



COVID-19 Impact: Vaccines, Variants, and More

This meeting will be recorded and will be available at www.fmda.org/journalclub.php



FMDA Journal Club

February 10, 2021

Diane Sanders-Cepeda, DO, CMD – Presenter

Agenda

- State of the State
- COVID Variants - What We Know
- Vaccination updates
- Clinical updates
- Open Discussion

COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)

Global Cases

106,993,984

Cases by Country/Region/Sovereignty

- 27,193,850 US
- 10,858,371 India
- 9,599,565 Brazil
- 3,983,756 United Kingdom
- 3,968,228 Russia
- 3,419,210 France
- 3,005,487 Spain
- 2,655,319 Italy
- 2,548,195 Turkey
- 2,305,470 Germany
- 2,166,904 Colombia
- 1,993,295 Argentina
- 1,946,751 Mexico
- 1,563,645 Poland



Cumulative Cases Active Cases Incidence Rate Case-Fatality Ratio Testing Rate

192 countries/regions

Lancet Inf Dis Article: Here. Mobile Version: Here. Data sources: Full list. Downloadable database: GitHub, Feature Layer. Lead by JHU CSSE. Technical Support: Esri Living Atlas team and JHU APL. Financial Support: JHU, NSF, Bloomberg Philanthropies and Stavros Niarchos Foundation. Resource support: Slack, Github and AWS.

Global Deaths

2,343,277

- 468,217 deaths US
- 233,520 deaths Brazil
- 168,432 deaths Mexico
- 155,252 deaths India
- 114,066 deaths United Kingdom
- 92,002 deaths Italy

US State Level

Deaths, Recovered

- 45,140 deaths, 133,869 recovered New York US
- 45,009 deaths, recovered California US
- 39,799 deaths, 2,125,302 recovered Texas US
- 28,048 deaths, recovered Florida US
- 22,590 deaths, 745,376 recovered Pennsylvania US

Global Deaths

US Deaths, Recovered



Last Updated at (M/D/YYYY) 2/10/2021, 7:23 AM

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Last Updated at (M/D/YYYY)

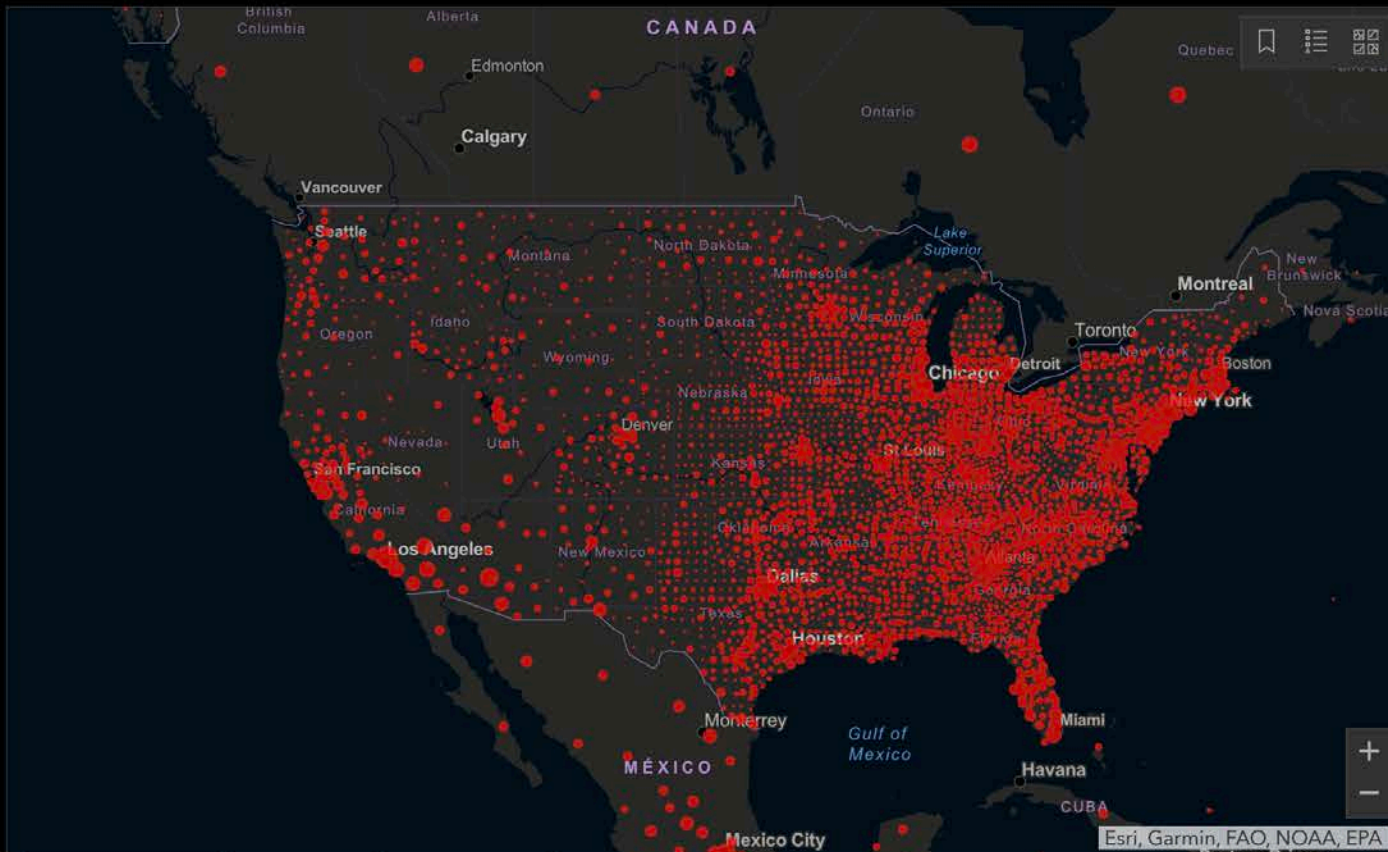
2/10/2021, 7:23 AM

192

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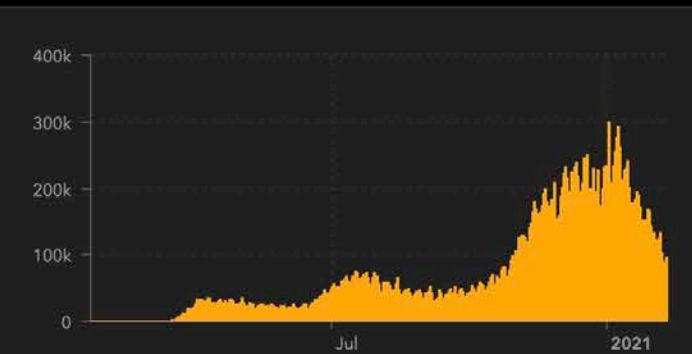
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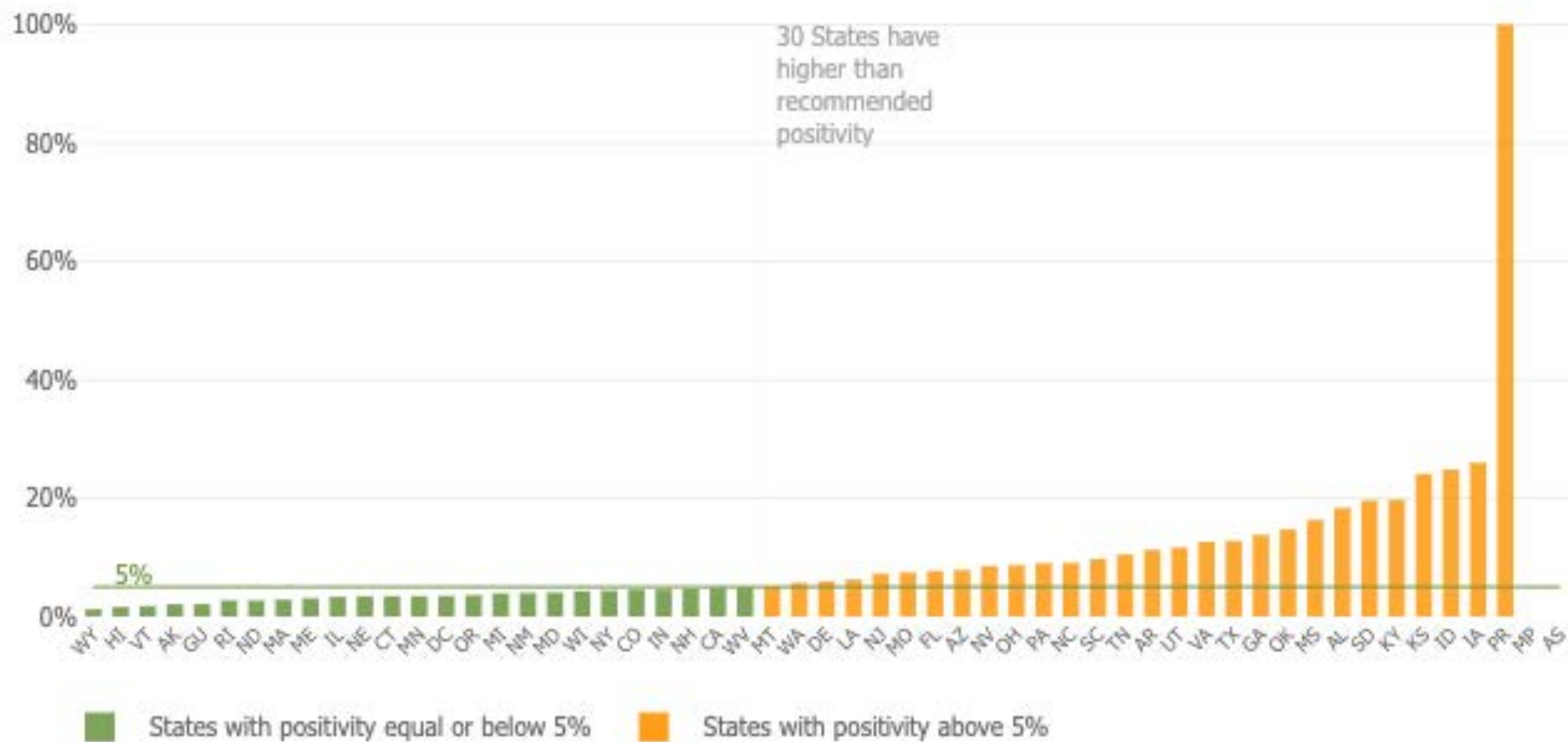
Global Deaths

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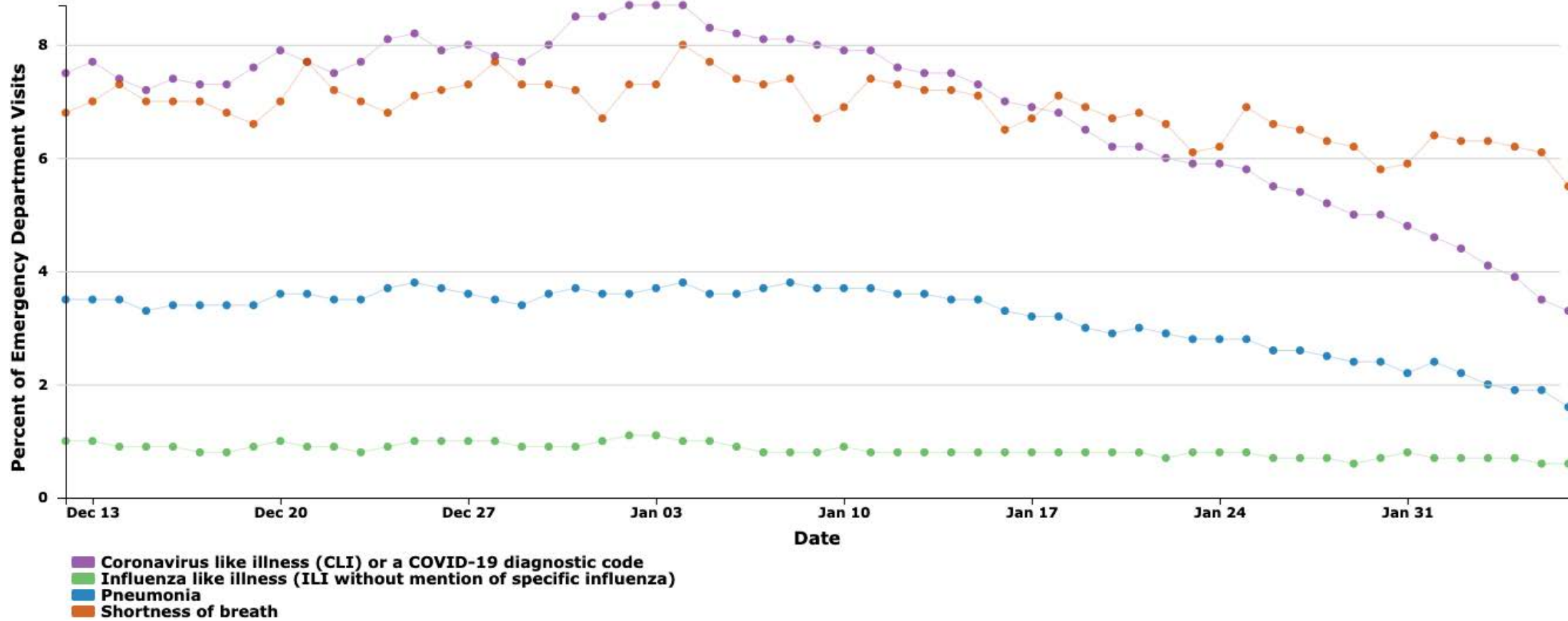


Daily Cases

Positivity Percentage
(average of the last 7 days)



Percentage of ED visits by syndrome in United States: COVID-19-Like Illness, Shortness of Breath, Pneumonia, and Influenza-Like Illness





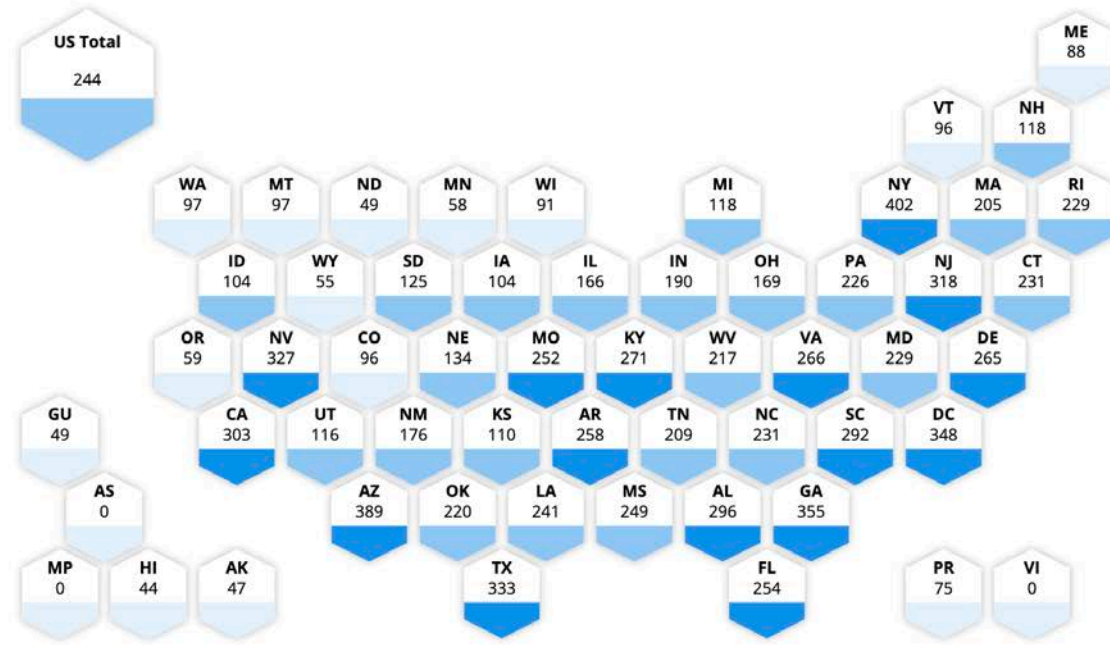
Hospitalization

Cases per 100k

National overview

Currently hospitalized per 1 million people

Data updated February 9, 2021



Under 100 100 - 250 250 - 500 Over 500 hospitalizations per 1 million

US Total

326,909,867

Total test results

26,968,049

Cases

79,179

Currently hospitalized

458,250

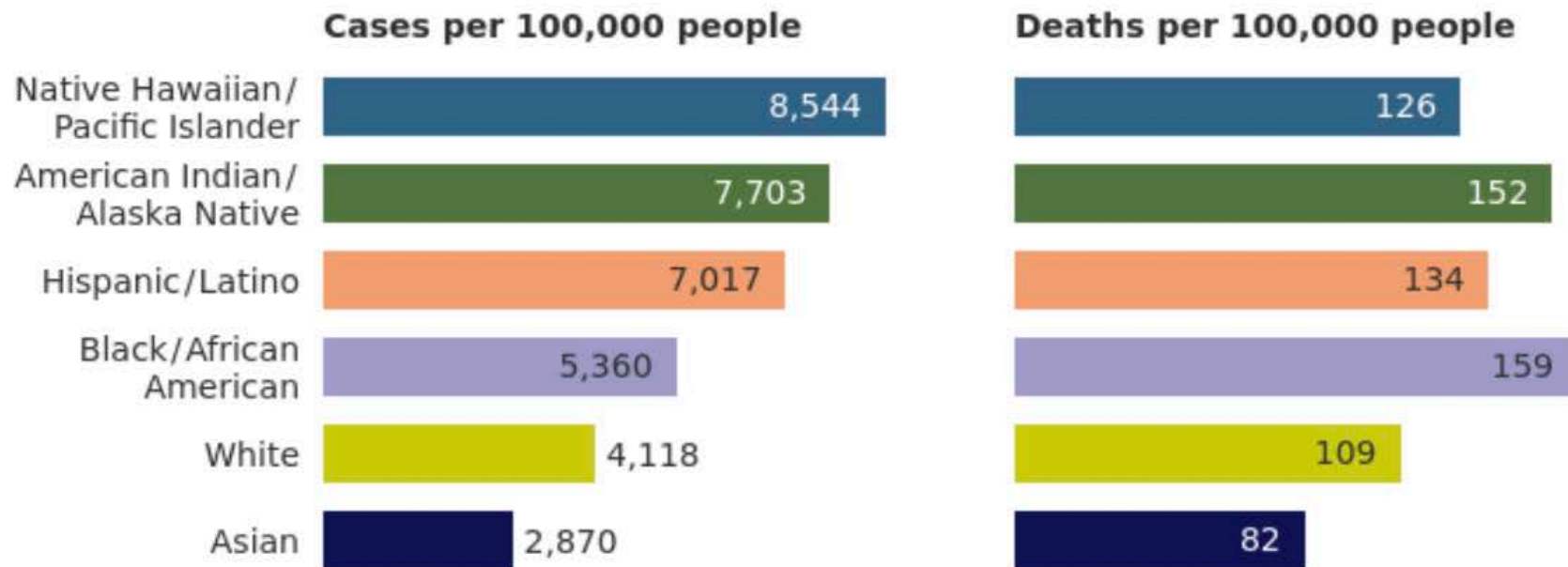
Deaths

February 1, 2021

It's Time: The COVID Tracking Project Will Soon Come to an End

[Read the article →](#)

In the **United States**, through February 9, Native Hawaiians/Pacific Islanders were most likely to have contracted COVID-19. Black/African American people were most likely to have died.



Notes: Nationwide, 51 of 56 states and territories report race/ethnicity information for cases and 51 of 56 report race/ethnicity for deaths. Graphic includes demographic data from all states and territories that report, using standard Census categories where possible, and scaled to the total US population for each Census category. Race categories may overlap with Hispanic/Latino ethnicity. Some rates are underestimated due to lack of reporting of race and ethnicity categories for COVID-19 cases and deaths.





Florida's COVID-19 Data and Surveillance Dashboard

Florida Department of Health, Division of Disease Control and Health Protection

Select a County



Total Cases

1,790,743

Cumulative Data for Florida Residents:

Positive Residents

1,758,254

Resident Hospitalizations

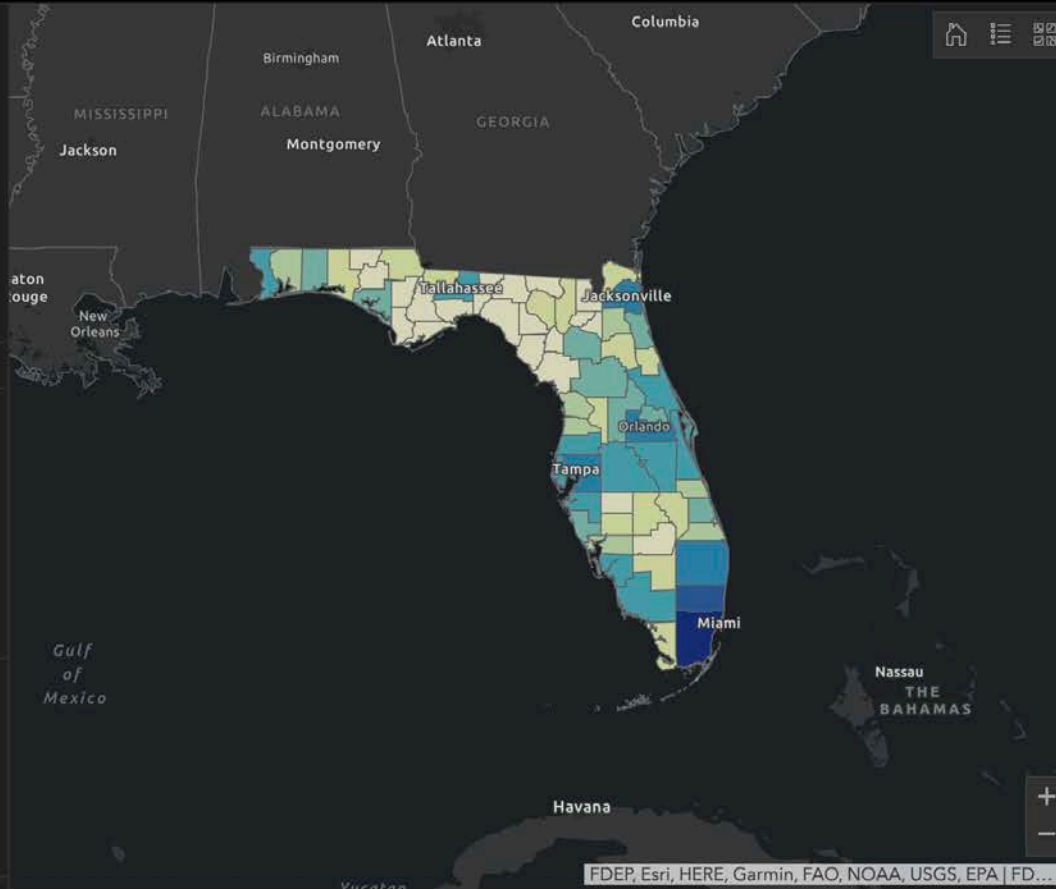
74,884

Florida Resident Deaths

28,048

Non-Resident Deaths

478



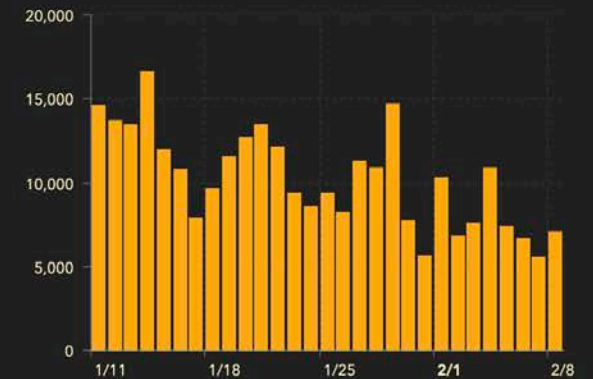
Data updated Daily

Comparison of counties is not possible because case data are not adjusted by population.

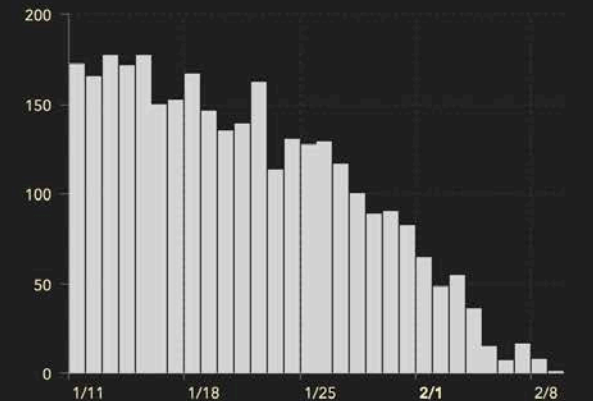
[Click here to access and download data](#)

Recent Data for Florida Residents (Last 30 Days):

New Cases of Residents by Day



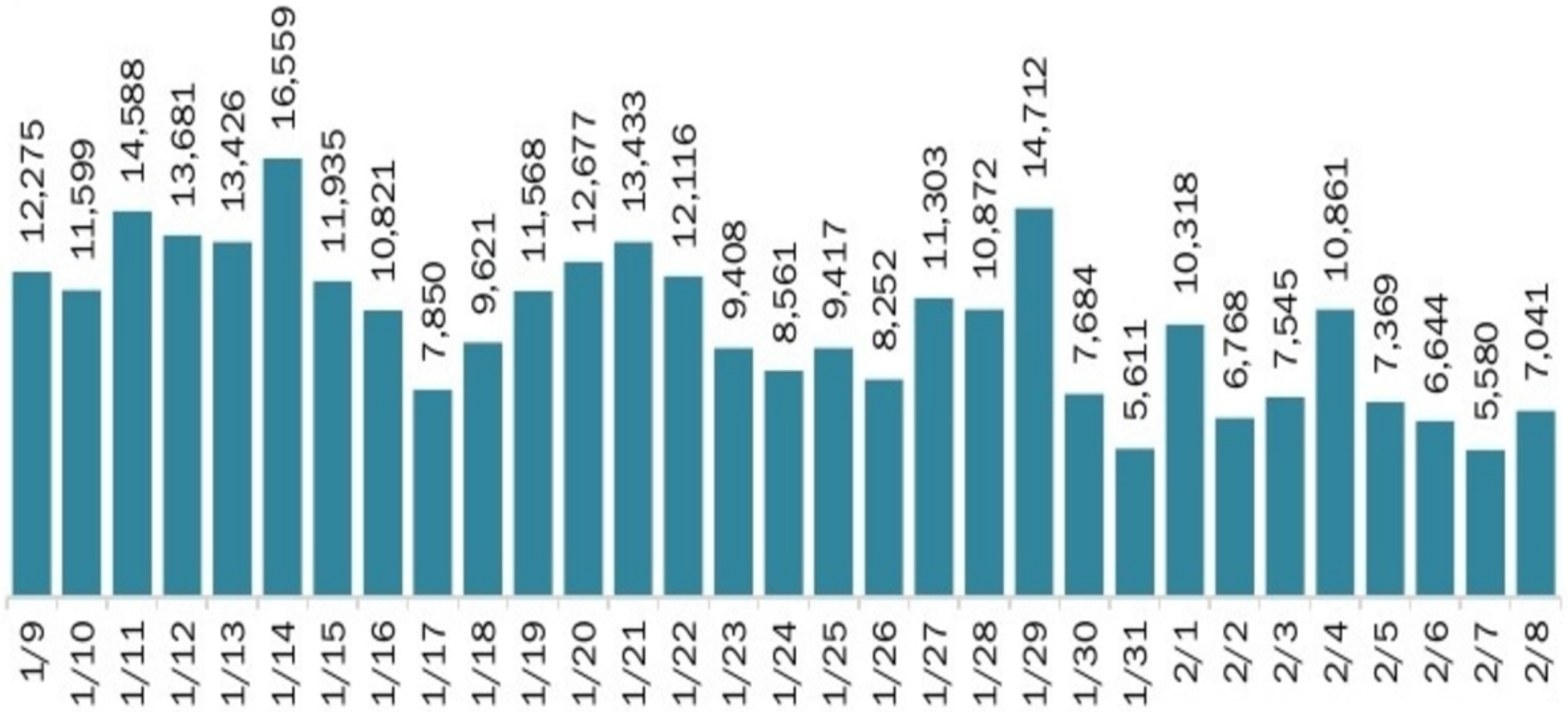
Resident Deaths by Date of Death



The Deaths by Day chart shows the total number of Florida residents with confirmed COVID-19 that died on each calendar day (12:00 AM - 11:59 PM). Death data often has significant delays in reporting, so data within the past two weeks will be updated



FL Daily Positivity Rate



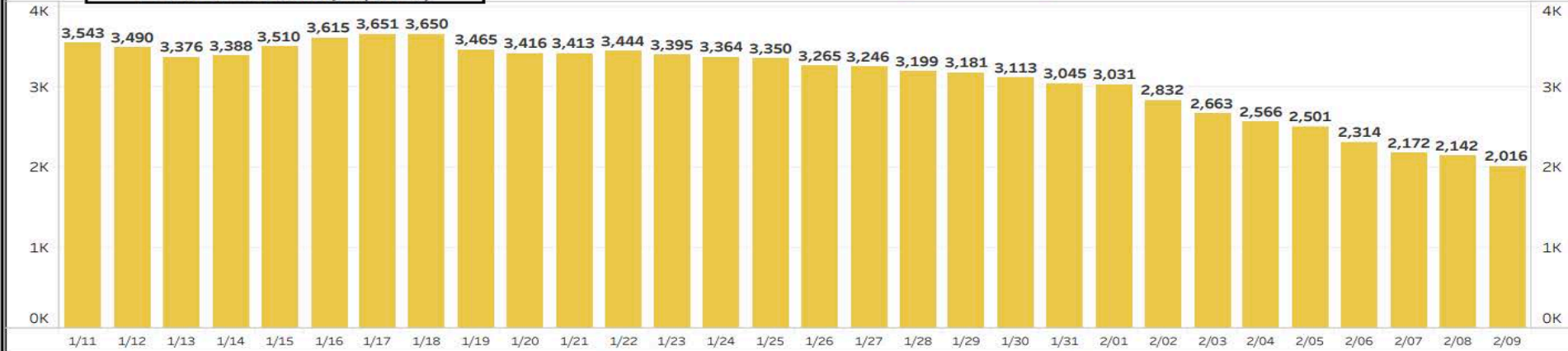
FL New Cases by Day

COVID in LTC

Last Updated: 2/8/2021 4:37:34 PM

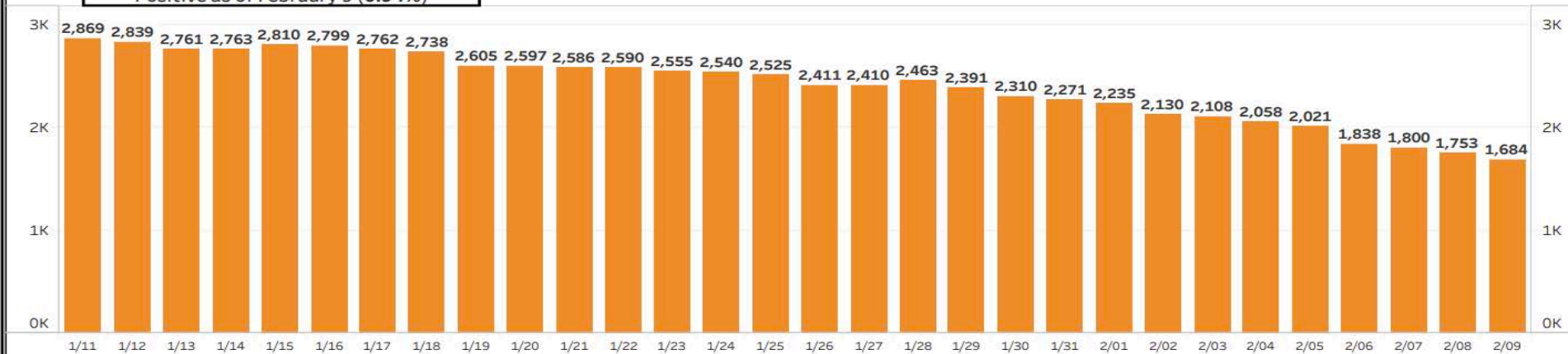
**2,016 of 136,917 Total Residents
Positive as of February 9 (1.47%)**

COVID Positive Residents (SNF & ALF)



**1,684 of 179,407 Total Staff
Positive as of February 9 (0.94%)**

COVID Positive Staff (SNF & ALF)



Data from AHCA ESS (Emergency Status System)

COVID positive residents and staff in Intermediate Care Facilities are not included in the bar chart totals. The data presented are reported by individual facilities and reporting errors may occur.



The Long-Term Care COVID Tracker

Help Us Collect Better Data

Less than 1% of America's population lives in long-term care facilities, but as of February 4, 2021, this tiny fraction of the country accounts for 36% of US COVID-19 deaths.

Cumulative

1,276,030

Total cases

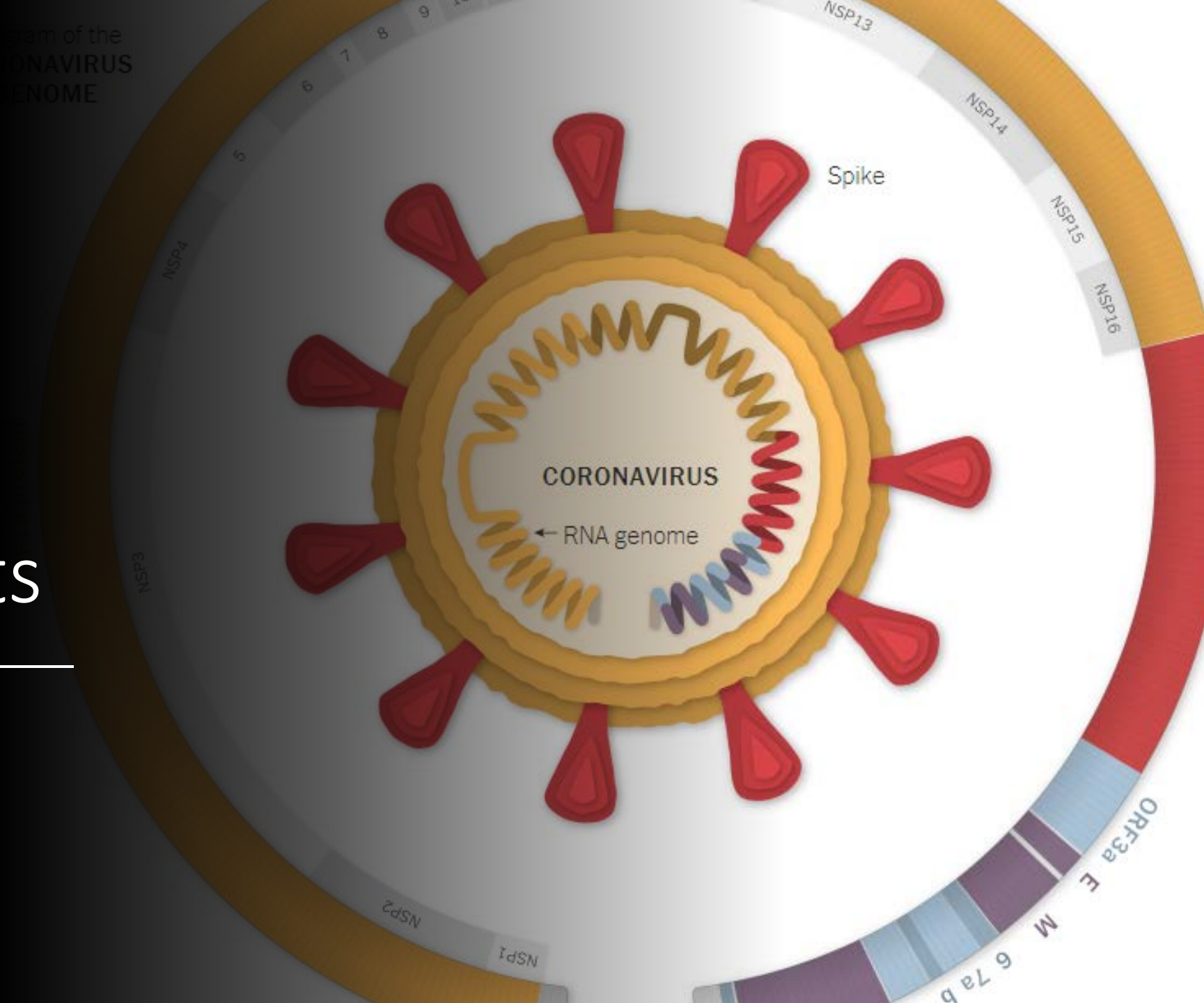
161,933

Total deaths

32,130

Total number of facilities affected

COVID Variants



US COVID-19 Cases Caused by Variants

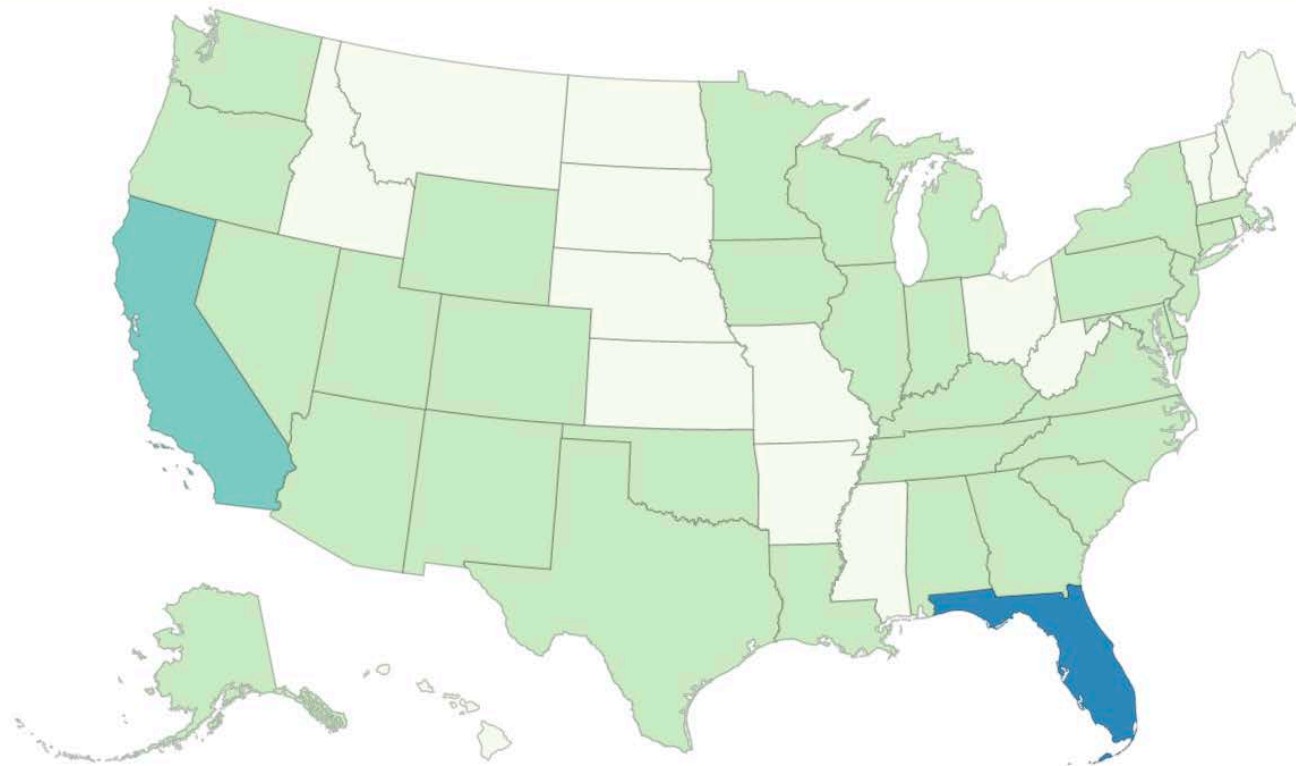
Updated Feb. 9, 2021

Languages ▾

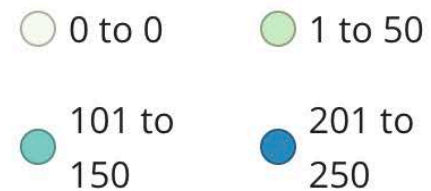
Print

| Variant | Reported Cases in US | Number of States Reporting |
|---------|----------------------|----------------------------|
| B.1.1.7 | 932 | 34 |
| B.1.351 | 9 | 3 |
| P.1 | 3 | 2 |

Emerging Variant Cases in the United States*†



Number of Cases



Filters

Variant B.1.1.7 ▼

Territories

AS

GU

MH

FM

MP

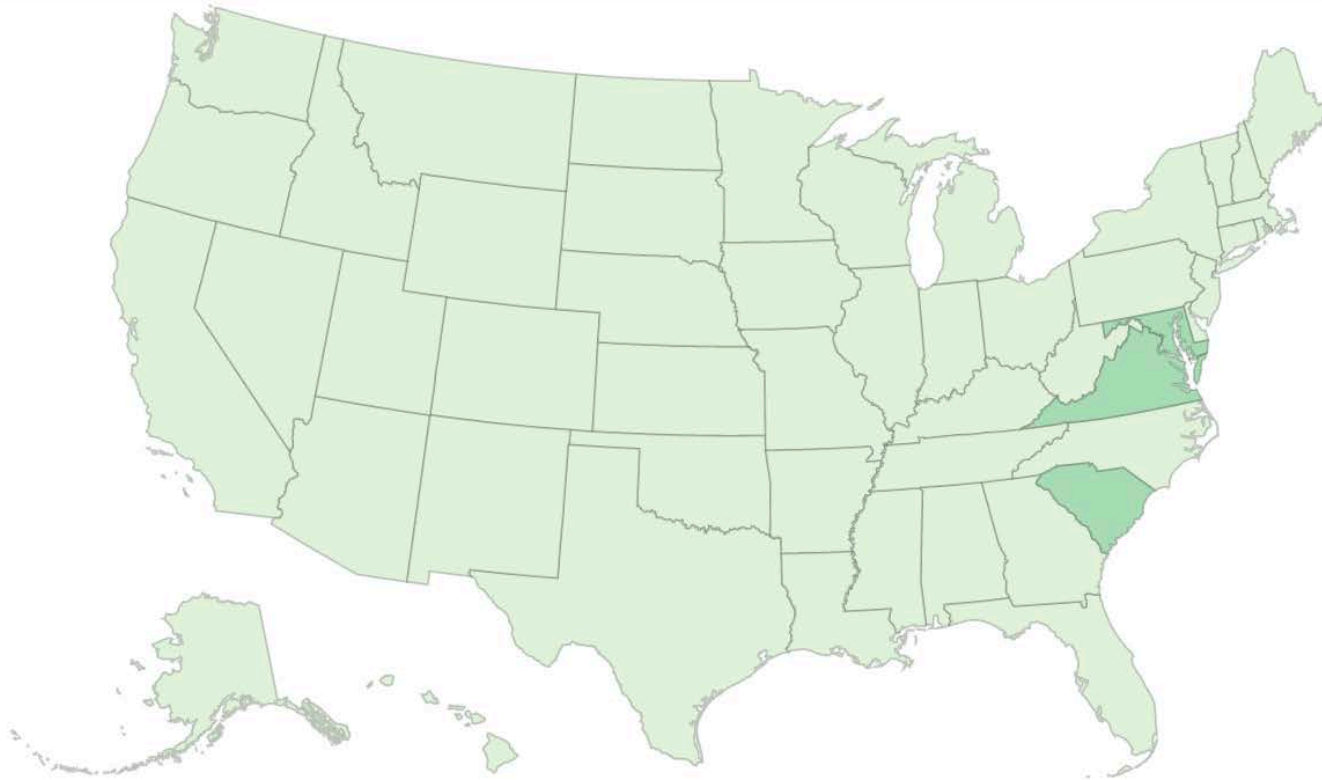
PW

PR

VI



Emerging Variant Cases in the United States*†



Number of Cases

0 to 0

1 to 50

Filters

Variant B.1.351 ▼

Territories

AS

GU

MH

FM

MP

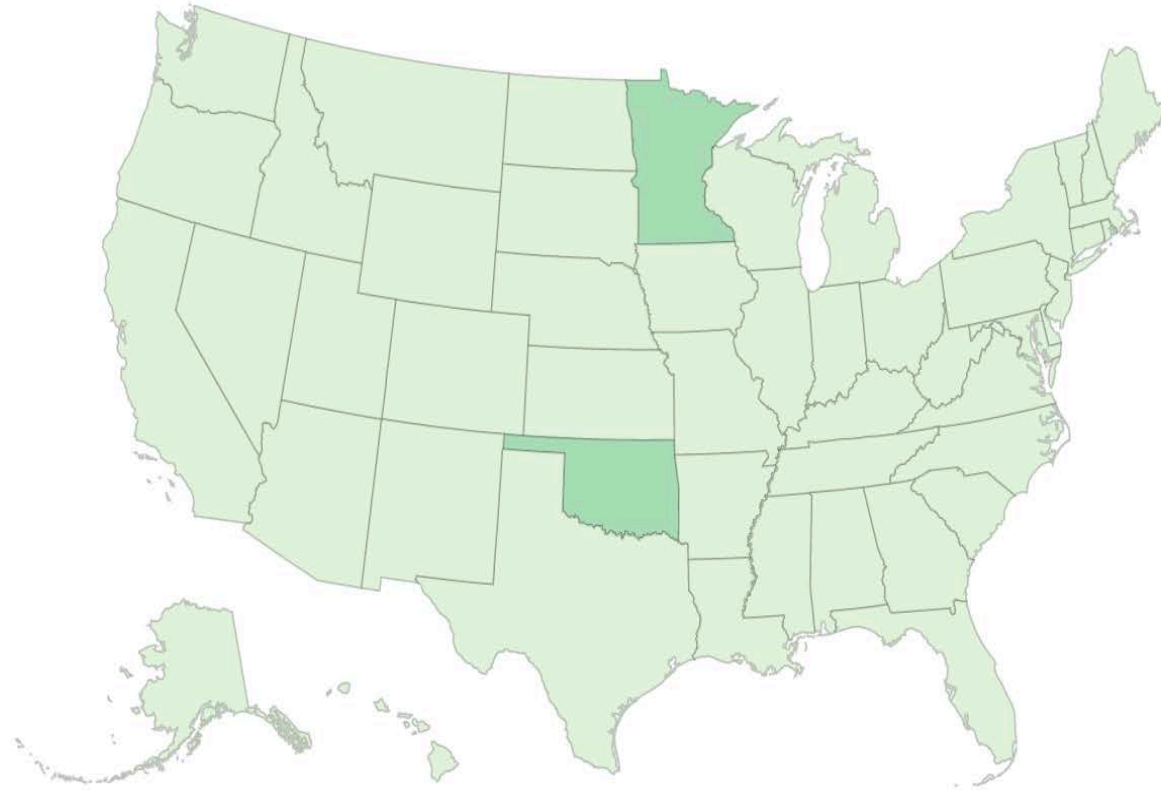
PW

PR

VI



Emerging Variant Cases in the United States*†



Number of Cases

0 to 0

1 to 50

Filters

Variant P.1

Territories AS GU MH FM MP PW PR VI



COVID Variants

| Lineage | Variant Name | Origin | Key Mutations |
|------------------|----------------------|--|--|
| B.1.1.7 | 501Y.V1 or 202012/01 | U.K.; now in over 70 countries and 33 states in the US | N501Y, P681H, H69-V70 deletion; Y144/145 deletion; |
| B.1.351 | 501Y.V2 | South Africa; now in 24 countries and 3 states in the US | N501Y, K417N, E484K |
| P.1 | 501Y.V3 | Brazil; and in 2 states in the US | N501Y, K417T, E484K |
| B.1.427, B.1.429 | CAL.20C | California | L452R |

*B.1 lineage has the D614G mutation

Reinfection & COVID Variants?

Those who had COVID-19 could get reinfected if the variants become dominant, Fauci says

12
Shares



Updated: 8:00 AM EST Feb 2, 2021

Infinite Scroll Enabled



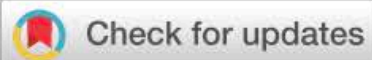
Vaccination Updates

VACCINE DEVELOPMENT

| | Pfizer/BionNtech BT162b1 RNA- based | Moderana mRNA-1237 | Johnson & Johnson Ad26.COVS-2 | Oxford/AstraZeneca AZD1222 | Novavax NVX-CoV2373 |
|--------------|--|---------------------------------|---|--|--|
| Type | mRNA | mRNA | Adenovirus-based | Adenovirus-based | Protein-based vaccine |
| Dose(s) | 2 doses, 21 days apart | 2 doses, 28 days apart | Single dose and 2 doses (57 days apart) are being studied | 2 doses, 28 days apart | 2 doses; 21 days apart |
| EUA | Approved | Approved | Submitted | Not approved | Not approved |
| Efficiency | 95% | 95% | 66% at preventing mod to severe COVID; 85% overall vaccine efficacy –in preventing severe disease Single dose | 70% | 89.3% |
| Availability | Approved in the US in 2020 | Approved in the US in Dec. 2020 | Pending approvals | Authorized in Europe, and in other countries | Feb. or March 2021 in UK Q1/Q2 in the US |

Vaccine's not likely to be approved in the US

- Russia's vaccine
 - Sputnik V
 - 91.4% efficacy
 - Adenovirus-based (2 doses)
- China's vaccines
 - Sinopharm
 - 79% efficacy
 - inactivated SARS-CoV-2 virus (2 doses)
 - Sinovac Biotech
 - 50.38-91.25% efficacy
 - inactivated SARS-CoV-2 virus (2 doses)
 - CanSino Biologics
 - 65.7% efficacy;
 - viral vector, loading an antigen from SARS-COV-2 onto an adenovirus (1 dose)



The BMJ

Cite this as: *BMJ* 2021;372:n372

<http://dx.doi.org/10.1136/bmj.n372>

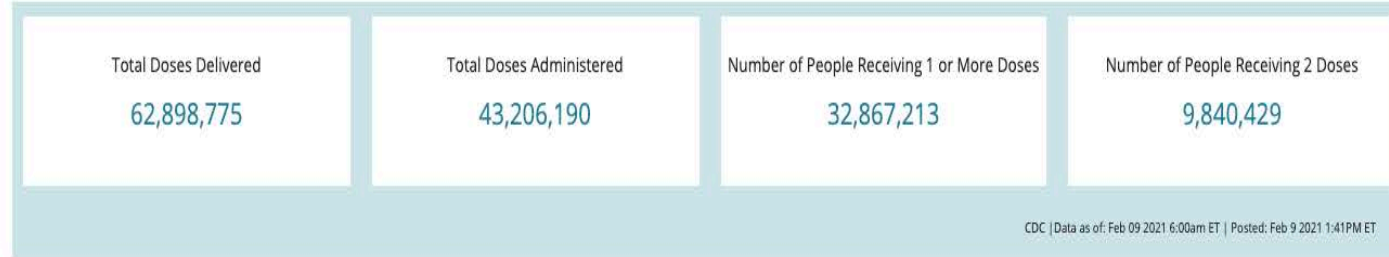
Published: 08 February 2021

Covid-19: South Africa pauses use of Oxford vaccine after study casts doubt on efficacy against variant

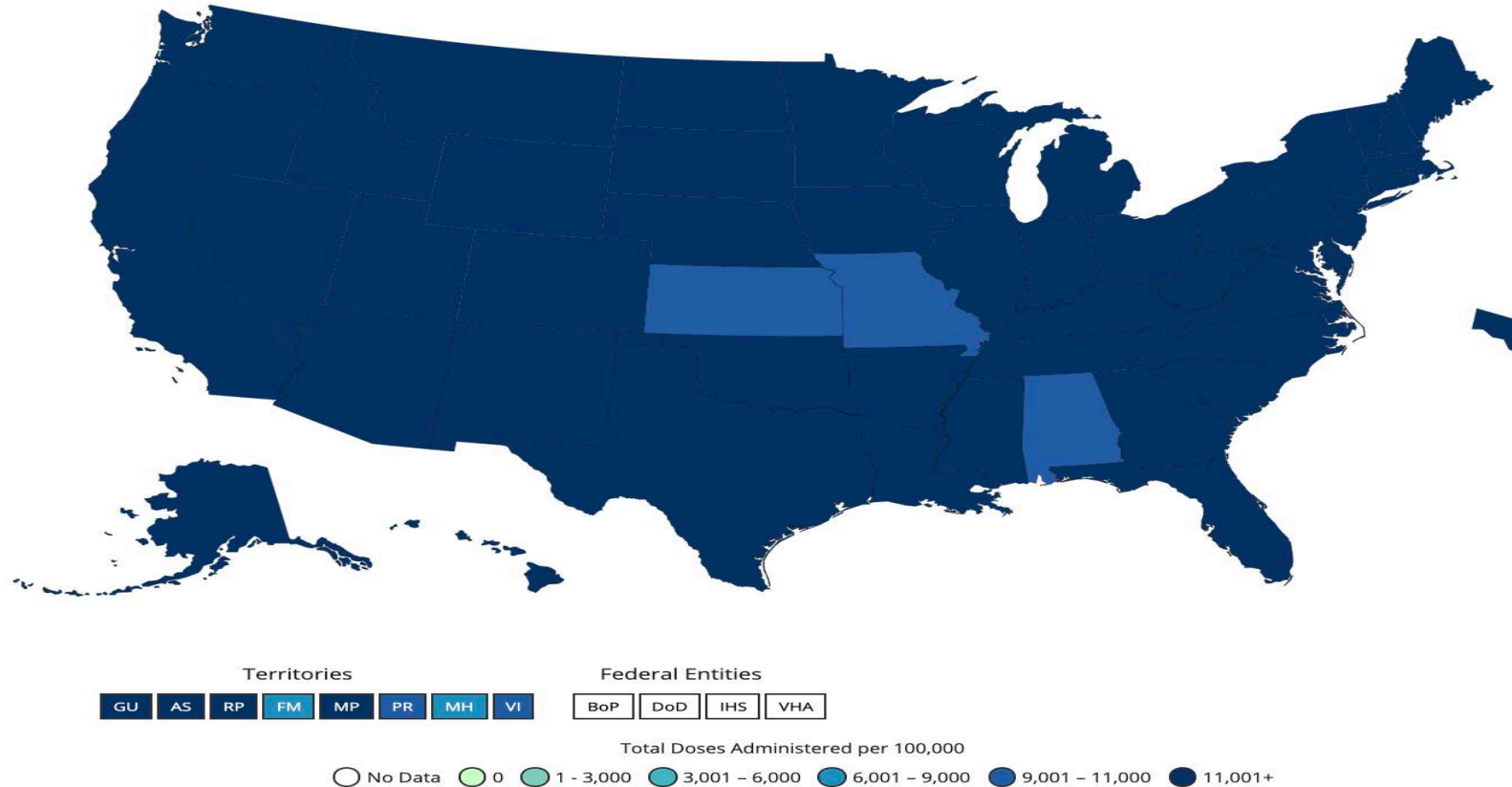
Elisabeth Mahase

COVID-19 Vaccinations in the United States

Overall US COVID-19 Vaccine Delivery and Administration; Maps, charts, and data provided by the CDC, updated daily by 8 pm ET[†]



Total Doses Administered Reported to the CDC by State/Territory and for Selected Federal Entities per 100,000

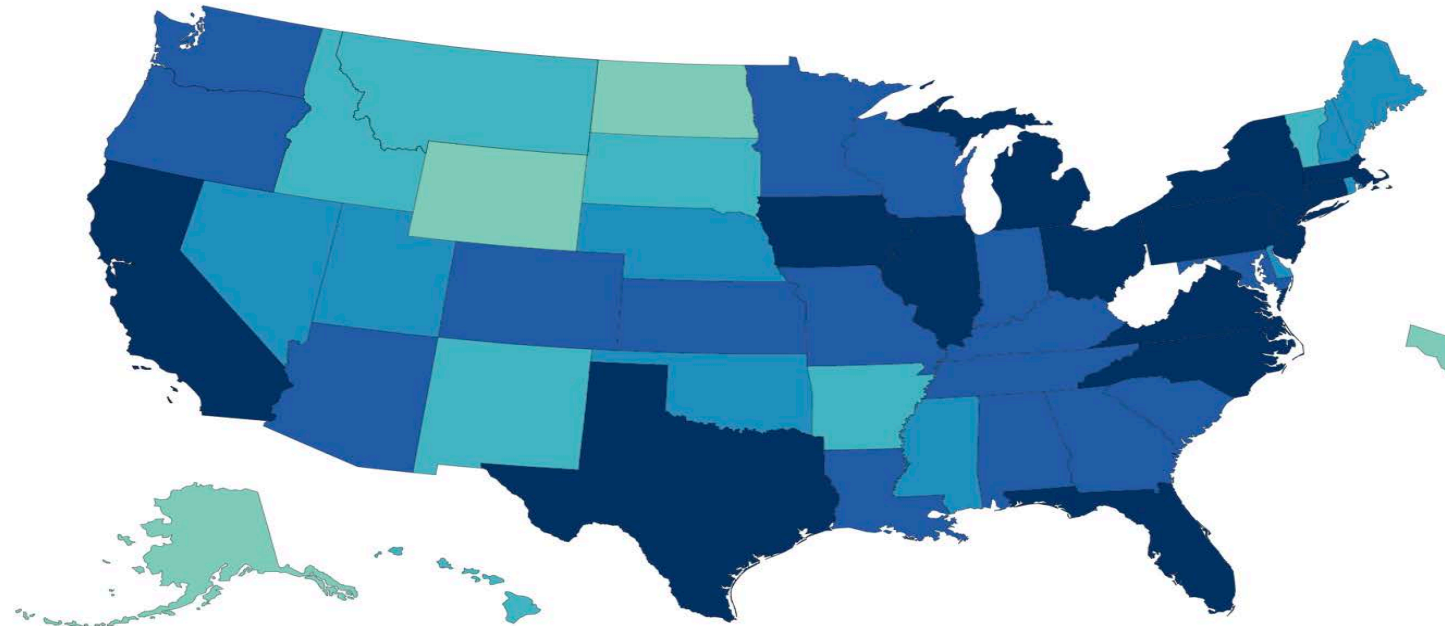


Federal Pharmacy Partnership for Long-Term Care (LTC) Program

Overall US COVID-19 Vaccine Distribution and Administration; Maps, charts, and data provided by the CDC, updated daily by 8 pm ET†



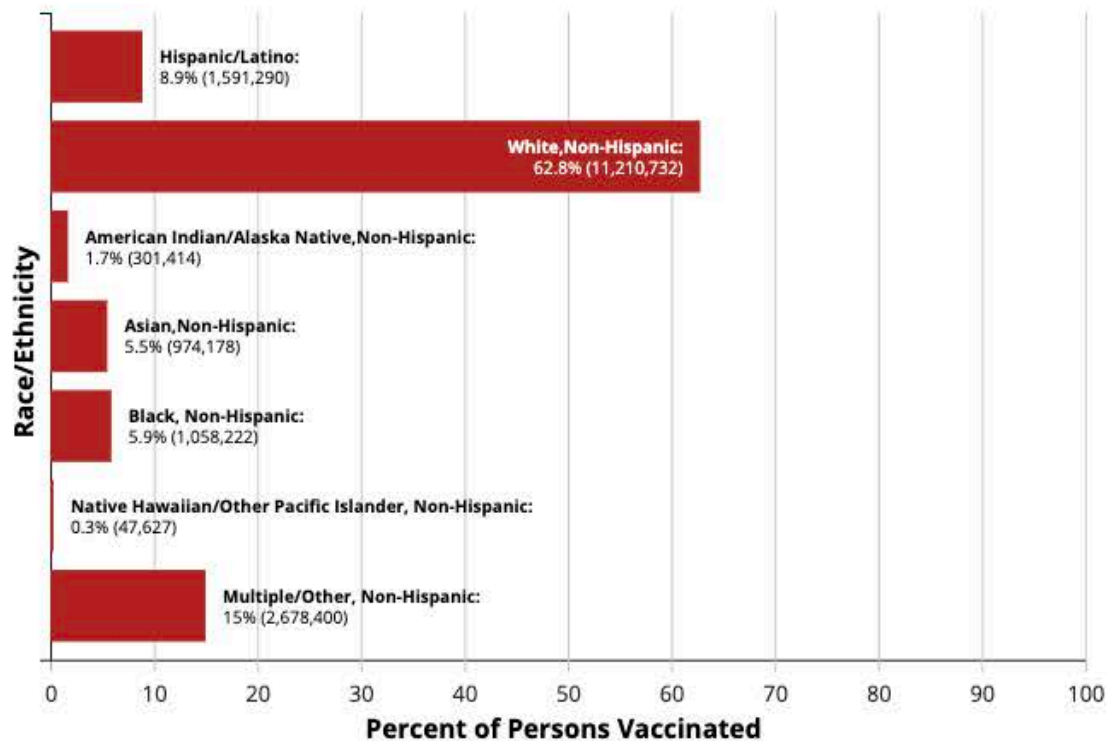
Total Doses Administered Reported to CDC by State/Territory, Federal Pharmacy Partnership for LTC Program



Race/Ethnicity of People with 1 or More Doses Administered:

 Download 

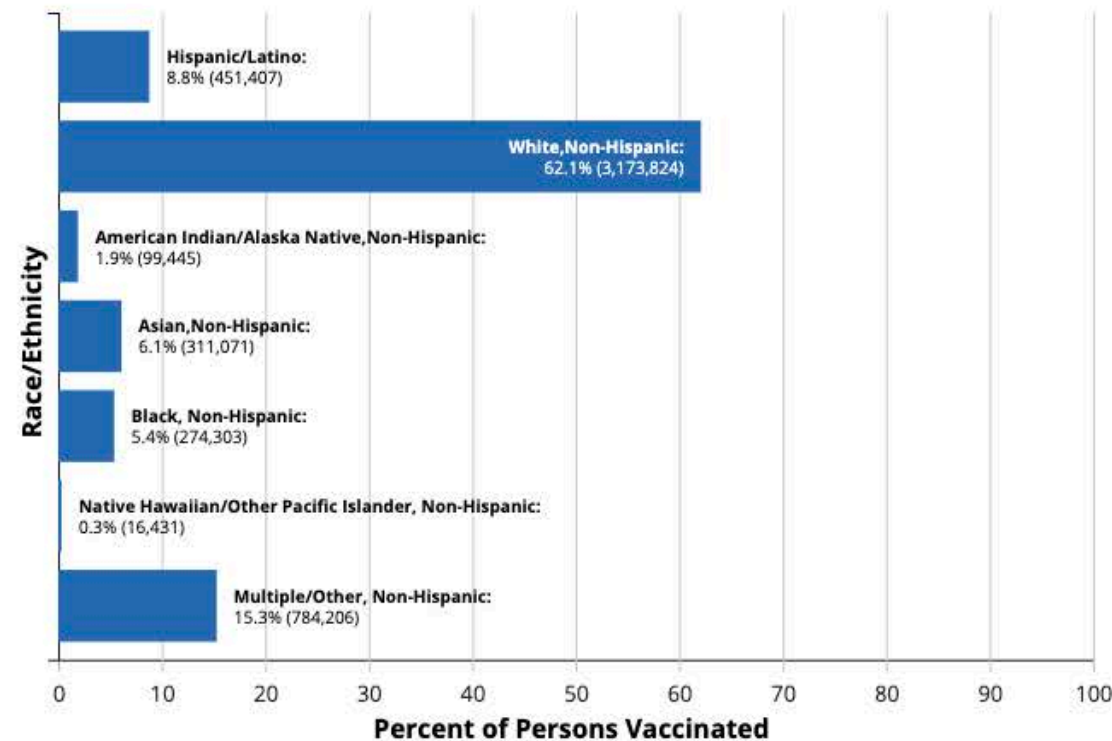
Data from 32,867,213 people with 1 or more doses administered. Race/Ethnicity was available for 17,861,863 (54.3%) people with 1 or more doses administered.



Race/Ethnicity of People with 2 Doses Administered:

 Download 

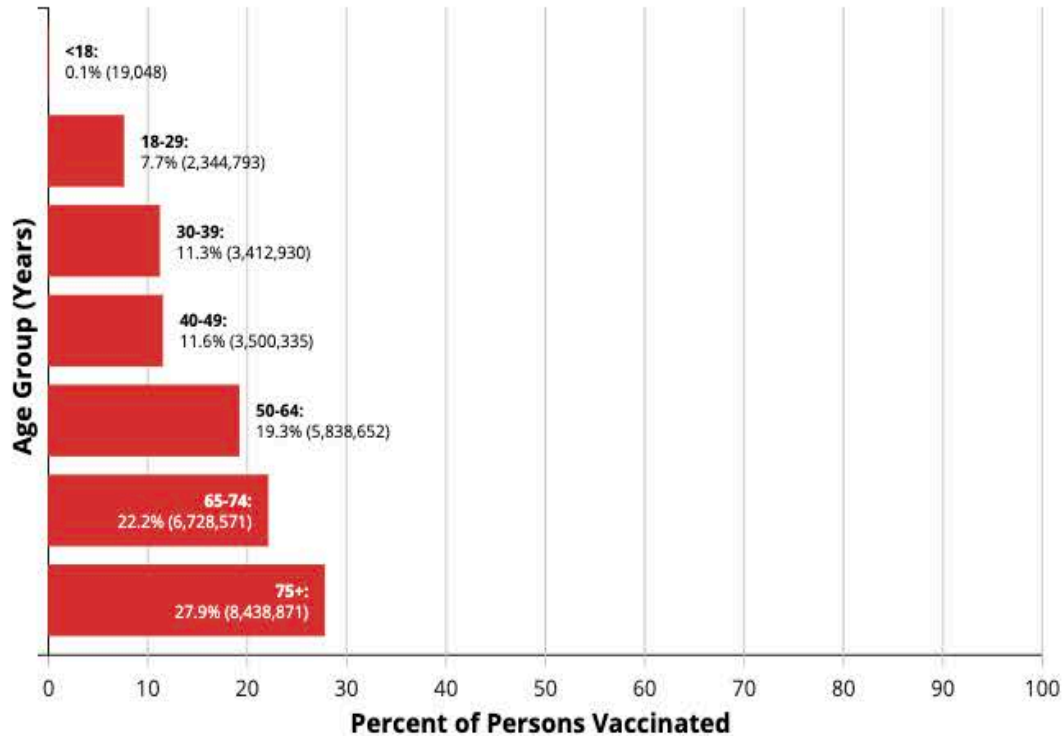
Data from 9,840,429 people with 2 doses administered. Race/Ethnicity was available for 5,110,687 (51.9%) people with 2 doses administered.



Age Groups of People with 1 or More Doses Administered:

 Download 

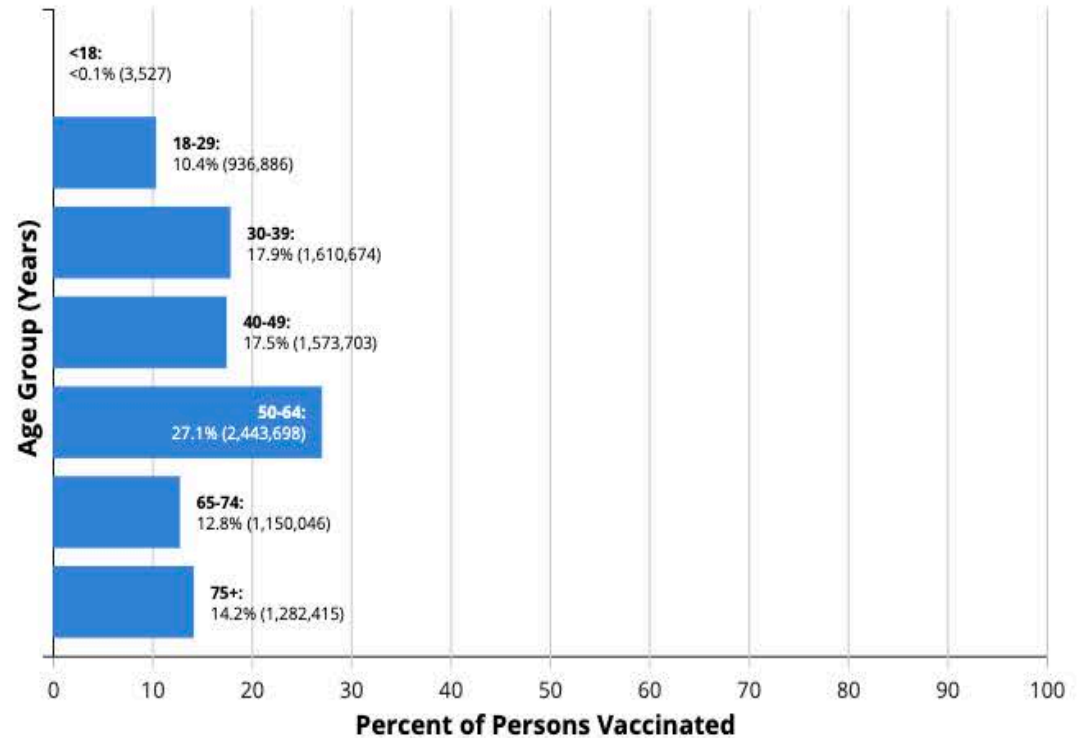
Data from 32,867,213 people with 1 or more doses administered. Age was available for 30,283,200 (92%) people with 1 or more doses administered.



Age Groups of People with 2 Doses Administered:

 Download 

Data from 9,840,429 people with 2 doses administered. Age was available for 9,000,949 (91%) people with 2 doses administered.

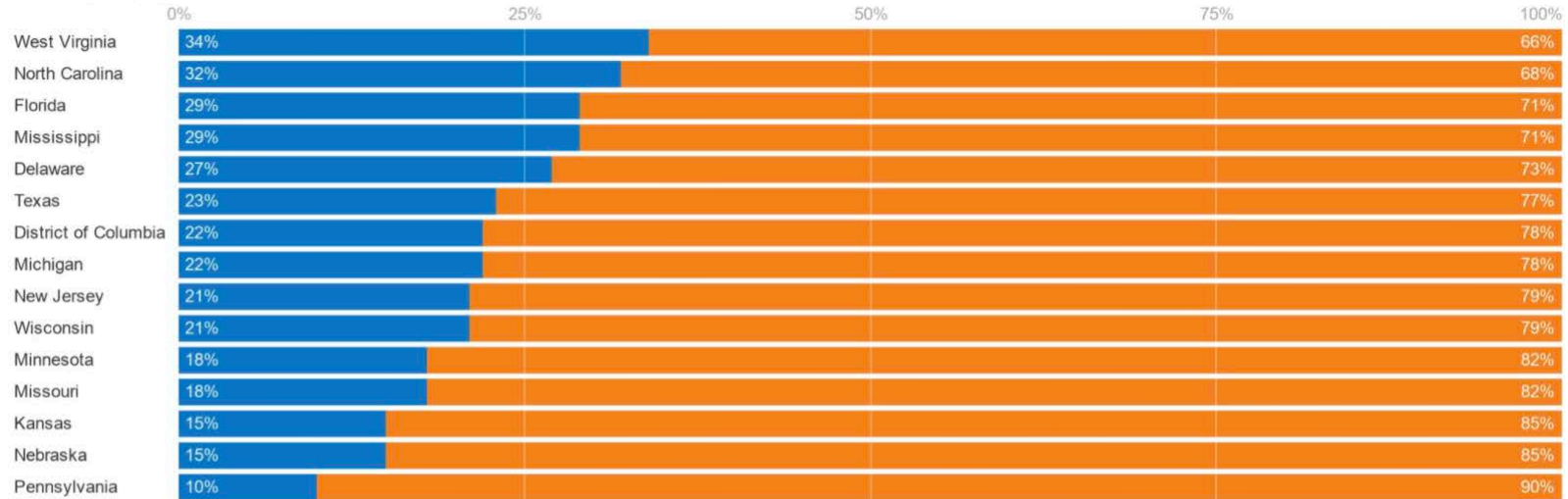


Among States Reporting COVID-19 Vaccinations by Age, the Majority of Older Adults Have Not Yet Received One or More Doses

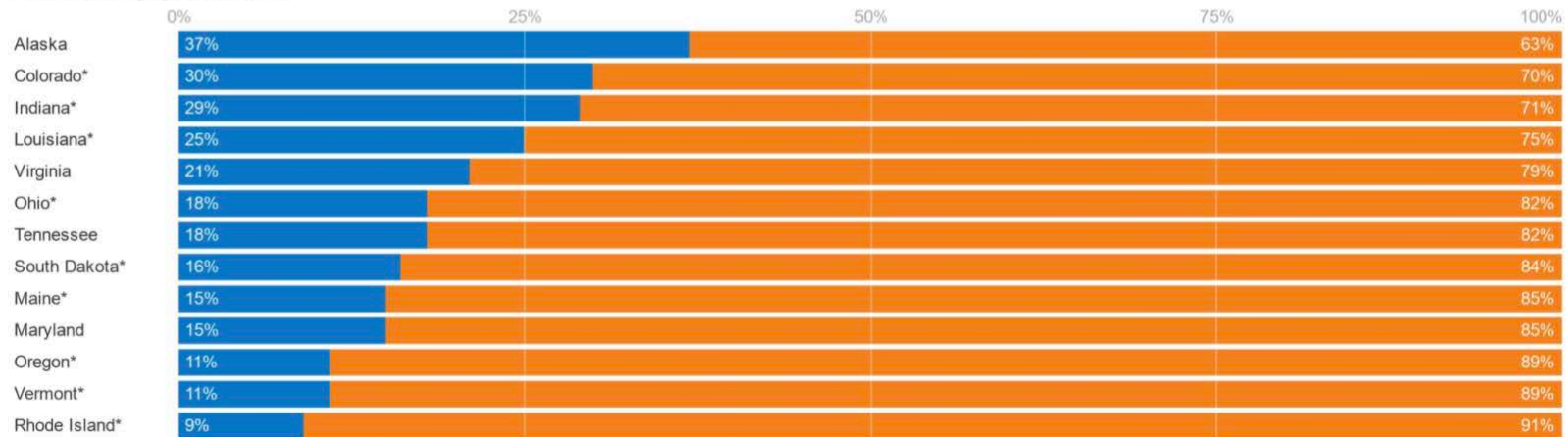
Share of older state residents who have received at least one COVID-19 vaccine dose, as a share of the respective older population, as of 2/4/2021

■ Share vaccinated ■ Share not yet vaccinated

States reporting age 65 and older



States reporting age 60 and older



States reporting age 70 and older



NOTE: *As of February 1, 2021, these states have not expanded vaccine eligibility to adults 65 and older. For vaccinations, states vary in whether they report total people who have received at least one vaccine dose, people who have received one dose and people who have received two doses, or total vaccinations administered. Where possible, we report data for the total number of people who have received at least one vaccine dose. However, some states only report total vaccinations, meaning people who have received two doses are included in the data twice. States also vary in whether their age data include long-term care facility residents. See methods for more information.

SOURCE: KFF analysis of publicly available data from state websites. Data retrieved on February 4, 2021. Population estimates by age from 2019 US Census Bureau. Census estimates are for the non-institutional population.





Popular

Latest

The Atlantic

IDEAS

The Key to West Virginia's Vaccine Success

The more the state collaborates with those at the local, community level, the greater the vaccine uptake.

FEBRUARY 8, 2021

Christopher Martin

Professor at the West Virginia University School
of Public Health

COVID-19: vaccine summary

Vaccination data through Feb 8, 2021 as of Feb 9, 2021 at 12:05 AM

Data in this report are provisional and subject to change.

Data in this summary pertain to COVID-19 vaccines approved by the U.S. Food and Drug Administration and have been issued an Emergency Use Authorization. These data summarize the number of people who have received either their first dose or have completed the series for a COVID-19 vaccine. A person can only be counted in one category, first dose or series complete. After individuals receive their second dose, they are moved from the first dose column to the series completed column.

COVID-19 doses administered in Florida

Doses administered 2,813,488

Total number of doses of the COVID-19 vaccine that have been administered in Florida.

Persons vaccinated for COVID-19 in Florida

Total people vaccinated 2,057,154

First dose 1,300,820

Series completed 756,334

First dose: received their first dose of the COVID-19 vaccine.

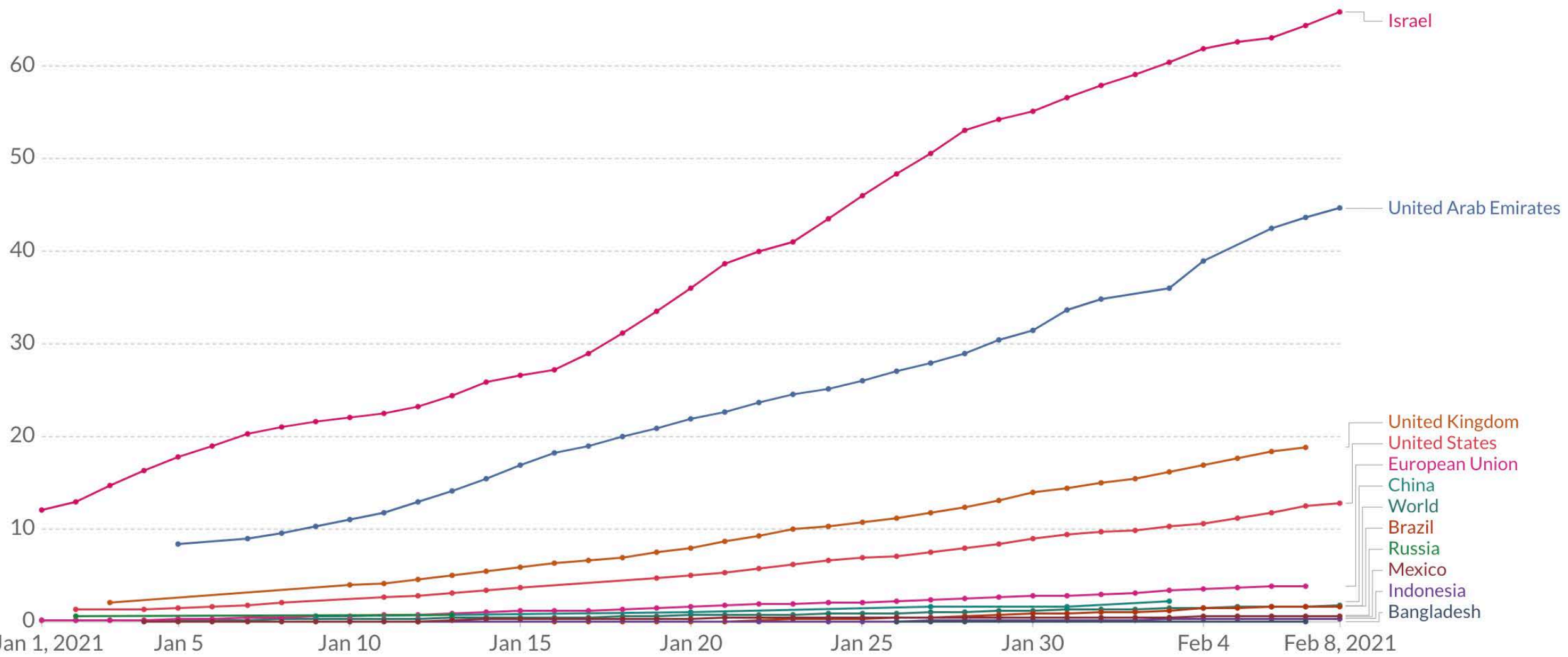
Series complete: received all recommended doses of the COVID-19 vaccine to be considered fully immunized.

| Demographic summary | First dose | Series complete | Total people vaccinated |
|---|------------|-----------------|-------------------------|
| Age group | 1,300,820 | 756,334 | 2,057,154 |
| 16-24 years | 13,255 | 13,699 | 26,954 |
| 25-34 years | 34,295 | 56,097 | 90,392 |
| 35-44 years | 43,073 | 68,407 | 111,480 |
| 45-54 years | 55,681 | 78,662 | 134,343 |
| 55-64 years | 90,016 | 91,192 | 181,208 |
| 65-74 years | 593,397 | 244,975 | 838,372 |
| 75-84 years | 344,306 | 141,707 | 486,013 |
| 85+ years | 126,797 | 61,595 | 188,392 |
| Race | 1,300,820 | 756,334 | 2,057,154 |
| American Indian/Alaskan | 4,442 | 2,403 | 6,845 |
| Black | 67,594 | 38,004 | 105,598 |
| Other | 142,494 | 138,923 | 281,417 |
| Unknown | 263,212 | 82,360 | 345,572 |
| White | 823,078 | 494,644 | 1,317,722 |
| Other race includes Asian, native Hawaiian/Pacific Islander, or other. | | | |
| Ethnicity | 1,300,820 | 756,334 | 2,057,154 |
| Hispanic | 92,420 | 78,430 | 170,850 |
| Non-Hispanic | 582,027 | 396,083 | 978,110 |
| Unknown | 626,373 | 281,821 | 908,194 |
| Gender | 1,300,820 | 756,334 | 2,057,154 |
| Female | 741,774 | 448,514 | 1,190,288 |
| Male | 552,177 | 306,513 | 858,690 |
| Unknown | 6,869 | 1,307 | 8,176 |

Cumulative COVID-19 vaccination doses administered per 100 people

This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses).

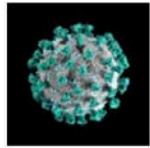
LINEAR LOG



Source: Official data collated by Our World in Data - Last updated 9 February, 09:55 (London time)

CC BY





Coronavirus Updates

THE CORONAVIRUS CRISIS



NFL Offers All 30 Stadiums For Use As Coronavirus Vaccine Sites

February 5, 2021 · 3:27 PM ET

[BILL CHAPPELL](#)



Understanding the Federal Retail Pharmacy Program for COVID-19 Vaccination





Clinical Updates

FDA NEWS RELEASE

Coronavirus (COVID-19) Update: February 5, 2021

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For Immediate Release: February 05, 2021

ORIGINAL ARTICLE

REGN-COV2, a Neutralizing Antibody Cocktail, in Outpatients with Covid-19

D.M. Weinreich, S. Sivapalasingam, T. Norton, S. Ali, H. Gao, R. Bhore, B.J. Musser, Y. Soo, D. Rofail, J. Im, C. Perry, C. Pan, R. Hosain, A. Mahmood, J.D. Davis, K.C. Turner, A.T. Hooper, J.D. Hamilton, A. Baum, C.A. Kyratsous, Y. Kim, A. Cook, W. Kampman, A. Kohli, Y. Sachdeva, X. Graber, B. Kowal, T. DiCioccio, N. Stahl, L. Lipsich, N. Braunstein, G. Herman, and G.D. Yancopoulos, for the Trial Investigators*

ORIGINAL ARTICLE

Antibody Status and Incidence of SARS-CoV-2 Infection in Health Care Workers

S.F. Lumley, D. O'Donnell, N.E. Stoesser, P.C. Matthews, A. Howarth, S.B. Hatch, B.D. Marsden, S. Cox, T. James, F. Warren, L.J. Peck, T.G. Ritter, Z. de Toledo, L. Warren, D. Axten, R.J. Cornall, E.Y. Jones, D.I. Stuart, G. Screaton, D. Ebner, S. Hoosdally, M. Chand, D.W. Crook, A.-M. O'Donnell, C.P. Conlon, K.B. Pouwels, A.S. Walker, T.E.A. Peto, S. Hopkins, T.M. Walker, K. Jeffery,

A blurred, high-angle photograph of a desk. In the foreground, a black pen lies diagonally across an open notebook. The notebook's pages are slightly out of focus, but some faint text is visible. To the right, a portion of a white smartphone is visible. In the background, a stack of papers or a folder is also blurred. The overall lighting is soft and diffused, creating a professional and contemplative atmosphere.

Open Discussion



THE FLORIDA SOCIETY
FOR POST-ACUTE AND
LONG-TERM
CARE MEDICINE

**400 Executive Center Drive, Suite 208
West Palm Beach, FL 33401**

www.fmda.org; www.bestcarepractices.org



This meeting has been recorded and will be available at www.fmda.org/journalclub.php