

\*\*Extraordinary Assumptions: There are many different data sources in this report and not all of them match. This document is informational purposes only, the goal is to provide an overall picture of the current situation.

## Situation Summary Friday, January 7, 2022 - <u>Day 667</u> of the Pandemic As of 3:00 PM

**COVID-19 by the Numbers** 

01/07/2022	Riverside	Imperial	Kern	Los Angeles*	Orange	San Bernardino	San Diego	San Luis Obispo	Santa Barbara	Ventura	California	United States	Global
Total Cases	410,155	38,411	137,773	1,686,203	358,052	401,938	451,154	33,667	51,912	112,762	5,424,507	58,689,973	296,496,809
Total Cases Per Capita	16,618	20,042	14,858	16,439	11,090	18,127	13,386	12,073	11,375	13,223	13,518	17,573	3,744
% of Total Cases/Population	16.62%	20.04%	14.86%	16.44%	11.09%	18.13%	13.39%	12.07%	11.37%	13.22%	13.52%	17.57%	3.74%
Recovered**	390,880	33,834	<u>157,855</u>	Not Reported	311,519	<u>379,455</u>	Not Reported	<u>31,635</u>	54,092	104,923	2,751,778	42,089,198	257,901,697
% of total recovered/population	15.84%	17.65%	17.02%	Not Reported	9.65%	17.11%	Not Reported	11.34%	11.85%	12.30%	6.86%	12.60%	3.26%
Total Deaths	5,504	800	387	27,394	5,894	6,056	4,476	367	571	1,211	37,074	831,729	5,462,631
Deaths Per Capita	223.00	417.43	41.74	267.06	182.56	273.11	132.80	131.61	125.12	142.01	92.39	249.04	68.98
% of Total Deaths/Population	0.22%	0.42%	0.04%	0.27%	0.18%	0.27%	0.13%	0.13%	0.13%	0.14%	0.09%	0.25%	0.07%
% of State's Cases	7.56%	0.71%	2.54%	31.08%	6.60%	7.41%	8.32%	0.62%	0.96%	2.08%	9.24%	19.79%	
Currently in Hospitals	791	64	167	2,902	779	862	837	34	75	196	9,279		
Total Hospital Beds	3,508	194	1,134	19,164	5,974	3,736	6,521	447	614	1,204	66,821		
Currently in ICU	126	25	31	426	122	166	156	9	8	31	1,500		
ICU Beds Available	65	0	28	455	130	98	195	16	31	24	1,541		
Case Fatality Rate	1.34%	2.08%	0.28%	1.62%	1.65%	1.51%	0.99%	1.09%	1.10%	1.07%	0.68%	1.42%	1.84%
Population*	2,468,145	191,649	927,251	10,257,557	3,228,519	2,217,398	3,370,418	278,862	456,373	852,747	40,129,160	333,976,981	7,918,710,000
% of State Population	6.15%	0.48%	2.31%	25.56%	8.05%	5.53%	8.40%	0.69%	1.14%	2.13%	12.02%	4.22%	
Sources: CDDH WHO CDC Local Cour	nty Data I A Ti	mac											

Sources: CDPH, WHO, CDC, Local County Data, LA Times

The date for which case statistics and hospital data were reported. Hospital COVID data are self-reported through a portal managed by the California Hospital Association and pulled at 2pm. COVID case statistics are reported by local health departments to CalREDIE and are pulled at 2pm. Hospital data and case statistics are integrated by the California Department of Technology and made available through the Open Data Portal the following morning. CA Open Data Portal is at least 24 Hours behind although a backlog of new case reports at the State level has ostensibly been cleared, some County dashboards still contain notes that indicate data are missing. \*California Demographics from State Database Blueprint Data Chart 12-15-20 & census.gov .(\*\*Many County sites do not report recovery rates or are only updating once a week)

News
More detail on page 2

Global Data
More detail on page 7

US Data More detail on page 13 State Data
More detail on page 25

County of Riverside

More detail on page 29

Weather

More detail on page 38

Air Quality
More detail on page 41

**News** – The collection of news articles are related to COVID-19. The inclusion or order of articles is not intended to reflect their importance, nor is it intended to endorse the political viewpoints or affiliations included in news coverage.

### Israel Approves 4th Covid Vaccine Dose for People 60 and Over

• Prime Minister Naftali Bennett announced that Israel would offer a fourth dose of the coronavirus vaccine to medical workers and people age 60 and above, making it the first country to broadly roll out an additional booster.

https://www.nytimes.com/video/world/middleeast/100000008143010/israel-covid-vaccine-booster.html

### Hong Kong bans flights from 8 countries, tightens COVID curbs

- Hong Kong has announced a two-week ban on incoming flights from eight countries and tightened coronavirus restrictions after detecting cases of the Omicron variant.
- Carrie Lam, the chief executive of Hong Kong, told reporters on Wednesday that incoming flights from Australia, Canada, France, India, Pakistan, the Philippines, the United Kingdom and the United States, including interchanges, would be banned from January 8 to January 21.

https://www.aljazeera.com/news/2022/1/5/hong-kong-bans-flights-from-8-countries-tightens-covid-curbs

### **Supreme Court hears vaccine mandate cases**

- The Supreme Court spent about three and half hours total on both cases, in what was a marathon session for a court that rarely hosts oral arguments on Friday.
- What comes next was only briefly alluded to during Friday's session. The cases before the Supreme Court are in an emergency posture, meaning that the court is not being asked to do a full review on the merits on each case.
- For the Occupational Safety and Health Administration's (OSHA) testing-or-vaccine rules, states are asking the court to put on hold an appeals court order that allows the mandate to be implemented, and in the health care worker case, the administration is asking the justices to lift lower court orders freezing the requirement in several states while the lawsuit plays out.
- So it's unclear how quickly we will hear from the court, how much explanation it will give for why it's doing what it is doing, or
  even if there will be a heads up that the decision is coming.
  https://www.cnn.com/politics/live-news/biden-covid-vaccine-mandates-supreme-court-01-07-22/index.html

### WHO chief warns Omicron not 'mild'

• The more infectious Omicron coronavirus variant appears to produce less severe disease than the globally dominant Delta strain, but it should not be categorised as "mild", said WHO Director-General Tedros Adhanom Ghebreyesus.

https://www.aliazeera.com/news/2022/1/6/morrison-denies-diokovic-singled-out-over-covid

### Amazon cuts paid Covid leave time for workers following changes to CDC guidance

- Amazon said all U.S. workers who test positive for Covid-19 and those required to quarantine will now be eligible for one week, or up to 40 hours, of paid leave.
- Previously, Amazon offered up to two weeks of paid Covid leave.
- Amazon's decision follows the U.S. Centers for Disease Control and Prevention's updated recommendations last week that
  asymptomatic people with Covid-19 isolate for five days instead of ten days.
  https://www.cnbc.com/2022/01/07/amazon-cuts-paid-covid-leave-for-workers-as-cdc-quidance-shifts.html

### WHO: Record weekly jump in COVID-19 cases, fewer deaths

- "Last week, the highest number of COVID-19 cases were reported so far in the pandemic," WHO Director-General Tedros Adhanom Ghebreyesus said on Thursday. He said the figure was certainly an underestimate because of a backlog in testing around the year-end holidays.
- The United Nations health agency, in its weekly report on the pandemic, said the weekly count amounted to 9,520,488 new cases with 41,178 deaths recorded last week compared with 44,680 in the week before that.

  https://www.aljazeera.com/news/2022/1/6/who-record-weekly-jump-in-covid-19-cases-but-fewer-deaths

### Weekly epidemiological update on COVID-19 - 6 January 2022-

https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---6-january-2022

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	5 390 588 (57%)	65%	103 190 471 (36%)	22 817 (55%)	-6%	1 674 758 (31%)
Americas	3 263 069 (34%)	100%	104 698 449 (36%)	10 787 (26%)	-18%	2 411 818 (44%)
Western Pacific	329 598 (3%)	38%	11 391 761 (4%)	2 769 (7%)	-10%	156 515 (3%)
Africa	294 373 (3%)	7%	7 350 001 (3%)	1 159 (3%)	22%	156 451 (3%)
South-East Asia	135 147 (1%)	78%	45 034 821 (16%)	2 454 (6%)	-9%	721 940 (13%)
Eastern Mediterranean	107 713 (1%)	40%	17 201 367 (6%)	1 192 (3%)	-7%	316 141 (6%)
Global	9 520 488 (100%)	71%	288 867 634 (100%)	41 178 (100%)	-10%	5 437 636 (100%)

### WHO: Campaign to vaccinate 70% of the world Population to end the acute phase of the pandemic in 2022.

- During the COVID-19 Update on 01-06-2022 Dr Tedros Adhanom Ghebreyesus calls for every country to share resources and be equitable to end the acute phase of the pandemic. <a href="https://fb.watch/aonXrgf43F/">https://fb.watch/aonXrgf43F/</a> Time stamp 3:32
- Related Dr. Mike Ryan on tactics and strategies to counter COVID-19 on 12-29-2021
   "The acute phase of the pandemic, the pandemic that's been associated with the tragedy of deaths & hospitalizations, that can end in 2022." https://fb.watch/aomJF72Wbf/
- Related Dr. Tedros Adhanom Ghebreyesus on equitable distribution of vaccines on 11-12-2021
   "Every day, there are 6 times more boosters administered globally than primary COVID-19 vaccine doses in low-income countries. This is a scandal that must stop now" <a href="https://fb.watch/aon5swgm\_Z/">https://fb.watch/aon5swgm\_Z/</a>

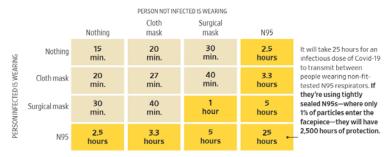
### Moderna CEO sees another round of COVID booster jabs in fall

- Moderna Inc. Chief Executive Officer Stephane Bancel said another round of vaccine boosters against Covid-19 will probably be needed this fall, even if immunity to the rapidly spreading omicron variant becomes widespread.
- Highly infectious omicron may move the world rapidly to an endemic phase where most people are exposed to the virus, the
  vaccine CEO said at a presentation late Thursday at a health-care conference hosted by Goldman Sachs Group Inc. Yet it's not
  yet clear how long protection from the current round of boosters will hold before fading, nor can scientists yet predict the
  potential impact of future mutations on the severity of the disease, he said.
- "Assuming omicron is an acceleration to the endemic phase, I still believe we're going to need boosters in the fall of '22 and forward," Bancel said in a presentation. However, boosters given this month or in the last quarter of 2021 will probably hold until spring begins in the Northern Hemisphere, he said.
- Moderna is continuing to work on an omicron-specific shot and expects to start human trials very soon, Bancel said. The company will also continue to look at shots tailored for a combination of different strains, he said.
- Moderna and competitors Pfizer Inc. and BioNTech SE have an interest in nudging policymakers toward regular Covid shots.
   Countries around the world have rushed forward with booster drives in an attempt to slow omicron's spread, even as it remains unclear how long the boosters will protect against infection. Israel has started offering a fourth dose of the vaccine to people aged 60 and over as the country grapples with record numbers of new cases.

#### https://www.aljazeera.com/economy/2022/1/7/moderna-ceo-sees-another-round-of-covid-booster-jabs-in-fall

### Why Cloth Masks Might Not Be Enough as Omicron Spreads

- With infections surging due to the fast-spreading Omicron variant, including among the vaccinated, physicians are now urging people to ditch cloth face masks, which they say may not provide enough protection against the virus. Instead, they recommend pairing cloth masks with surgical models or moving on to stronger respirator masks.
- The Mayo Clinic began on Thursday requiring all patients and visitors to wear surgical masks or N95 or KN95 masks. Anyone wearing a single-layer, homemade cloth mask, gaiter or bandanna, or a mask with a vent, will be provided a medical-grade mask to wear over it.



Note: Results published in Spring 2021. The CDC expects the Omicron variant to spread more easily. Source: ACGIH's Pandemic Response Task Force

- "If you really want no exposure, you have to wear the right type of mask," says Monica Gandhi, an infectious disease specialist
  at the University of California, San Francisco. Dr. Gandhi recommends N95 masks, which are certified in the U.S., or the KN95,
  KF94 and FFP2 masks, which are certified in China, South Korea and Europe respectively. If those aren't available, she
  recommends double masking—a multilayered cloth mask tightly on top of a surgical mask. Surgical masks are made of
  polypropylene, which has electrostatic charge characteristics that block the virus.
- "If everyone is just wearing a cloth mask or just a surgical mask, it won't make any difference" with this highly-transmissible variant, she says. Others in the field say high-quality surgical masks, worn properly, offer protection, but they would also like more data and research on how they stand up against Omicron.
- "Any mask is better than no mask. But cloth masks and then surgical masks are not as good as N95-caliber masks," says Ranu Dhillon, a physician at Brigham and Women's Hospital. https://www.wsj.com/articles/cloth-face-mask-omicron-11640984082

### California Department of Public Health (CDPH) made changes to isolation and quarantine periods

https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Guidance-on-Isolation-and-Quarantine-for-COVID-19-Contact-Tracing.aspx

The new CDPH's updated periods of isolation and quarantine override Cal/OSHA's ETS workplace exclusion periods. These are not applicable to healthcare personnel.

# If you test Positive for COVID-19 you are to be in isolation regardless of vaccination status, previous infection or lack of symptoms.

- ✓ Say home for at least 5 days
- ✓ Isolation can end after day 5 if symptoms are not present or are resolving and a diagnostic specimen\* collected on day 5 or later tests negative.
- ✓ If unable to test or choosing not to test, and symptoms are not present or are resolving, isolation can end after day 10.
- ✓ If fever is present, isolation should be continued until fever resolves.
- ✓ If symptoms, other than fever, are not resolving continue to isolate until symptoms are resolving or until after day 10.
- ✓ Wear a well-fitting mask around others for a total of 10 days, especially in indoor settings (see Section below on masking for additional information)

# If you are Exposed to Someone with COVID-19 (Quarantine) Unvaccinated; OR Vaccinated and booster-eligible but have not yet received their booster dose.

- ✓ Say home for at least 5 days after your last contact with a person who has COVID-19.
- ✓ Test on day 5.
- ✓ Quarantine can end after day 5 if symptoms are not present and a diagnostic specimen collected on day 5 or later tests negative.
- ✓ If unable to test or choosing not to test, and symptoms are not present, quarantine can end after day 10.
- ✓ Wear a well-fitting mask around others for a total of 10 days, especially in indoor settings (see Section below on masking for additional information).
- ✓ Strongly encouraged to get vaccinated or boosted.
- ✓ If testing positive, follow isolation recommendations above.
- ✓ If symptoms develop, test and stay home.

### In a workplace setting, asymptomatic employees in this category are not required to stay home from work if:

- ✓ A negative diagnostic test is obtained within 3-5 days after last exposure to a case
- ✓ Employee wears a well-fitting mask around others for a total of 10 days
- ✓ Employee continues to have no symptoms.

### If you are Exposed to Someone with COVID-19 (No Quarantine) if you are Boosted; OR Vaccinated, but not yet boostereligible.

- ✓ Test on day 5.
- ✓ Wear a well-fitting mask around others for 10 days, especially in indoor settings (see Section below on masking for additional information)
- ✓ If testing positive, follow isolation recommendations above.
- ✓ If symptoms develop, test and stay home.

### Employees in LA County must wear medical-grade masks, health officials say

- Employees in Los Angeles County who work indoors alongside others will be required to wear medical-grade masks starting Jan. 17, according to a new county health order.
- Under the new order issued Wednesday, employers must start providing employees who work indoors next to others "with well-fitting medical grade masks, surgical masks, or higher-level respirators, such as N95 or KN95 masks."
- Employers will be required to provide the masks, and employees will be required to wear them, according to the order.
- The county Department of Public Health issued the new order amid a staggering increase in COVID-19 infections as the highly-contagious omicron variant continues to spread rapidly.

  https://abc7.com/medical-grade-mask-n95-k95-la-county-mandate/11430277/

### California schools are hurtling toward crisis. But omicron surge isn't the only problem

- If California genuinely wants to keep schools open, state leaders need to appreciate the depth of the crisis unfolding in its communities. School districts are buckling under staffing shortages caused by the explosive omicron variant and the internal strife over fragmented public health policies, once again putting unions and districts at odds. Without further action, our children will suffer disproportionately, as they have throughout the pandemic.
- COVID infection rates in California <u>reached an all-time high</u> this week. With vital public spaces such as schools open, <u>hundreds</u> <u>of teachers and even more students are testing positive</u> and being forced into quarantine in Sacramento alone, causing widespread absences among credentialed staff.
- The failings of the latest coronavirus surge have familiar roots: toxic labor relations and an abdication of responsibility by state officials. Nowhere is that clearer than in the capital city.

  https://www.sacbee.com/opinion/editorials/article257109827.html

### California COVID surge could ease next month

- The California surge in coronavirus cases has shut down schools and sidelined thousands of police, firefighters, teachers and health care workers but officials are hoping it will be short-lived.
- "My hope is that, you know, by the time we get to February, we're on the downside of seeing that massive amount of community transmission," Los Angeles County Public Health Director Barbara Ferrer said Thursday.
- California's number of confirmed COVID-19 cases has soared five-fold in two weeks and hospitalizations have doubled. Los Angeles County, the state's largest with 10 million residents, reported more than 37,000 new cases on Thursday, which was the highest level since the pandemic started.
- "We do see this as a surge that will be, it is our hope and belief, short-lived," Los Angeles Police Chief Michel Moore said
  Thursday as the city announced that the virus had sidelined more than 800 police and fire personnel.
  <a href="https://www.pressdemocrat.com/article/news/official-california-covid-surge-could-ease-next-month/">https://www.pressdemocrat.com/article/news/official-california-covid-surge-could-ease-next-month/</a>

### Orange County reports third COVID-19 death of a child younger than 5

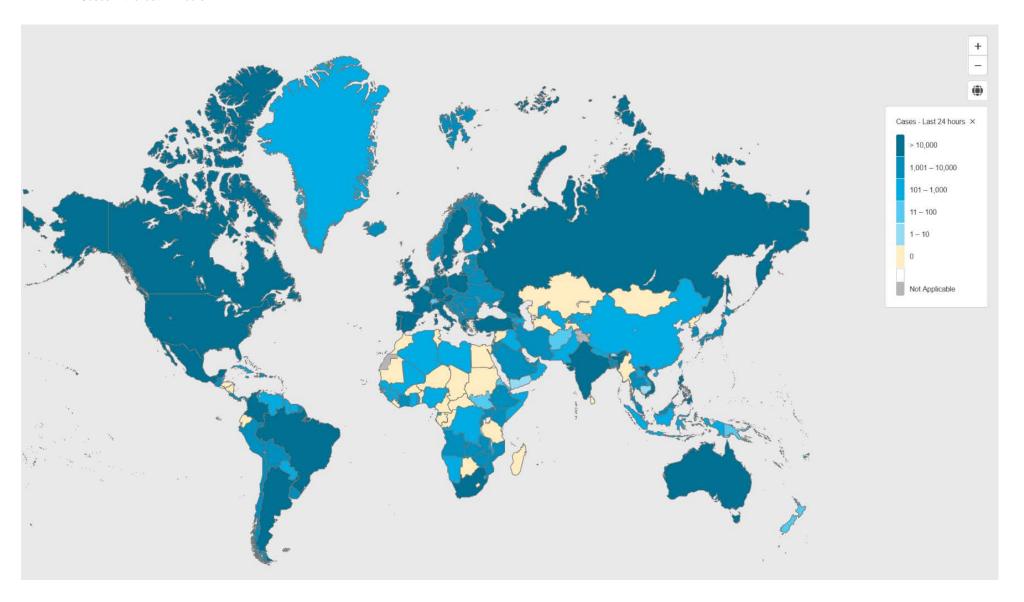
• "We have lost another precious young life to this terrible virus; it is our third pediatric death in Orange County since the start of the pandemic," said Dr. Clayton Chau, the county's health officer. "This is yet another somber reminder that we must continue to do everything we can to protect our loved ones, especially our little ones under 5 years of age who are not able to be vaccinated."

https://www.latimes.com/california/story/2022-01-06/orange-county-third-pediatric-covid-death-young-child

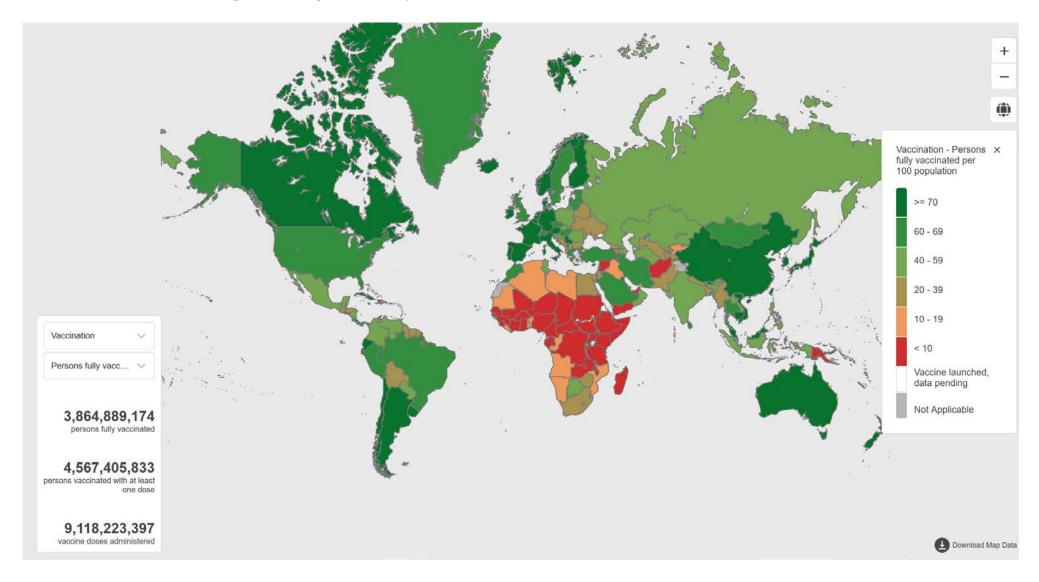
### **Global Data**

https://covid19.who.int/

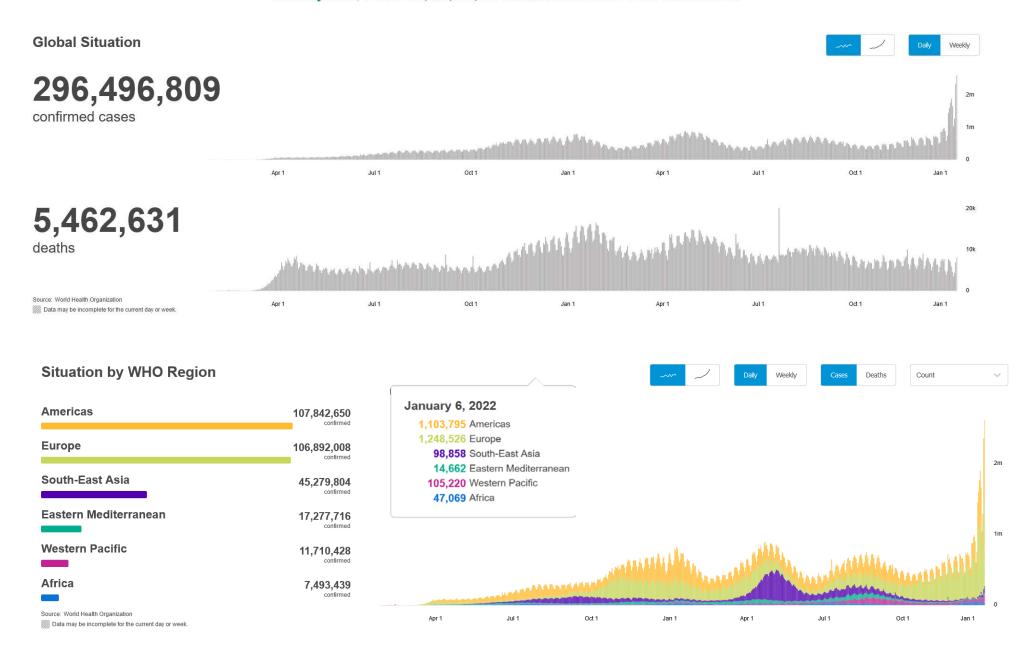
Cases in the last 24 Hours



### Gloabal Vaccination (persons fully vaccinated)



Globally, as of 5:13pm CET, 6 January 2022, there have been 296,496,809 confirmed cases of COVID-19, including 5,462,631 deaths, reported to WHO. As of 5 January 2022, a total of 9,118,223,397 vaccine doses have been administered.



### **Tracking SARS-CoV-2 variants**

All Fields

Search for lineage..

Prepared by Justin Czerniak

justin.czerniak@norcocollege.edu

https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/

#### Currently designated variants of concern (VOCs)+:

WHO label	Pango <b>lineage•</b>	GISAID clade	Nextstrain <b>clade</b>	Additional amino acid changes monitored°	Earliest documented samples	Date of designation
Alpha	B.1.1.7	GRY	20I (V1)	+S:484K +S:452R	United Kingdom, Sep-2020	18-Dec-2020
Beta	B.1.351	GH/501Y.V2	20H (V2)	+S:L18F	South Africa, May-2020	18-Dec-2020
Gamma	P.1	GR/501Y.V3	20J (V3)	+S:681H	Brazil, Nov-2020	11-Jan-2021
Delta	B.1.617.2	G/478K.V1	21A, 21I, 21J	+S:417N +S:484K	India, Oct-2020	VOI: 4-Apr-2021 VOC: 11- May-2021
Omicron*	B.1.1.529	GRA	21K, 21L 21M	+S:R346K	Multiple countries, Nov-2021	VUM: 24- Nov-2021 VOC: 26- Nov-2021

<sup>•</sup> Includes all descendent lineages. See the cov-lineages.org and the Pango network websites for further details.

### Lineage List

Lineage	Most common countries	Earliest date	# designated	# assigned	Description	WHO Name
Δ	United States of America 27.0%, United_Arab_Emirates 13.0%, China 9.0%, Germany 8.0%, Japan 5.0%	2019-12-30	1698	2235	Root of the pandemic lies within lineage A. Many sequences or sequences or sequences or sequences global exports; including to South East Asia Japan South Korea Australia the USA and Europe represented in this lineage	
<u>A.l</u>	United States of America 81.0%, Australia 9.0%, Canada 6.0%, United Kingdom 1.0%, Iceland 1.0%	2020-01-01	2699	3031	USA lineage	
<u>A.2</u>	Spain 70.0%, United Kingdom 6.0%, Panama 5.0%, United States of America 4.0%, Portugal 2.0%	2020-02-17	1107	1268	Mostly Spanish lineage now includes South and Central American sequences, other European countries and Kazakhstan.	
A.2.2	Australia 92.0%, New_Zealand 3.0%, Canada 2.0%, United States of America 2.0%, United Kingdom 1.0%	2020-03-17	473	549	Australian lineage	
<u>A.2.3</u>	United Kingdom 99.0%, Spain 0.0%, China 0.0%, Finland 0.0%	2020-02-26	167	203	Scottish lineage	

### **SARS-CoV-2 Lineage List**

https://cov-lineages.org/lineage\_list.html

<sup>\*</sup> See TAG-VE statement issued on 26 November 2021

<sup>°</sup> Only found in a subset of sequences

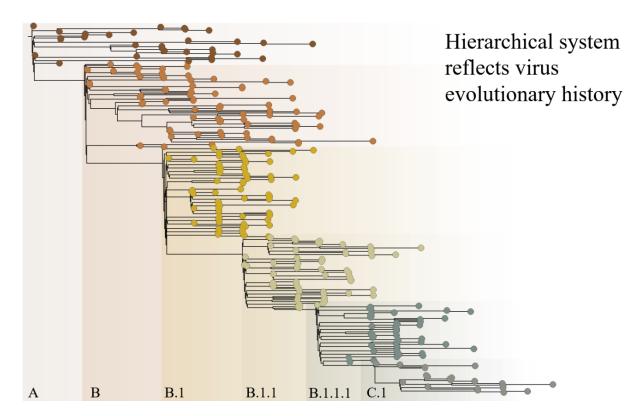
### The Pango Nomenclature System

https://www.pango.network/

Pango is a rule-based system for naming SARS-CoV-2 genetic lineages. It provides a shared, common terminology for everyone who is investigating or discussing the transmission and spread of the virus.

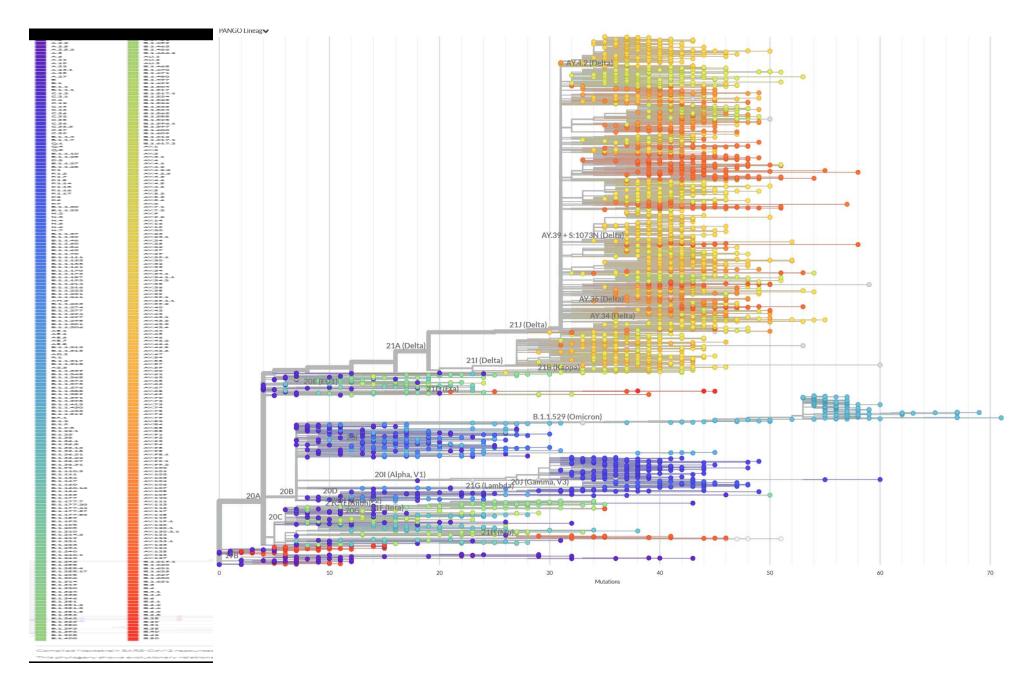
Pango is a dynamic and flexible system that can adapt to the changing nature of the pandemic and to growth in the generation of SARS-CoV-2 genomic data. The Pango nomenclature is used by researchers and public health agencies worldwide and you may have come across Pango lineage names, such as B.1.1.7 or B.1.351, in the news. Pango lineages are designed to support epidemic surveillance and outbreak investigation, and capture the leading edge of ongoing transmission at a high resolution.

Each Pango lineage defines a group of SARS-CoV-2 genome sequences and is created according to two guiding principles. First, Pango lineages signify groups or clusters of infections with shared ancestry. If the whole pandemic can be thought of as a vast branching tree of transmission, then Pango lineages represent the individual branches within that tree. Second, Pango lineages are intended to highlight epidemiologically-relevant events, such as the appearance of the virus in a new location, a rapid increase in cases, or the evolution of viruses with new phenotypes.



### Genomic epidemiology of novel coronavirus - Global subsampling

https://nextstrain.org/ncov/gisaid/global?c=pango\_lineage&d=tree&m=div&p=full&r=division&tl=pango\_lineage





### U.S. Data

https://covid.cdc.gov/covid-data-tracker/#cases\_casesper100klast7days

# United States COVID-19 Cases, Deaths, and Laboratory Testing (NAATs) by State, Territory, and Jurisdiction

Maps, charts, and data provided by CDC, updated Mon-Sat by 8 pm ET

View Footnotes and Download Data

TOTAL CASES

57,898,239

+705,264 New Cases

7 DAY CASE RATE PER 100,000 1,236.4 TOTAL DEATHS

829,740

+1,577 New Deaths

CDC | Data as of: January 6, 2022 3:56 PM ET. Posted: January 6, 2022 8:33 PM ET

### COVID-19 Vaccinations in the United States

https://covid.cdc.gov/covid-data-tracker/#vaccinations

Total Vaccine Doses	At Least One Dose	Fully Vaccinated	Booster Doses***
Delivered 632,575,655 Administered 515,162,867	Fully Vaccinated* People	Count	Percent of US Population
Administered 515,162,867  Learn more about the distribution of vaccines.	Total	207,016,514	62.4%
	Population ≥ 5 Years of Age	207,006,442	66.3%
207.0M People fully vaccinated	Population ≥ 12 Years of Age	202,375,514	71.4%
73.0M	Population ≥ 18 Years of Age	188,777,814	73.1%
People received a booster dose**	Population ≥ 65 Years of Age	48,079,504	87.7%

The percent of the population coverage metrics are capped at 95%. Learn how CDC estimates vaccination coverage.

\*For surveillance purposes, COVID Data Tracker counts people as being "fully vaccinated" if they received two doses on different days (regardless of time interval) of the two-dose mRNA series or received one dose of a single-dose vaccine.

\*\*The count of people who received a booster dose includes anyone who is fully vaccinated and has received another dose of COVID-19 vaccine since August 13, 2021. This includes people who received booster doses and people who received additional doses.

\*\*\*Some COVID-19 vaccine recipients are recommended to receive booster doses.

Total Vaccine Dos	ses
Delivered	632,575,655
Administered	515,162,867
Learn more al	
	7.0M y vaccinated

At Least One Dose	Fully Vaccinated	Booster Doses***
Fully Vaccinated* People with a Booster Dose**	Count	Percent of Fully Vaccinated*
Total	72,991,028	35.3%
Population ≥ 18 Years of Age	72,344,151	38.3%
Population ≥ 50 Years of Age	49,191,993	50.1%
Population ≥ 65 Years of Age	28,668,993	59.6%

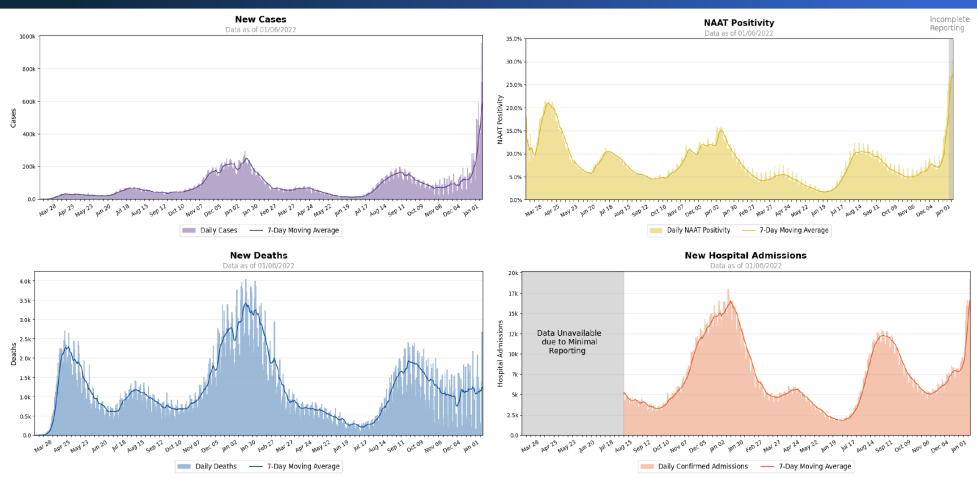
The percent of the population coverage metrics are capped at 95%. Learn how CDC estimates vaccination coverage.

\*For surveillance purposes, COVID Data Tracker counts people as being "fully vaccinated" if they received two doses on different days (regardless of time interval) of the two-dose mRNA series or received one dose of a single-dose vaccine.

\*\*The count of people who received a booster dose includes anyone who is fully vaccinated and has received another dose of COVID-19 vaccine since August 13, 2021. This includes people who received booster doses and people who received additional doses.

\*\*\*Some COVID-19 vaccine recipients are recommended to receive booster doses.

## **NATIONAL TIME SERIES**

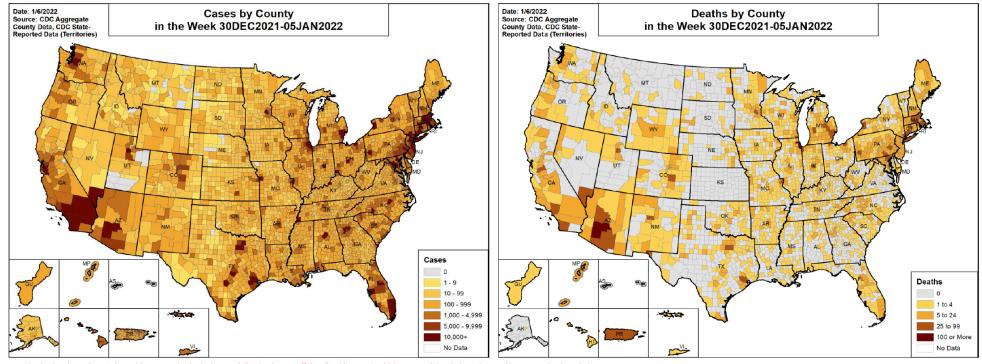


Source: CDC state-reported data (cases and deaths), Unified Testing Dataset, Unified Hospital Dataset.



### NUMBER OF NEW CASES AND DEATHS IN THE LAST 7 DAYS

Total Cumulative Cases: 57,898,239 New Cases in Last 7 Days: 4,104,738 Percent Change from Previous 7 Days: +85.7% Total Cumulative Deaths: 829,740
New Deaths in Last 7 Days: 8,720
Percent Change from Previous 7 Days: +14.4%



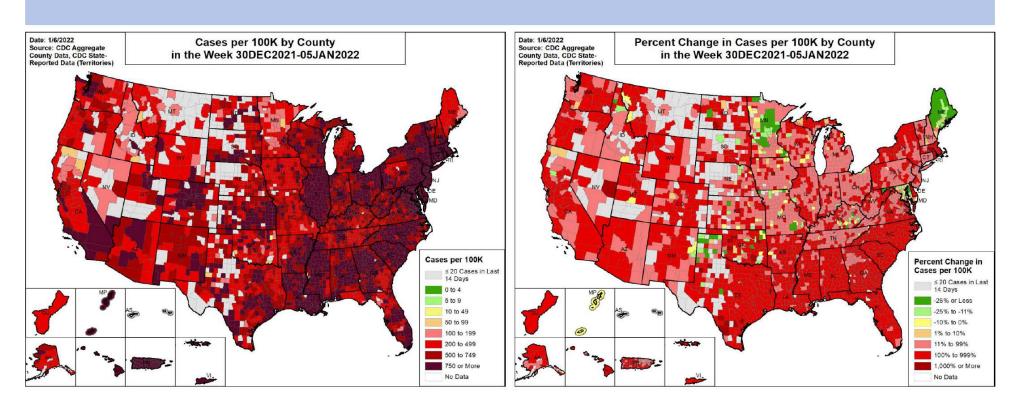
KS deaths data has at least 7 days with no reporting in the last week (by the data cutoff time for this report), which may result in missing values and inaccurate death statistics.



### CASE INCIDENCE IN LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

Incidence Rate in the Last 7 Days: 1,236.3 per 100,000

**Percent Change from Previous 7 Days: +85.7%** 

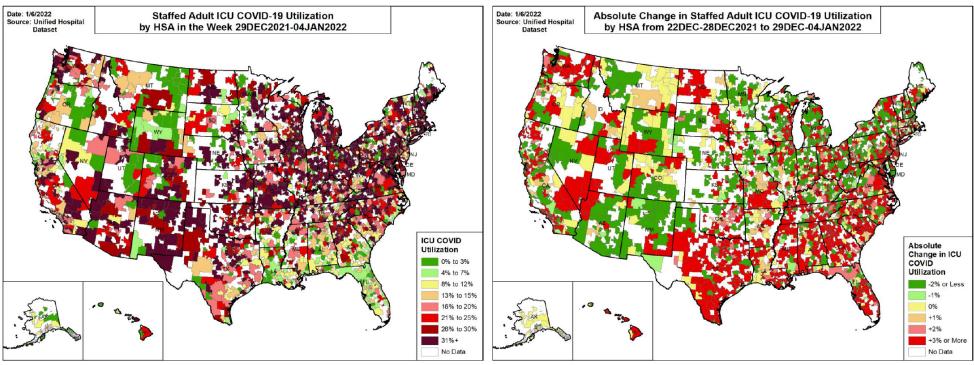




### STAFFED ADULT ICU COVID-19 UTILIZATION IN THE LAST 7 DAYS AND COMPARISON TO THE PREVIOUS 7 DAYS

# Average Daily Adult ICU COVID-19 Patients over Last 7 Days: 18,936

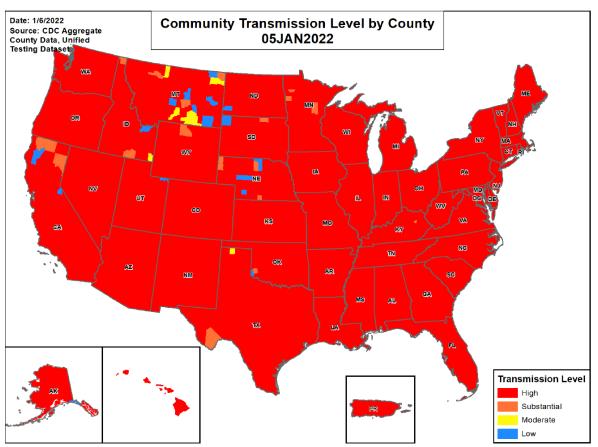
### **Percent Change from Previous 7 Days:** +15.5%



**Source:** Unified Hospital Dataset, excluding psychiatric, rehabilitation, and religious non-medical hospitals. Staffed adult ICU COVID-19 utilization indicates average percentage of staffed adult ICU beds occupied by confirmed COVID-19 patients within the given time period. HSA indicates Hospital Service Area. Hospitals are assigned to HSA based on zip code where known. In some areas, reports are aggregates of multiple facilities that cross HSA boundaries; in these cases, values are assigned based on the zip code for the aggregate. See Data Sources/Methods slides for additional details.

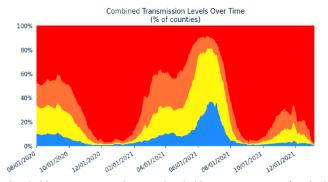


### **COMMUNITY TRANSMISSION LEVEL**



Counties by Community Transmission Indicator								
Cases per 100k	0 to 9	10 to 49	50 to 99	100 +				
# of counties (change)	32 (↓19)	9 (↓50)	33 (↓156)	3146 (↑225)				
% of counties (change)	1.0% (↓0.6%)	0.3% (↓1.6%)	1.0% (↓4.8%)	97.7% (个7.0%)				
Test Positivity	0.0% to 4.9%	5.0% to 7.9%	8.0% to 9.9%	10.0% +				
# of counties (change)	153 (↓126)	84 (↓163)	70 (↓164)	2913 (↑453)				
% of counties (change)	4.8% (↓3.9%)	2.6% (↓5.1%)	2.2% (↓5.1%)	90.5% (↑14.1%)				

Counties by Combined Transmission Level							
Category	Low Transmission Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red			
# of counties (change)	22 (↓9)	6 (↓35)	18 (↓84)	3174 ( 128)			
% of counties (change)	0.7% (↓0.3%)	0.2% (↓1.1%)	0.6% (↓2.6%)	98.6% (↑4.0%)			
% of population (change)	0.0% (↓0.0%)	0.0% (↓0.1%)	0.1% (↓0.5%)	99.9% (↑0.6%)			

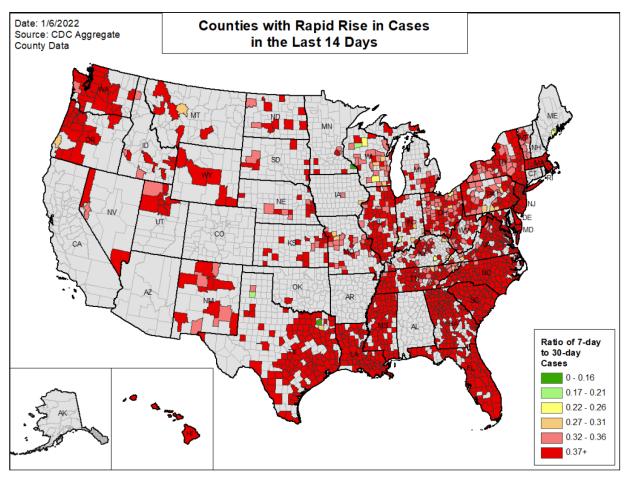


Source: CDC Aggregate County Dataset (cases), Unified Testing Dataset (tests)

Notes: Cases data from December 30-January 5, test positivity data from December 28-January 3. Combined Transmission Level is the higher threshold among cases and testing thresholds. See Data Sources/Methods slides for additional details.



## **AREA OF CONCERN CONTINUUM - RAPID RISER COUNTIES**



This map shows counties that have seen a rapid rise in cases within the last 14 days by meeting the following Rapid Riser County criteria:

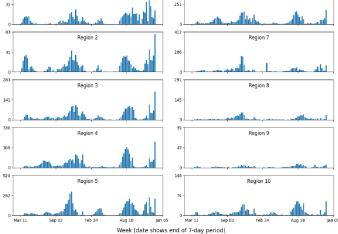
- >100 new cases in last 7 days
- >0% change in 7-day incidence
- >-60% change in 3-day incidence
- 7-day incidence / 30-day incidence ratio >0.31
- one or both of the following triggering criteria: (a) >60% change in 3-day incidence,
  - (b) >60% change in 7-day incidence

The color indicates *current* acceleration in cases (ratio of 7-day to 30-day cases). Counties in light red and red are continuing to see accelerating cases in the most recent week, while those in dark green and green may have seen declines in the most recent week.

The bar charts below show the history of rapid riser counties by FEMA region and week, indicating when different geographic areas have seen the greatest acceleration in cases.

### # of Distinct Rapid Riser Counties by Week and FEMA Region (vertical axis scaled to number of counties in region)







### Level of Community Transmission of COVID-19, by State/Territory

https://covid.cdc.gov/covid-data-tracker/#cases\_community

UNITED STATES LEVEL OF COMMUNITY

TRANSMISSION

High

7 DAY CASE RATE PER 100,000 1,236.4 7 DAY PERCENT POSITIVITY 27.24%

CDC | Data as of: January 6, 2022 3:56 PM ET. Posted: January 6, 2022 8:33 PM ET

### **Variant Proportions**

https://covid.cdc.gov/covid-data-tracker/#variant-proportions



# **COVID-19 RESPONSE BY THE NUMBERS** As of January 03, 2022



Accessible www.cdc.gov/coronavirus/2019-ncov/cdcresponse/by-the-numbers.html

	10,000	CDC personnel supporting the outbreak response	000	57.11+ million	Times people have used CDC's online Coronavirus Self-Checker
	1,883	CDC deployers who have conducted 4,370 deployments to 352 cities across the United States and abroad		1.5+ million	Calls and emails to CDC-INFO
<b>③</b>	387	COVID-19 studies published in CDC's Morbidity and Mortality Weekly Report (MMWR)		3.7+ billion	Times people have looked for information on CDC websites
	9,590	Documents providing information and guidance for government agencies, businesses, and the public		4.5+ billion	Social media impressions on 18,777 CDC response-related posts
	712+ million	COVID-19 tests conducted by public and private laboratories in the United States	<b>\Psi</b>	95,942+	Inquiries from doctors, nurses, or other clinical staff and health departments received by CDC
V	243+ million	People who have received at least one dose of a COVID-19 vaccine		205+ million	People who have been fully vaccinated with a COVID-19 vaccine

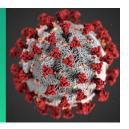
cdc.gov/coronavirus

CS316565-A

### **COVID-19 Science Update**



# **COVID-19 Science Update**



https://www.cdc.gov/library/covid19/scienceupdates.html?Sort=Date%3A%3Adesc

COVID-19 Science Update released: December 17, 2021 Edition 117

COVID-19 Science Update released: December 10, 2021 Edition 116

COVID-19 Science Update released: December 3, 2021 Edition 115

COVID-19 Science Update released: November 19, 2021 Edition 114

COVID-19 Science Update released: November 15, 2021 Edition 113

COVID-19 Science Update released: November 5, 2021 Edition 112

COVID-19 Science Update released: October 29, 2021 Edition 111

COVID-19 Science Update released: October 22, 2021 Edition 110

COVID-19 Science Update released: October 15, 2021 Edition 109

COVID-19 Science Update released: October 8, 2021 Edition 108

COVID-19 Science Update released: October 1, 2021 Edition 107

COVID-19 Science Update released: September 24, 2021 Edition 106

COVID-19 Science Update released: September 17, 2021 Edition 105

COVID-19 Science Update released: September 10, 2021 Edition 104

### **CDC What's New & Updated**

https://www.cdc.gov/coronavirus/2019-ncov/whats-new-all.html

- 1/7/22EARLY RELEASE: Risk for Newly Diagnosed Diabetes 30 Days After SARS-CoV-2 Infection Among Persons Aged 18 years
   United States, March 1, 2020–June 28, 2021
- 1/7/22EARLY RELEASE: Effectiveness of BNT162b2 (Pfizer-BioNTech) mRNA Vaccination Against Multisystem Inflammatory Syndrome in Children Among Persons Aged 12–18 Years United States, July–December 2021
- 1/6/22COVID-19 Vaccine Booster Shot
- 1/6/22COVID-19 Vaccines for Moderately to Severely Immunocompromised People
- 1/6/22Staffing Resources
- 1/6/22Information about the Moderna COVID-19 Vaccine
- 1/6/22Different COVID-19 Vaccines
- 1/6/22Infection Prevention and Control Assessment Tool for Nursing Homes Preparing for COVID-19
- 1/6/22COVID Data Tracker Weekly Review
- 1/6/22CDC Media Telebriefing: Update on COVID-19
- 1/6/22<u>Cases in the U.S.</u>
- 1/6/22Risk Factors for Severe COVID-19 Outcomes Among Persons Aged ≥18 Years Who Completed a Primary COVID-19 Vaccination Series 465 Health Care Facilities, United States, December 2020–October 2021
- 1/6/22Receipt of COVID-19 Vaccine During Pregnancy and Preterm or Small-for-Gestational-Age at Birth Eight Integrated Health
  Care Organizations, United States, December 15, 2020–July 22, 2021
- 1/6/22Overall US COVID-19 Vaccine Distribution and Administration Update as of Thu, 06 Jan 2022 06:00:00 EST
- 1/5/22Overview of COVID-19 Isolation for K-12 Schools
- 1/5/22Overview of COVID-19 Quarantine for K-12 Schools
- 1/5/22Responding to COVID-19 Cases in K-12 Schools: Resources for School Administrators
- 1/5/22What You Should Know About COVID-19 Testing in Schools
- 1/5/22Guidance for COVID-19 Prevention in Kindergarten (K)-12 Schools
- 1/5/22Information about the Pfizer-BioNTech COVID-19 Vaccine
- 1/5/22Schools and Childcare Programs
- 1/5/22CDC Expands Booster Shot Eligibility and Strengthens Recommendations for 12-17 Year Olds
- 1/4/22Stay Up to Date with Your Vaccines
- 1/4/22COVID-19 Forecasts: Deaths
- 1/4/22Previous COVID-19 Forecasts: Hospitalizations
- 1/4/22CDC Science Agenda for COVID-19
- 1/4/22COVID-19 Forecasts: Cases
- 1/4/22Test for Current Infection (Viral Test)
- 1/4/22Coronavirus Disease 2019 (COVID-19)
- 1/4/22 CDC Recommends Pfizer Booster at 5 Months, Additional Primary Dose for Certain Immunocompromised Children
- 1/3/22What We Know About Quarantine and Isolation

#### **CDC Guidance**

https://www.cdc.gov/coronavirus/2019-ncov/communication/quidance-list.html?Sort=Date%3A%3Adesc

### Guidance for COVID-19 Prevention in K-12 Schools

See guidance on COVID-19 prevention in kindergarten (K)-12 schools including promoting vaccination, mask use, and physical distancing. Date: 1/5/22

### Public Health Guidance for Potential COVID-19 Exposure Associated with Travel

Find detailed guidance for public health officials about possible COVID-19 travel exposure, risk assessments, and other technical considerations. Date: 1/5/22

# Operational Considerations for the Identification of Healthcare Workers and Inpatients with Suspected COVID-19 in non-U.S. Healthcare Settings

This document is provided by CDC and is intended for use in non-US healthcare settings. This document provides guidance on the identification or screening of healthcare workers and inpatients with suspected COVID-19. Date: 12/29/21

### Guidance for Institutions of Higher Education (IHEs)

See guidance for Institutes of Higher Education (IHE), including guidance for in-person learning during COVID-19, and offering and promoting vaccines. Date: 12/28/21

### **Contact Tracing for COVID-19**

This section provides steps and consideration that jurisdictions can use to develop a protocol for the tracing of close contacts. Date: 12/28/21

### Care for Breastfeeding People

Find guidance for healthcare workers on managing breastfeeding people, infants, and children, including those with confirmed or suspected COVID-19. Date: 12/28/21

### Testing Strategies for SARS-CoV-2

Explore SARS-CoV-2 testing strategies, including their intended use and applications, regulatory requirements, and reporting requirements. (138) Date: 12/27/21

### Considerations for Case Investigation and Contact Tracing in K-12 Schools and Institutions of Higher Education (IHEs)

Learn what administrators of K-12 schools and institutions of higher education should know about COVID-19 case investigation and contact tracing. Date: 12/27/21

### California Takes Action to Combat COVID-19

https://www.gov.ca.gov/california-takes-action-to-combat-covid-19/





### **Indoor masking required until February 15**

To fight the surge in new COVID-19 infections, CDPH has extended the mask mandate. Everyone in California should wear a mask in indoor public spaces and workplaces until February 15, 2022.

### **Tracking COVID-19**

https://update.covid19.ca.gov/#top

https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/ncov2019.aspx#https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/CovidDataAndTools.aspx

### Safely reopening California

https://covid19.ca.gov/safely-reopening/

### **California Healthy Places Index**

https://covid19.healthyplacesindex.org/ https://map.healthyplacesindex.org/

### **CDPH Statewide Guidance**

https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Guidance.aspx



Press Releases, Executive Orders, Media Advisories, and Proclamations. https://www.gov.ca.gov/newsroom/

### **Data models**

https://covid19.ca.gov/data-and-tools/

#### Cal/OSHA

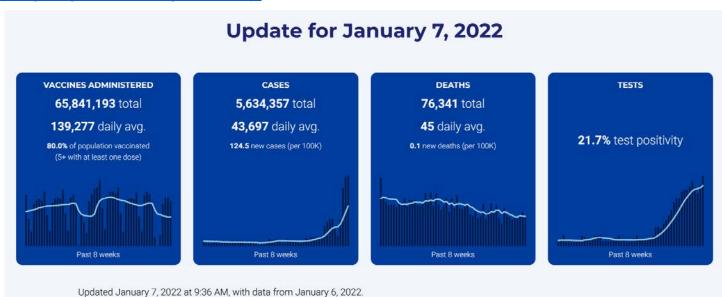
https://www.dir.ca.gov/dosh/https://www.dir.ca.gov/dosh/COVID19citations.htmlhttps://www.dir.ca.gov/oshab/oshab.html

### **Vaccines**

https://covid19.ca.gov/vaccines/ https://myturn.ca.gov/

### **News Releases**

https://www.cdph.ca.gov/Programs/OPA/Pages/News-Releases-2021.aspx



### Statewide

### Doses Administered by County of Residence

•

**26,956,555 (71.5%)** People 5+ fully vaccinated **3,185,841 (8.5%)** People 5+ partially vaccinated

County (All)



65,841,193 (85.8%) Doses administered 139,277 Average doses per day

10,583,011 (49.5%) Booster recipients



**6,086,407** Doses on hand (**44** days of inventory)

**76,715,855** Doses Delivered



30,285,340 CDC Pharmacy Doses Delivered

See Data Dictionary for Details.

Today's administration data is incomplete due to data processing latency. This report will be updated as soon as the data becomes available.



Los Angeles	16,990,418	-
San Diego	5,901,506	
Orange	5,431,816	
Santa Clara	3,986,810	
Riverside	3,298,224	
Alameda	3,207,540	
San Bernardino	2,758,530	
Sacramento	2,406,087	
Contra Costa	2,244,724	
San Francisco	1,838,220	
San Mateo	1,570,566	
Ventura	1,410,632	
Fresno	1,373,013	
San Joaquin	1,057,987	
Kern	1,052,944	
Sonoma	929,310	
Santa Barbara	714,197	
Stanislaus	708,989	
Monterey	708,962	
Solano	693,216	-

40 000 440

‡‡ + a b | e a u







Data: 1/6/2022 11:59pm | Posted: 1/7/2022







### **Post-Vaccine COVID-19 Cases**

https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Post-Vaccine-COVID19-Cases.aspx

### Unvaccinated and vaccinated data

https://covid19.ca.gov/state-dashboard/#postvax-status

#### What Is a Post-Vaccination COVID-19 Case?

Post-vaccination cases are defined as individuals who are fully vaccinated and have a positive SARS-CoV-2 molecular (e.g. PCR) test 14 days or more after they have completed their full one-dose or two-dose COVID-19 vaccination series. They are also referred to as vaccine breakthrough cases.

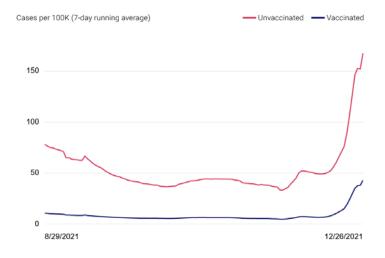
# How Are Post-Vaccination COVID-19 Cases Identified?

The California Department of Public Health (CDPH) is identifying post-vaccination cases by analyzing the immunization and case registries to find individuals who have a positive SARS-Cov-2 molecular test at least 14 days after they have completed their full vaccination series. Local Health Jurisdictions (LHJs) are also encouraged to alert CDPH of post-vaccination cases especially if they result in severe disease (e.g., hospitalization or death) or if they are associated with an outbreak.

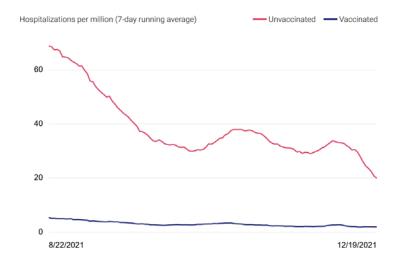
### Why are we Tracking Post-Vaccination Cases?

Tracking cases of COVID-19 that occur after vaccination is important for monitoring the immunization campaign. While COVID-19 vaccines are safe and effective, some cases are still expected in persons who have been vaccinated, as no vaccine is 100% effective. If the number or severity of post-vaccination cases exceeds expected levels, this could be a signal of reduced protection against a variant or errors in vaccine delivery. Whole genome sequencing of post-vaccination cases, especially severe cases, can help characterize the effectiveness of current vaccines against variants.

From December 20, 2021 to December 26, 2021, unvaccinated people were **3.9 times more likely** to get COVID-19 than fully vaccinated people.



From December 13, 2021 to December 19, 2021, unvaccinated people were **10.1 times more likely** to be hospitalized with COVID-19 than fully vaccinated people.



# **Regional ICU Capacity (Data as of 1/06/2022)**

Region	% of Staffed Adult ICU Beds Available	% COVID+ in Adult ICU Beds	Number of Consecutive Days Under 10 % *	Date Health Order Effective	Date Health Order Set to Expire **
California Statewide	18.5	26.5			
Bay Area	20.6	18.3			
Greater Sacramento	14.7	23.8			
Northern California	26	20.9			
San Joaquin Valley	13.6	25.6			
Southern California	18.9	29.6			

<sup>\*</sup> Must be under 10% for 3 consecutive days to trigger Health Order.

<sup>\*\*</sup> The region will be reevaluated seven days from the date the Health Order was triggered.



Confirmed **410,526** 

772
Includes 123 in ICU

Deaths **5,620** 

Recovered **390,880** 

Zip Code & Community Data here

Daily Case Rate / 100k 82.0 (7-Day Avg & 7-Day Lag)

Positivity
21.3%
(7-Day Avg & 7-Day Lag)

Daily Test Rate / 100k 505.8 (7-Day Avg & 7-Day Lag)

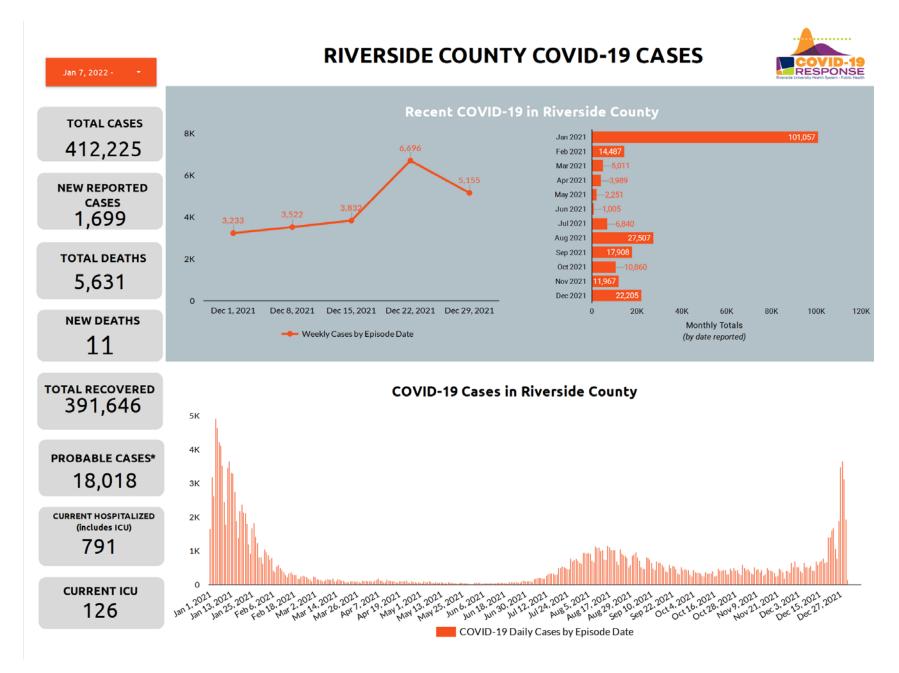
Dashboard -Click <u>here</u> for more detailed city/community data and reports

### **RUHS Public Health News:**

- Health officials in Riverside County report first case of Omicron variant English / Spanish
- RUHS Public Health: Guidance on the use of masks in CA 12.14.21
- Pfizer vaccine doses for children between 5-11 years old to be made available in Riverside County English / Spanish
- Booster for Moderna, Johnson & Johnson to be available in Riverside County starting Tuesday English / Spanish
- Booster vaccine doses available in Riverside County from Public Health and community partners <a href="English">English</a> / <a href="Spanish">Spanish</a>
- Health officials confirm death of 4-year-old is COVID-19 related English / Spanish

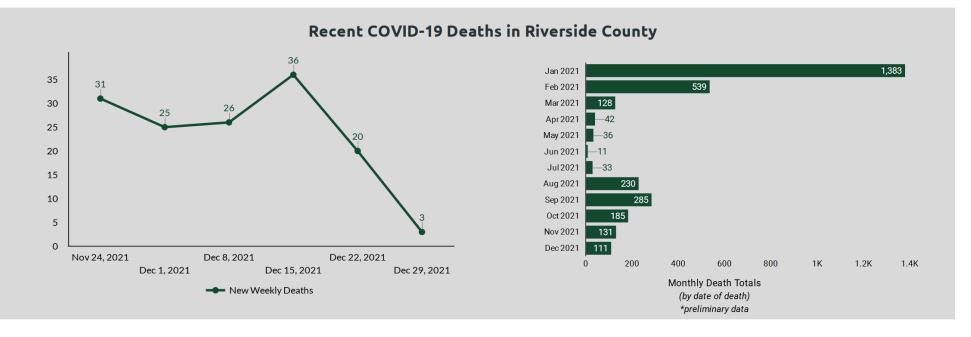
### **RIVERSIDE COUNTY DAILY COVID-19 REPORT**

 $\underline{https://www.rivcoph.org/Portals/0/Documents/CoronaVirus/Reports/DailyEpidemiologySummary.pdf?x=1641576035800}$ 

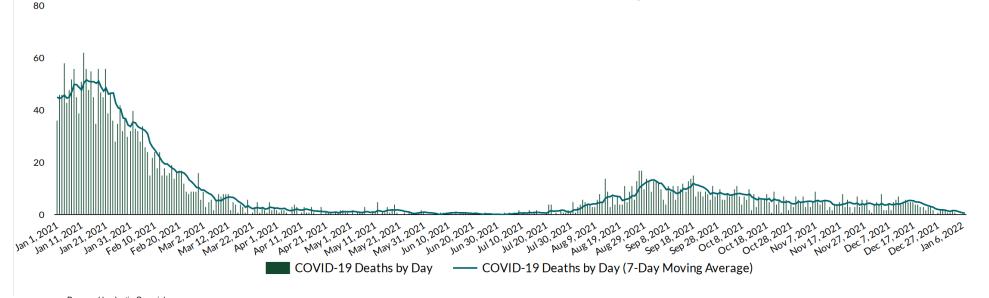


### **RIVERSIDE COUNTY COVID-19 DEATHS**





### **COVID-19 Deaths in Riverside County**

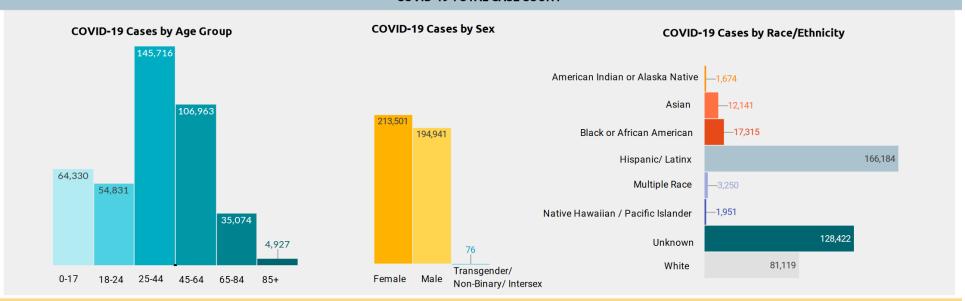


Jan 7, 2022 -

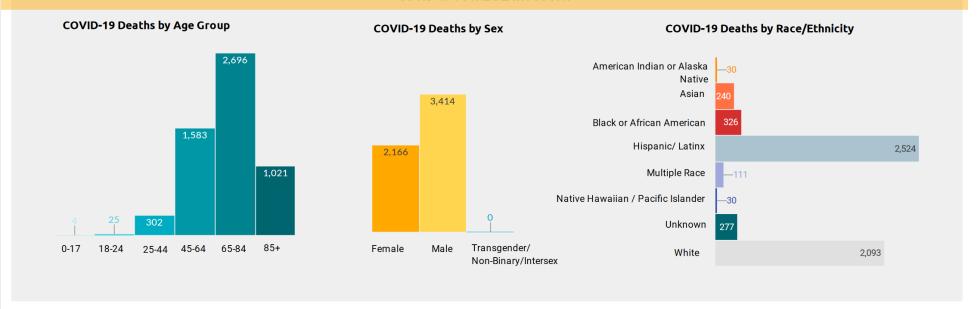
# RIVERSIDE COUNTY COVID-19 TOTAL CASE & DEATH DEMOGRAPHICS (COUNTS)



#### **COVID-19 TOTAL CASE COUNT**



#### **COVID-19 TOTAL DEATH COUNT**

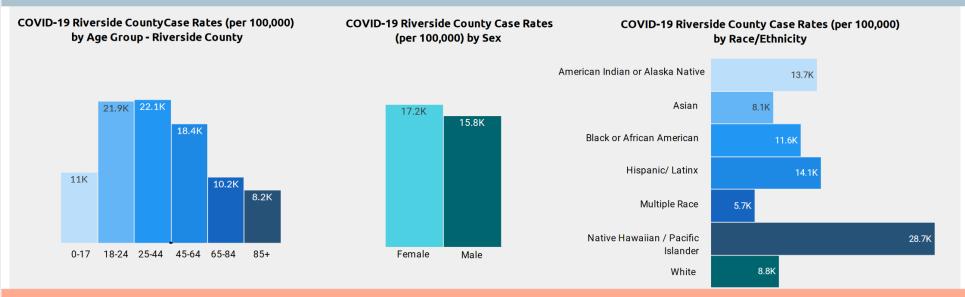


Jan 7, 2022 - ▼

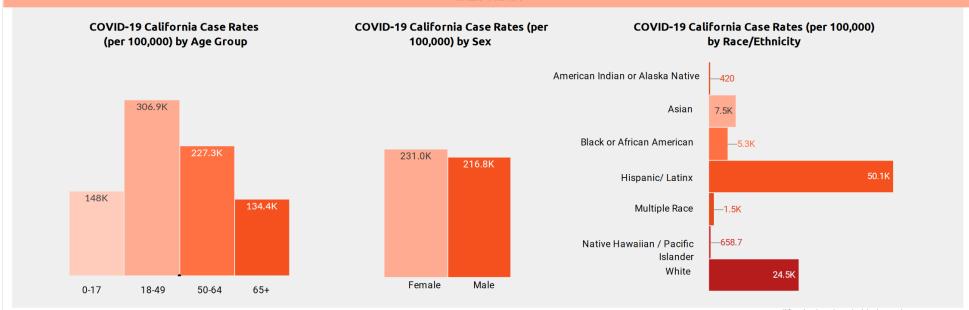
# COVID-19 CASE RATE DEMOGRAPHICS CALIFORNIA AND RIVERSIDE COUNTY







#### **CALIFORNIA**



Prepared by Justin Czerniak justin.czerniak@norcocollege.edu

\* California data lags behind one day

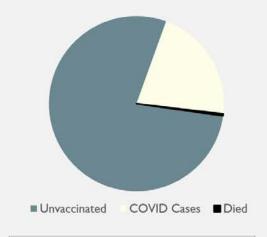
https://www.rivcoph.org/Portals/0/Documents/CoronaVirus/Reports/Condensed%20EPE%20Report.pdf?x=1641576035801

# COVID AMONG FULLY VACCINATED VS. UNVACCINATED RESIDENTS 5+ IN RIVERSIDE COUNTY JAN-DEC 2021

1.3% of the vaccinated population are cases compared to 27.3% of the unvaccinated population.



	Number	Percent
Fully Vaccinated	1,487,496	
COVID Cases	19,186	1.3%
Died	112	0.008%



	Number	Percent
Unvaccinated	616,543	
COVID Cases	168,060	27.3%
Died	2,861	0.5%



Source: CalREDIE & Snowflake Data Data as of: 12/26/2021 Page 2 of 7

# COVID-19 CASES, AMONG RIVERSIDE RESIDENTS 5+ BY MONTH AND VACCINATION STATUS, FEB-DEC 2021

"Because vaccines are not 100% effective, as the number of people who are fully vaccinated goes up, the number of vaccine breakthrough infections will also increase." (CDC, 2021)

#### Cases among vaccinated individuals have continued to rise as overall cases have increased. 35000 15.7% 30000 25000 Number of Cases 29.9% 17.6% 20000 23.9% 21.9% 15000 15.9% 0.2% 10000 5000 1.5% 2.5% 5.1% 8.8% 0 Apr July Feb Mar May lune Aug Sept Oct Nov Dec ■ Total Cases ■ Fully Vaccinated Cases Note: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/effectiveness/why-measure-effectiveness/breakthrough-cases.html Source: Snowflake, CalREDIE https://www.rivcoph.org/coronavirus Data as of 12/26/2021 Page 3 of 7

### **VACCINATION STATUS BY AGE GROUP 0-17 YEARS** RIVERSIDE COUNTY JUNE-DEC, 2021

In December 2021, 80.4% of all cases among adolescents 12-17 years were unvaccinated.

8,715 unvaccinated cases ages 12-17 years were eligible for a vaccine.

COVID Cases by Vaccination Status 0-17 years							
	Unvaccinated			Fully Vaccinated			
Month	0-4	5-11	12-17	5-11	12-17		
June	47	90	128	0	2		
July	303	688	920	I	28		
Aug	865	2653	2903	I	117		
Sept	570	1697	1781	0	89		
Oct	395	1155	974	0	97		
Nov	413	1118	949	0	128		
Dec	505	1265	1060	5	258		
Total	3098	8666	8715	7	719		

Note: Tuesday November 2<sup>nd</sup>, 2021 children ages 5-11 became vaccine eligible



https://www.rivcoph.org/coronavirus

Source: CalREDIE CDC- vaccine eligibility Data Accessed: 12/26/2021 Page 7 of 7 https://www.rivcoph.org/COVID-19-Vaccine

### **RUHS Public Health:**

- Pfizer Covid Vaccine Updated EUA October 20, 2021
- <u>Fact Sheet for Healthcare Providers Administering Vaccine (Vaccination Providers) Emergency Use Authorization (EUA) of the Pfizer-Biontech Covid-19 Vaccine to Prevent Coronavirus Disease 2019 (Covid-19) **October 20, 2021**</u>
- Fact Sheet for Recipients and Caregivers Emergency Use Authorization (EUA) of the Pfizer-Biontech Covid-19 Vaccine to Prevent Coronavirus Disease 2019 (Covid-19) in Individuals 12 Years of Age and Older October 20, 2021





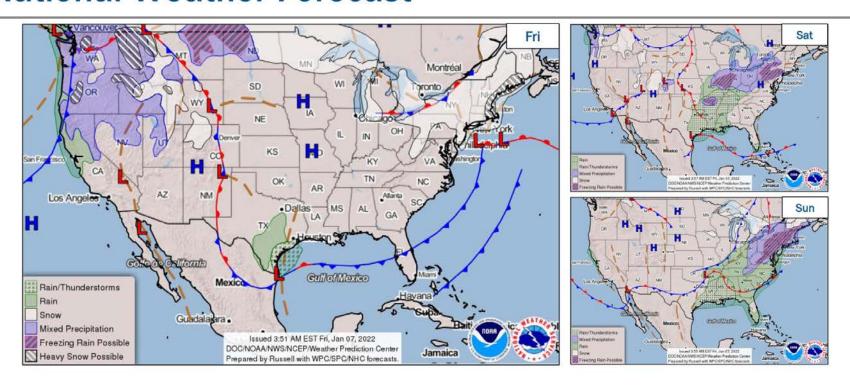
### Weather



Latest hazard threat table: https://www.wrh.noaa.gov/sgx/event/dsstable.php

https://www.weather.gov/forecastpoints#

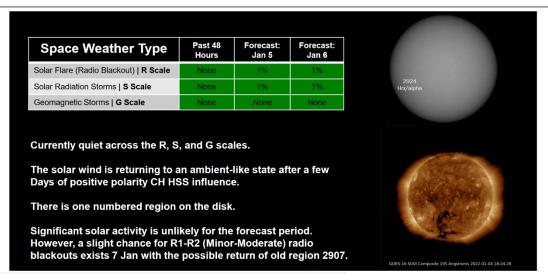
## **National Weather Forecast**





**National Watch Center** 

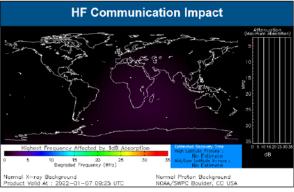
### **Space Weather Summary/Outlook**

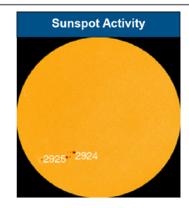


National Watch Center

### **Space Weather Outlook**

	Space Weather Activity	Geomagnetic Storms	Solar Radiation	Radio Blackouts		
Past 24 Hours	None	None	None	None		
Next 24 Hours	None	None	None	None		
For further information on NOAA Space Weather Scales refer to: http://www.swpc.noaa.gov/noaa-scales-explanation For further information on Sunspot Activity refer to: https://www.swpc.noaa.gov/phenomena/sunspotssolar-cycle						







National Watch Center

https://www.arcgis.com/apps/webappviewer/index.html?id=85c7770bac684749a631bd7b42eac1b7

