

This report summarizes the influenza and respiratory syncytial virus (RSV) surveillance data in Santa Clara County during the 2023-2024 respiratory virus season. For more information, visit the [Santa Clara County Influenza/RSV Webpage](#), the [CDPH Influenza Webpage](#), and the [CDC Respiratory Viruses Webpage](#).

**Key Points**

- In Santa Clara County, influenza activity peaked from late December 2023 to early January 2024. Countywide, statewide, and nationwide, influenza activity peaked a little later this season compared to the 2022-2023 season.
- Influenza A and influenza B viruses co-circulated countywide, statewide, and nationwide, with influenza A as the predominant strain.
- Countywide, statewide, and nationwide, RSV activity peaked starting in mid-November, slightly before the influenza peak.
- No influenza deaths under 18 years old or RSV deaths under 5 years old were reported in Santa Clara County.

**Table 1. Summary of respiratory virus activity during the 2023-24 respiratory virus season<sup>1,2,3</sup>**

		<u>Countywide</u> Santa Clara County	<u>Statewide</u> California	<u>Nationwide</u> United States
<b>Influenza</b>				
<b>Activity</b>	Activity level	This season, influenza activity increased steadily from October to December, after which activity decreased but remains higher compared to the 2022-2023 season.		
	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	6,122 (5.5%)	46,295 (9.7%)	343,365 (10.7%)
<b>Deaths</b>	Children (Under 18 years)	0	9	167

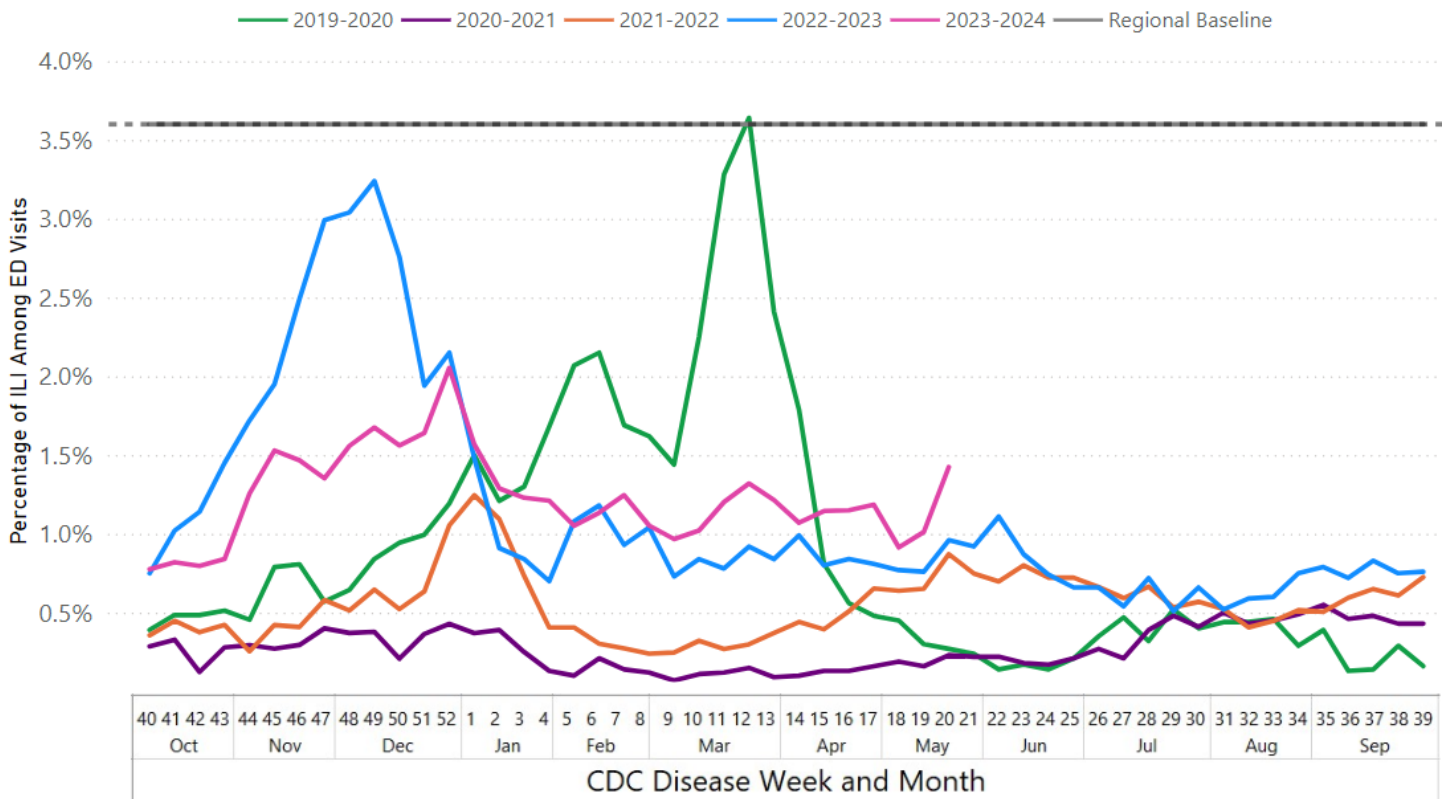
<sup>1</sup> For Santa Clara County data, laboratory sources include PCR (Polymerase Chain Reaction), rapid, and point-of-care tests from Santa Clara County Health System, Sutter Health/Palo Alto Medical Foundation, and Stanford Health Care. Countywide data is from 10/1/23-5/18/24 and are provisional as of 5/22/24.

<sup>2</sup> California data is from the California Department of Public Health (CDPH) using data from clinical sentinel laboratories. Statewide data is from 10/1/23-3/23/24 and are provisional as of 5/22/24.

<sup>3</sup> United States data is from the Centers for Disease Prevention and Control (CDC) using data from clinical laboratories. Nationwide data is from 10/1/23-5/11/24 and are provisional as of 5/22/24.

		<u>Countywide</u> Santa Clara County	<u>Statewide</u> California	<u>Nationwide</u> United States
<b>Respiratory Syncytial Virus</b>				
<b>Activity</b>	Activity level	This season, RSV activity increased steadily from October to December, after which activity decreased.		
<b>Deaths</b>	Children (Under 5 years)	0	3	Data not available

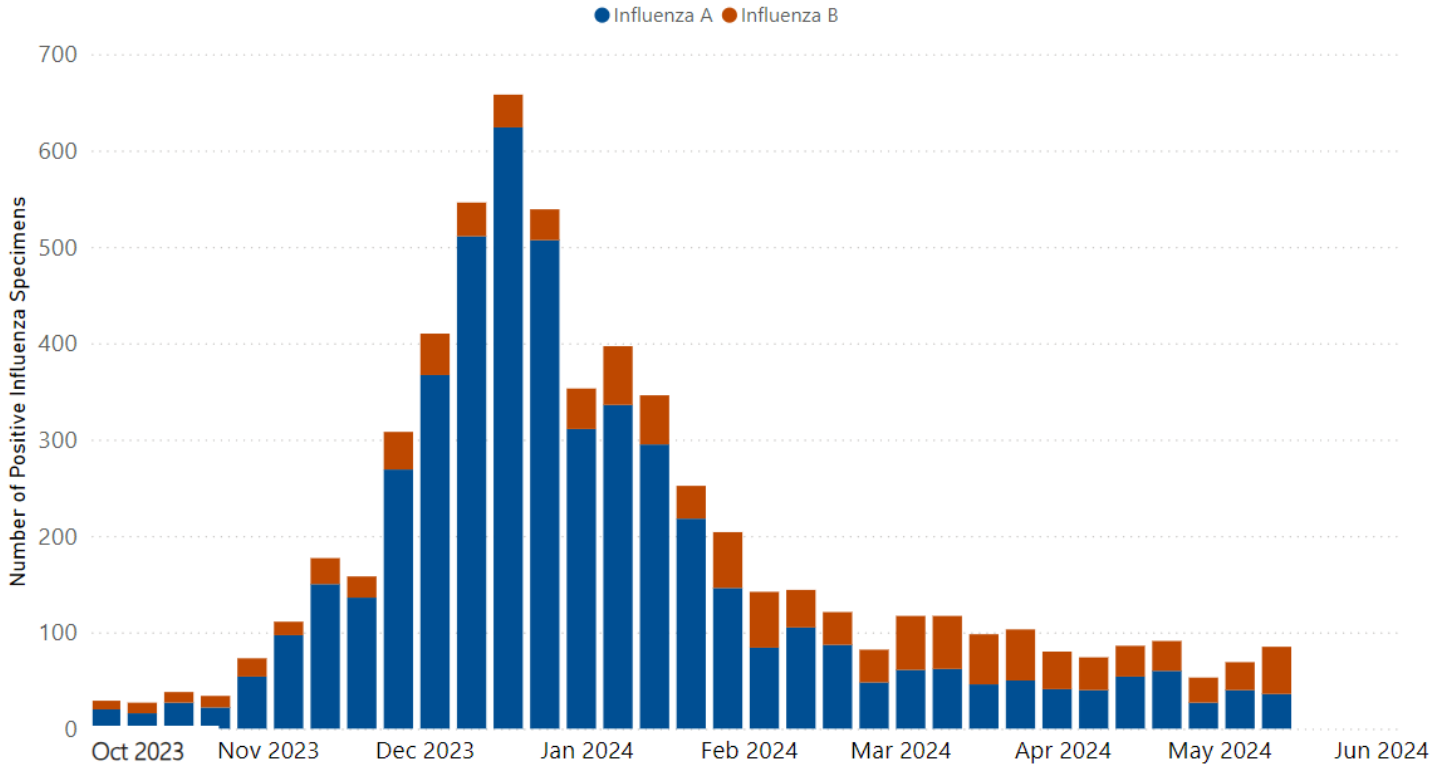
**Figure 1. Weekly percentage of emergency department (ED) visits for influenza-like illness (ILI) in Santa Clara County, 2019-2020 to 2023-2024 respiratory virus seasons<sup>4</sup>**



<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 5/22/24.

**Influenza Virologic Surveillance**

**Figure 2. Respiratory specimens testing positive for influenza in Santa Clara County by specimen collection week, October 1, 2023 – May 18, 2024<sup>5</sup>**

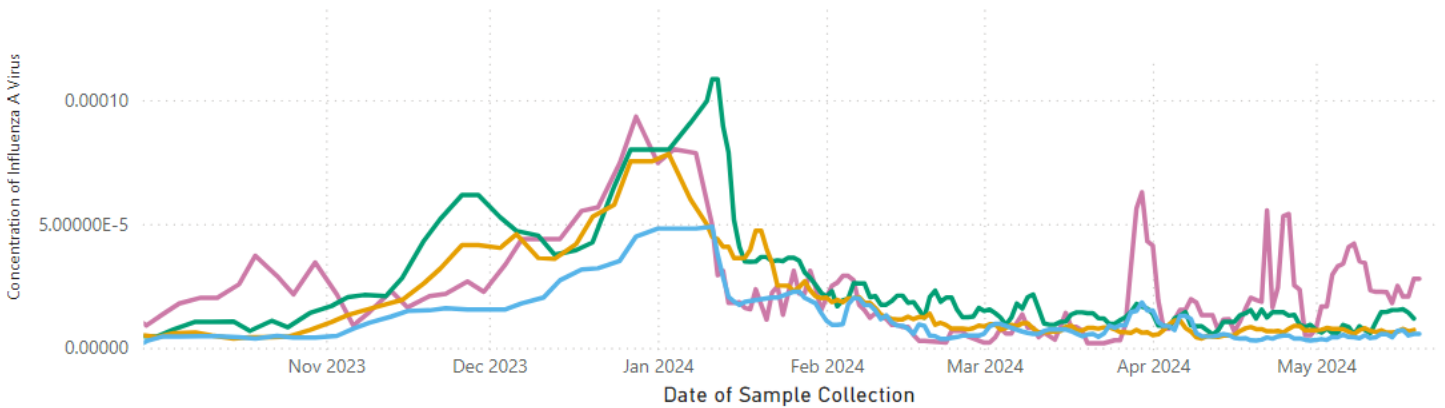


<sup>5</sup> Laboratory sources include PCR, rapid, and point-of-care tests from Stanford Health Care, Sutter Health/Palo Alto Medical Foundation, O'Connor Hospital, Santa Clara Valley Medical Center, and St. Louise Regional Hospital. Influenza results for Santa Clara County residents and cases with 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. Data are provisional as of 5/22/24.

**Influenza Wastewater Surveillance**

**Figure 3. Concentration of Influenza A Virus in Santa Clara County Sewershed Wastewater Samples, October 1, 2023 – May 18, 2024<sup>6</sup>**

Sewershed ● Gilroy ● Palo Alto ● San Jose ● Sunnyvale



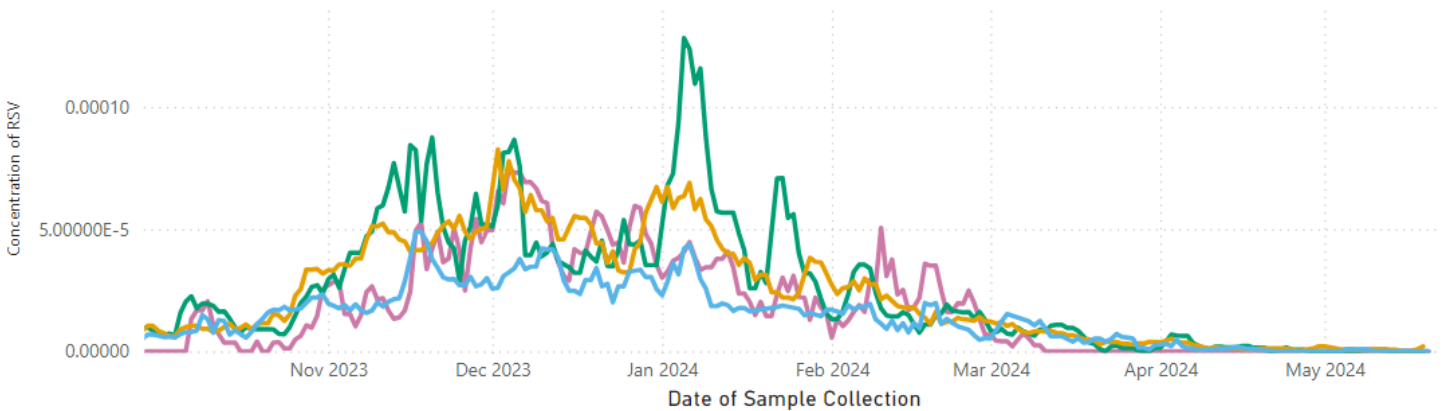
Note: Influenza B virus concentrations in wastewater were minimal from October to January, peaked between mid-January to April (surpassed influenza A concentrations in some areas of the county), and has decreased since then.

**RSV Wastewater Surveillance**

**Figure 4. Concentration of Respiratory Syncytial Virus in Santa Clara County Sewershed Wastewater Samples, October 1, 2023 – May 18, 2024<sup>6</sup>**

Sewershed ● Gilroy ● Palo Alto ● San Jose ● Sunnyvale

All time



<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, influenza B, and RSV 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. Data are provisional as of 5/22/24.

## About Our Surveillance Systems

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

### Influenza/RSV Reporting Required by CDPH

- Laboratory-confirmed influenza fatalities <18 years old and RSV fatalities <5 years old
- Outbreaks of laboratory-confirmed respiratory pathogens
- Novel influenza strains or cases thereof

### 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 weeks for the most recent two seasons and adding two standard deviations.

### Influenza/RSV Deaths

Laboratory-confirmed influenza and RSV deaths are reported to SCCPHD and tracked in California Reportable Disease Information Exchange (CalREDIE). California mandates reporting laboratory-confirmed influenza deaths under 18 years old and RSV-associated deaths under 5 years old, which are supported by vital records surveillance data.

### Outbreak Surveillance

SCCPHD investigates all respiratory outbreaks, defined as at least one case of laboratory-confirmed respiratory pathogen in the setting of a cluster ( $\geq 2$  cases) of ILI or acute respiratory illness within a 72-hour period.

### Wastewater Surveillance

Monitoring concentrations of influenza A/B and RSV virus in wastewater can detect levels of infection caused by influenza A/B and RSV virus within a community. Public Health is monitoring levels of influenza A/B and RSV 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.

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<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.