



Board of Supervisors The Novel Coronavirus (COVID-19)

December 14, 2021

Briefing Topics

- Current rates
- Vaccination & booster data
- CDPH guidance
- Omicron variant



Santa Barbara County By the Numbers

December 13, 2021

Updated M-F except holidays

New Cases 21

↓ -71% from 2 week avg of 73

New Deaths 0

↓ -100% from 2 week avg of 1

Active Cases 416

↑ 6% from 2 week avg of 391

Hospitalized 39

↑ 11% from 2 week avg of 35

Total Cases
46,655

Total Deaths
554

Case Rate per 100k as of December 9, 2021

12.8

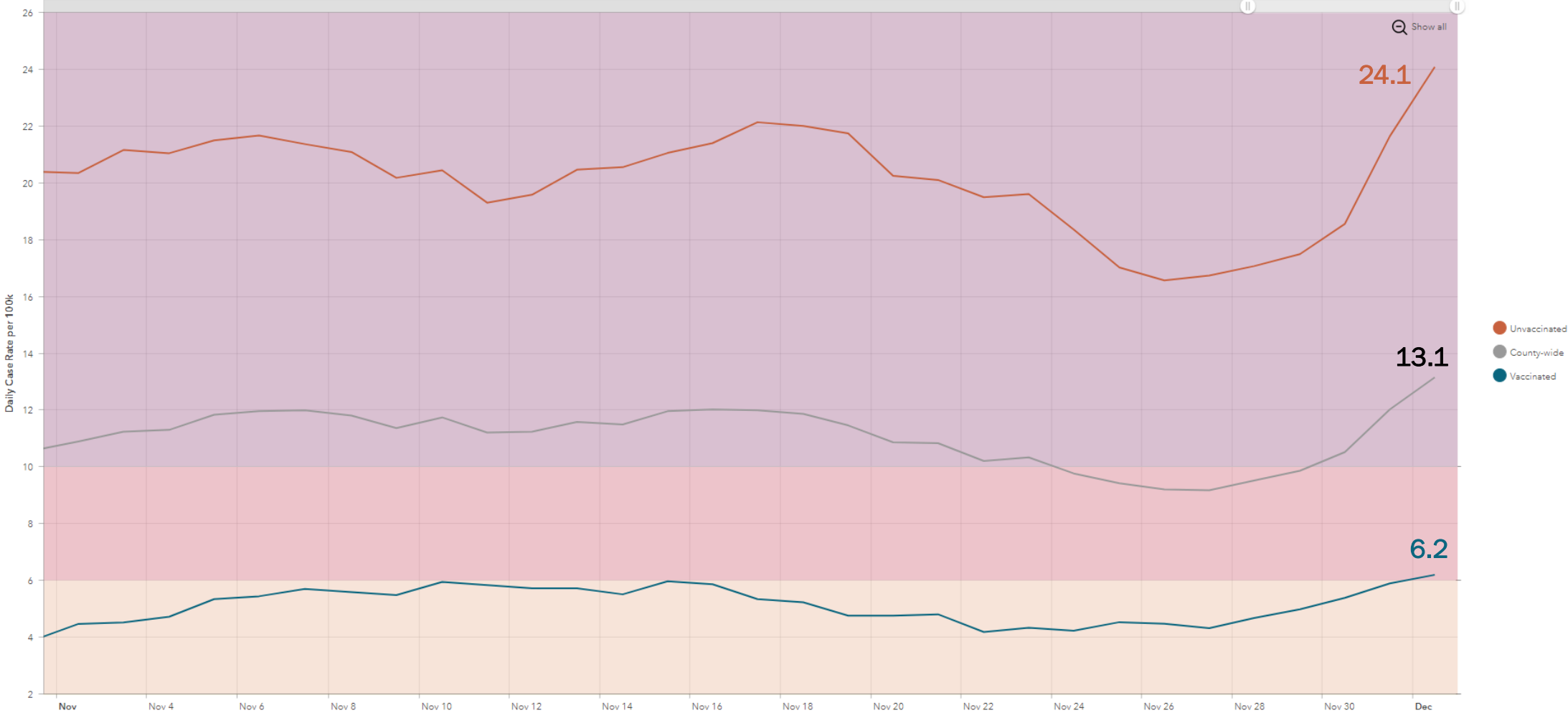
Test Positivity as of December 9, 2021

3.5%



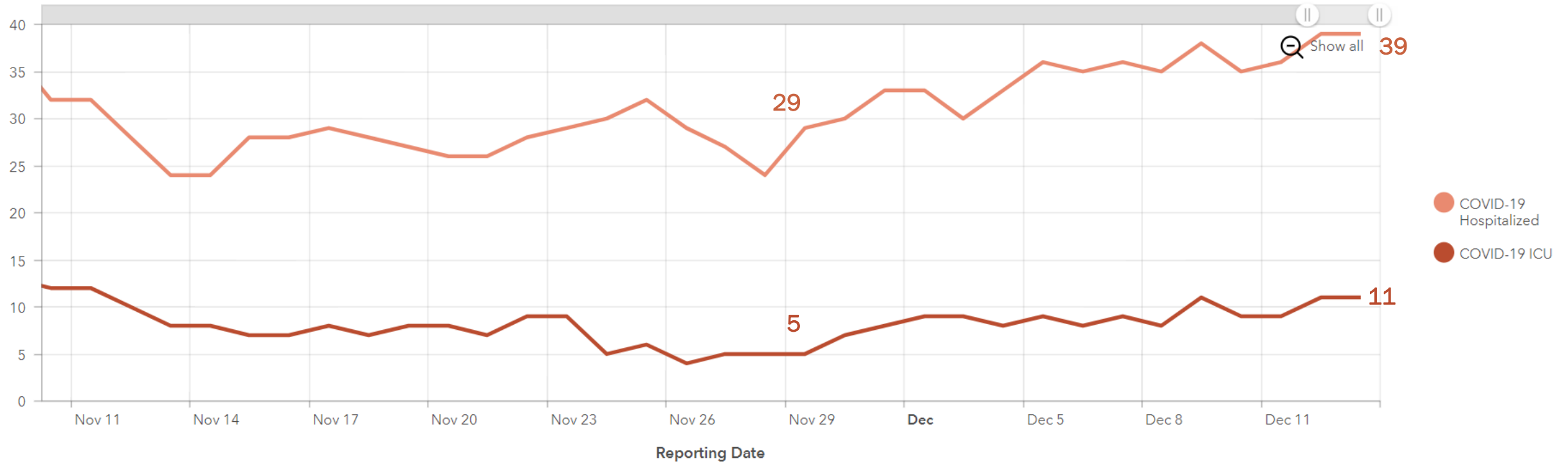
Case Rates by Vaccination Status

Daily Case Rate of Unvaccinated vs Vaccinated in Santa Barbara County



Hospitalization

Adult COVID-19 Patients Hospitalized



CDC Level of Community Transmission

Community Transmission Levels	Low Transmission	Moderate Transmission	Substantial Transmission	High Transmission
Total new cases per 100,000 persons in the past 7 days	0-9.99	10-49.99	50-99.99	≥100
Percentage of NAATs that are positive during the past 7 days	0-4.99%	5-7.99%	8-9.99%	≥10.0%

- Current SBC daily case rate: 12.8/100,000
 - or 89.6/100,000 for 7 days
- SBC has substantial transmission per CDC standards

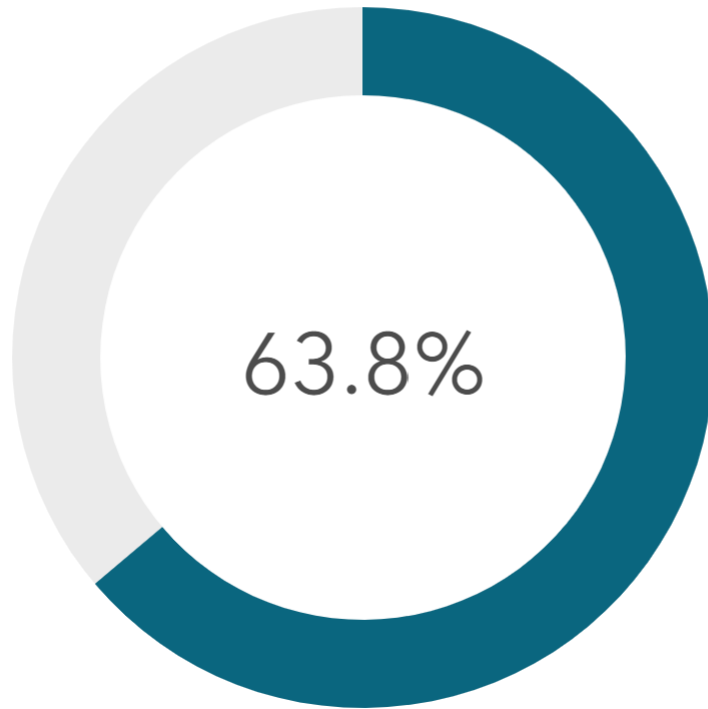


Vaccination Data



SBC Vaccination Rates

% of SB County
Fully Vaccinated



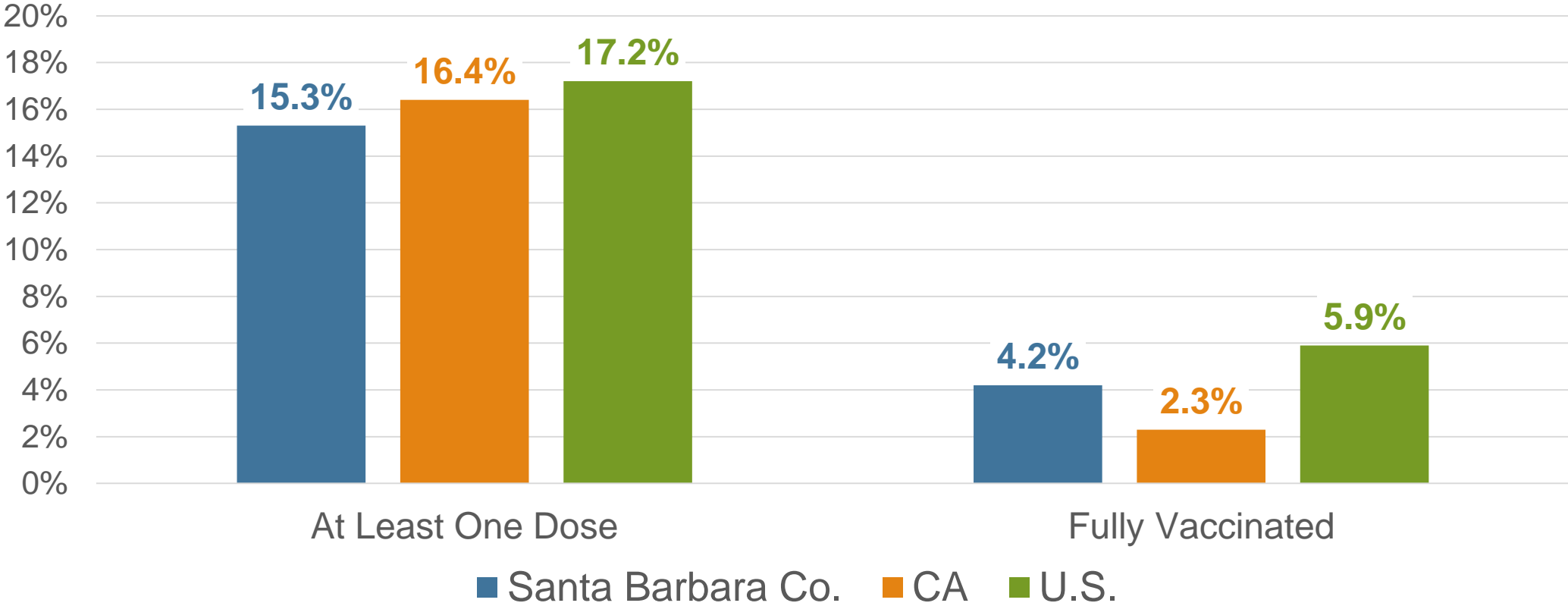
% of Eligible Fully Vaccinated

67.8%

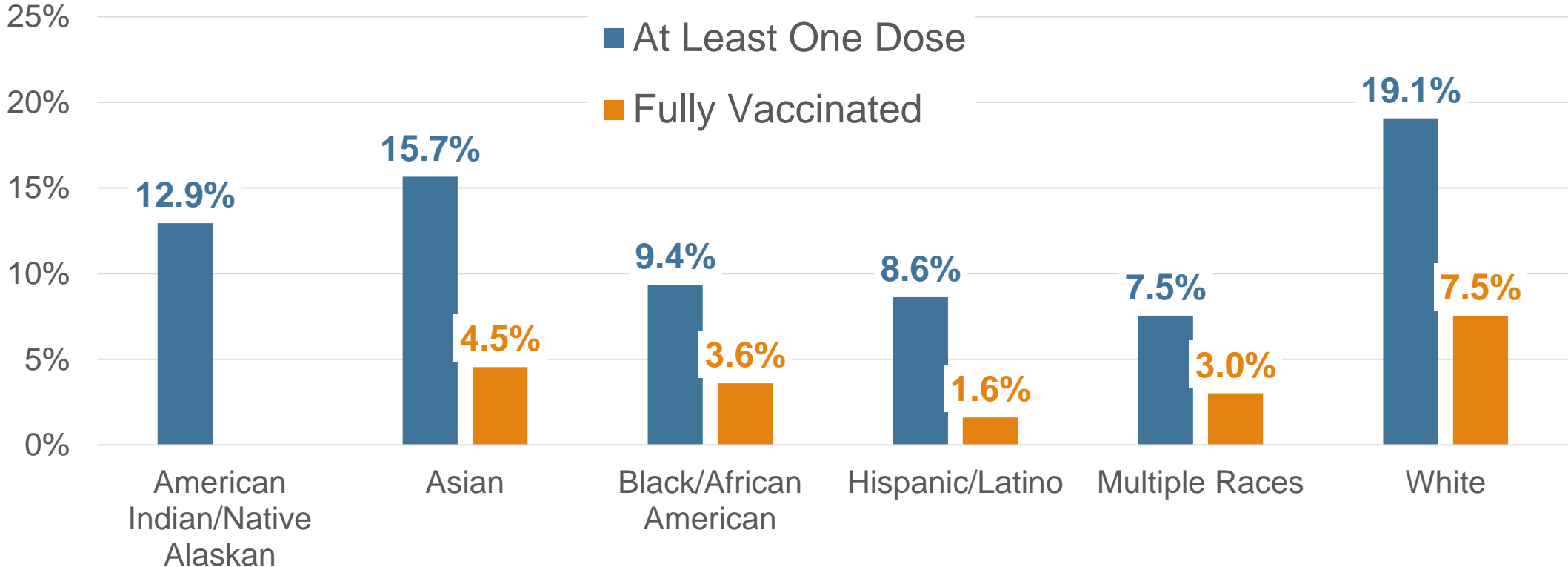
County residents 5+ years old



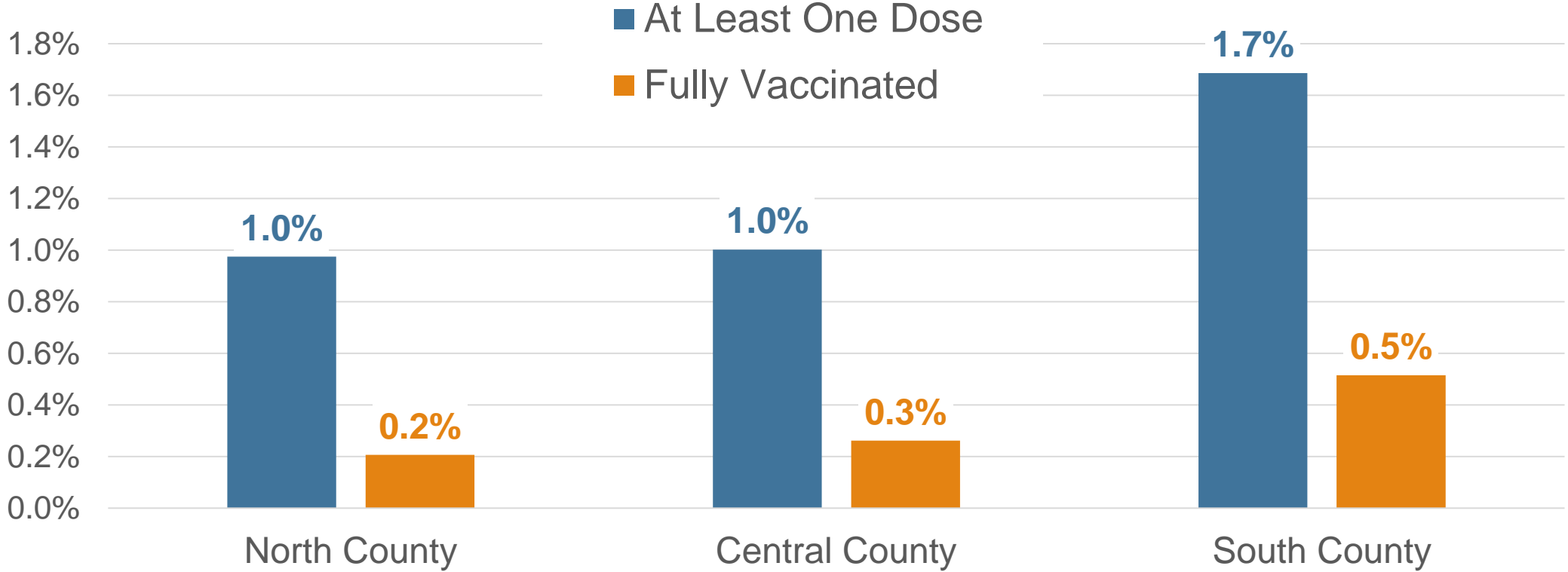
Vaccination Rates Among 5-11 Years Old



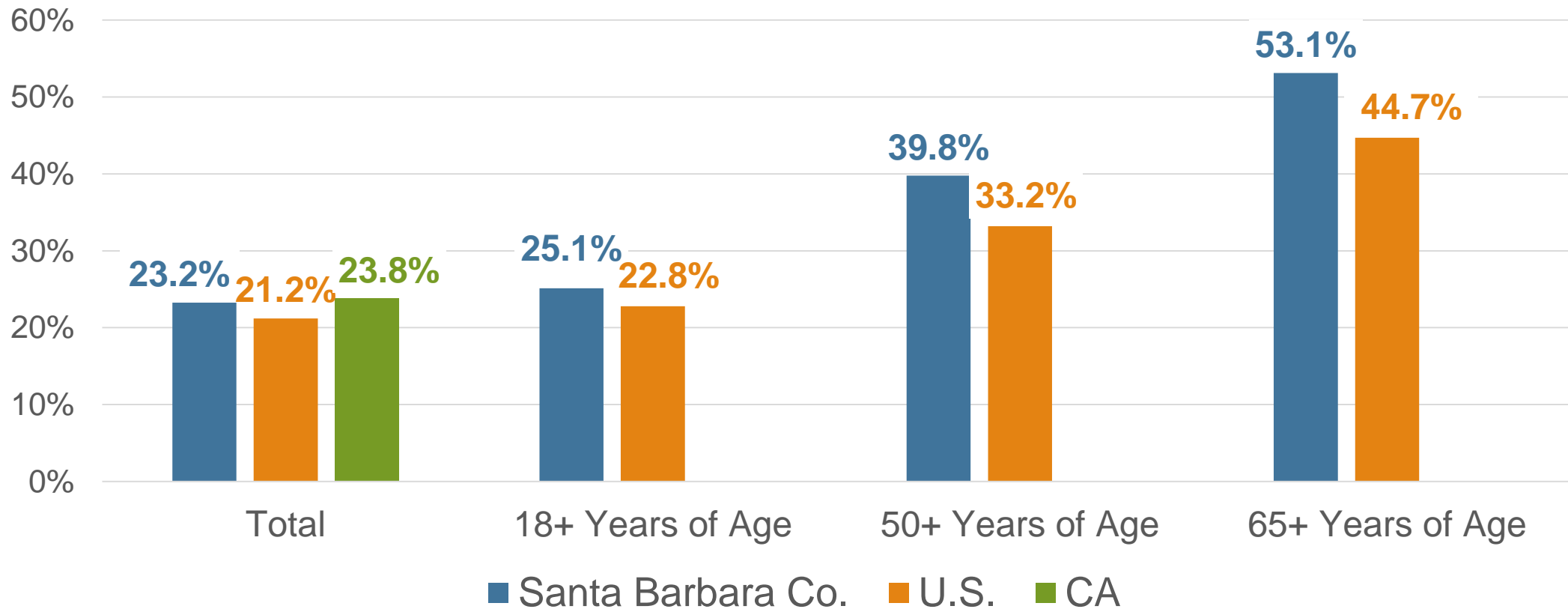
Vaccination Rates Among 5-11 Years Old



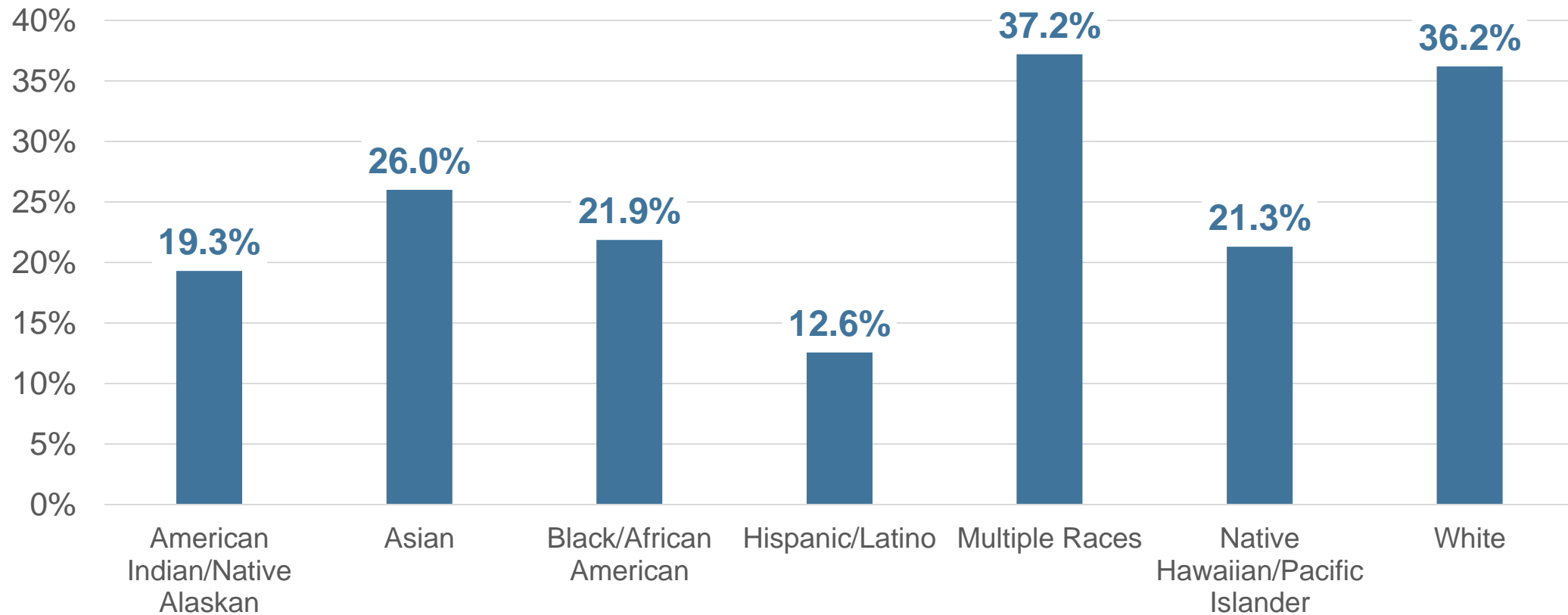
Vaccination Rates Among 5-11 Years Old



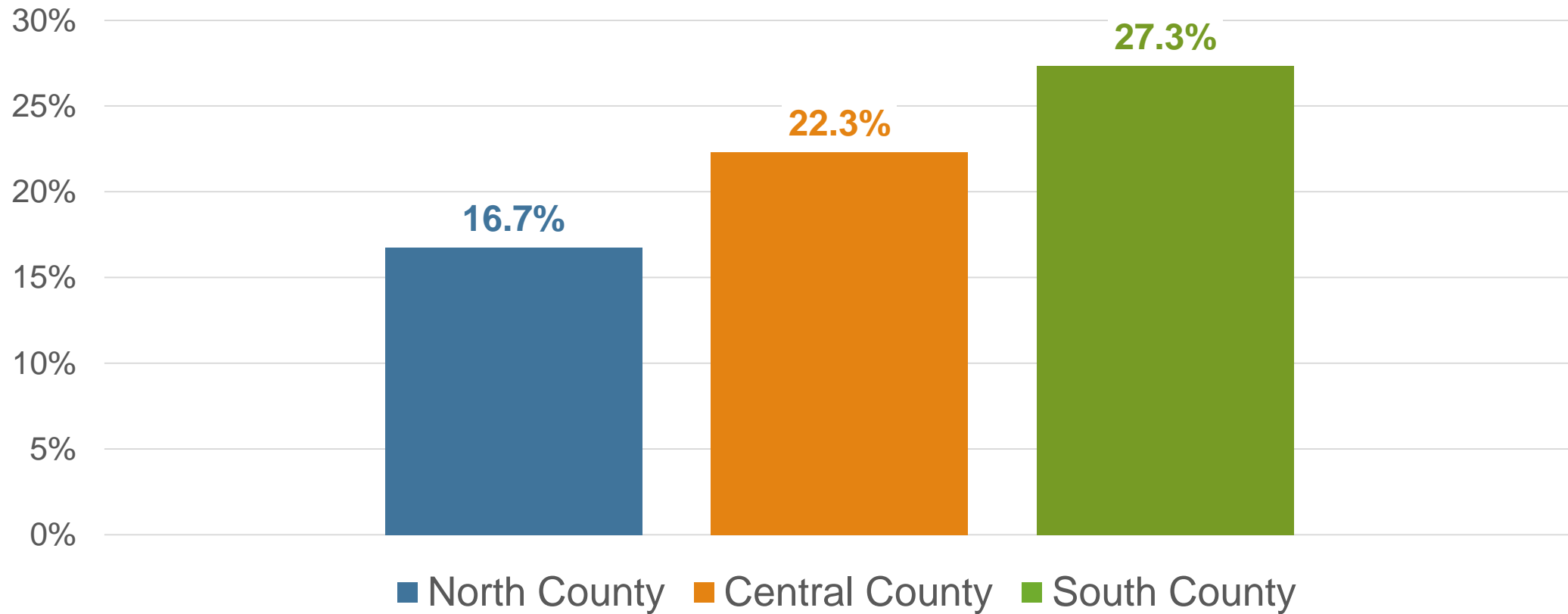
Boosters Among Fully Vaccinated



Percent Boosters Among Fully Vaccinated



Percent Boosters of Fully Vaccinated



CDPH Guidance



New CDPH Guidance

- Universal indoor masking statewide, effective 12/15 until 1/15
- Events with more than 1,000 people: Proof of vaccination or negative test
 - 48 hours before event with PCR test
 - 24 hours before event with antigen test
- Testing recommendation for all travelers to CA or returning to CA: within 3 to 5 days upon arrival



Omicron

WHAT WE KNOW AND WHAT WE DO NOT KNOW

Mutations in Omicron

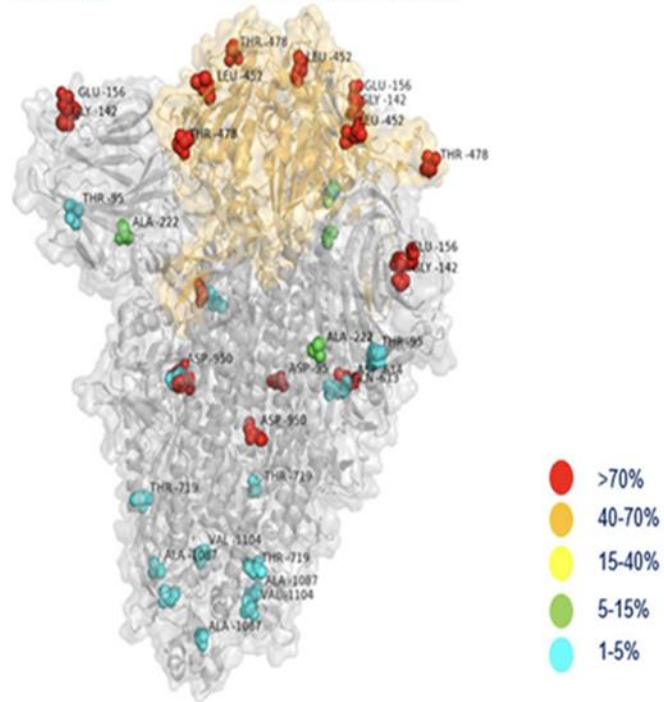
- At least 50 mutations, many of them new
- Some of these mutations likely lead to more rapid spread
- As many as 30 or more mutations on the Spike protein section
- Changes in the Spike protein configuration has the potential to make the virus less vulnerable to antibodies (from vaccine or from previous infection)



Mutations in Omicron

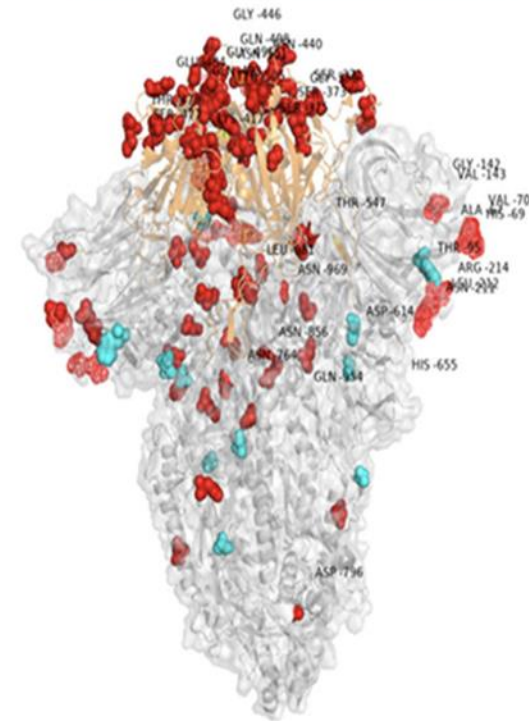
Delta

18 aa mutated residues in the Spike protein
8 residues in >60% of available sequences



Omicron

43 aa mutated residues in the Spike protein
34 residues in >60% of available sequences



The structure of SARS-CoV-2 spike protein showing the active site in orange and the residues coloured against different mutational rate.

Omicron Transmissibility

- Doubling time 2-3 days (vs Delta 4-5 days)
- More contagious than Delta
- Higher rate of breakthrough cases than Delta
- Requires 3rd vaccine dose (vs Delta requires 2nd dose) for protection against more severe disease
- Yet unclear if morbidity and mortality less severe than Delta



Omicron in UK

- UK currently has by far most confirmed Omicron cases worldwide.
- Omicron is apparently causing a new surge in the UK.
- Already 40% of new infections in the UK are due to Omicron.
- It clearly has the potential to replace Delta due to speed of transmission (doubling time about 3 days compared to 4 1/2 days with Delta).
- The rate of breakthrough infections so far seems to be greater than with Delta.
- At this point it is not possible to determine if the level of need for hospitalization is decreased with Omicron compared to Delta.
- A few small studies out of South Africa, Israel, as well as from Pfizer report that a 3rd vaccine dose improves the protection against Omicron greatly.
- Given that we usually trail the UK by 6-8 weeks, we will only be dealing mainly with Delta for the next 2 months.

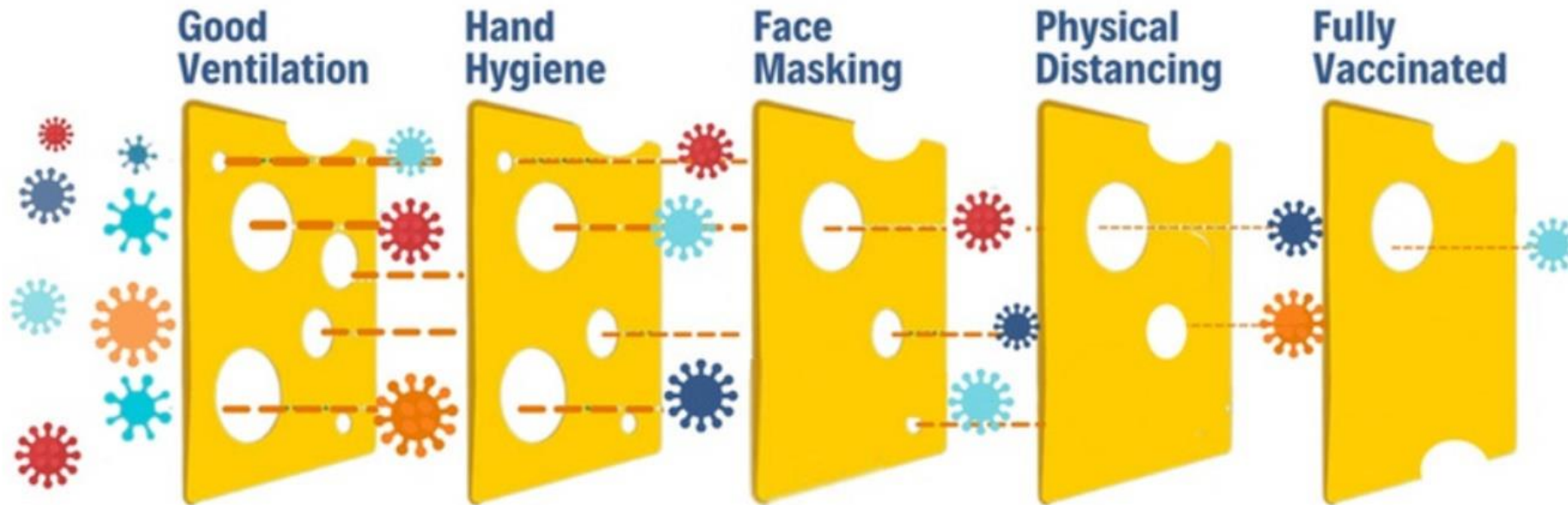


Multiple Layers of Protection

HOW TO STOP COVID-19:

THE SWISS CHEESE MODEL

The more steps you take, the safer you are against COVID-19.



Happy Holidays!



HAPPY HOLIDAYS!

A big THANK YOU
to our amazing businesses and
our valued community during the pandemic.

We appreciate your dedication and commitment
to doing your part to stop the spread of COVID-19.

This holiday season let's...
Be Safe...*by taking precautions*
Be Smart...*by staying informed*
Be Kind...*by supporting each other*

