

## CRIHB COVID-19 Updates December 21, 2021

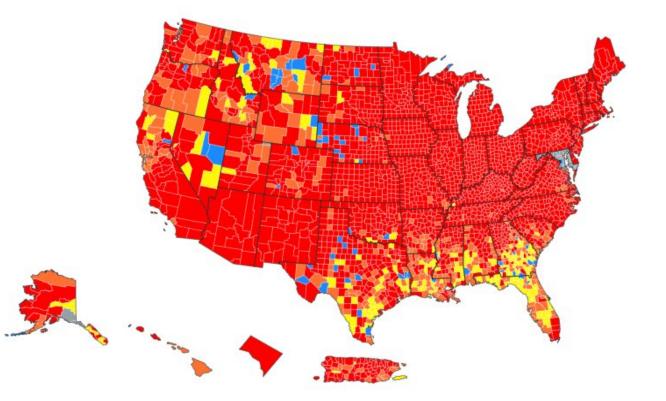
Please sign-in in the Group Chat with your name and Tribe or Indian Health Program name



### COVID-19 cases in the United States

- Compared to a month ago, the pace of new cases nationally is up to 41%
- About three quarters of counties have high levels of transmission
- CDC expects a surge in COVID-19 cases in the coming days to weeks

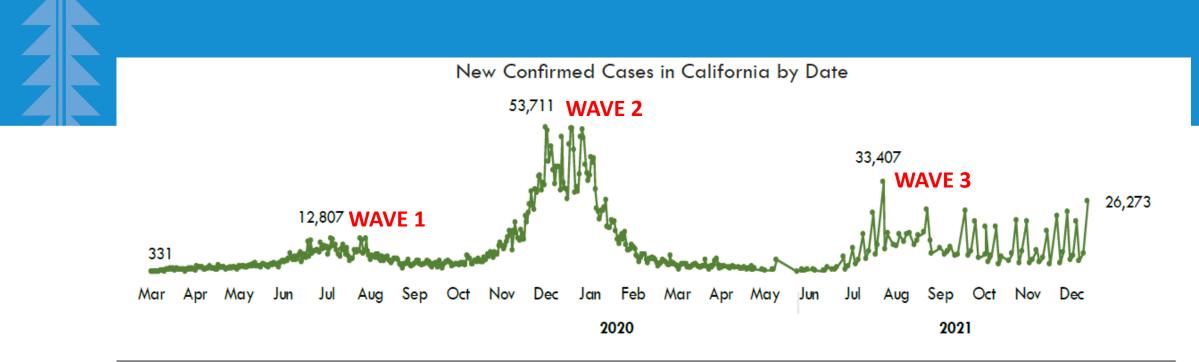
### **Community transmission**



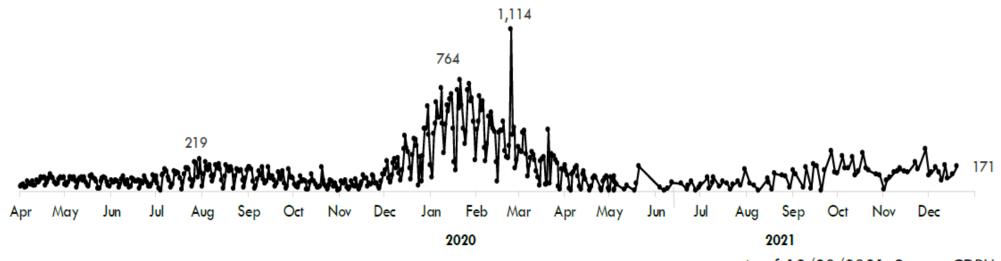
Community Tra	ansmiss	ion in US	by County
	Total	Percent	% Change
High	<mark>25</mark> 41	78.86%	-1.06%
Substantial	392	12.17%	0.84%
Moderate	196	6.08%	-0.71%
Low	67	2.08%	0.25%

How is community transmission calculated?

CDC, 12/21/2021

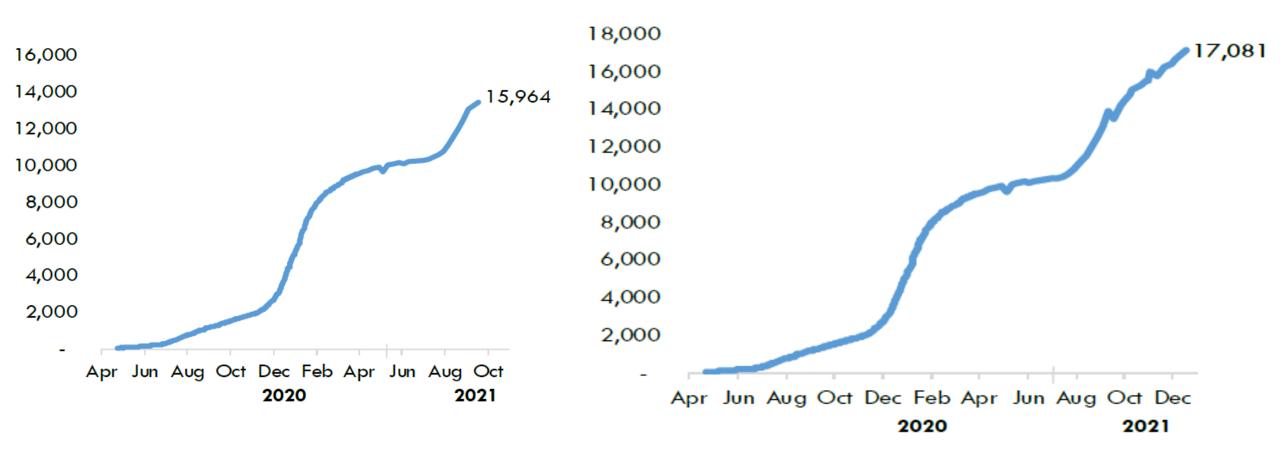


New Confirmed Deaths in California by Date

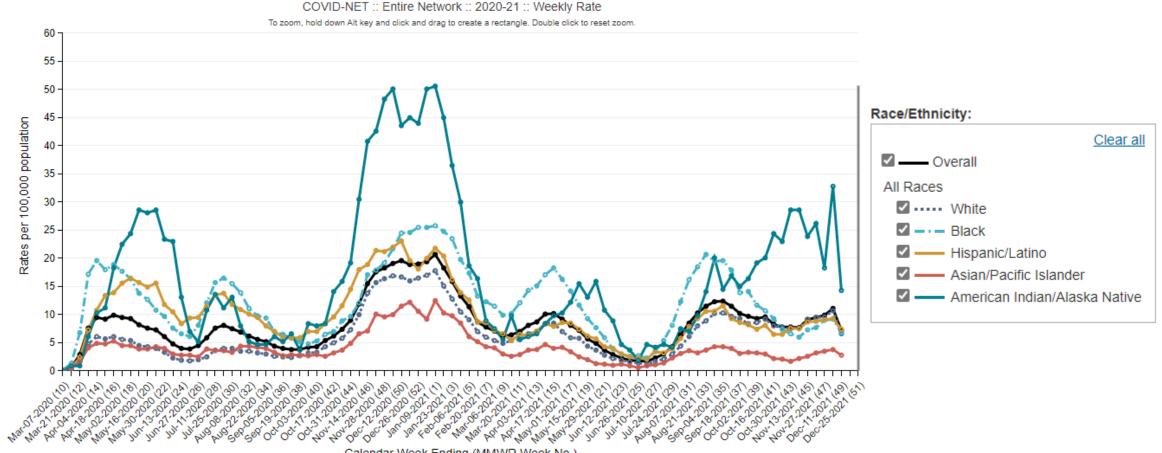


As of 12/20/2021. Source: CDPH

### COVID-19 cases in AIAN, California



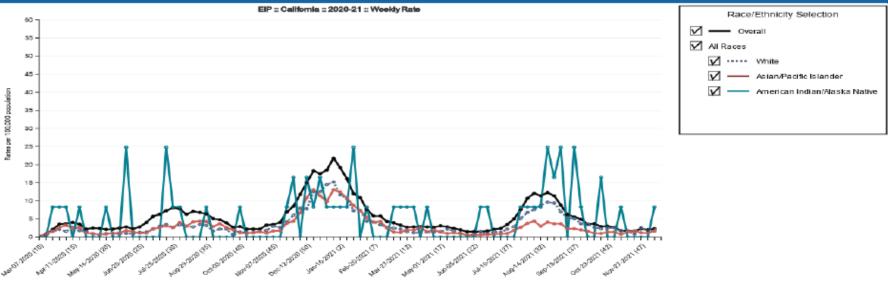
### Hospitalization rates by race/ethnicity, United States



Calendar Week Ending (MMWR Week No.)

#### COVID-19 HOSPITALIZATION BY RACE/ETHNICITY, CA

For the week ending on December 11, 2021, the graph to the right shows that the hospitalization rate among AIAN statewide was 8.3 per 100,000 (vs. 1.7 per 100,000 among Whites).



Celender Week Ending (MMWR Week No.)

#### DAILY NEW CASES 15.3 PER 100K COVID NOT CONTAINED, BUT DAILY NEW CASES ARE AT MEDIUM

# **O**.99

COVID IS STILL SPREADING, BUT AT MEDIUM LEVELS POSITIVE TEST RATE **2.7**%

INDICATES LOW TESTING POSITIVITY

Lab tests reported statewide\*: 105,713,064

7-day test positivity rate\*: 2.4%

\*as of 11/10/21

#### California COVID-19 threat level: High

DAILY NEW CASES

LEVELS

**18.1** PER 100K

COVID NOT CONTAINED, BUT DAILY NEW CASES ARE AT MEDIUM LEVELS INFECTION RATE

| 1.00

COVID IS STILL SPREADING, BUT AT MEDIUM LEVELS **POSITIVE TEST RATE** 

**2.3**%

INDICATES LOW TESTING POSITIVITY

Lab tests reported statewide\*: 117,483,254

7-day test positivity rate\*: 2.8%

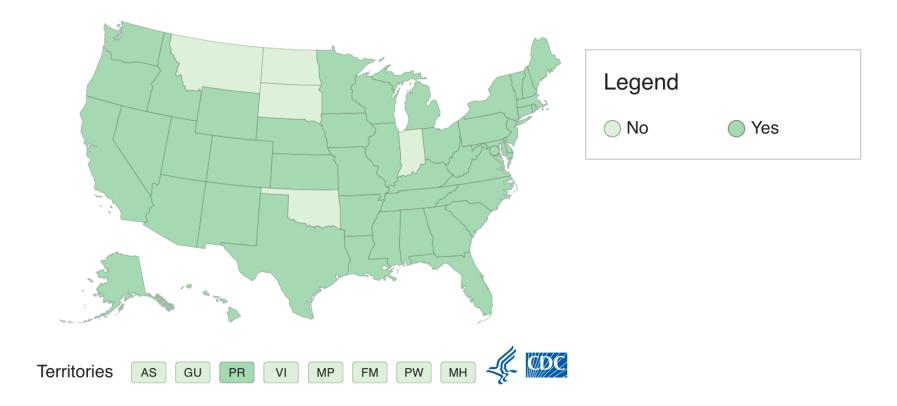
\*as of 12/19/21

### Omicron variant

- November 9 First confirmed case in South Africa
- December I First case detected in the United States (California)
- Spreads more easily

# Where has Omicron been Detected in the United States

CDC is working with state and local public health officials to monitor the spread of Omicron. This map shows the states that have detected at least one case of COVID-19 illness caused by the Omicron variant. More Omicron variant surveillance data on CDC's <u>COVID Data Tracker</u>.



### Variants in California

As of December 15, 299,708 samples have been sequenced in California. In August 2021, 16% of cases in California have been sequenced so far. In July 2021, 23% of cases in California were sequenced. The table below shows the percent of specimens sequenced that are variants of concern or variants of interest statewide.

Specimen Collection Month		Beta	Gamma	Delta	Epsilon	Zeta	Eta	lota	Карра	Mu	Omicron
21-Dec	0.0%	0.0%	0.0%	98.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%

#### 49 cases caused by Omicron in California

Data from California Department of Public Health (CDPH) does not include vaccines administered by Federal entities such as Indian Health Service, Department of Defense, U.S. Federal Bureau of Prisons, and Veterans Affairs.

62,762,797 Doses administered

#### 3,055,332 People partially vaccinated

26,478,495 People fully vaccinated

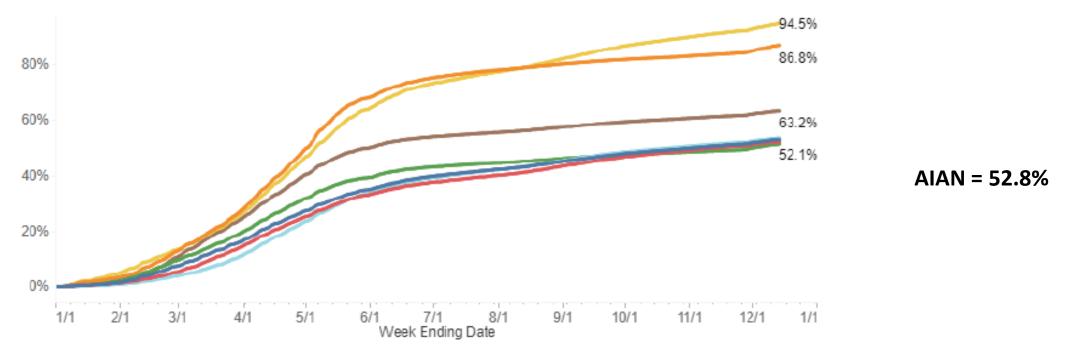


#### Doses administered by county of residence

16,177,639
5,610,346
5,172,338
3,774,773
3,044,546

As of 12/20/2021. Source: CDPH

### Fully vaccinated by race/ethnicity, California



Note: Population estimates do not include "other" or 'unknown" race and ethnicity categories, therefore their percentage of state population is not available. Some race/ethnicity groups in this county may have small populations. Where the county of residence was not reported, the county where vaccinated is used. Data is not shown where there are fewer than 11 records in a group.



Source: California Department of Public Health, accessed 12/20/2021

### New guidance in California

- As of December 15, 2021, the California Department of Public Health requires masks to be worn in all indoor public settings irrespective of vaccine status through January 15, 2022
- New travel advisory, all travelers arriving in California must test for COVID-19 within three to five days after arrival, regardless of vaccination status
- Mega events (concerts, sports) require proof of vaccination, or a negative COVID-19 test

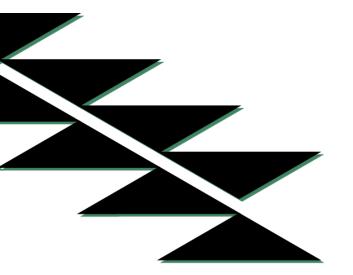
Submit CTEC TA online request: https://crihb.org/technical-assistance-request-form/

### How to reach us for questions:

<u>Clinical-related assistance:</u> Thomas Kim, MD, MPH Medical Director/Epidemiologist <u>tkim@crihb.org</u>

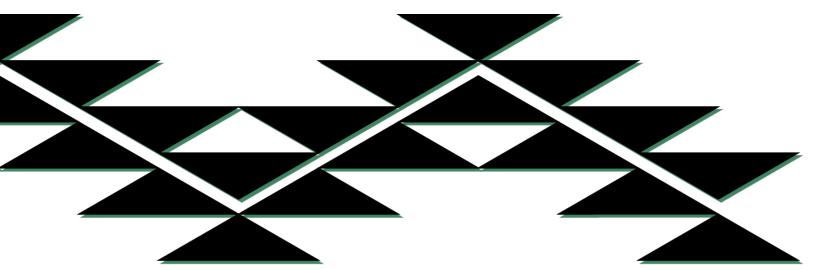
<u>Community or grant-related assistance:</u> Kathleen Jack, MPH Deputy Director, Research and Public Health <u>kjack@crihb.org</u>

Epidemiologic or data-related assistance: Aurimar Ayala, MPH Epidemiology Manager aayala@crihb.org



### Omicron and the Covid-19 Vaccine in an Ever-Evolving Pandemic

Thomas J. Kim, MD, MPH











# Pandemic update on Omicron



### **Omicron Variant**



# lceland

reland

# Sweden

Norway

Britain

# Estonia

From the New York Times Covid-19 Variant Tracker



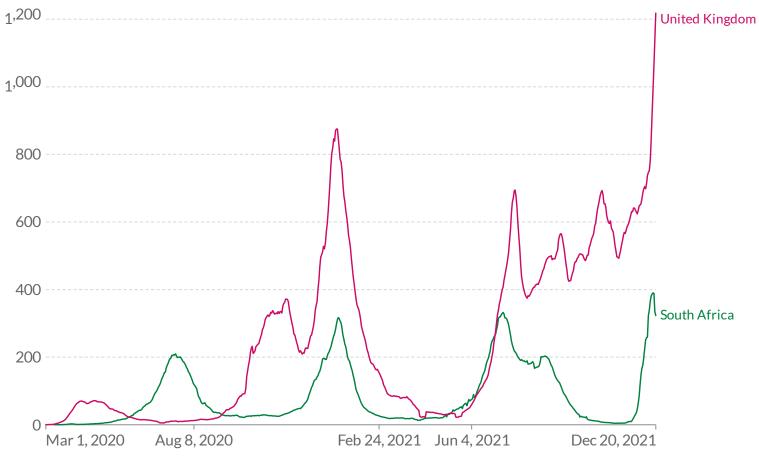
### **Omicron Variant**



### Contagiousness

#### Daily new confirmed COVID-19 cases per million people

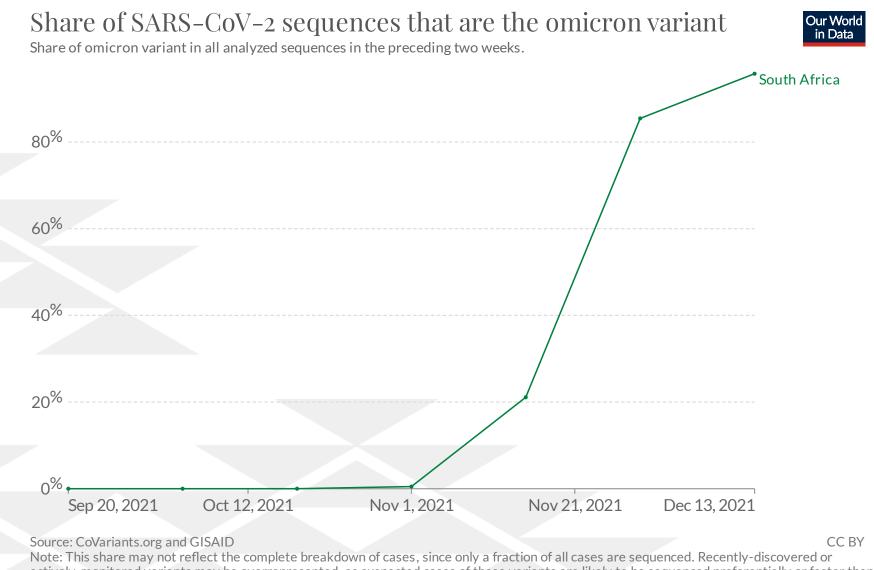
7-day rolling average. Due to limited testing, the number of confirmed cases is lower than the true number of infections.



Source: Johns Hopkins University CSSE COVID-19 Data

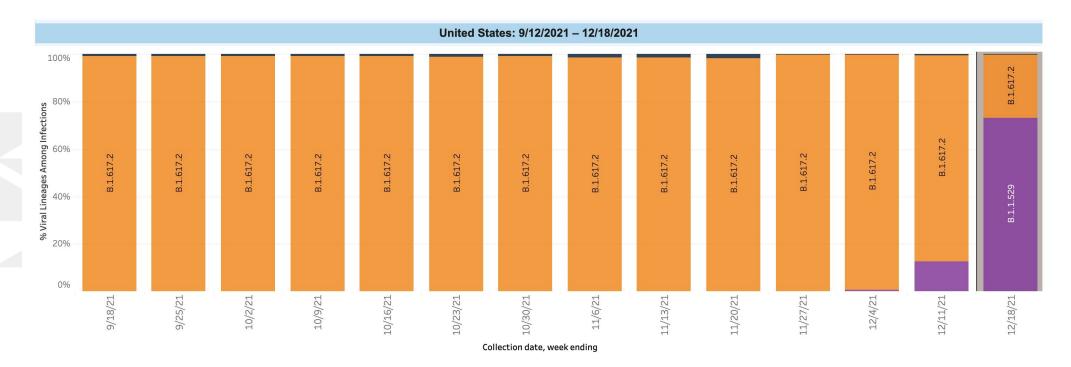
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Our World in Data



Note: This share may not reflect the complete breakdown of cases, since only a fraction of all cases are sequenced. Recently-discovered or actively-monitored variants may be overrepresented, as suspected cases of these variants are likely to be sequenced preferentially or faster than other cases.

### Dominance of Omicron Variant in US



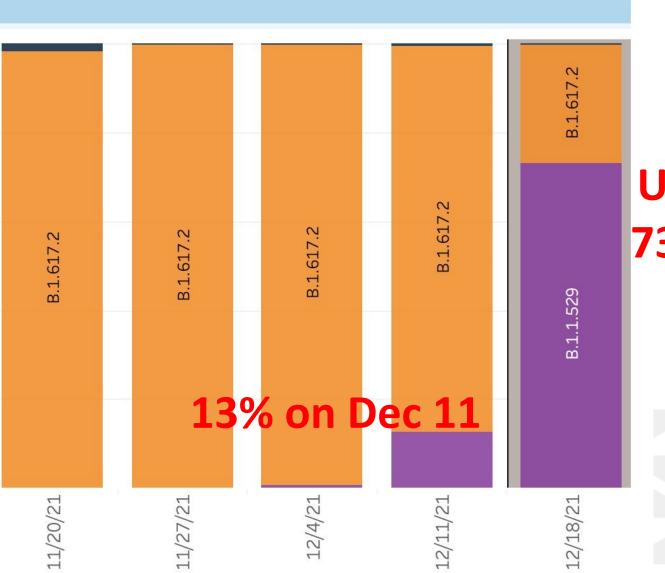
#### Nowcast On Nowcast Off

- Nowcast Off
- United States: 12/12/2021 12/18/2021 NOWCAST

USA

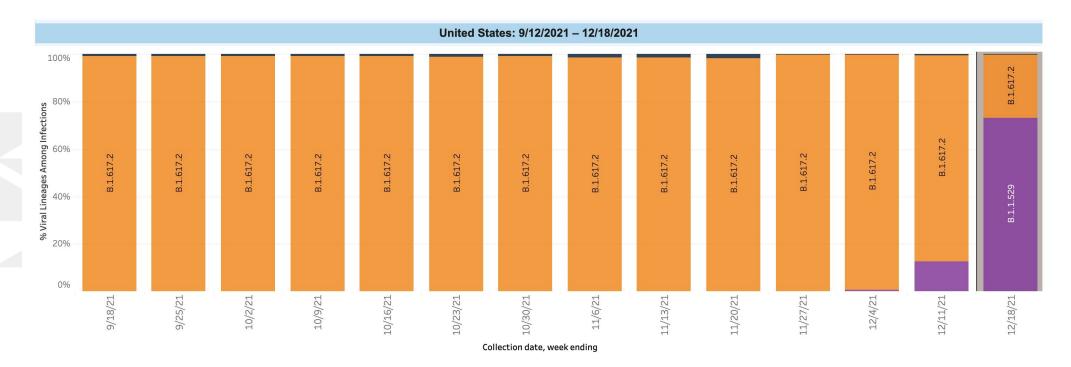
WHO		US			
label	Lineage #	Class %Total	95%PI		
Delta	B.1.617.2	VOC 26.6%	5.1-65.8%		
Omicr	B.1.1.529	VOC 73.2%	34.0-94.9%		
Other	Other*	0.1%	0.0-0.4%		

### **Dominance of Omicron Variant**



### United States 73% on Dec 20

### Dominance of Omicron Variant in US



#### Nowcast On Nowcast Off

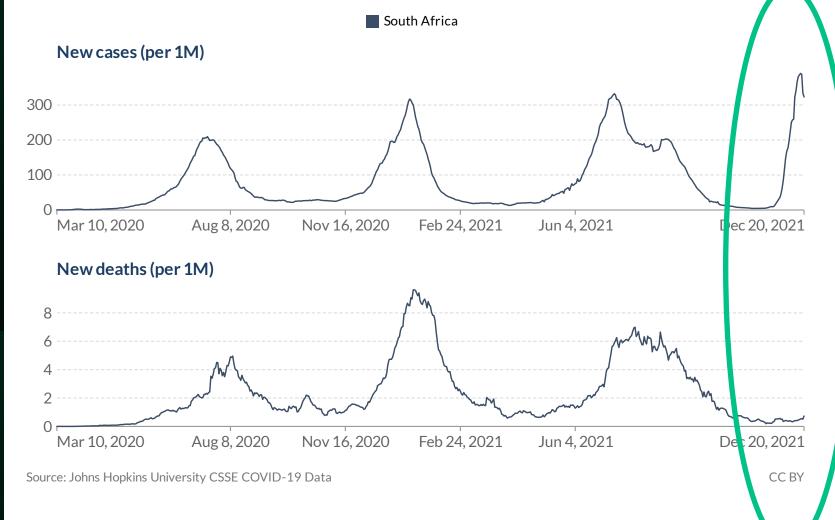
- Nowcast Off
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USA

WHO		US			
label	Lineage #	Class %T	otal 95%Pl		
Delta	B.1.617.2	VOC 26.	5% 5.1-65.8%		
Omicr	B.1.1.529	VOC 73.	2% 34.0-94.9%		
Other	Other*	0.1	% 0.0-0.4%		

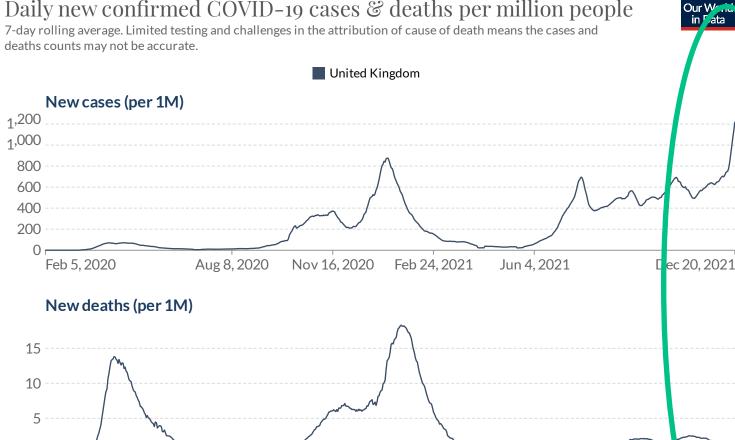
#### Daily new confirmed COVID-19 cases & deaths per million people

7-day rolling average. Limited testing and challenges in the attribution of cause of death means the cases and deaths counts may not be accurate.



### Severity

Our World in Data



Feb 24, 2021

Jun 4, 2021

### Severity

800 600

400 200

15

5

 $\cap$ 

Feb 5, 2020

Source: Johns Hopkins University CSSE COVID-19 Data

Aug 8, 2020

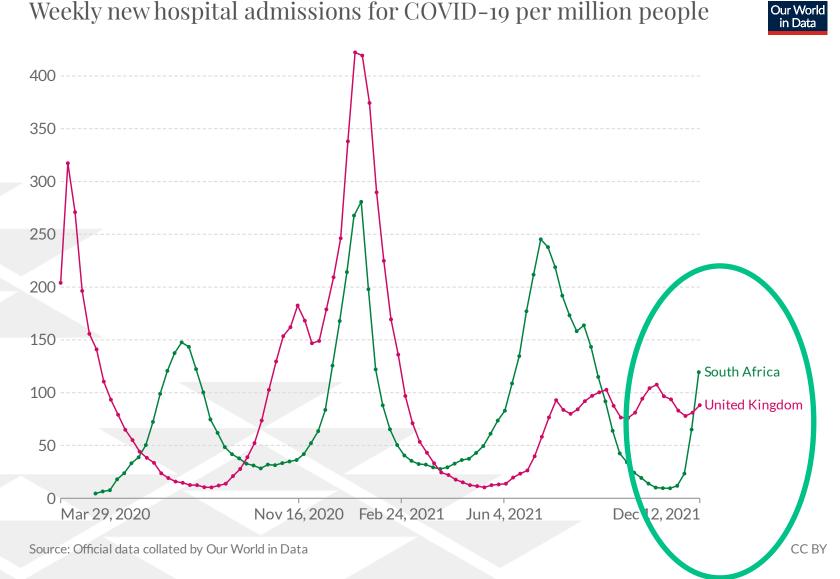
Nov 16, 2020

#### Daily new confirmed COVID-19 cases & deaths per million people

7-day rolling average. Limited testing and challenges in the attribution of cause of death means the cases and deaths counts may not be accurate.

Dec 20, 2021

CC BY



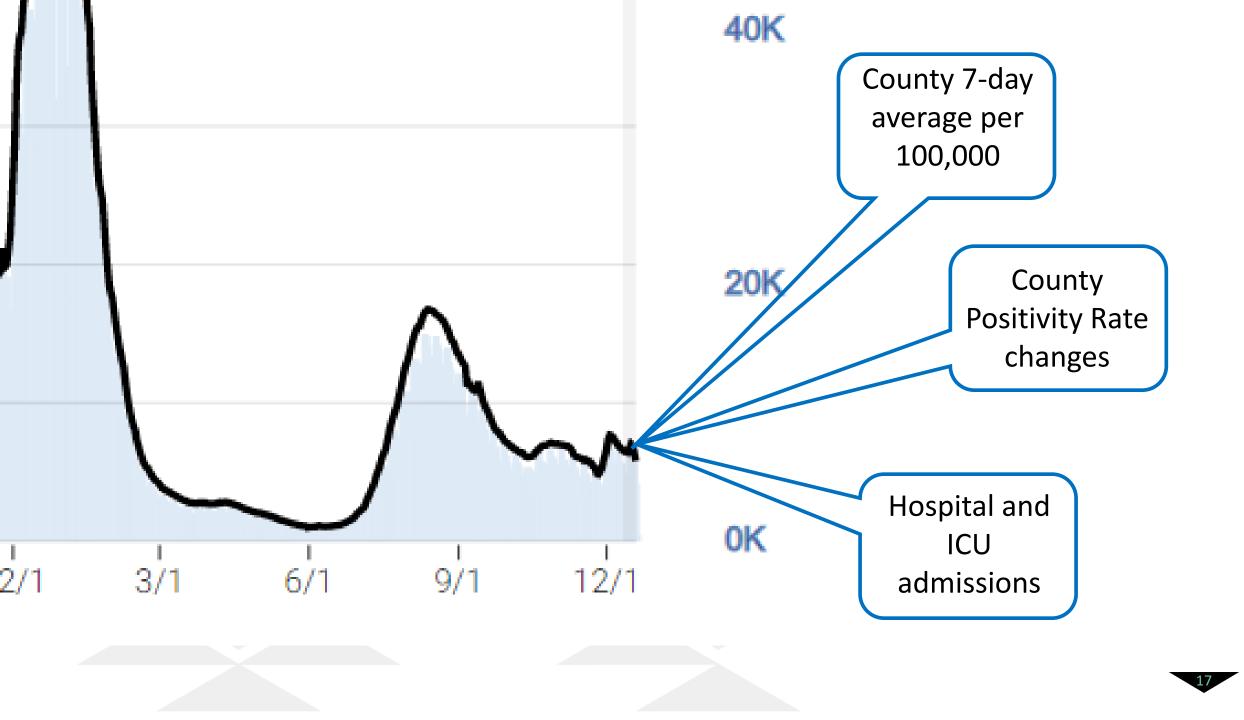
#### Weekly new hospital admissions for COVID-19 per million people

#### 4,935,461 total confirmed cases

26,273 new cases (0.5% increase) 13.0 cases per 100K (7-day average)

Cases per 100K Cases Pending 120 60K 100 7-day average 80 40K 60 40 20K 20 0K 0 3/1 9/1 12/16/1 6/1 9/1 3/1 12/1

Tracking Covid-19 in California and in your region



#### 4,935,461 total confirmed cases

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Tracking Covid-19 in California and in your region

# Covid-19 Vaccine and Omicron

MRNA Vaccine after dilution date/time:

FE2707 10/2021 COMIRNATY Sterile concentration COVID-19 mRNA b doses after di Discard date/time



### Vaccine Evasion – Neutralizing Antibody Studies

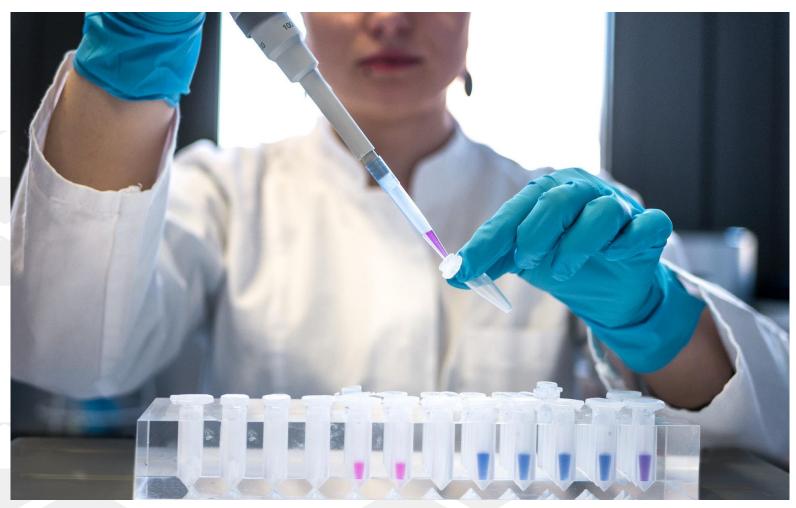


Photo by Julia Koblitz on Unsplash

### Early Study Take-Aways

- Omicron compromises
   effectiveness of vaccines
- But protection is not completely gone
- Result: more "breakthrough" infections





### Adding Booster Doses



- Neutralizing antibody tests
- Antibodies from a person with a booster dose
- Neutralization to Omicron is 80-90%
- Result: presumed strengthened protection against infection, hospitalization and death

### **Current Understanding**

- Omicron is more transmissible (2-3x)
  - Evidence of vaccine evasiveness
  - Inherent ability?
- Unknown if Omicron causes more/less severe disease
- 2 doses mRNA vaccine protection
  - Modestly against infection
  - Still decent against hospitalization/deaths
- 3 doses mRNA vaccine protection
  - Strongly presumed effective against infection
  - Strongly presumed effective in preventing hospitalization/deaths
- Previously infected individuals
  - Unknown though expected protection

#### From Eric Topol MD, Scripps Research Translational Institute

	Good News	Bad News
Transmission/spread	We know how to reduce by mitigation measures (masks, especially, medical grade, distancing, ventilation, air filtration)	Cases doubling every 2-3 days 3-fold higher transmission than Delta for household contacts
Vaccine effectiveness (Pfizer)	Gets to ~75% with a booster (duration ?)	Drops to ~35% with only 2-doses Booster got to 95% with Delta
Illness severity/virulence	Markedly less hospitalizations than prior variants; cases mostly mild	A lot more cases, so even when less severe absolute numbers can be high
Immune escape	It's blunted by the 3 <sup>rd</sup> shot	Reduced vaccine effectiveness Monoclonal antibodies less effective Key driver of rapid spread
Reinfection	Prior Covid plus vaccination provides solid protection	At least 2.5X increased compared with prior variants (UK data: 3-8 X Delta)

### We can do a lot

- Do all possible to encourage initial vaccination and booster doses
- Keep wearing masks indoors
- Distance when possible
- Use rapid tests as available
- Follow isolation/quarantine
   instructions
- Stay connected with people safely over the holidays



### You've got to have a lot of humility with these viruses. I know less about viruses than I did 10 years ago."

- Dr. Michael Osterholm Director of the Center for Infectious Disease Research and Policy, University of Minnesota



#### CRIHB COVID-19 Update Meeting Notes

<u>CRIHB STAFF</u> ATTENDEES:	DATE: Tuesday, December 21 <sup>st</sup> , 2021 (3:30 PM-4:30 PM, PST) HOST: CRIHB						
Aurimar Ayala	MEETING RECORDING: https://us02web.zoom.us/rec/share/89D3AEANFBqpzT5N-						
Dr. Thomas Kim Kathleen Jack	YcCErvwZc_x7qpNjnFy8WxQDrTPFbe-XfmlPV7vffytn1jB.evWlVwrUlb5dlixZ?startTime=1640129819000						
	Topics discussed:						
	COVID-19 cases in the U.S.						
	Current COVID-19 case trends in California						
	COVID-19 Variant in California						
	<ul> <li>COVID-19 cases in American Indian/Alaska Native (AIAN) communities</li> </ul>						
	New guidance in California						
	Omicron and the COVID-19 Vaccine						
	Case trends nationally:						
	<ul> <li>New cases are up 41% since compared to November</li> </ul>						
	<ul> <li>COVID-19 surge expected as we approach the holidays</li> </ul>						
	Case trends in California:						
	<ul> <li>As of 12/20/21, there are around 26,273 new confirmed cases</li> </ul>						
	Transmission persists     Since had a second s						
	<ul> <li>Since last month, there are increases in daily new cases and infections rates</li> </ul>						
	Slight decrease in positive test rates						
	COVID-19 Variants:						
	<ul> <li>Omicron was first detected in the U.S. in California on December 1<sup>st</sup>, 2021</li> <li>Delta is still the most provalent variant. However, only a small persent of cases are</li> </ul>						
	<ul> <li>Delta is still the most prevalent variant. However, only a small percent of cases are sequenced each month so Omicron rates may increase as sequencing occurs</li> </ul>						
	COVID-19 Trends in AIAN:						
	<ul> <li>Compared with 15,964 cases in October, there are now 17,081 cases in December</li> </ul>						
	<ul> <li>52.8% of AIAIN are vaccinated, which is much lower than other racial/ethnic groups</li> </ul>						
	<ul> <li>As of December, AIAN are still experiencing higher rates of COVID-19 hospitalizations</li> </ul>						
	compared to other racial/ethnic groups in California						
	New Guidance in California:						
	• As of December 15 <sup>th,</sup> 2021, the California Department of Public Health requires masks to						
	be worn in all indoor public settings						
	New travel advisory, all travelers arriving in California must test for COVID-19 within						
	three-five days						
	<ul> <li>Mega events require proof of vaccination, or a negative COVID-19 test</li> </ul>						
	Omicron and the COVID-19 Vaccine						
	<ul> <li>Omicron is 2-3 times more transmissible than Delta</li> </ul>						
	<ul> <li>Omicron is 3-8 times more likely to cause breakthrough infections</li> </ul>						
	<ul> <li>73% of new cases in the U.S. are the Omicron variant</li> </ul>						
	<ul> <li>The Omicron variant will become the dominant variant in the next few weeks</li> </ul>						
	<ul> <li>Although protection is not completely gone, Omicron does compromise the effectiveness</li> </ul>						
	of vaccines						
	<ul> <li>Studies show that those with booster doses have a strengthened protection against</li> </ul>						
	infection, hospitalization, and death						
	<ul> <li>Three doses of the mRNA vaccine are recommended (i.e., two initial mRNA vaccines with</li> </ul>						
	the booster dose)						
	<ul> <li>Continue to wear mask and social distance, if possible</li> </ul>						