

Zoom link

- ZOOM link <https://us02web.zoom.us/j/88274227563>

January 11, 2022



Serving pharma, biotech, diagnostics and medical devices

Pia Abola

NEWS ITEM: IN 2021 AMERICANS SET A NEW RECORD FOR GAMBLING...

JUDGE © 2022 KING FEATURES

I
PLAYED
SLOT MACHINES.



I
PLAYED
POKER.



I
DIDN'T GET
VACCINATED.

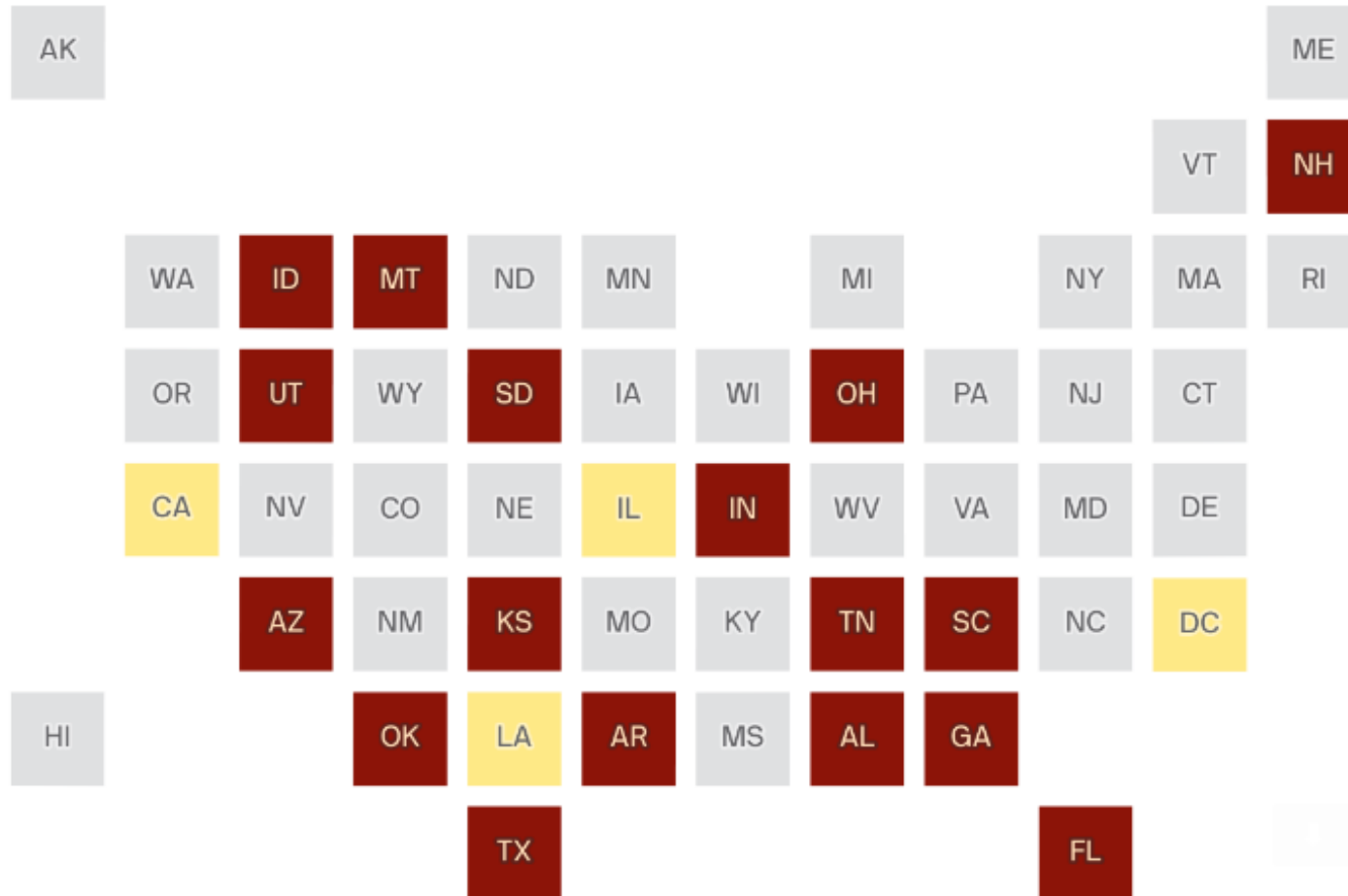




Should we follow the law as required in 1918??

States with student vaccine mandates or mandate bans

Student vaccine mandates Ban on vaccine mandates



Reproduced from [National Academy for State Health Policy](#). Map: Danielle Alberti/Axios



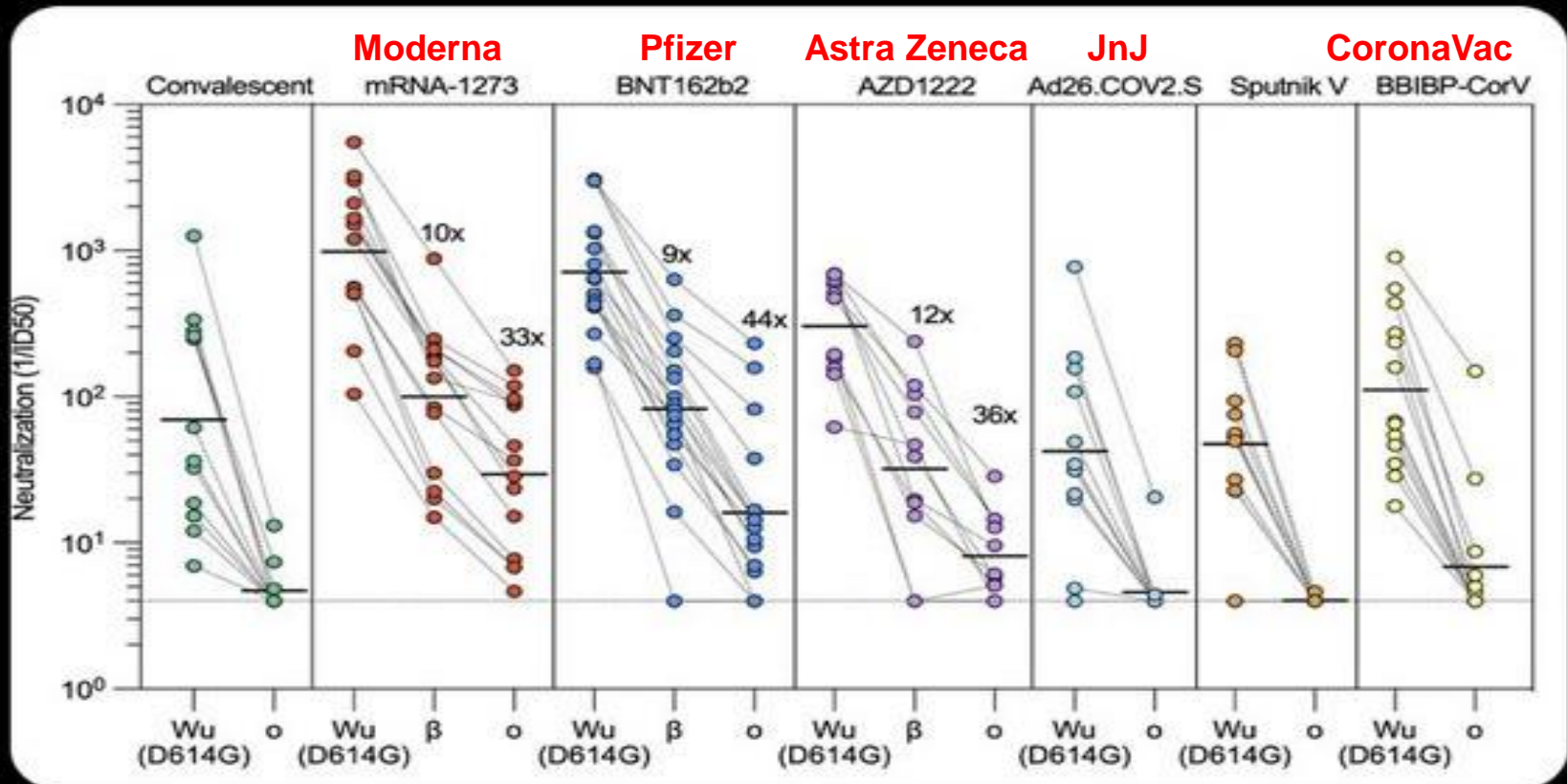
Eric Topol
@EricTopol

...

To a varying extent, Omicron overriding all vaccines and prior infection for ability to induce neutralizing antibodies

And a report that even 3 doses of CoronaVac, widely used around the world, not providing sufficient antibody level response to Omicron

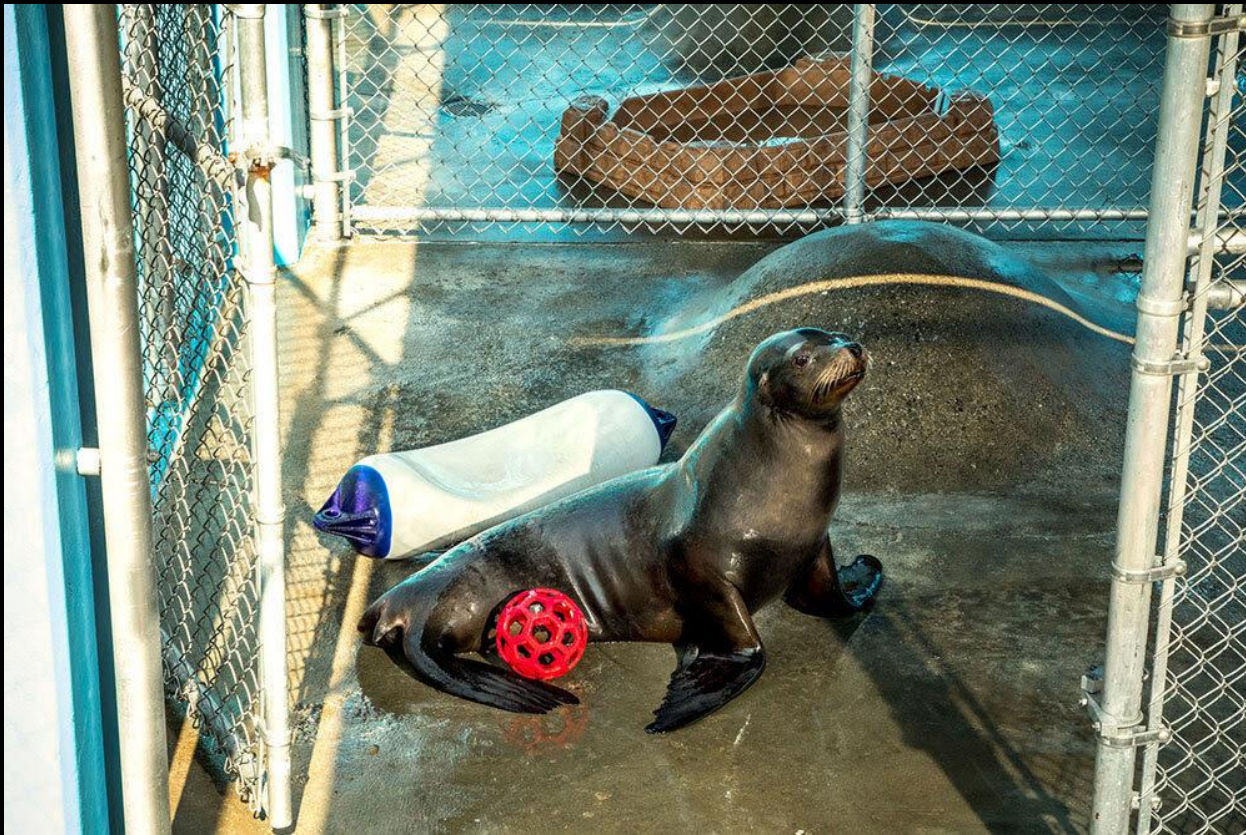
[bloomberg.com/news/articles/...](https://www.bloomberg.com/news/articles/...)





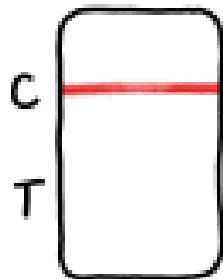
Rilu, an 11-year-old snow leopard, has died after contracting COVID-19 at the Miller Park Zoo in Bloomington, Illinois. Rilu was one of five big cats to test positive for the virus at the zoo last month. JOEL



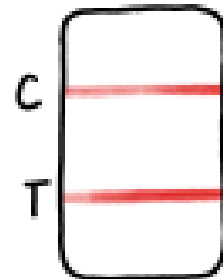


Are humans next? Cronutt, a seven-year-old sea lion, was having several seizures a week and his health was rapidly deteriorating. But the animal went through surgery that involved transplanting healthy pig neurons into his damaged hippocampus. The success of the experimental brain surgery and others have led researchers to broaden efforts toward a similar surgery to help epilepsy and other issues in humans.

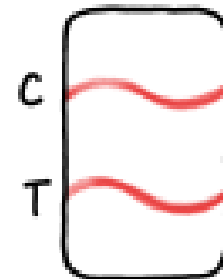
INTERPRETING RAPID TEST RESULTS



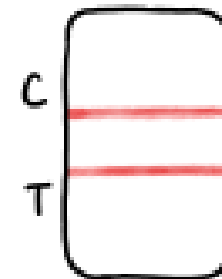
NEGATIVE



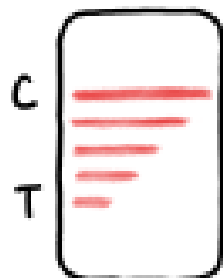
POSITIVE



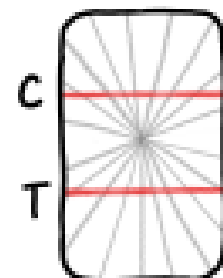
APPROXIMATELY
POSITIVE



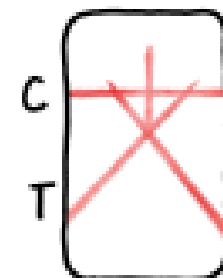
POSITIVE
(COLLEGE
RULED)



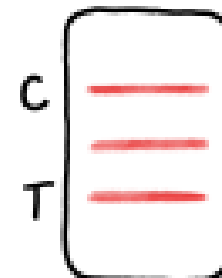
GOOD
CELL
SIGNAL



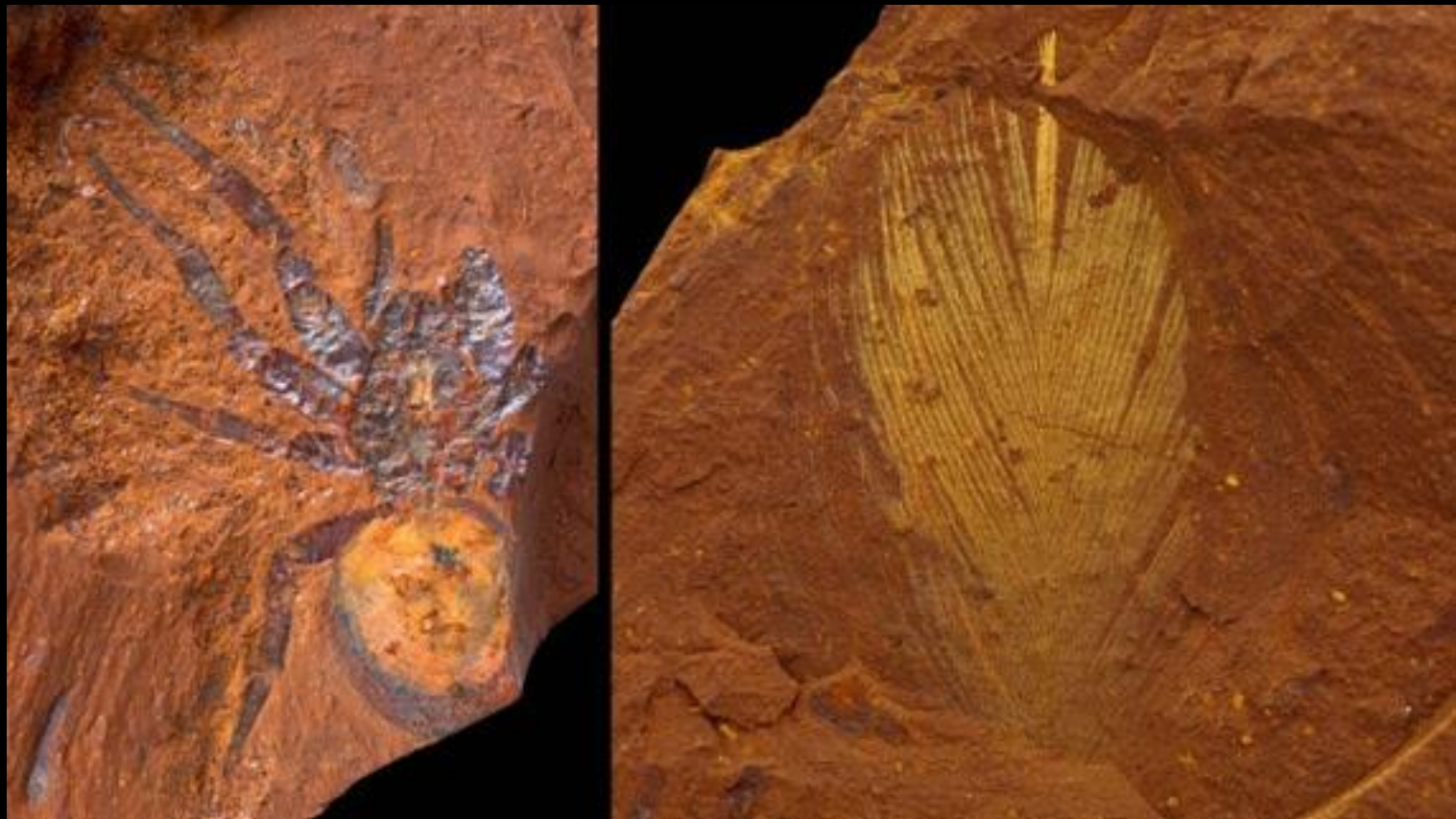
DID YOU KNOW
THESE LINES
ARE ACTUALLY
PARALLEL?



THE BLAIR
WITCH IS
NEAR



CLICK TO
EXPAND
COVID
MENU



Buried in New South Wales' so-called dead heart, a trove of exceptional fossils, including those of trapdoor spiders, giant cicadas, tiny fish and a feather from an ancient bird, reveal a unique snapshot of a time when rainforests carpeted the now mostly-arid continent. These remains of plants and animals lived sometime between 16 million and 11 million years ago.

January 11, 2022



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Pia Abola

IHME – 12.79M currently 13.38M Mar 1

Last Updated at (M/D/YYYY)
1/11/2022, 12:21 PM

Total Cases

312,273,593

Total Deaths

5,501,266

Total Vaccine Doses Administered

9,473,526,314

Cases | Deaths by
Country/Region/Sovereignty

28-Day Cases

39,764,632

28-Day Deaths

180,267

28-Day Vaccine Doses Administered

922,075,802

US
28-Day: **11,421,909** |
19,065
totals: **61,983,723** | **841,123**

France
28-Day: **3,937,019** | **5,048**
totals: **12,680,780** | **127,048**

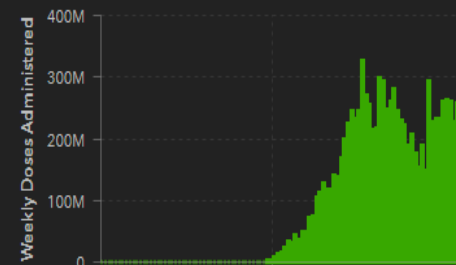
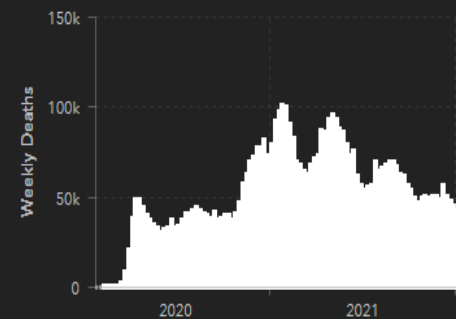
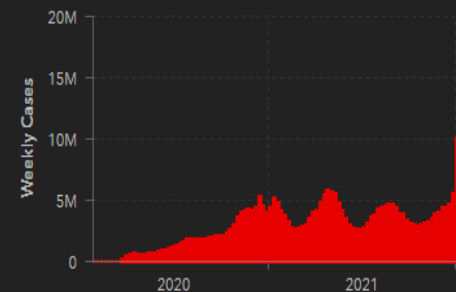
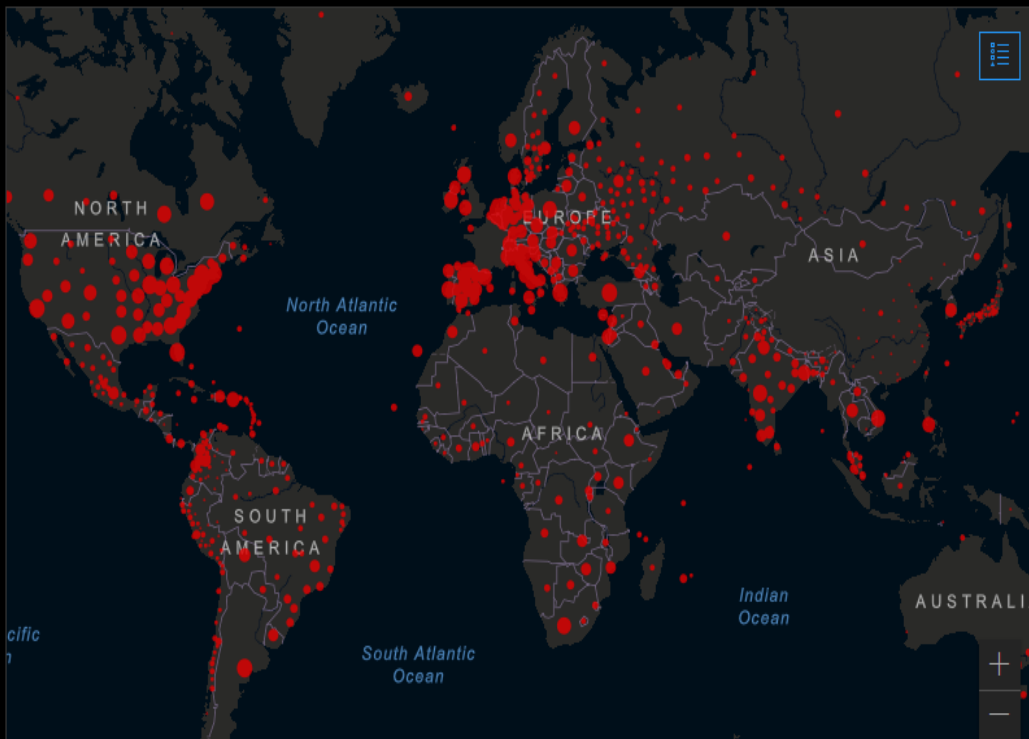
United Kingdom
28-Day: **3,773,755** | **3,777**
totals: **14,825,800** | **151,091**

Italy
28-Day: **2,316,123** | **4,336**
totals: **7,774,863** | **139,559**

Spain
28-Day: **2,117,308** | **1,652**
totals: **7,592,242** | **90,383**

India
28-Day: **1,172,146** | **8,325**
totals: **35,875,790** | **484,213**

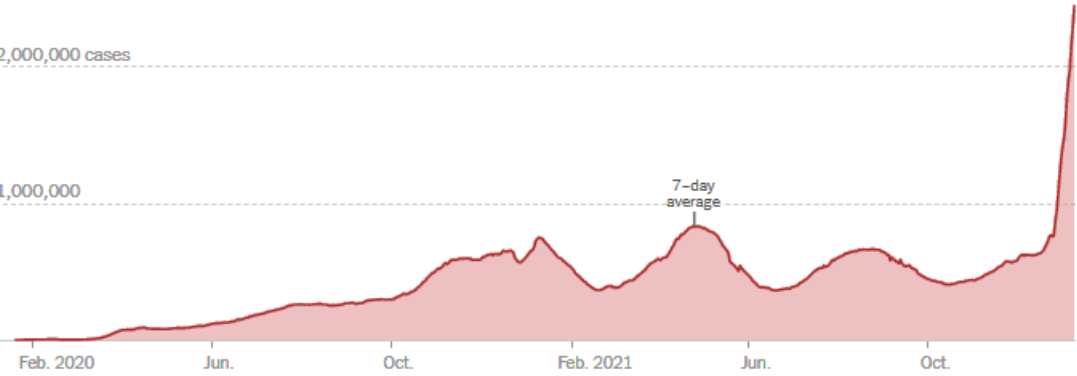
Argentina
28-Day: **1,037,229** | **751**
totals: **6,399,196** | **117,543**



+6.7%/10.3% confirmed cases in world v. US. Deaths **0.9%** v. **1.6%** deaths.

**Unfortunate milestones- 300M cases, 5.5M deaths;
USA – 60M cases, 860K deaths, 1.35M cases**

All time Last 90 days

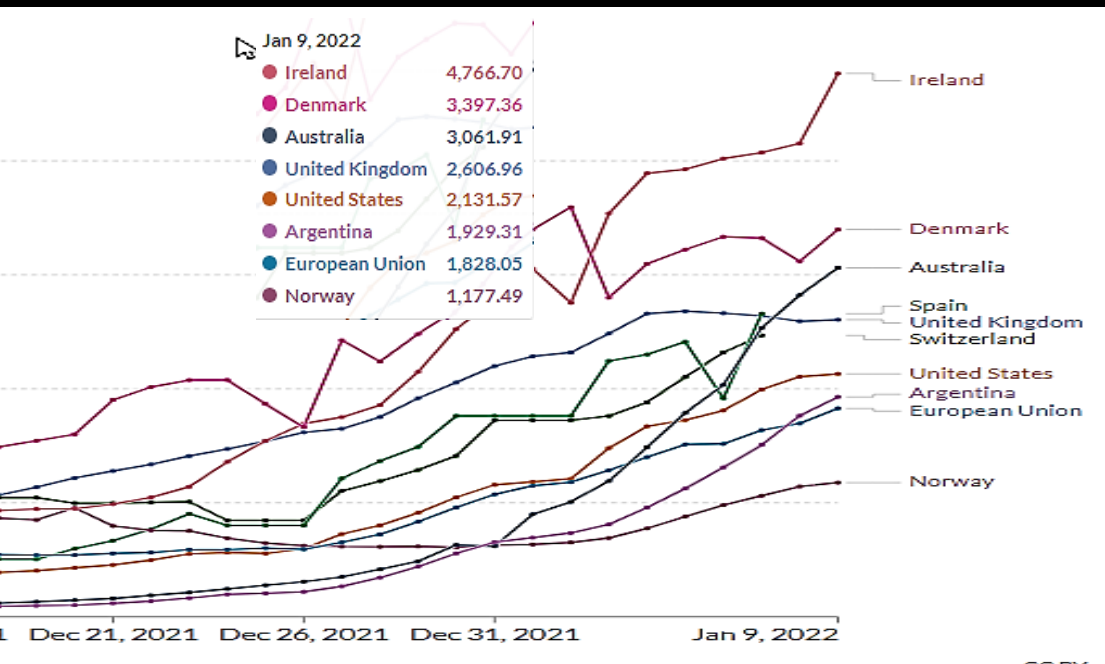


	DAILY AVG. ON JAN. 9	14-DAY CHANGE	TOTAL REPORTED
Cases	2,431,143	+222%	307,826,466
Deaths	6,450	-1%	5,488,031

1.3M or 2% in UK suffering from long COVID; 40% more than a year, 70% more than 12 weeks.

Some Chinese scientists published estimates a few months ago of the costs of not doing “Zero Covid” (before Omicron):

- 200,000 cases/day EU-style
- 400,000 cases/day UK-style
- 500,000 cases/day US-style

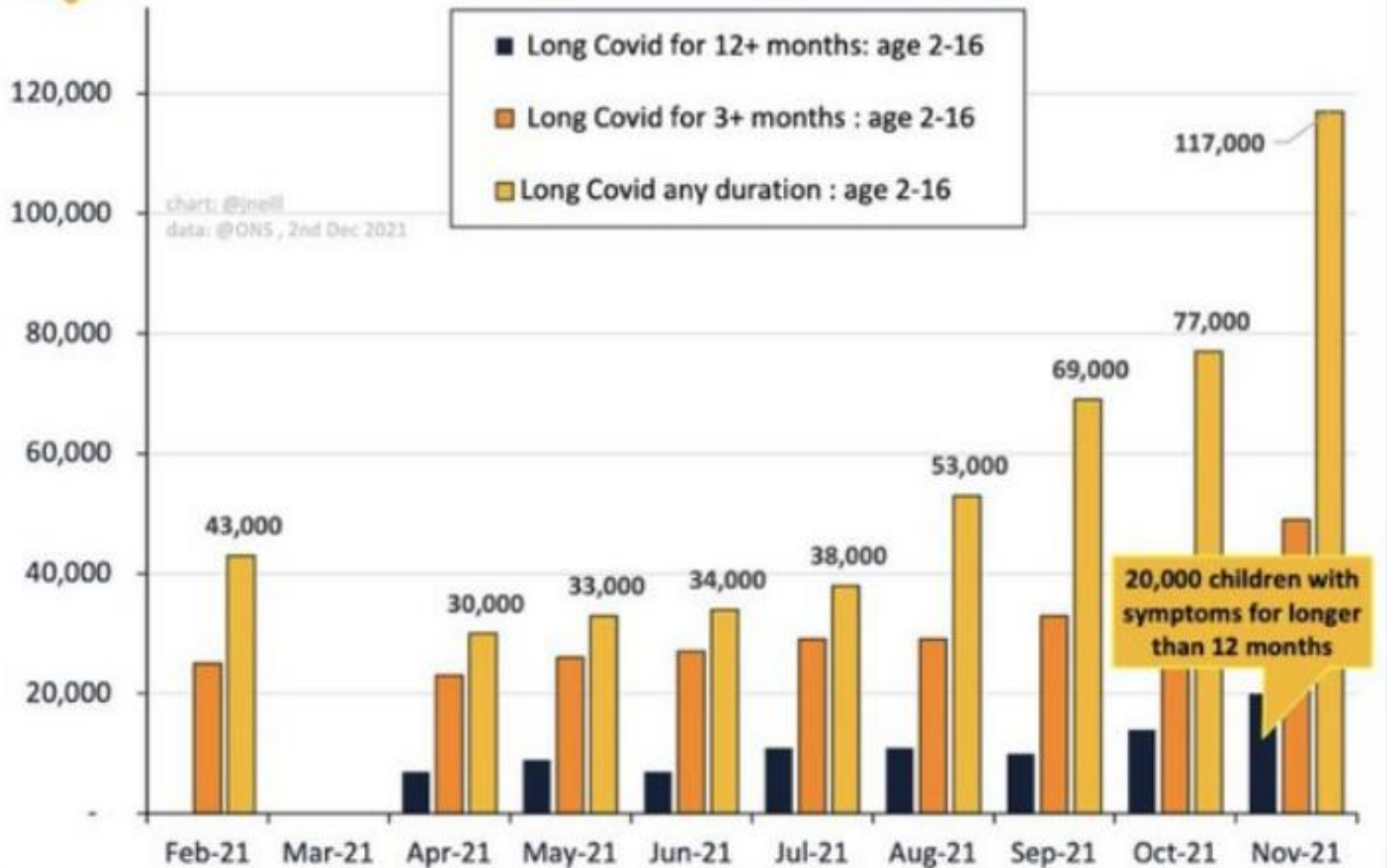


Loss/damaged smell/taste and memory/thinking issues are signs of damage to brain neurons. Avoid even mild Covid if you can. It's not like a typical cold or flu.



Long Covid Kids
& Friends Supporting each other.

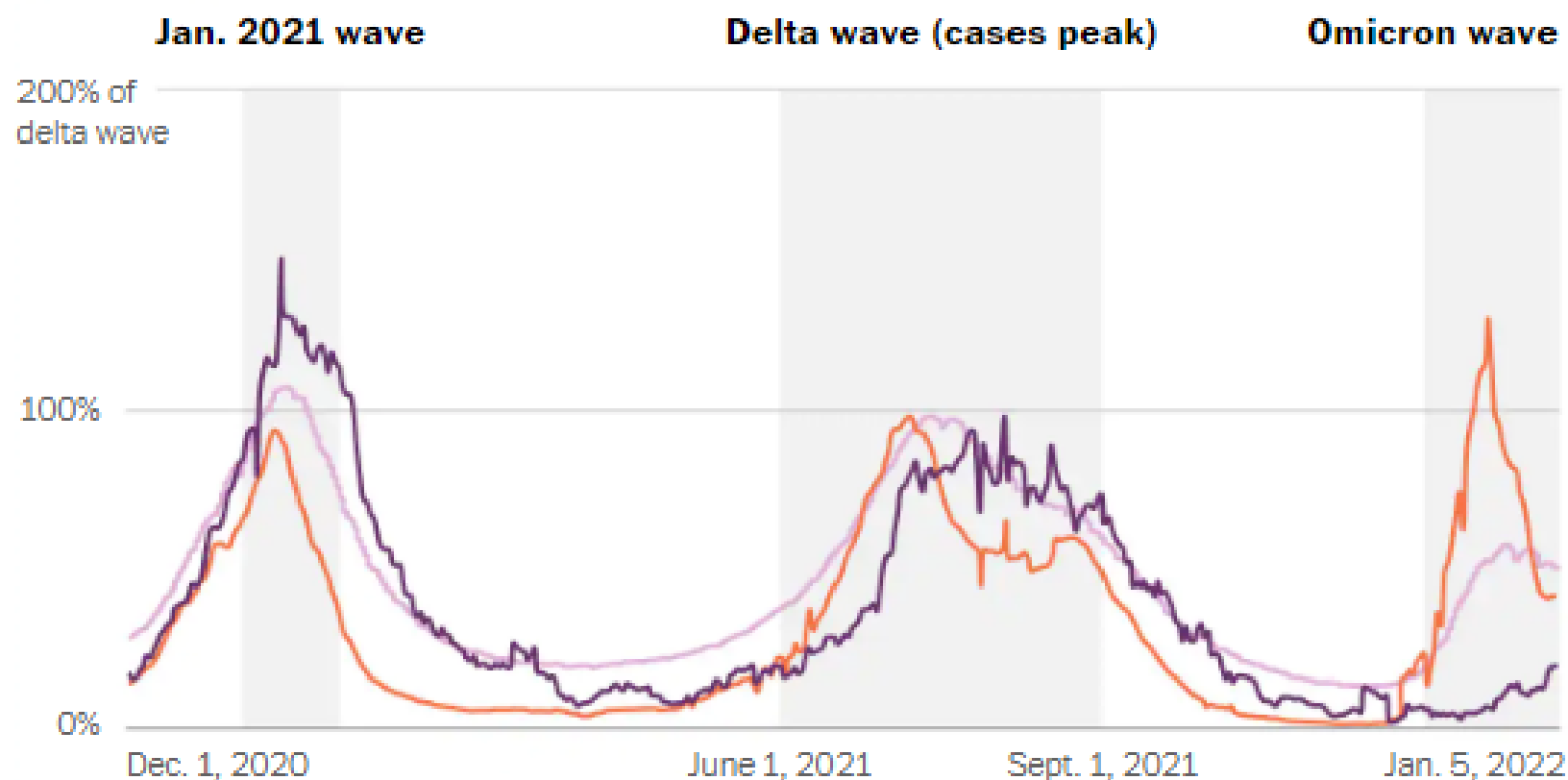
Children with Long Covid (UK, ONS)

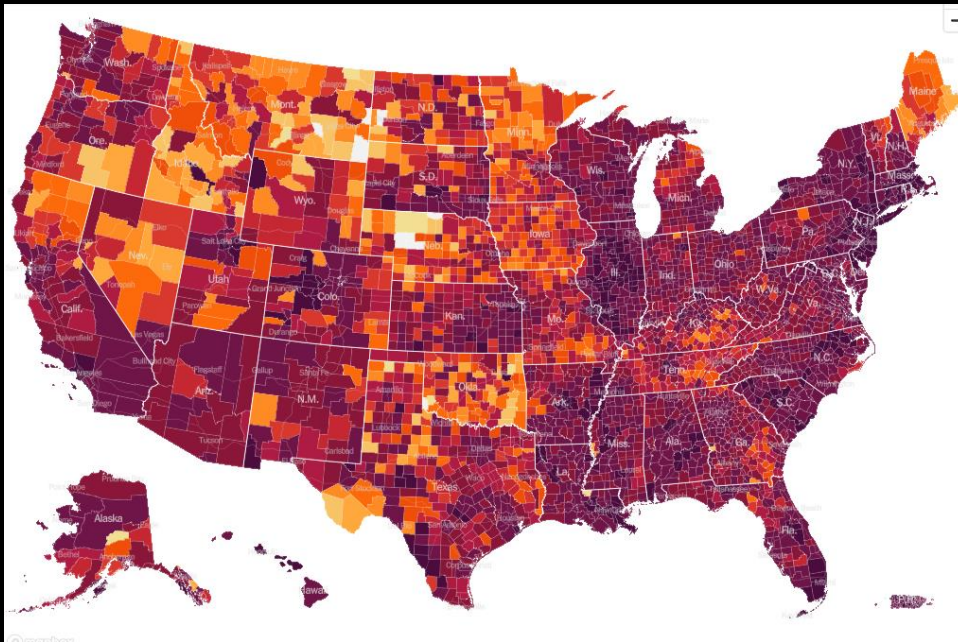


South Africa's omicron cases reached a new record, but death and in-patient numbers remained relatively low

Compared to the delta wave, which caused the previous peak in case numbers, omicron is more contagious but less dangerous.

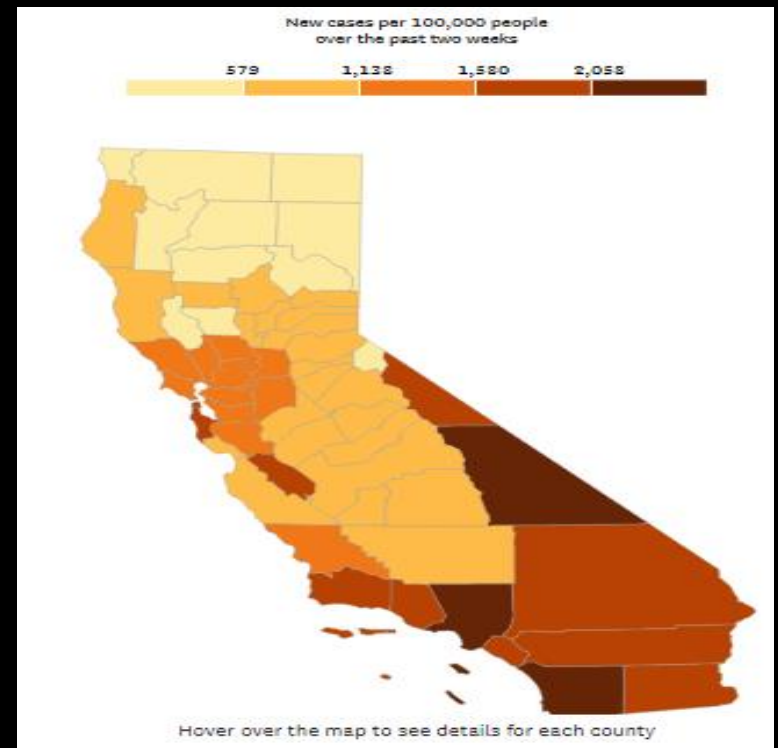
● Cases ● Deaths ● Hospitalizations

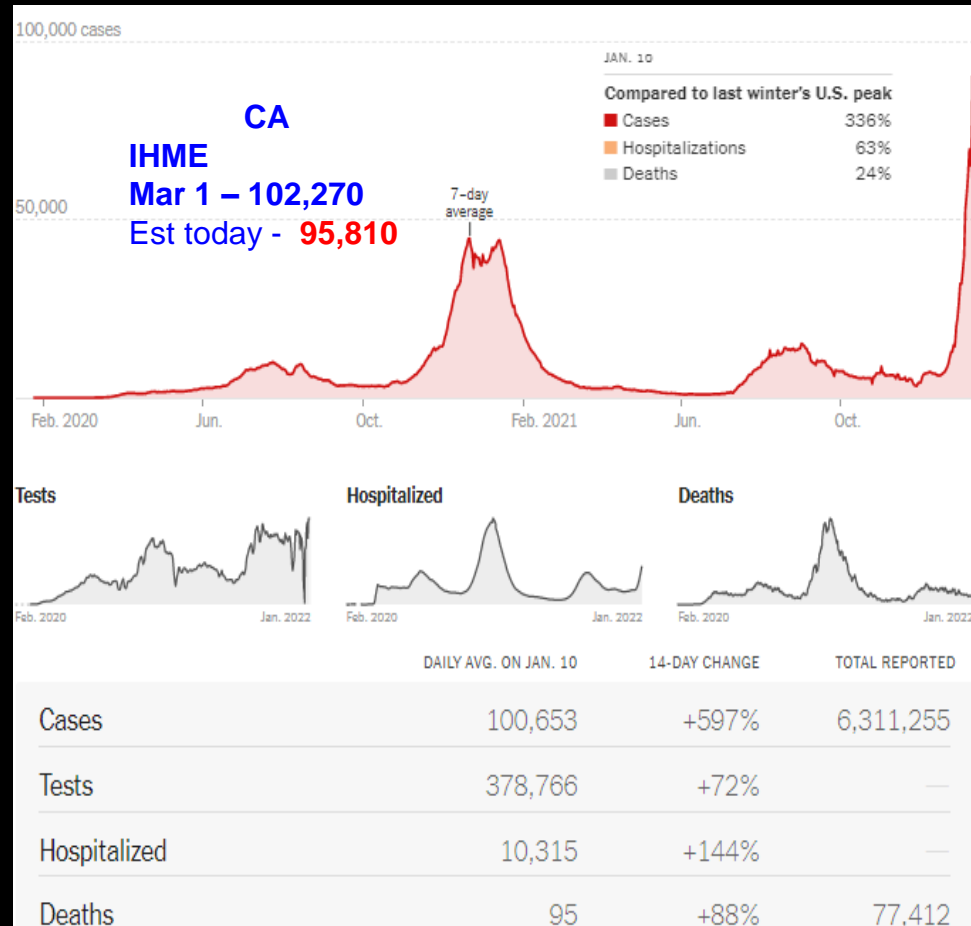
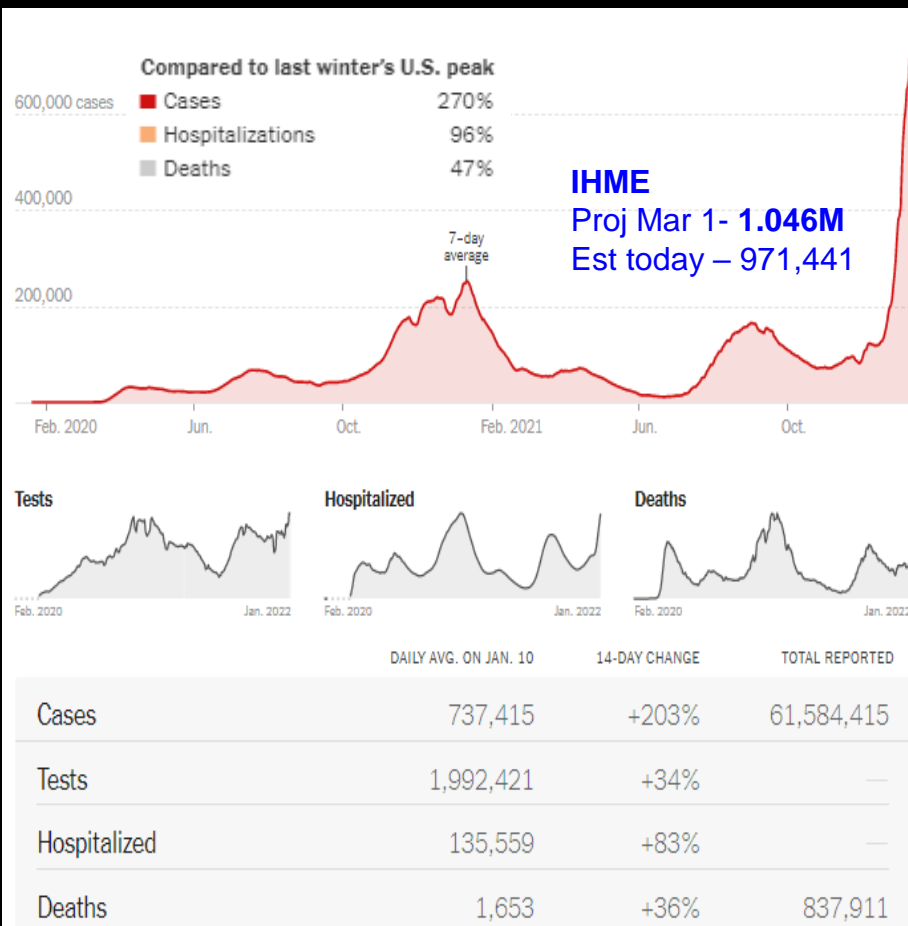




- **8 Americans test positive for COVID-19 per second!!!!**
- **Max day of 1.35M cases**
- Records, we've got records, lots and lots of records!
- Children represent 17.7%
- Cities hit earlier are showing increased death rates
- 62,000 Los Angeles students and staff test positive for covid ahead of return to school
- Several cities may have peaked
- >142,388 record hospitalizations

	CASES DAILY AVG.	PER 100,000	14-DAY CHANGE
United States	737,415	222	+203%
California >	100,653	255	+597%
New York >	73,815	379	+117%
Florida >	59,268	276	+145%
Texas >	48,367	167	+284%
New Jersey >	31,699	357	+120%
Illinois >	31,562	249	+119%
Pennsylvania >	27,724	217	+173%
Massachusetts >	24,420	354	+244%
North Carolina >	21,983	210	+479%
Ohio >	19,230	165	+59%





Don't assume we have beaten COVID and Omicron!!

>700K/day; 1600 deaths/day;

Henry- Sv 262/1.50/46.3%/0.0/ 48.1%

Thurston Sv 163/1.51/48.%/1/ 70.1%

California's Sv RØ is 1.45, 190 cases/100K, positivity 20.9%, 78 deaths/day - 84% vax

SCC - Sv 164 cases/100K, and RØ of 1.72, 13.0% positivity, 1.3 deaths/day - 88.2%

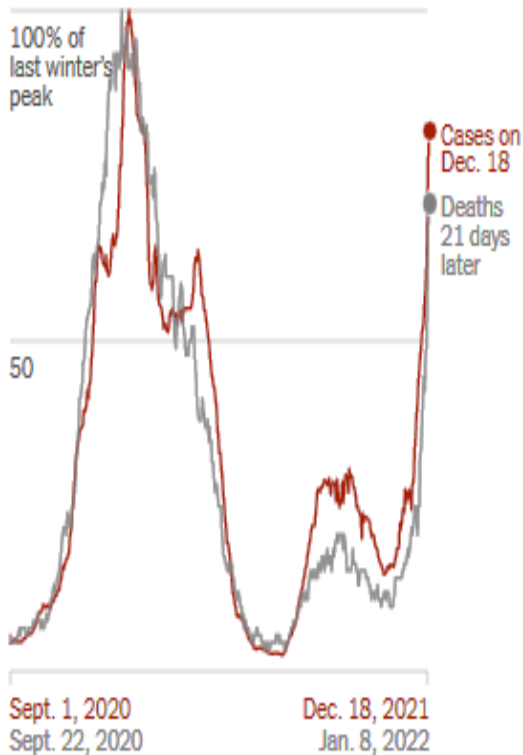
CA-13.6%/0.9% SCC - 7.8%/0.5%

In cities hit early by Omicron, Covid deaths have begun to spike

Death trends are sharply up in these three cities but are not approaching last winter's peaks quite as fast as increasing case rates. The chart below shows death rates shifted by three weeks to allow a clearer comparison of the peaks and dips in cases and deaths.

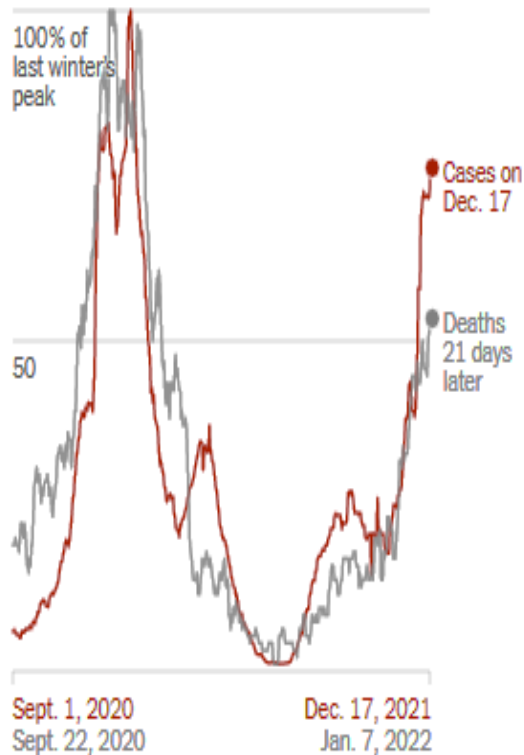
New York City

Covid-19 cases and deaths



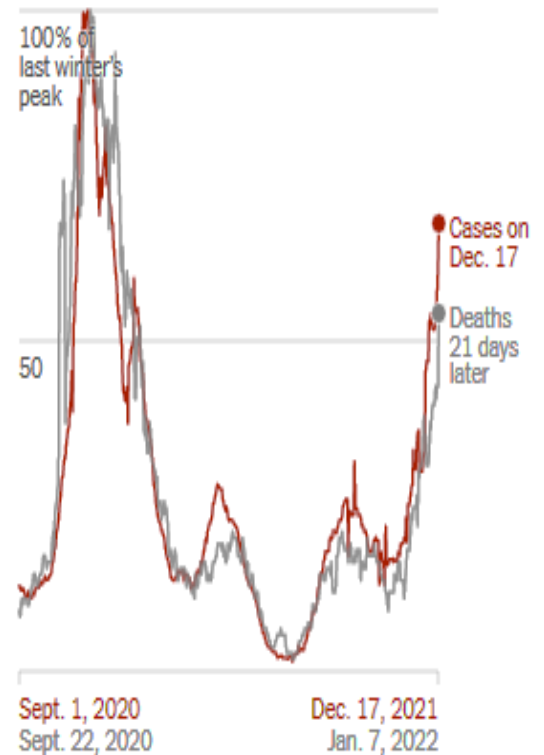
Boston

Covid-19 cases and deaths



Chicago

Covid-19 cases and deaths



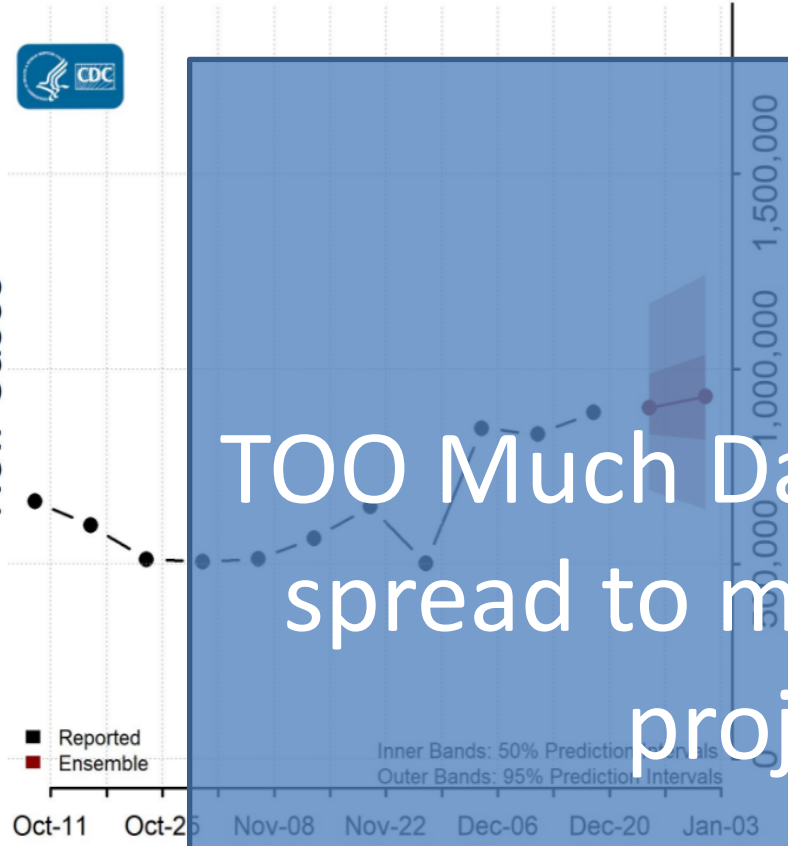
Source: New York Times database of reports from state and local health agencies. • Note: Case and death curves show seven-day averages and are scaled to the highest number for each metropolitan area from Sept. 1, 2020, to Dec. 1, 2021.

National Forecast

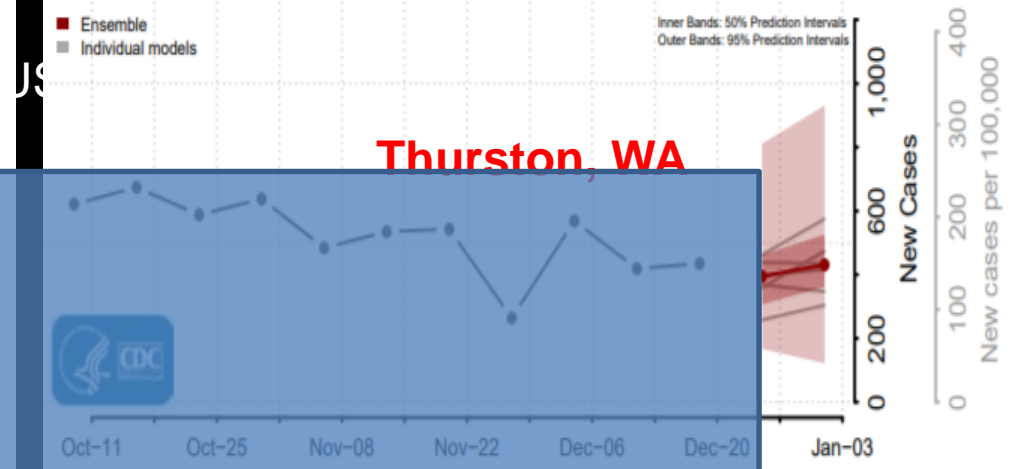
Combined Forecast



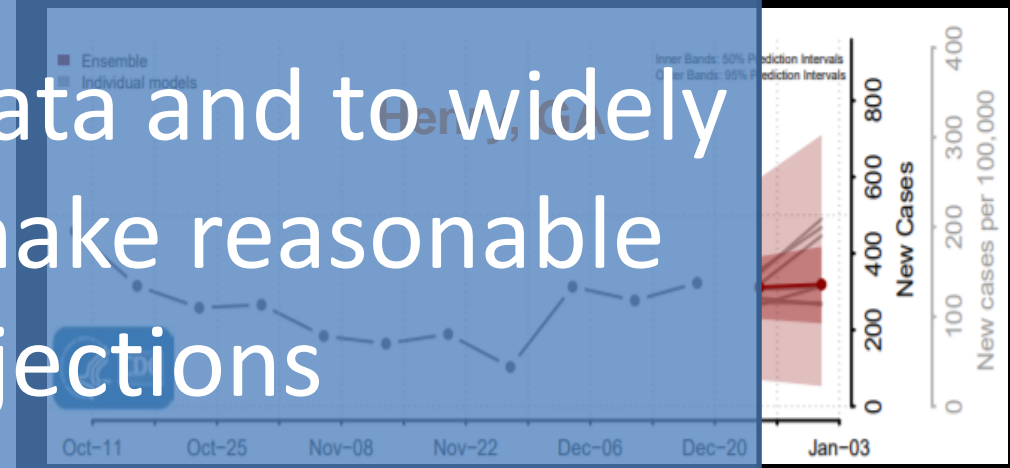
New Cases



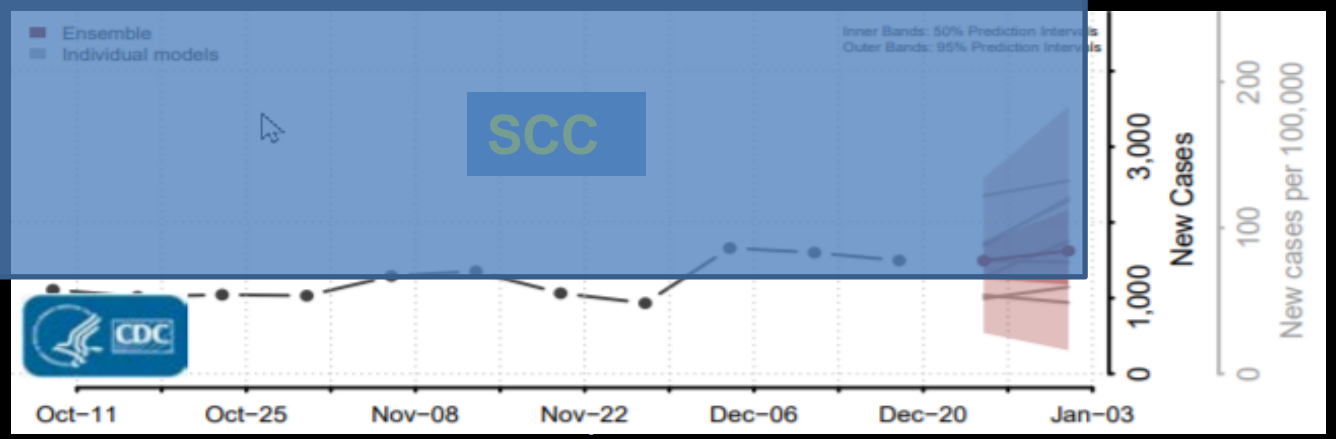
TOO Much Data and to widely spread to make reasonable projections



Thurston, WA



Henry, CA



SCC

Omicron COVID surge could peak in U.S. by January end- Fauci

Total Vaccine Doses
 Delivered 639,652,445
 Administered 520,166,098

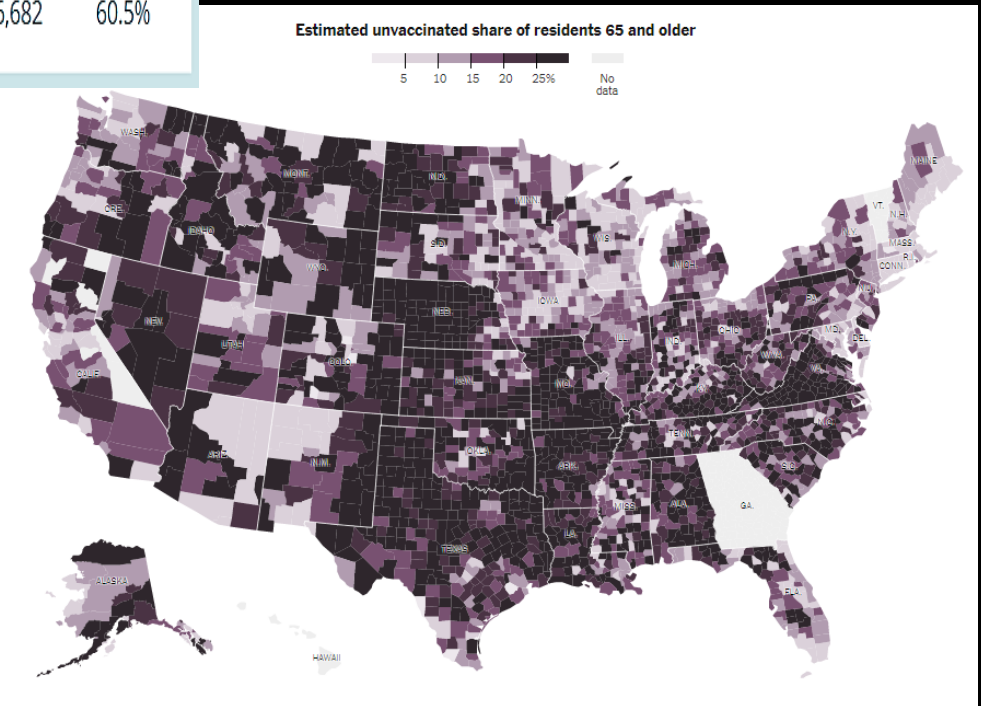
Learn more about the distribution of vaccines.

207.8M
 People fully vaccinated

75.8M
 People received a booster dose**

	At Least One Dose	Fully Vaccinated	Booster Doses***	At Least One Dose	Fully Vaccinated	Booster Doses***
	Fully Vaccinated*	Count	Percent of US Population	Fully Vaccinated*	Count	Percent of Fully Vaccinated*
Total		207,796,335	62.6%	Total	75,816,800	36.5%
Population ≥ 5 Years of Age		207,786,207	66.5%	Population ≥ 18 Years of Age	74,931,903	39.6%
Population ≥ 12 Years of Age		202,855,799	71.5%	Population ≥ 50 Years of Age	50,413,194	51.3%
Population ≥ 18 Years of Age		189,190,363	73.3%	Population ≥ 65 Years of Age	29,126,682	60.5%
Population ≥ 65 Years of Age		48,126,500	87.8%			

Fully vaxed increased about 1% in the last 1 week, whereas the booster vax increased by about 2%.



Total Vaccine Doses
 Delivered 639,652,445
 Administered 520,166,098

At Least One Dose	Fully Vaccinated	Booster Doses***
Fully Vaccinated*	Count	Percent of US Population

At Least One Dose	Fully Vaccinated	Booster Doses***
Fully Vaccinated*	Count	Percent of Fully Vaccinated*

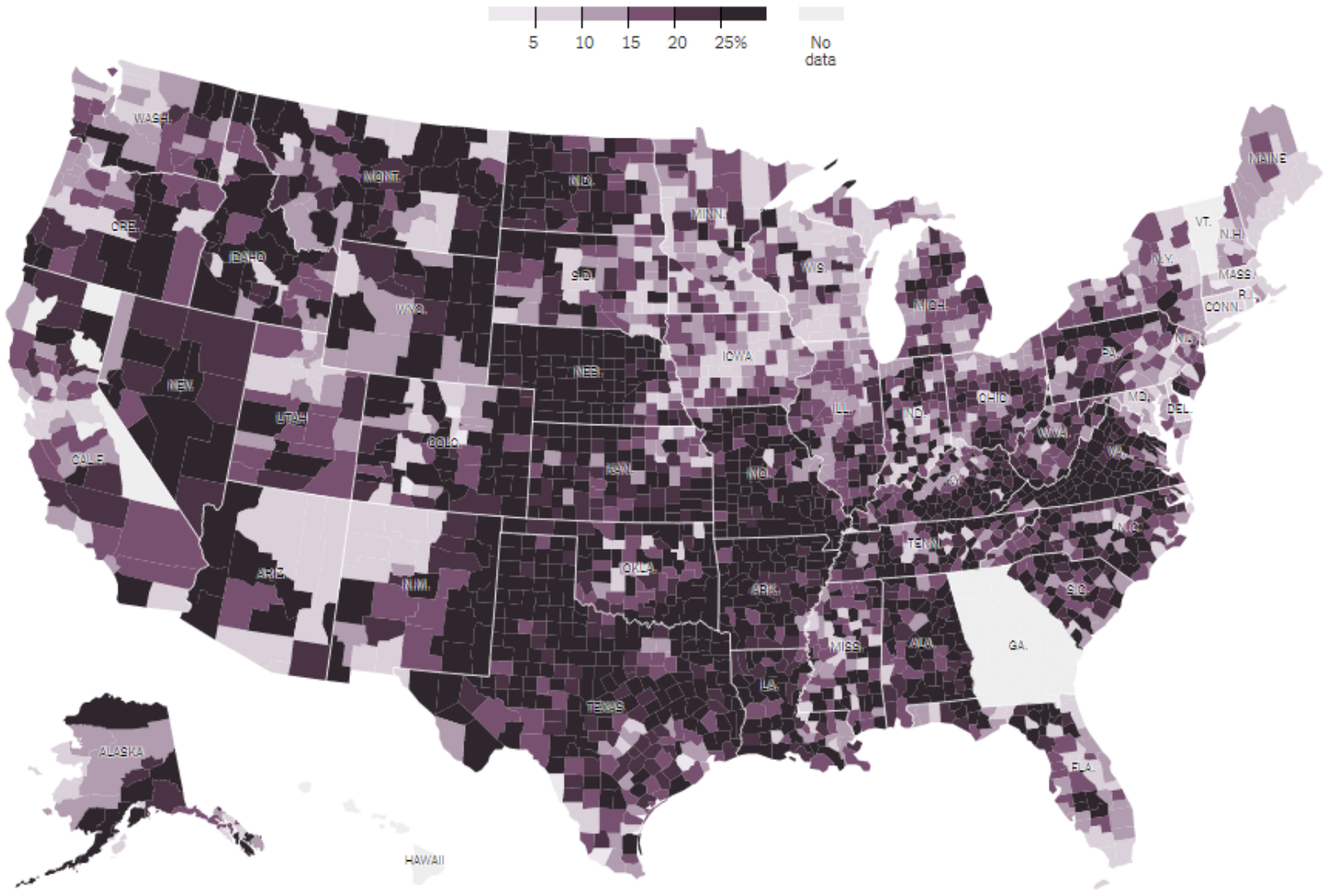
Learn more about the [distribution of vaccines.](#)

207.8M
 People fully vaccinated

75.8M
 People received a booster dose**

Fully vaccinated in the last 3 months received a booster

Estimated unvaccinated share of residents 65 and older





Covid-19 Case Rates by Vaccination Status



Last updated on January 7, 2022

Unvaccinated Case Rate
(Ages 5+)

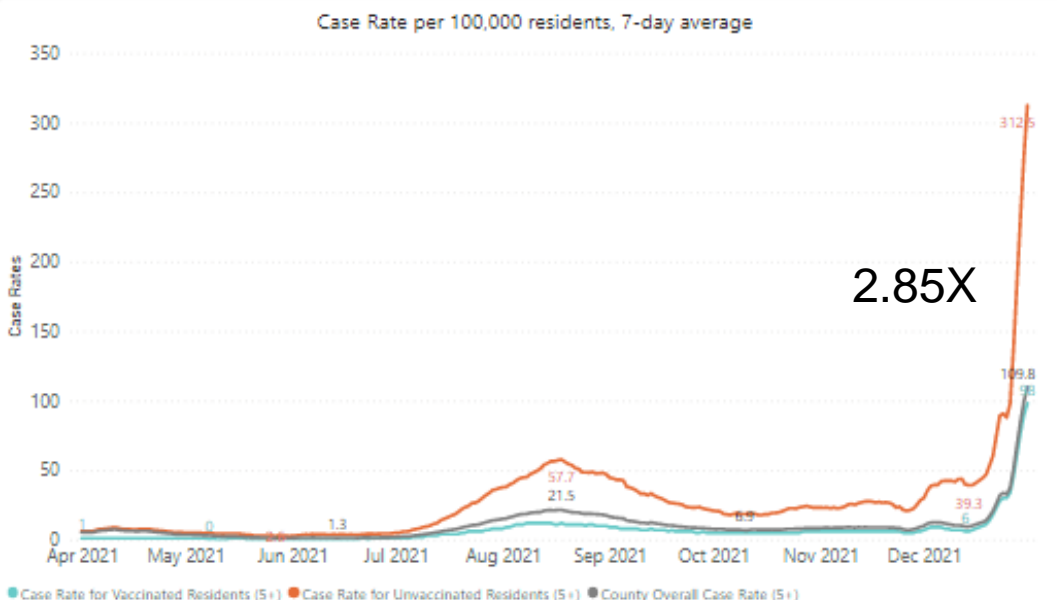
312.5

County Overall Case Rate
(Ages 5+)

109.8

Fully Vaccinated Case Rate
(Ages 5+)

98.0



Microsoft Power BI

This dashboard is updated Wednesdays and Fridays and will not be updated on holidays.



Santa Clara County COVID-19 Snapshot



Last updated on January 10, 2022

COVID-19 Cases		COVID-19 Deaths **	COVID-19 Vaccination, All Ages		Percent of Booster Eligible Residents Who Have Received a Booster Dose (Ages 16+)	Number of Residents With Booster Dose
Cumulative	7 Day average new cases	Cumulative	Number of Residents Vaccinated	Percent of Residents Vaccinated		
203,430	2,919	1,951	1,588,892	82.4%	59.6%	782,147

Table 4. Odds Ratios for SARS-CoV-2 Infection, Demographics and Comorbidities, Test-Negative Design, and Vaccination Status

Category	OR (95% CI)
Vaccination status	
2 Doses	1 [Reference]
3 Doses	
Days 0-6	0.88 (0.83-0.92)
Days 7-13	0.42 (0.39-0.44)
Days 14-20	0.15 (0.14-0.17)
Days 21-27	0.15 (0.14-0.17)
Days 28-65	0.14 (0.13-0.15)
Age group, y	
40-49	1 [Reference]
50-59	0.85 (0.82-0.88)
60-69	0.78 (0.74-0.82)
70-79	0.74 (0.7-0.79)
≥80	0.60 (0.55-0.66)
Sex	
Male	1 [Reference]
Female	0.82 (0.79-0.84)
Comorbidities	
Obesity (BMI ≥30)	1.23 (1.19-1.28)
Diabetes	1.26 (1.20-1.32)
Immunosuppression	1.11 (1.02-1.21)
Cardiovascular disease	1.19 (1.07-1.33)
Time-varying risk of exposure	
Log (No. of community infections)	2.09 (1.99-2.21)

Abbreviations: BMI, body mass index (calculated as weight in kilograms divided by height in meters squared); OR, odds ratio.

In this case-control study that included 306,710 Israeli adults 40 years and older, there was an estimated significant reduction in the odds of SARS-CoV-2 infection within a few weeks of receiving the booster compared with receiving just the 2 primary doses. Those receiving the booster also had lower odds of hospitalization.



Rapid antigen tests for COVID-19 may not reliably detect the omicron variant during the first few days of infection, even when a person is shedding the virus in high enough quantities to be contagious, preliminary evidence hints.

For the new study, posted to the preprint database [medRxiv](#), researchers looked at 30 people from five different workplaces in New York and California, all of whom tested positive for SARS-CoV-2 in December 2021.

On the day of each person's first positive PCR test, and on the day after, their rapid tests all came back negative, [STAT News](#) reported. It wasn't until nearly two days after the positive PCR that any of the rapid tests came back positive. Across all the subjects, "the median time from first positive PCR to first detectable antigen positive was three days," the researchers wrote in their report.

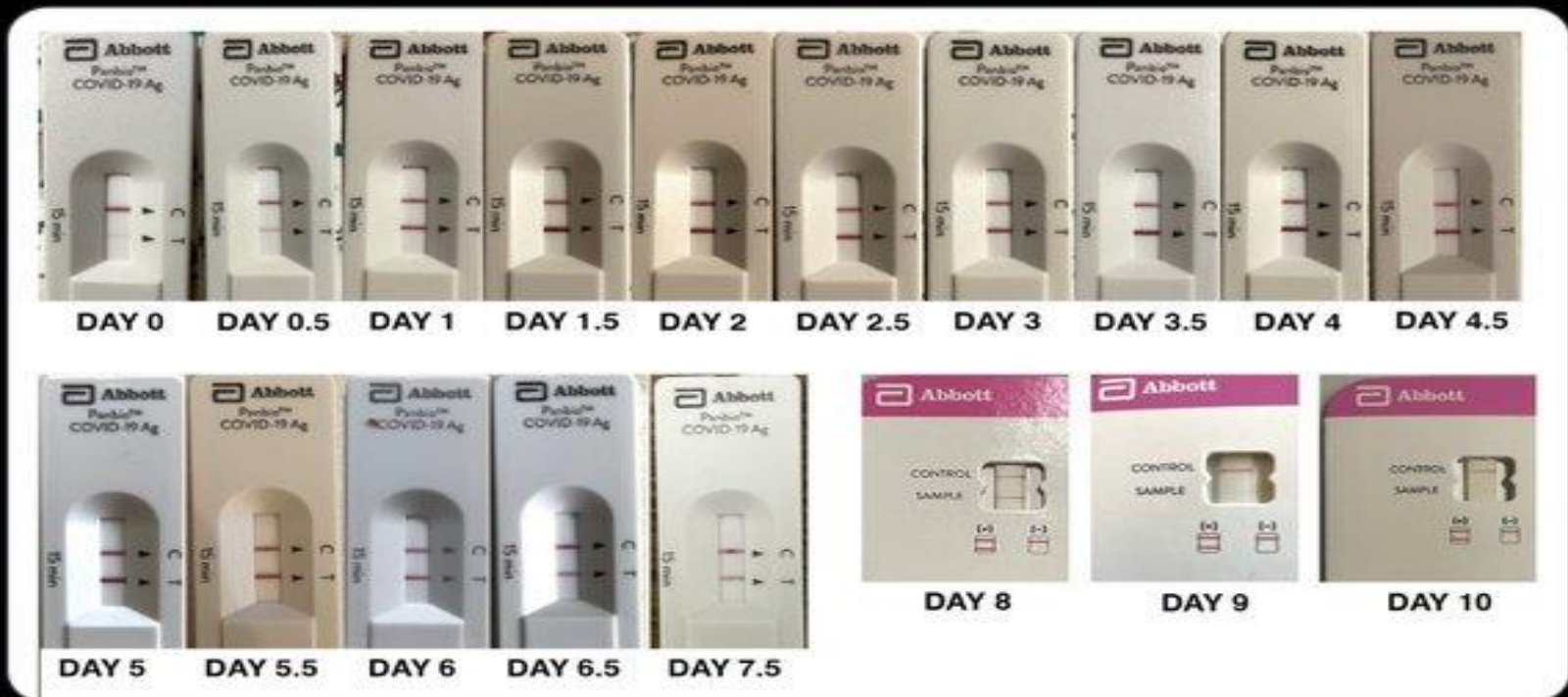
That's despite the fact that, in 28 of the 30 cases, the amount of virus detected by PCR was high enough to infect other people on Day 1.



Saul Kato
@neurotheory

...

I took rapid tests through my mild Covid infection two weeks ago. Two takeaways: (1) I was positive for 9+ days. (2) rapid tests show gradation which can have some value for monitoring nasal viral load / presumptive infectiousness. #safertogetherSF @michaelmina_lab @EricTopol



Runny nose 73%

Headache 68%

Fatigue (mild & severe) 64%

Sneezing 60%

Sore throat 60%

Persistent cough 44%

Hoarse voice 36%

Other 36%

Chills or shivers 30%

Fever 29%

Dizzy 28%

Brain fog 24%

Altered smell 23%

Eye soreness 23%

Unusual muscle pains 23%

Skipped meals 21%

Loss of smell 19%

Chest pain 19%

Swollen glands 19%

Feeling down 16%

US is also seeing “night sweats” and inner ear pain as symptoms.

This guidance is for the general public. [Healthcare related guidance is here.](#)

Start Here
↓
I'm a close contact of someone who has tested positive for COVID-19. Now what?

Are you fully vaccinated & boosted?*

Yes.

No.

Have you completed your primary series of the Pfizer or Moderna vaccine **WITHIN** the last 6 months **OR** completed the primary series of the J&J vaccine **WITHIN** the last 2 months?

Yes.

No.

No Quarantine: You can leave your house and test on day 5.

Wear a mask around others for 10 days.

Are you fully vaccinated but not boosted?*

Yes.

Have you completed the primary series of your Pfizer or Moderna vaccine **MORE THAN 6 months ago?**
OR
Have you completed your primary series of the J&J vaccine **MORE THAN 2 months ago?**

Quarantine: Stay home for 5 days

Continue to wear a mask around others for an additional 5 days

If you can't quarantine, you **MUST** wear a mask for 10 days.

Test on day 5, if possible.

Are you partially vaccinated or unvaccinated?*

****If you develop symptoms, stay home, isolate, get tested, and contact your healthcare provider if symptoms persist.***

December 29, 2021
Created by the Maine Center for Disease Control & Prevention

miro

This guidance is for the general public. [Healthcare related guidance is here.](#)

Updated: January 5, 2022
Developed by the Maine Center for Disease Control & Prevention

I've tested positive for COVID-19. Now what?

Regardless of vaccination status: **Isolate**

Stay home for 5 days.

No symptoms, or resolving symptoms?

Worsening or persistent symptoms?

If you have no symptoms, or your symptoms are resolving - including no fever for at least 24 hours without medication - and you've isolated for 5 days, you can leave your house.

Stay home until you have no symptoms or your symptoms are resolving AND until 24 hours after your fever resolves without the use of medications, THEN you can leave your home. For questions about your symptoms: Call your healthcare provider.

Did you take an antigen test on day 5?

Yes. No.

Continue to wear a mask around others for 5 days.

If positive:
Continue to isolate for another 5 days.

If negative

For more information, please see the [U.S. CDC FAQ on this guidance.](#)

miro

Known Variants of Concern in California

As of December 22, 2021

Variant	WHO Label	Number of Cases Caused by Variant
B.1.617.2*	Delta	203,955
B.1.1.529	Omicron	460

Known Variants of Concern in California

As of December 29, 2021

Variant	WHO Label	Number of Cases Caused by Variant
B.1.617.2*	Delta	217,856 6.8%
B.1.1.529	Omicron	2,788 506%

*Includes AY sublineages

** B.1.617.2 sublineages AY.1 and AY.2 have an additional mutation in their spike protein and have been shown to have a reduced susceptibility to the anti-SARS-COV-2 monoclonal antibody therapy bamlanivimab/etesevimab. The FDA does not authorize use of bamlanivimab/etesevimab in any state where resistant variants to this product exceed 5%. At this time, AY.1 and AY.2 sublineages together make up <1% of all circulating variants in the state.

Known Variants of Concern in Santa Clara County

Variant	WHO Label	Number of Cases by Variant
B.1.617.2*	Delta	13,607
B.1.1.529	Omicron	60

*Includes all AY sublineages

Known Variants of Concern in Santa Clara County

Variant	WHO Label	Number of Cases by Variant
B.1.617.2*	Delta	14,032 3.1%
B.1.1.529	Omicron	376 527%

Variants of Concern

Variants of concern are likely to have one or more of the following features:

- More contagious
- Likely to cause more severe symptoms
- Resistant to treatment
- More resistant to vaccines

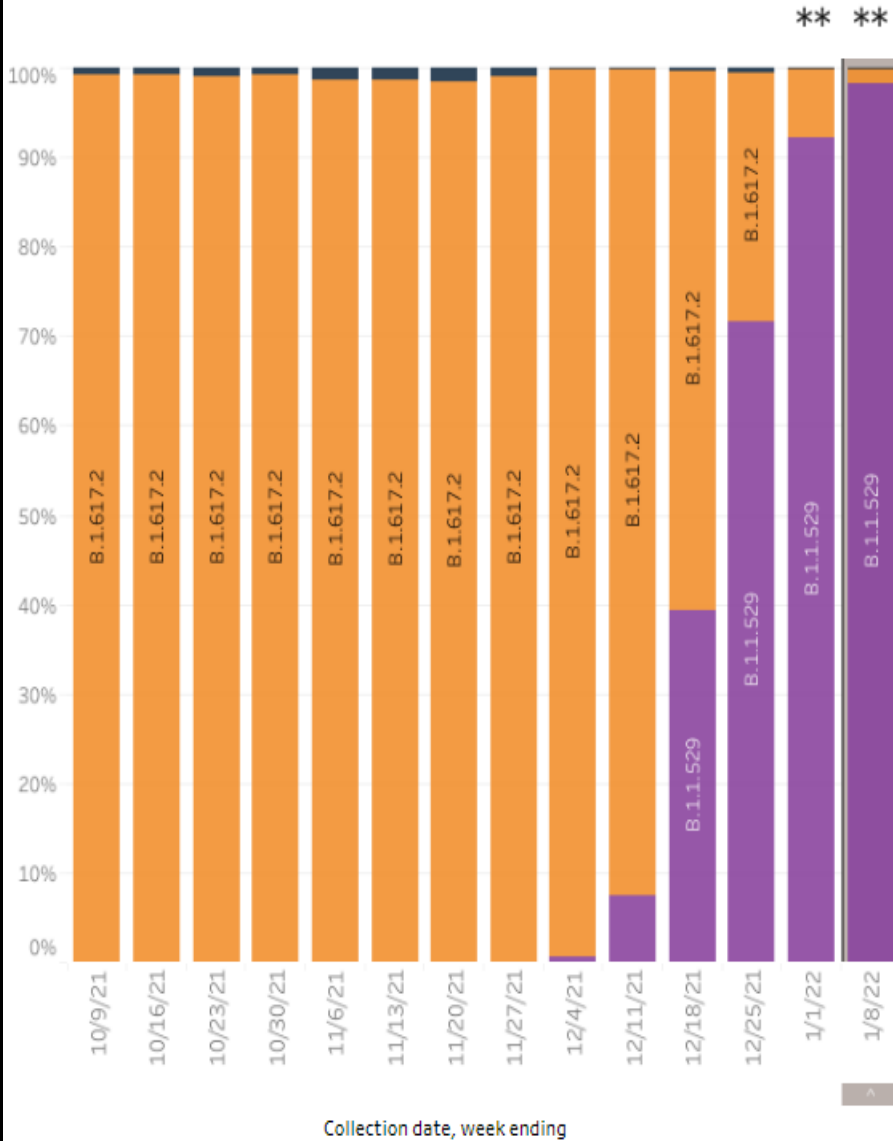
Variant	Known differences
Delta	<ul style="list-style-type: none">• 200% increased transmission compared to other variants• Reduced antibody treatment effectiveness
Omicron	<p>The California Department of Public Health is working with the CDC to gather up-to-date information about the Omicron variant.</p> <ul style="list-style-type: none">• At least 2 to 4 times more transmissible than the Delta variant• Reduced effectiveness of certain antibody treatments



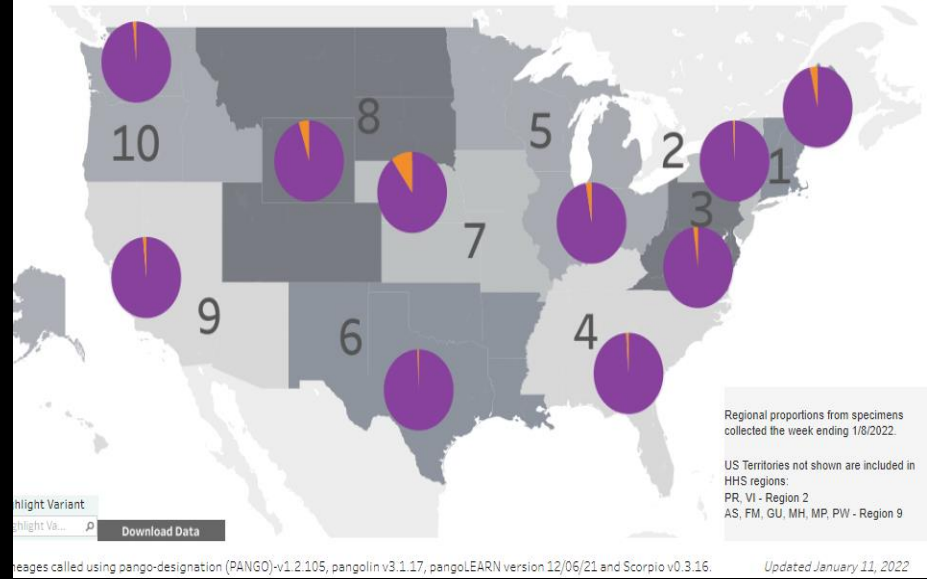
Known Variants of Concern in Santa Clara County

Variant	WHO Label	Number of Cases by Variant
B.1.617.2*	Delta	14,096 0.5%
B.1.1.529	Omicron	972 159%

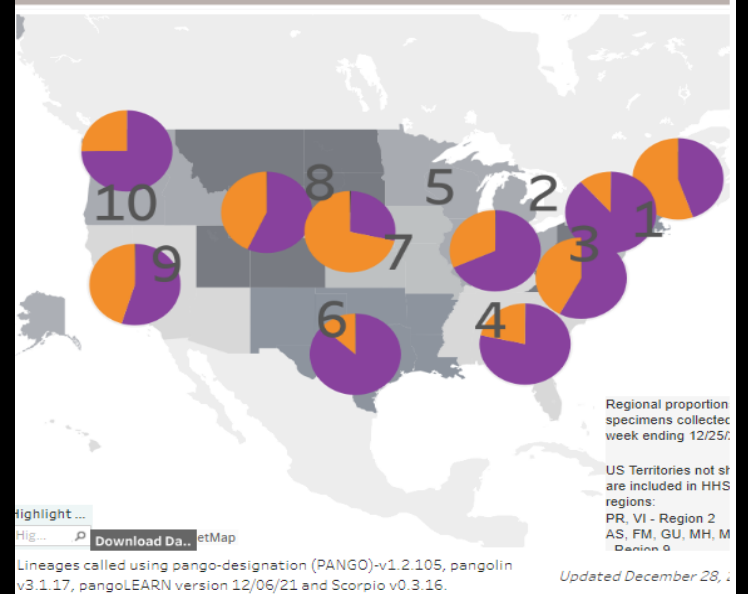
United States: 10/3/2021 – 1/8/2022



United States: 1/2/2022 – 1/8/2022 NOWCAST



United States: 12/19/2021 – 12/25/2021 NOWCAST





Original research

Evidence for a mouse origin of the SARS-CoV-2 Omicron variant

Changshuo Wei ^{a, b, 1}, Ke-Jia Shan ^{a, b, 1}, Weiguang Wang ^{a, b, 1}, Shuya Zhang ^{a, b}, Qing Huan ^a  ,
Wenfeng Qian ^{a, b}  

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<https://doi.org/10.1016/j.jgg.2021.12.003>

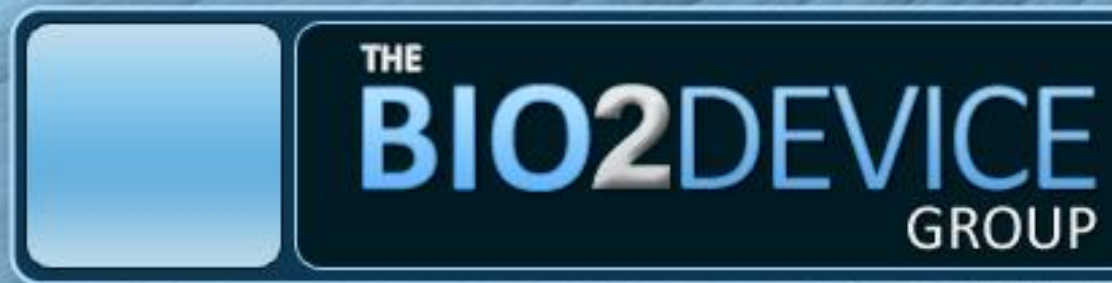
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January 11, 2022



Serving pharma, biotech, diagnostics and medical devices

Pia Abola

Upcoming B2DG Events

- **Jan. 18 – BIONews & Video discussion**
- **Jan. 25 – Stuart Mitchell-** Founder & CEO, Novuson Surgical, **TBD**
- **Feb. 1 – Raja Sundaram –** CEO, Plethy-Musculoskeletal Care, **TBD**
- **Feb. 8 - Shagun Bindlish –** MD, FACP, Diabetologist, **TBD**
- **Feb. 15 – Phac Le Tuan –** President, PaceWorks, **TBD**
- **Feb. 22 - Elsa Rolo -** Ventus Therapeutics, **TBD**

Life Sciences Info Videos/Items

- **John Campbell –Mouse Origin** <https://youtu.be/aH1u1GIPU2A>
- **Eric Topol, Scripps Research– UCSF Grand Rounds, Jan 13 – search around**
<https://www.youtube.com/channel/UCprcipiXNXTzJYJfN02rHsA>

BioNews – OMICRON, B.1.1.529

- Do you have COVID, Flurona, or Deltacron?
- The **Pfizer** vaccine was 91% protective against the inflammatory disorder MIS-C.
- Rather than 75 years, it will now take about eight months for the **FDA** to make public the information it used to license **Pfizer** and **BioNTech's** COVID-19 vaccine.
- **Moderna** said that people are likely to need a second booster dose in the fall, with front-line workers and those 50 and older a particular priority as antibody levels wane.
- **CDC** recommended first covid-19 boosters for 12- to 15-year-olds. Can be 5 months vs 6 months.
- **Mayo Clinic** fires 1% of workforce for failing to get COVID-19 vaccines.

BioNews – OMICRON, B.1.1.529

- Possible explanation for long COVID- in blood from patients with long COVID, persistent microclots are resistant to the body's own fibrinolytic processes. high levels of various inflammatory molecules are found trapped in the persistent microclots. This perpetuates coagulation and vascular pathology, resulting in cells not getting enough oxygen in the tissues to sustain bodily functions. This condition is not typically seen with traditional lab techniques.
- Is Fluvoxamine the covid drug we've been waiting for? A 10-day treatment costs only \$4 and appears to greatly reduce symptoms, hospitalization and death. [FDA](#) approved it in 1994 to treat obsessive-compulsive disorders. It's unlikely to be blunted by Omicron.



BioNews – OMICRON, B.1.1.529

- "Nearly 18,000 more dialysis patients died in 2020 than would have been expected based on previous years," *ProPublica* wrote, adding, "They were COVID-19's perfect victims." Many dialysis patients were previously diagnosed with diabetes, hypertension, or other underlying conditions.
- Hospitalization risk from Omicron 'around a third of Delta.'

BioNews - International

- **UK** advisers have recommended against giving a 4th dose of COVID-19 vaccine to nursing home residents and people over 80 because data shows that a 3rd shot offers lasting protection against admission to the hospital; 90% after 3 months.
- **Chinese** leaders are imposing the harshest infection controls since the beginning of the pandemic. With the **Winter Olympics** in Beijing just weeks away, authorities have locked down 13 million residents in the central city of Xian amid a virus outbreak there. Also confirmed first cases of Omicron.
- Pope Francis urged countries to vaccinate their populations and decried “baseless information” used to turn people against the shots.
- **Germany** braced for protests as vaccine rules tightened across Europe.
- In **France**, some COVID-19-positive health workers are now allowed to continue treating patients.

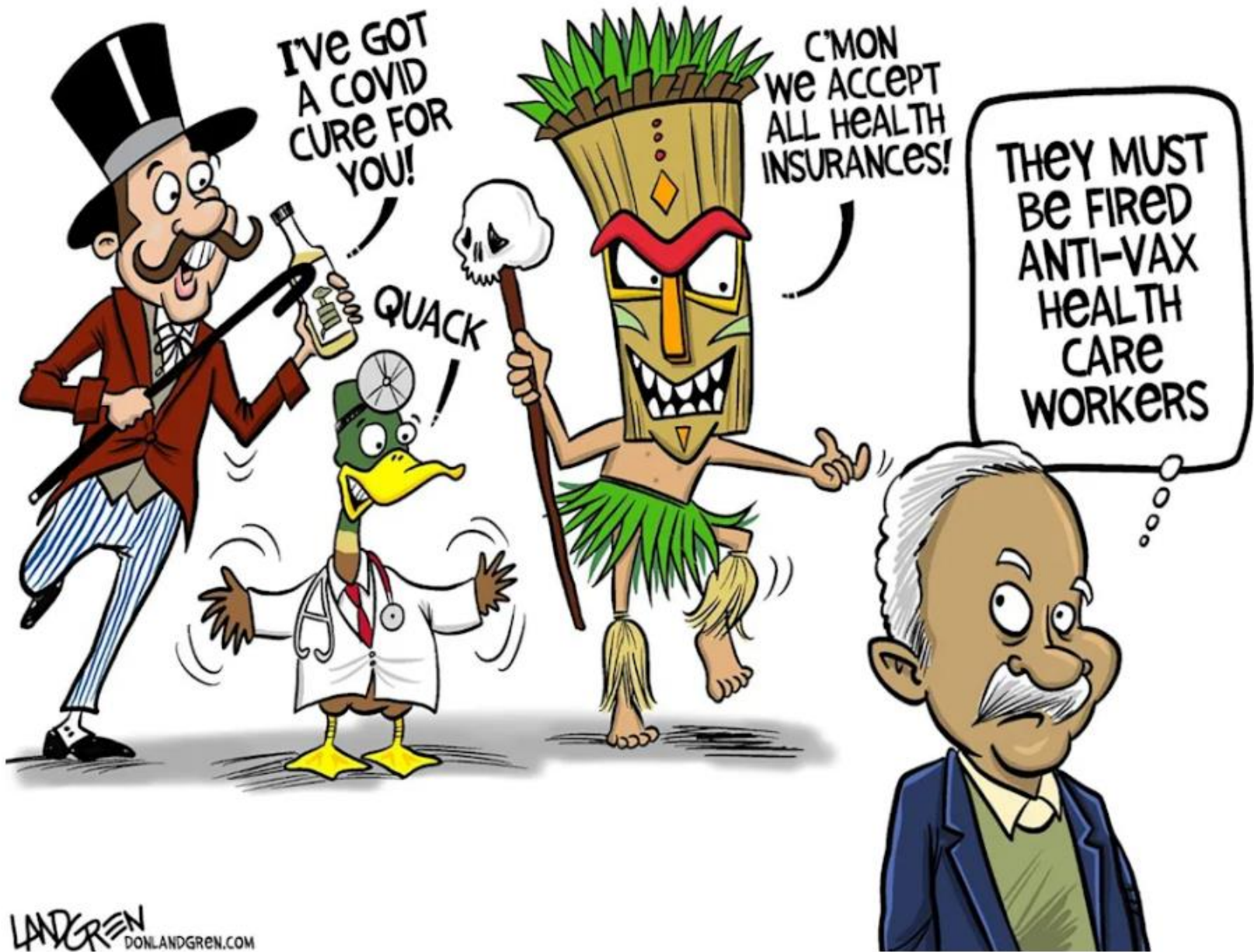
BioNews - International

- Dr. Tedros Adhanom Ghebreyesus, the head of **WHO**, said that while the COVID-19 omicron variant seems to be less severe than delta, it should not be categorized as mild. "Just like previous variants, omicron is hospitalizing people and it is killing people."
- **Hong Kong** bans all flights from **U.S., Britain, Canada, Australia** and other countries as Omicron spreads.
- **Danish** researchers reported non-hospitalized patients who recovered from asymptomatic to mild COVID-19 can experience small but measurable drops in dynamic lung volume.
- Even 3 doses of **CoronaVac**, widely used around the world, not providing sufficient antibody level response to Omicron."
- **U.S.** issues 'do not travel' warning for **Omicron-hit-Canada**.



BioNews – Coronavirus News

- Gov. **Ron DeSantis** defended his administration's decision to allow up to one million Covid-19 rapid test kits to expire. DeSantis argued that the stockpile resulted from a lack of demand in the later part of 2021 and blamed President Joe Biden's administration for not granting extensions to keep the tests eligible. Now demands monoclonals???
- **Florida** school bans teaching CRT, gender fluidity, and 'mainstream narrative surrounding COVID.'
- **CA** officials are now warning against price gouging for home test kits.
- If you're a hospital worker in **AZ** with covid, you could still go to work.
- Covid vaccine and treatment misinformation is medical malpractice. It should be punished, and in general it is not.
- Federal Judge blocked The **DoD** from punishing **Navy** Forces who refuse the vaccine.
- **USPS** seeks 120-day waiver from Biden coronavirus vaccine mandate.



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Editorial cartoon

BioNews – Coronavirus News

- A lack of a high school education was the most important predictor of COVID-19 vaccine hesitancy in 3,142 US counties.
- Police, Local Governments step in as testing sites careen out of control. Civility from antivax and anti-mask protestors is missing.
- New **Biden** administration plan will require private insurers to cover the cost for eight at-home coronavirus tests per person per month.
- Omicron-specific vaccine -- ready by March according to **Pfizer** CEO.
- **Pfizer** wins \$442.13M **Army** contract modification for PAXLOVID.
- **FDA** said it will temporarily suspend many of its foreign and domestic facility inspections due to the surge in Omicron coronavirus cases "to ensure the safety of its employees and those of the firms it regulates."
- **CDC** says hospitalization rate among <5yoa skyrocketed since mid-Dec. with "more than four in 100,000 children ages 4 and younger."

BioNews – Coronavirus News

- **Researchers found “a 2.6-fold increase in new T1 diabetes cases among children, <18, in one study and a smaller 30% increase in another after recovering from COVID.**

BioNews

- **Biogen's** Aduhelm faces a key coverage decision next week. Which way will Medicare Rule, and how much does it matter?
- **Government may scale back Medicare Part B Premium 15% Increase.**
- **People who have cataracts removed are 30% less likely to develop dementia.**
- **A new study found exercise boosts levels of a protein known to strengthen communication between brain cells via synapses, which may be a key factor in keeping dementia at bay.**
- **A man received a new heart from a genetically modified pig, a medical first that could change the outlook for patients needing organ transplants.**
- **MRSA strain may have originated in hedgehogs a hundred years ago, long before antibiotics.**

BioNews

- **CDC** said three people in the US—including one child—died from bat rabies between September and November 2021.
- **US and Canadian** researchers found that female patients treated by male surgeons had 15% greater odds of worse outcomes than female patients treated by female surgeons.
- Inhaled cannabidiol blocked three components of the process glioblastoma tumors use to form new blood vessels and grow, and the treatment interfered with an enzyme called IDO that brain tumors hijack to evade the immune system.
- New **California** state report shows rise in cost of prescription drugs. Prices jump 5% for 2022 on more than 450 prescription drugs.
- **Red Cross** declares first-ever national blood crisis!! If you can, please give.

BioNews – Local

- **DNA Script** closed \$200 million series C financing with completion of second tranche.
- **Maze Therapeutics** announced \$190 Million financing.
- **VitalConnect** announced closure of \$39 Million E Round.
- **AN2 Therapeutics** closed \$80 Million Series B.
- **Eikon** boasts massive \$518 Million Series B.
- **California** intends to keep **Super Bowl** in Los Angeles.
- **California** extends its mask mandate until February 15.
- **California** became the first state to require health insurance plans to cover at-home tests for sexually transmitted infections such as HIV, chlamydia and syphilis — which could help quell the STI epidemic.

BioNews – Jobs/Finance/Legal

- Healthcare venture fundraising soared to record highs, with \$28.3 billion invested in the U.S., nearly doubling 2020's record.
- **California** voters will consider overturning the state's flavored tobacco ban and hiking medical malpractice awards. Other proposals to decriminalize psychedelic mushrooms, target dialysis clinics and boost public health funding could also be on the ballot.
- Pharma companies that said they would cut off campaign funds to those in Congress who fomented the Jan. 6 riots by voting against certifying the presidential election results have quickly changed their stance, according to a report by Accountable. U.S. **Merck, Eli Lilly, Pfizer** and **Johnson & Johnson** were cited by the watchdog group.

B2DG Job Board

- **Outset Medical- SVP – Sales, Sr Staff ME, Staff Component EE, Senior Business Systems Analyst – Supply Chain**
- **Brian Testa - ICAD/XOFT –**
 - **Senior Manufacturing & Equipment Technician**
- **Calyxo --Supply Chain Manager, Senior Quality Engineer, Manufacturing Assembler**
- **Ionpath - Multiple Engineering opportunities ME, EE**

Job Postings B2DG **Darshana Nadkarni**

More details and other opportunities in JOBS category at www.darshanavnadkarni.wordpress.com

- **Scientist with mammalian cell culture experience**
- **Scientist with molecular biology & vector design experience**
- **Scientist with molecular biology & cell culture experience**
- **R&D formulations scientist w/ sustained release experience**
- **Scientist with single molecule detection experience**
- **Bioanalytical scientist with biochem analysis, microplate assays automation & liquid handling experience**

B2DG LinkedIn - Chozen, Inc.

- **R&D, MANUFACTURING ENGINEERING, OPERATIONS**
 - Materials Manager – REMOTE (prefer SF)
 - Human Factors Engineer (several roles, open on level) SF Bay Area - South Bay
 - Sr. Manufacturing Engineer – Reno, NV
 - Staff/Principal R&D Design Engineer – San Diego Area
 - Director Clinical Operations - SF Bay Area – East Bay
 - Clinical Engineer SF Bay Area – South Bay
- **REGULATORY, QUALITY & CLINICAL**
 - Regulatory Affairs Manager SF Bay Area – East Bay
- **FINANCE, TECH, SALES**
 - Digital Marketing Associate - REMOTE/HYBRID SF Bay Area – South Bay
 - Editing Associate (Technical Writer) – REMOTE/HYBRID
 - Accounting Associate - REMOTE/HYBRID
- **Cindy Johnson- cjohnson@chozeninc.com - 925-577-8135**

B2DG Website

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contact@bio2devicegroup.org

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