lab Data for 2018-2019 Season - 13	
No. of specimens tested	19
No. of positive specimens [n (%)]	5 (26.4)
Positive specimens by type/subtype* [n (%)]	
Influenza A	4 (21.1)
A/H3	0 (0)
2009 A/H1	4 (21.1)
Unknown subtype	0 (0)
Influenza B	1 (5.3)
Yamagata	0 (0)
Victoria	1 (5.3)
Unknown subtype	0 (0)

*Subtyping is not performed on some specimens

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



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.

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet

2019-20 Influenza Season Week 13 ending Mar 28, 2020

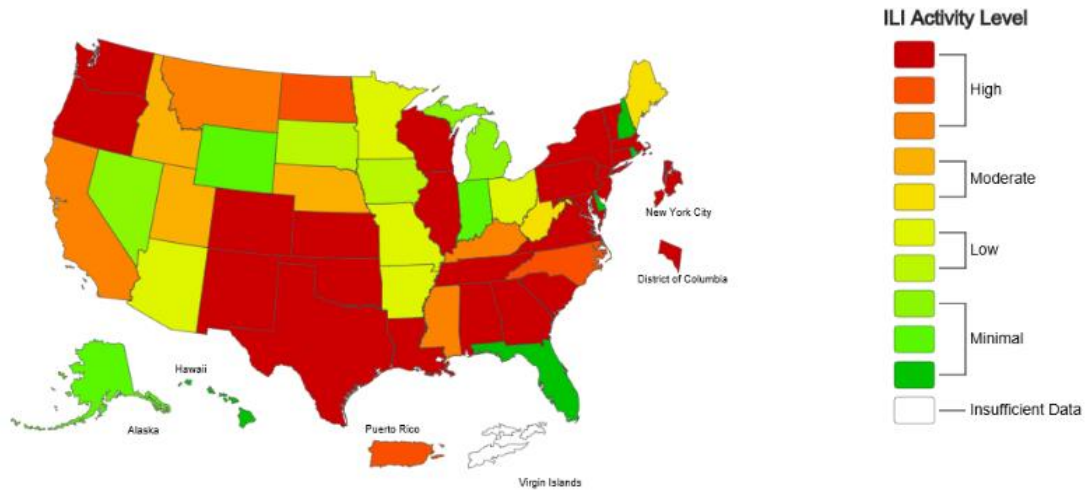


Image source: <https://gis.cdc.gov/grasp/fluview/main.html>

Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System Data through the week ending March 28, 2020

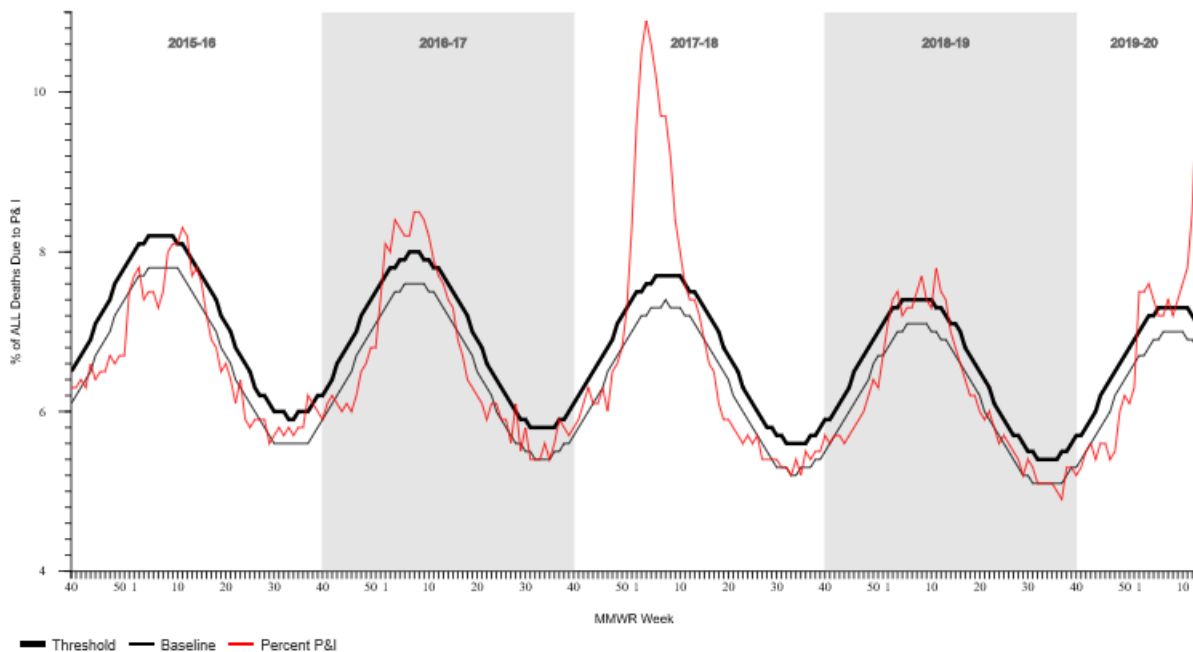


Image source: <https://www.cdc.gov/flu/weekly/>

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.

