

This report summarizes the influenza surveillance data in Santa Clara County during the 2022-2023 influenza season. For more information, visit the [Santa Clara County Influenza Webpage](#), the [CDPH Influenza Webpage](#), and the [CDC U.S. Influenza Webpage](#).

**Key Points**

- In Santa Clara County, influenza activity peaked in early December 2022. Countywide, statewide, and nationwide, influenza activity peaked earlier in the season and exhibited higher levels compared to last season.
- Influenza A and Influenza B viruses co-circulated countywide, statewide, and nationwide, with flu A as the predominant strain.

**Table 1. Summary of influenza activity during the 2022-23 influenza season<sup>1,2,3</sup>**

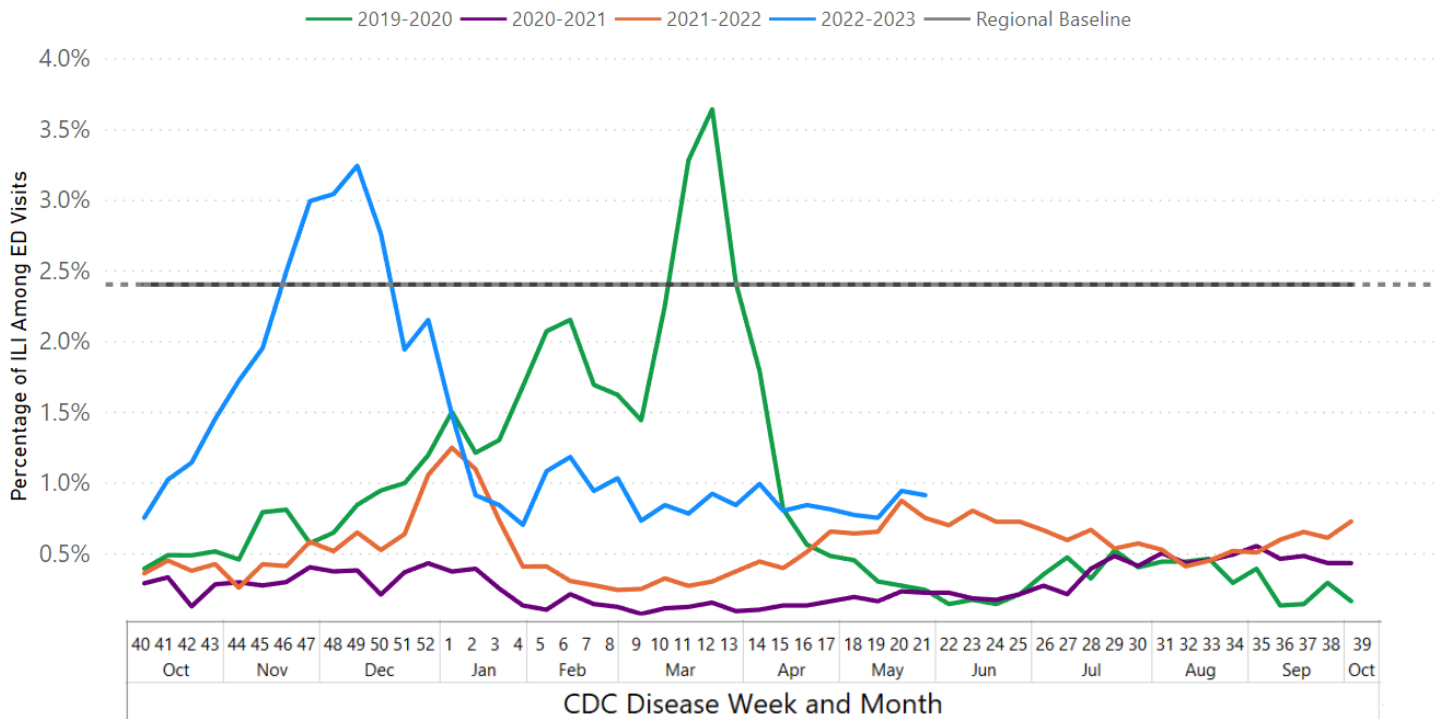
		<u>Countywide</u> Santa Clara County	<u>Statewide</u> California	<u>Nationwide</u> United States
<b>Activity</b>	Activity level	This influenza season started at a higher level compared to previous seasons, with flu activity peaking in Week 49 (Dec 4 to Dec 10, 2022).		
	Circulating strains	Influenza A & B	Influenza A & B	Influenza A & B
	Predominant strain	Influenza A	Influenza A	Influenza A
<b>Laboratory</b>	# (%) positive for influenza	7,068 (7.1%)	2,577 (12.3%)	352,572 (10.4%)
<b>Hospitalizations</b>	ICU admissions (Under 65 years) <sup>1</sup>	33	132	Data not available
<b>Deaths</b>	Children (Under 18 years)	1	10	154
	Adults (18 to 64 years)	9	162	2,245
<b>Outbreaks</b>	Healthcare or community setting	6	116	Data not available

<sup>1</sup> For Santa Clara County data, laboratory sources include PCR (Polymerase Chain Reaction), rapid, and point-of-care tests from Santa Clara County Health System, Sutter Health/Palo Alto Medical Foundation, and Stanford Health Care. Countywide data is from 10/2/22-5/27/23 and are provisional as of 5/30/23.

<sup>2</sup> California data is from the California Department of Public Health (CDPH). Statewide data is from 10/2/22-5/20/23 and are provisional as of 5/30/23.

<sup>3</sup> United States data is from the Centers for Disease Prevention and Control (CDC). Nationwide data is from 10/2/22-5/20/23 and are provisional as of 5/30/23.

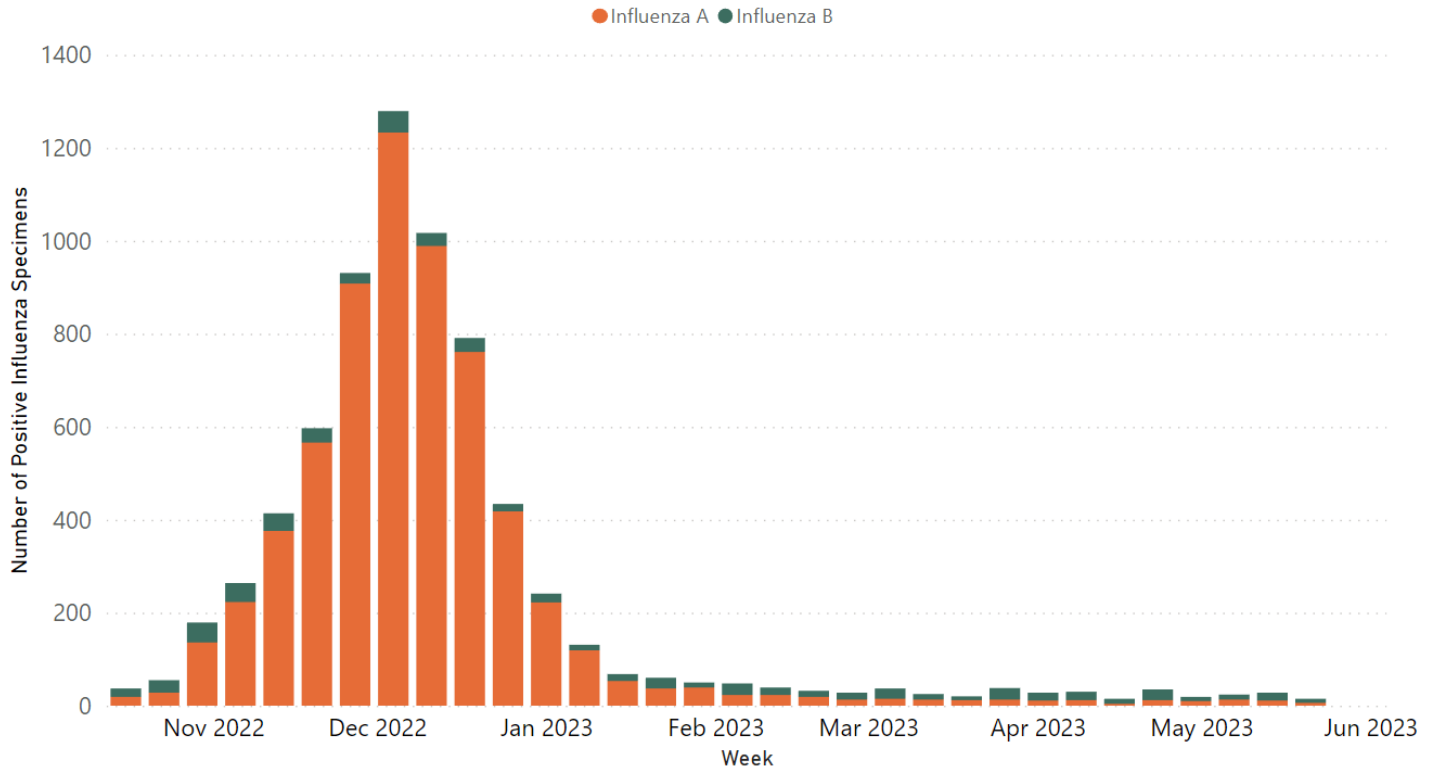
**Figure 1. Weekly percentage of emergency department (ED) visits for influenza-like illness (ILI) in Santa Clara County, 2019-2020 to 2022-2023 flu seasons<sup>4</sup>**



<sup>4</sup> ED visits for ILI are tracked through ESSENCE (Electronic Surveillance System for the Early Notification of Community-Based Epidemics). Figure 1 does not distinguish whether ED visits for these symptoms ultimately resulted in a diagnosis of influenza and/or any other type of respiratory illness. Data are provisional as of 5/30/23.

**Influenza Virologic Surveillance**

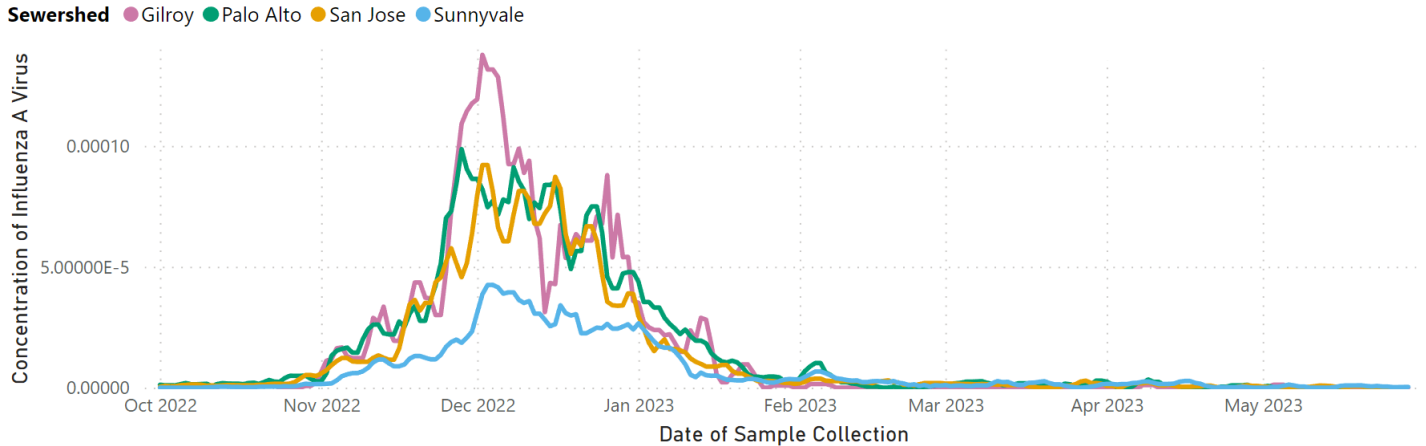
**Figure 2. Respiratory specimens testing positive for influenza in Santa Clara County by week, October 2, 2022 – May 27, 2023<sup>5</sup>**



<sup>5</sup> Laboratory sources include PCR, rapid, and point-of-care tests from Stanford Health Care, Sutter Health/Palo Alto Medical Foundation, O'Connor Hospital, Santa Clara Valley Medical Center, and St. Louise Regional Hospital. Influenza results for Santa Clara County residents and cases with unknown residency data are counted in this graph. Limitations of Figure 2 include potential missed influenza cases tested by alternate laboratories in the county or missed Santa Clara County resident cases who are tested outside of the county.

**Influenza Wastewater Surveillance**

**Figure 3. Concentration of Influenza A Virus (in PMMoV) in Santa Clara County Sewershed Wastewater Samples, October 2, 2022 – May 27, 2023<sup>6</sup>**



Note: Influenza B virus concentrations in wastewater were minimal from the start of collection (mid-November 2022) to the end of the Santa Clara County influenza reporting season (late May 2023).

<sup>6</sup> Wastewater data source: Sewer Coronavirus Alert Network (SCAN) project by Stanford University. The County of Santa Clara Public Health Department provides an overview of Influenza A and B virus concentration in wastewater samples collected at wastewater treatment facilities that serve people in Santa Clara County. Four wastewater treatment facilities receive wastewater from designated geographic areas, known as “sewersheds,” within Santa Clara County.

## About Our Surveillance Systems

In Santa Clara County, we use a broad range of surveillance methods to monitor influenza activity trends throughout the flu season. We closely monitor ED ILI data, laboratory data provided by clinical laboratories, severe/fatal influenza cases reported to SCCPHD, and wastewater concentrations<sup>7</sup>.

### Reporting Requirements

Required by CDPH	Voluntarily Reported in Santa Clara County
<ul style="list-style-type: none"> <li>Laboratory-confirmed fatalities &lt;18 years old</li> <li>Outbreaks of laboratory-confirmed influenza</li> <li>Novel influenza strains or cases thereof</li> </ul>	<ul style="list-style-type: none"> <li>Laboratory-confirmed fatalities &lt;65 years old</li> <li>Laboratory-confirmed ICU cases &lt;65 years old</li> </ul>

### Emergency Department (ED) Visits for ILI

ED visits for ILI are tracked through ESSENCE, a real-time, automated syndromic surveillance system that collects and categorizes chief complaint data from ED visits into different syndromes, including ILI (fever, congestion, sneezing, sore throat, runny nose, and cough). The %ILI regional baseline is calculated by the CDC as the mean percentage of ILI patient visits during non-influenza season weeks for the most recent three seasons (excluding the COVID pandemic) plus two standard deviations.

### Influenza ICU Cases

Laboratory-confirmed influenza cases under 65 years old requiring ICU level care are voluntarily reported to SCCPHD and tracked in California Reportable Disease Information Exchange (CalREDIE). To prevent double counting, cases that result in death after being hospitalized in the ICU may be excluded from the count of ICU hospitalizations.

### Influenza Deaths

Laboratory-confirmed influenza deaths are reported to SCCPHD and tracked in CalREDIE. California mandates reporting only laboratory-

confirmed influenza-associated pediatric deaths. However, Santa Clara County also tracks death reports among county residents aged 18–64 years old, which are supported by vital records surveillance data.

### Outbreak Surveillance

SCCPHD investigates all outbreaks, defined as at least one case of laboratory-confirmed influenza in the setting of a cluster (≥2 cases) of ILI within a 72-hour period.

### Wastewater Surveillance

Monitoring concentrations of Influenza A and B virus in wastewater can detect levels of infection caused by Influenza A and B virus within a community. Public Health is monitoring levels of Influenza A and B virus in wastewater in partnership with Stanford University’s Wastewater SCAN Project. This effort includes all four wastewater treatment plant partners in Santa Clara County and builds on techniques developed during the COVID pandemic to track community virus transmission through wastewater analysis.

<sup>7</sup> Clinical laboratory sources include PCR, rapid, and point-of-care tests from Stanford Health Care, Sutter Health/Palo Alto Medical Foundation, O’Connor Hospital, Santa Clara Valley Medical Center, and St. Louise Regional Hospital.