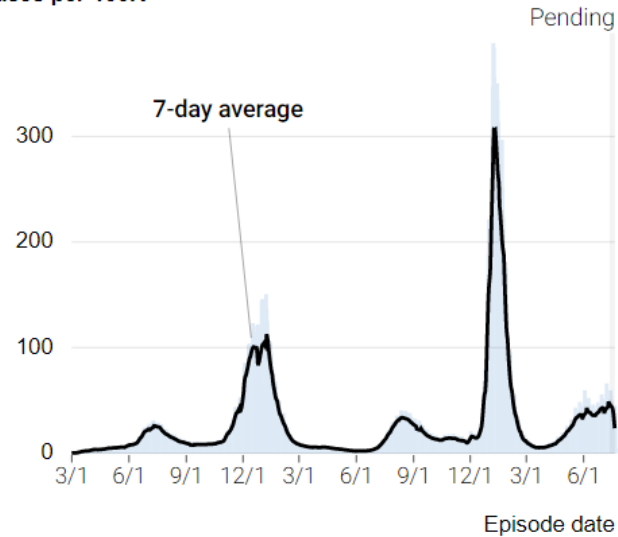
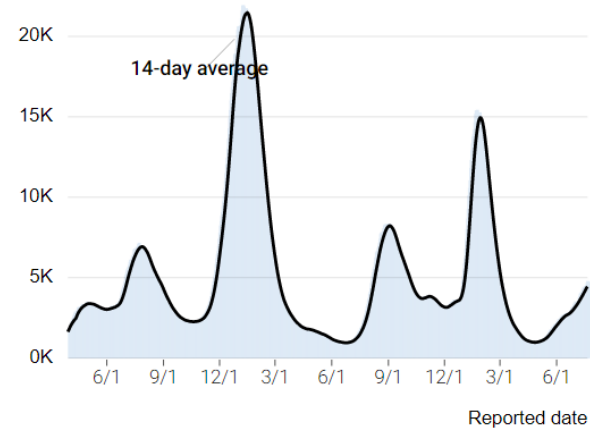


# Testing Taskforce: New California COVID-19 cases, hospitalizations and deaths

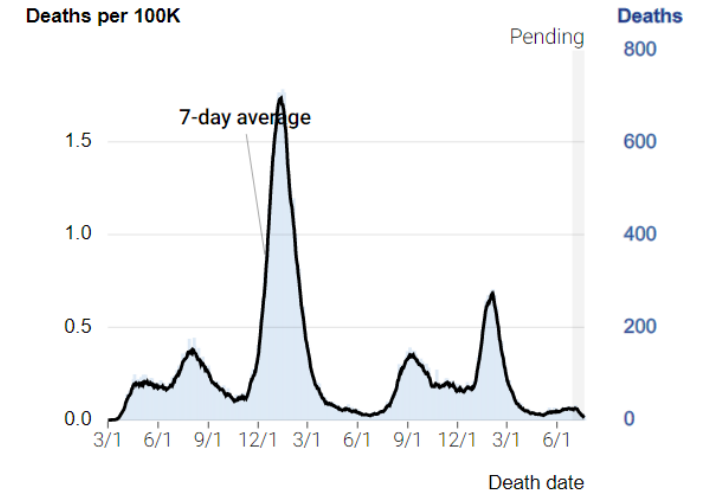
Cases per 100K



14 day average Hospitalizations



7 day Average Deaths



Avg. test positivity past 7 days 15.0%, Down 1.2% from last week

Cases have fallen from the peak

14 day avg hospitalizations are rising and have increased 4.5 times since 4 months ago

7 day average deaths remain at low levels.

Average turnaround time as of 7/23 was 0.9 days with 97% of molecular tests resulting in less than 48 hours.

July 26, 2022 with data as of July 25, 2022.

<https://covid19.ca.gov/state-dashboard/> <https://testing.covid19.ca.gov/>  
COVID-19 Cases Dashboard v2.0 - CA Open Data | Tableau Public

# Variant update

- BA.5 and its sub-lineages represent the most common variant of COVID-19 circulating in the US (82%) and California (66%).
- In the US and worldwide including Europe and Japan it is resulting in a rapid increase of cases
- In many countries around the world including, Europe, Japan, across the US and in California it has led to a rise of hospitalizations
- BA5 has mutations at the spike protein to enable it to better evade the immune system and result in reinfections. Some are estimating it may be as contagious as measles with a R not of 18.
- These are data from preprints
- A study in Qatar: Effectiveness of a previous pre-Omicron infection against symptomatic BA.4/BA.5 reinfection was 15.1% (95% CI: -47.1-50.9%), Effectiveness of a previous Omicron infection against symptomatic BA.4/BA.5 reinfection was 76.1% (95% CI: 54.9-87.3%), <https://www.medrxiv.org/content/10.1101/2022.07.11.22277448v1>
- A study in the NEJM looked at neutralizing antibody titers of to BA4/BA5 compared to the original strain in people that were vaccinated and boosted and were previously infected with a pre-Omicron strain. These data show that as compared with the WA1/2020 isolate (original strain of COVID-19), the median neutralizing antibody titer was lower by a factor of 6.4 against BA.1, and by a factor of 18.7 against BA.4 or BA.5 highlighting the immune evasion properties.
- <https://www.nejm.org/doi/full/10.1056/NEJMc2206576>
- In South Africa and in Portugal where the first BA5 strains were detected hospitalizations are beginning to decrease. Portugal saw a rise in hospitalizations and deaths that reached the January 2022 Omicron peak. However South Africa did not see a marked rise in hospitalizations or deaths with BA5. <https://ourworldindata.org/coronavirus>
- In Portugal there was a decrease in vaccine effectiveness against severe disease with BA5 from approximately 93% to 77% in those that have been boosted. BA5 resulted in a 3 fold increase in hospitalization compared to BA2
- <https://www.medrxiv.org/content/10.1101/2022.07.25.22277996v1>
- Thus far in the US and in California we are not seeing a rise in deaths, but we are watching this closely as hospitalizations rise
- The FDA has not reported any new failures to testing for antigen tests or molecular tests with BA4/ BA5. Molecular tests may show s gene target failure due to mutations at the spike protein. This measure may be used as a proxy for BA5 as BA1 is no longer circulating.