

Emerging Infections Newsletter for Clinicians

Feb.22, 2024

Written by Dr. Silvers with contributions from Dr. Joan Etzell (Lab), Lisa Rieg (Pharmacy), and Gordon Sproul (Pharmacy). Please use Google Chrome for the best experience.

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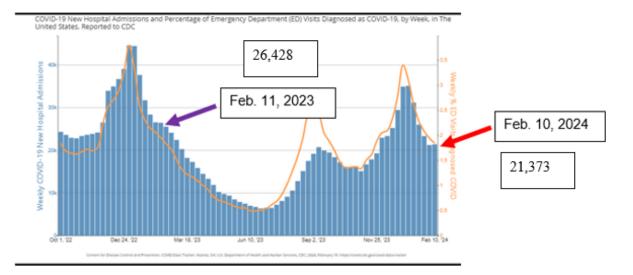
The Tripledemic

• The season is on the downslope, but it is not done.

- JN.1 remains dominant over other SARS-CoV-2 strains. It now represents over 94% of all isolates in the United States, both from national testing data and from arriving international travelers.
- Although SARS-CoV-2 is not going away, there is good news. Nationally, hospitalizations are stable, well off the peak. The trend is similar to 1 year ago at this time. Weekly hospitalizations with COVID as a diagnosis (severity not indicated) are almost 20% lower than the same time last year.
- Sutter SARS-CoV-2 positivity rates have dropped down to about 8% in both ambulatory and acute ED settings.
- Influenza positivity and testing for all three respiratory infections is decreasing in Sutter, consistent with less illness in the communities.
- RSV season is approaching the end.
- As the <u>CDC</u> published Feb. 16 "While the respiratory virus season is likely past its peak, it is definitely not over. There is still a lot of respiratory virus activity, so it's not time to let our guard down."

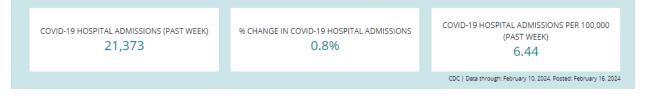
<u>COVID-19</u>

- JN.1 has established itself as the most dominant strain in the world. The good news is that the virulence of this strain is less than some previous strains.
- <u>Hospitalizations</u> in the United States are a surrogate for the virulence of the circulating strain. The graph below has been modified to make it easier to see trends from the last 18 months. As before, the blue vertical bars represent the number of hospitalizations per week and the orange run line demonstrates the percentage of patients being diagnosed with COVID in emergency departments.
- Looking at the trend of the blue bars, the recent drop in hospitalization rates is similar to one year ago. However, there is a significant difference in the number of patients hospitalized due to circulating variants at those times.
- The week of Feb.10, 2024 had 21,373 hospitalizations (red arrow) compared to 26,428 during the week ending Feb.11, 2023 (purple arrow). 5,000 fewer people were hospitalized during this week in 2024 compared to 2023. Emergency room positivity rates were about the same during that 1-year comparison.

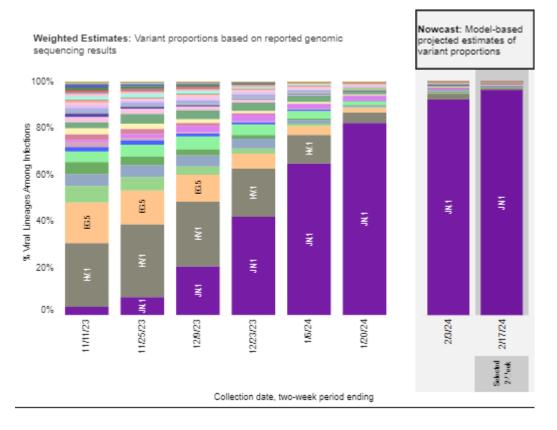


• The CDC tracks hospital admissions per 100,000 county population. Less than 10/100,000 is considered a low number of new hospital admissions. National rates have continued to

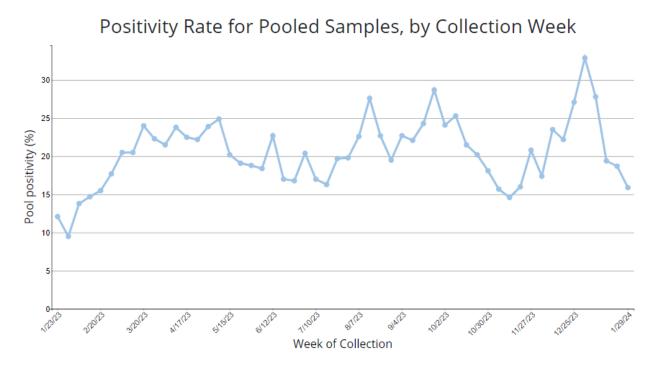
slowly decline over the last two weeks and are down to 6.4/100,000. The table below shows the most recent weekly hospitalization data. This supports decreased virulence of circulating strains and likely some contribution from an effective vaccine.



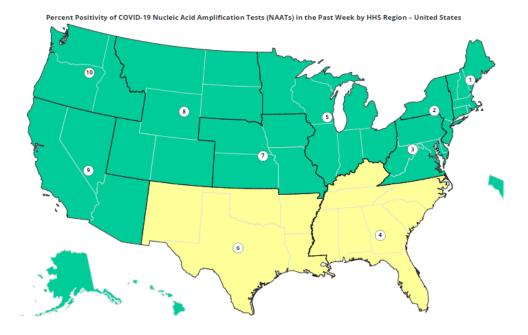
National genomic sequencing was updated by the CDC on Feb. 16. JN.1 now comprises 96.4% of sequenced isolates.



- Surveillance of international air travelers is conducted at several major U.S. airports as an early warning system and to fill gaps in worldwide genomic surveillance. It covers flights from more than 135 countries.
- Traveler-based genomic surveillance positivity rates are on the graph below. Positivity rates for the latest week reported (ending Jan. 29) dropped from 19% to 16%. Remember that international testing data are at least 2 weeks from collection until it is reported on the graph.
- Their data are similar to national data with JN.1 representing 94% of sequenced international isolates (data not shown).

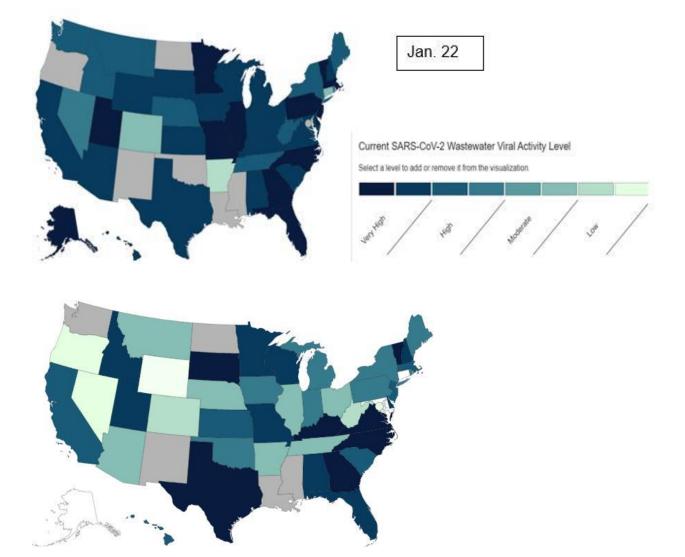


- The map below shows <u>national</u> molecular test positivity rates by region (updated Feb. 16). Most of the country has moved from yellow to green. Green denotes a positivity rate of less than 10%. Yellow means a positivity rate of 10-14.9%.
- Regions 4 and 6 are less than 12%. Despite the rapid rise of JN.1, positivity rates have continued to drop. This suggests decreased contagion, with some contribution from increased masking of some people and the vaccine.

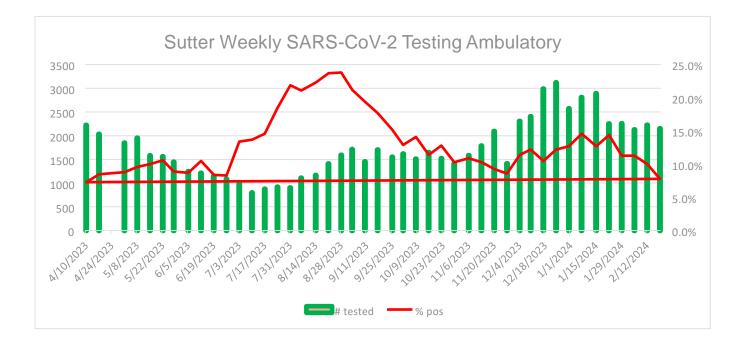


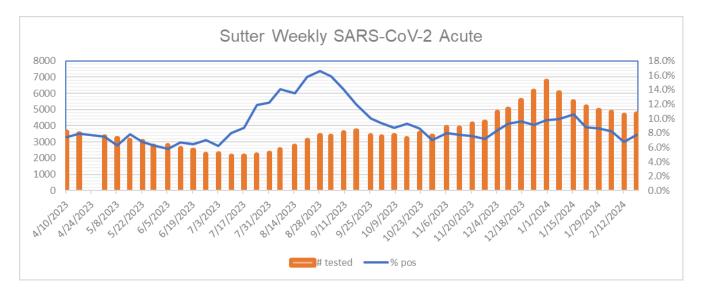
• SARS-Co-V-2 wastewater levels are shown on the two <u>CDC</u> maps below. The top map was reported Jan. 22 and the bottom Feb.19. Similar to hospitalizations and testing positivity, wastewater levels have progressively decreased since JN.1 became the dominant strain.

Grey (eight states) represents insufficient data. Sixteen states now report moderate to minimal levels of SARS-CoV-2 in wastewater.

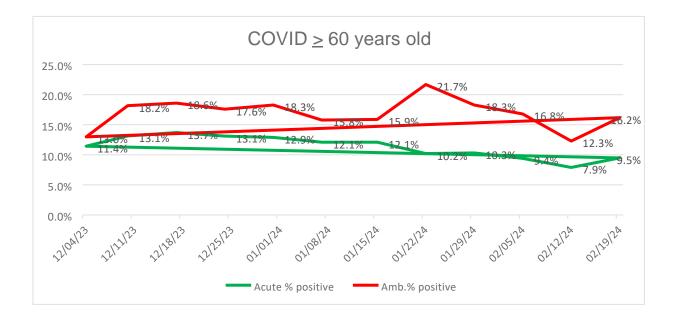


• Updated Sutter testing data below demonstrates a slow decline in positivity rates in the ambulatory setting, and they now match the acute ED at about 8%. Testing is decreasing.





• COVID test positivity rates in persons greater than 60 years old are being pulled out to analyze and compare to all other age groups combined. Rates in this age group are higher than the total cohort of all ages. Notably, rates are reasonably stable.



Healthcare Workers and Return to Work

<u>CDPH</u> published relaxed guidelines on COVID quarantine and isolation on Jan.19. Multiple questions have been raised about whether this applies to healthcare personnel or healthcare environments.

 CDPH specifically states that this new guidance does not apply to those situations. The following <u>CDPH link</u> goes to the appropriate unchanged Dec. 2, 2022, guidance.

COVID-19 Take-Home:

JN.1 dominates in the United States and in international travelers coming to the U.S.

- Stable identification but decreased hospitalizations and emergency room visits suggest decreased virulence of JN.1. Decreased positivity test rates and wastewater levels of COVID support decreased transmissibility of JN.1
- Although the international, national and Sutter data are encouraging, SARS-CoV-2 is not going away. Ultimately, JN.1 will be replaced by another strain. Vigilance remains necessary.
- All persons aged ≥ 6 months should stay up to date with COVID-19 vaccinations, including receipt of an XBB monovalent vaccine this season.

Related Links

- CDC Caring for Patients
- CDC Data Tracker
- <u>CDC Latest Updates</u>
- <u>CDC Vaccine Information</u>
- <u>CDPH Tracking and Vaccination Updates</u>
- Sutter Health for Clinicians
- <u>Sutter Health for Patients</u>
- WHO Table of Contents

<u>RSV</u>

• <u>CDPH</u> reports RSV data weekly during the season. The CDPH graph below demonstrates the current California RSV season (blue arrow) compared to other seasons since 2018. RSV

rates are still elevated, but they are progressively decreasing and are down to 4.6% during calendar week 6 of 2024.

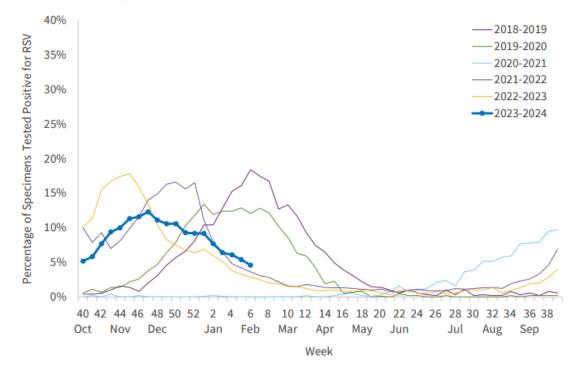
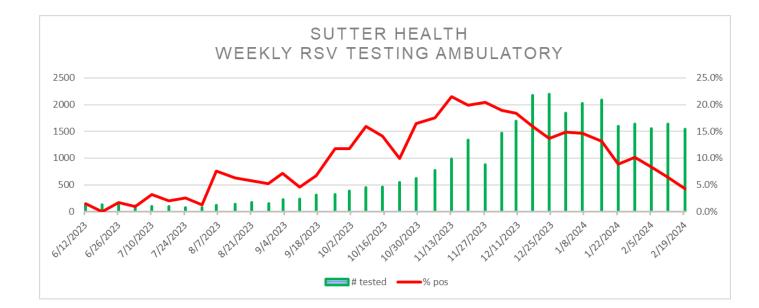
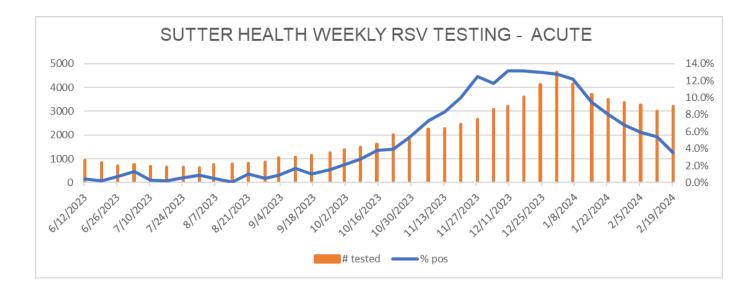


Figure 12. Percentage of RSV Detections at Clinical Sentinel Laboratories, 2018-2024 Season to Date

• RSV identification rates continue to decrease. They are down to 3.5% in ambulatory settings and 4.2% in Sutter emergency departments. See two graphs below.





RSV Take-Home:

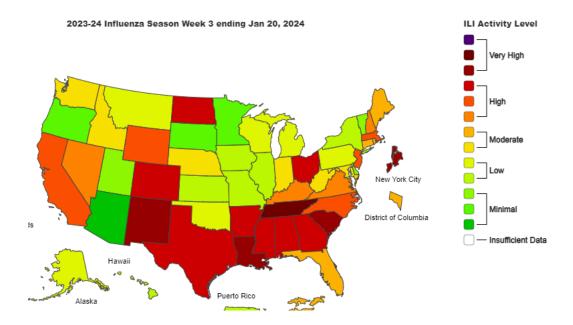
- The RSV season is approaching the end in California. It is difficult to predict when the 2024-25 season will start. Our teams will be carefully following international, national, and local data during the summer, especially in the pediatric population.
- RSV vaccination of adults
 <u>></u> 60 years old is recommended year-round with shared decision making.
- RSV vaccine administration to pregnant persons should have stopped for this season on Feb. 1. The vaccine takes 2 weeks to stimulate adequate antibodies and disease rates are expected to continue dropping.
- Continue with nirsevimab for appropriate candidates through the end of March.

<u>Influenza</u>

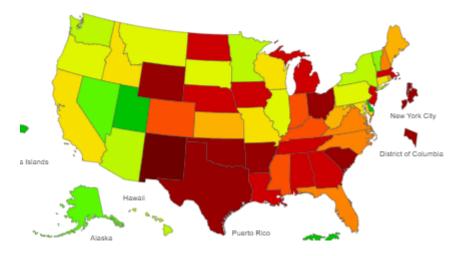
- The <u>WHO</u> released its biweekly global influenza update on Feb. 19. This includes the most recent two weeks of data, but it is only up to Feb. 4
- Although activity is decreasing, influenza levels remain elevated in most of the Northern Hemisphere.
- The <u>table</u> below shows influenza activity in the Northern Hemisphere for the same week over three different years. The first year, 2020, was before COVID started to spread. Influenza activity was widespread at that time, with a positivity rate in the Northern Hemisphere of over 30%.
 - Last year at this time, positivity rates were much lower at 6.4% and testing had already dramatically decreased. This year, a lot of testing was still ongoing in the comparable week and positivity rates are three times as high compared to the same time last year.

Week Ending	Influenza A	Influenza B	Flu A plus B
	# specimens	# specimens	Total % Pos.
Feb. 2, 2020	32,146	19,383	31.2%
Feb. 3, 2023	10,300	5,346	6.4%
Feb. 4, 2024	45,040	14,432	19.9%

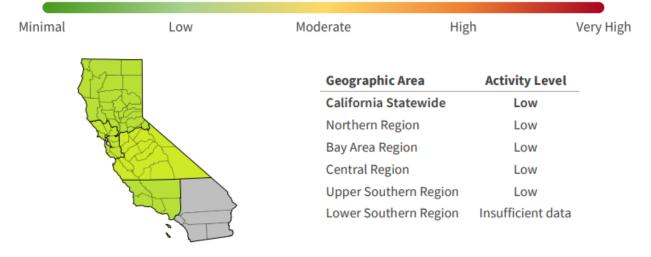
- The weekly <u>CDC</u> Influenza Surveillance Report was released Feb. 16.
- Influenza B continues to be identified in a larger percentage of isolates, now up to 23%
- AH3N2 has been stable for the last 2 weeks, representing 41% of the influenza A isolates.
- Influenza-like illness (ILI), the surrogate for influenza used by the <u>CDC</u>, is represented by the two maps below. This shows the difference over the last reported 3 weeks.
- The first has data for the week ending Jan. 20 and the second has data ending Feb. 10. Notice the color difference between the states on the two maps. This shows variation between states and regions.
- There are still substantial parts of the country where ILI is still quite high. Remember that this does not measure influenza but measures fever plus either sore throat or cough.



2023-24 Influenza Season Week 6 ending Feb 10, 2024



 The <u>CDPH</u> map below of influenza (last updated through Feb. 10), shows that influenza rates have decreased to low everywhere except the lower southern region where the data is inadequate to report. The state influenza positivity rate decreased from 12.3%.to 6.5% in the last three weeks.



CDPH Influenza Activity Levels*

- **Minimal:** The percentage of specimens positive for influenza is <2%.
- Low: The percentage of specimens positive for influenza is between 2% and <10%.
- Moderate: The percentage of specimens positive for influenza is between 10% and <20%.
- **High:** The percentage of specimens positive for influenza is between 20% and <40%.
- Very High: The percentage of specimens positive for influenza is \geq 40%.

The <u>CDPH graph</u> below demonstrates that present influenza activity continues to drop (blue arrow).

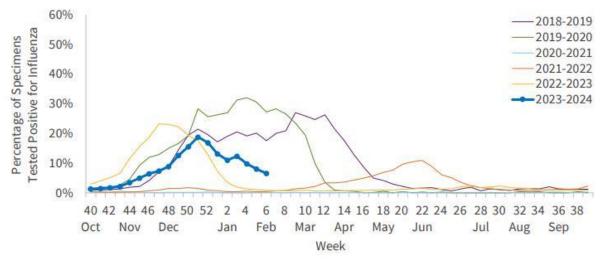
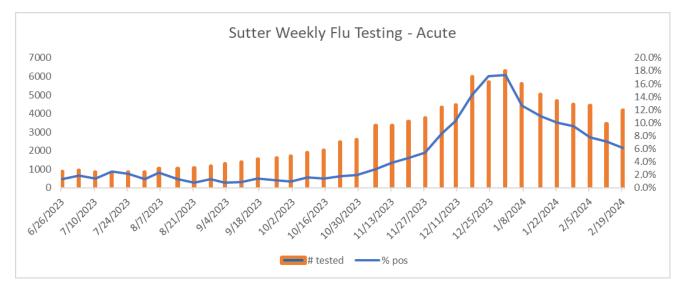
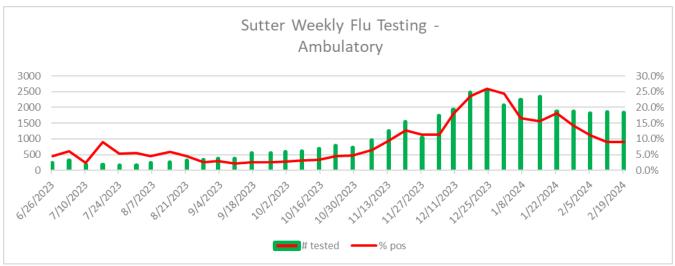


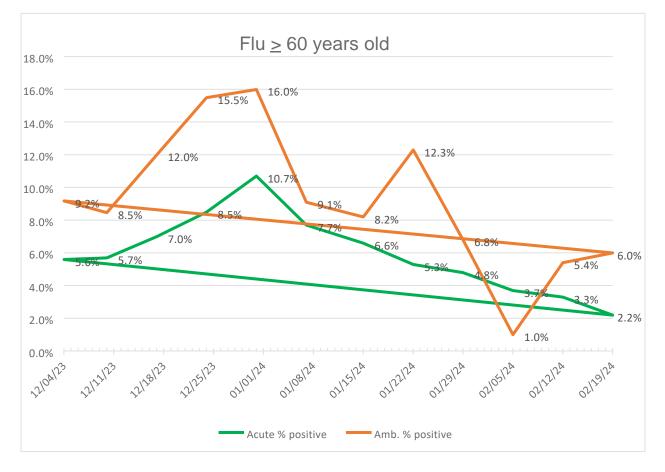
Figure 1. Percentage of Influenza Detections at Clinical Sentinel Laboratories, 2018–2024 Season to Date

 The graphs below show Sutter emergency department and ambulatory influenza positivity rates. In the acute setting (emergency departments), positivity rates decreased to 6.1% in the last 2 weeks, and the ambulatory setting decreased to 9.02%. These are similar to state rates. Testing numbers have been decreasing.





 The positivity rate in persons > 60 years old is shown on the following graph. Rates are down to 2.2% in the acute ED. This is consistent with mild disease in the older age group, likely because of increased vaccinations in this population, and the good vaccine match to circulating strains.



Take-Home Influenza:

- Although influenza rates are progressively decreasing, ILI and positivity rates remain significantly elevated in parts of the country. The season is anticipated to continue.
- Influenza-associated hospitalizations have decreased significantly from the season peak.

• The influenza vaccine is a good match to circulating strains. Vaccination of everyone 6 months and older should continue to be recommended.

Other Respiratory Viruses

- <u>CDPH</u> tracks respiratory viruses beyond SARS-CoV-2, influenza and RSV. They started reporting again in October. SARS-CoV-2 (red arrow), included in the graph below, has reached a plateau and is decreasing as shown by other data earlier in this report.
- Enterovirus/Rhinovirus (green arrow) remains the one most commonly identified as a percentage of positive tests and has seen an uptick with over 20% of tests being positive. The common human Coronavirus is also being reported more frequently (orange arrow).
- These last two organisms are usually identified on large multiplex respiratory panels. Usage of these panels varies because of their high cost.

