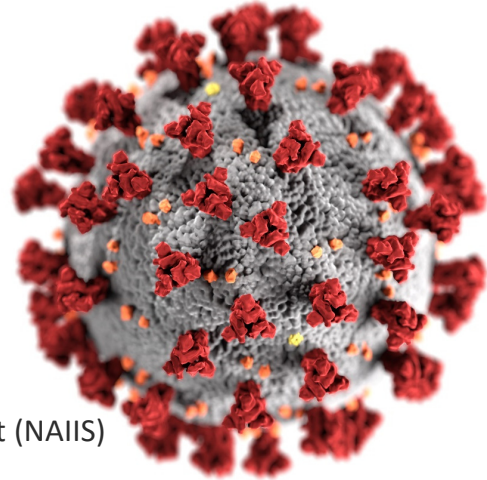


CDC COVID-19 Epidemiology Update

Katie Fullerton, MPH
Co-lead, Integrated Analytics and Visualization
Data, Analytics, and Visualization Task Force
CDC COVID-19 Response



July 1, 2021
National Adult and Influenza Immunization Summit (NAIIS)



cdc.gov/coronavirus

1

COVID-19 Epidemiology Update

- Current case counts, laboratory data, hospitalizations, and deaths
- Current SARS-CoV-2-variant data
- Current vaccination coverage data



2

COVID-19 Summary, June 30, 2021

COVID-19 Summary

| | Cumulative Total | Daily | 7-Day Daily Average | Change from Prior 7-Day Period |
|----------------------------------|------------------|-------|---------------------|--------------------------------|
| Cases ¹ | 33,470,212 | 7,888 | 11,708 | +3.2% |
| Hospital Admissions ² | 2,279,278 | 1,566 | 1,795 | -3.9% |
| Deaths ¹ | 601,808 | 168 | 286 | +0.7% |
| Test Volume ³ | 466,646,225 | N/A | 574,316 | -14.6% |
| Test Positivity ³ | 7.6% | N/A | 1.9% | +11.1% |

1 Time Period: Jan 22, 2020 – Jun 28, 2021; confirmed and probable cases and deaths. Number of jurisdictions reporting: 59 of 60. Aggregate case and death data will be updated Mon – Sat. The total of new cases/deaths in the last 24 hours and 7-day averages do not include historical cases/deaths reported retroactively. Of 85,058 historical cases reported retroactively, 106 were reported on the most recent submission date; 5,528 in the current week; and 649 in the prior week. Of 6,395 historical deaths reported retroactively, none were reported on the most recent submission date; 26 in the current week; and 54 in the prior week.

2 Time period: Aug 01, 2020 – Jun 27, 2021.

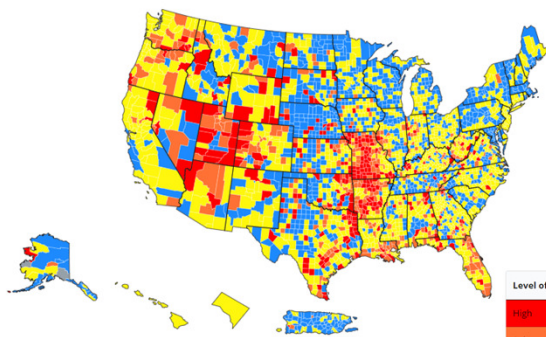
3 Time period: Mar 01, 2020 – Jun 26, 2021; Time period for test volume 7-day average and percent change: Jun 09, 2021 – Jun 22, 2021.

- https://covid.cdc.gov/covid-data-tracker/#cases_casesper100klast7days
- <https://covid.cdc.gov/covid-data-tracker/#new-hospital-admissions>
- https://covid.cdc.gov/covid-data-tracker/#cases_deathsper100klast7days
- https://covid.cdc.gov/covid-data-tracker/#cases_testspers100k7day
- https://covid.cdc.gov/covid-data-tracker/#cases_positivity7day



3

Level of community transmission in the United States



- From June 22 to June 28, 2021
- Majority of counties (80%) at “Moderate” (44%) or “Low” (36%) transmission levels
- Fewer than 10% of counties at “High” transmission level

| Level of Community Transmission | Number of U.S. Counties at this Level | Percent of U.S. Counties at this Level | Percentage Point Difference Since 7 Days Ago |
|---------------------------------|---------------------------------------|--|--|
| High | 305 | 9.47% | 1.06% |
| Substantial | 347 | 10.78% | 0.84% |
| Moderate | 1421 | 44.13% | -2.95% |
| Low | 1146 | 35.59% | 1.06% |

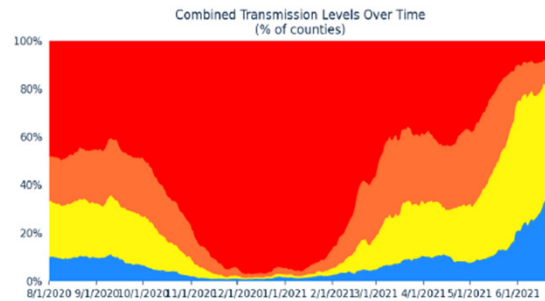
| Indicator - If the two indicators suggest different transmission levels, the higher level is selected | Low Transmission Blue | Moderate Transmission Yellow | Substantial Transmission Orange | High Transmission Red |
|---|-----------------------|------------------------------|---------------------------------|-----------------------|
| Total new cases per 100,000 persons in the past 7 days | 0-9.99 | 10-49.99 | 50-99.99 | ≥100 |
| Percentage of NAATs ¹ that are positive during the past 7 days | 0-4.99% | 5-7.99% | 8-9.99% | ≥10.0% |

● High ● Substantial ● Moderate ● Low ● No Data

<https://covid.cdc.gov/covid-data-tracker/#county-view>

4

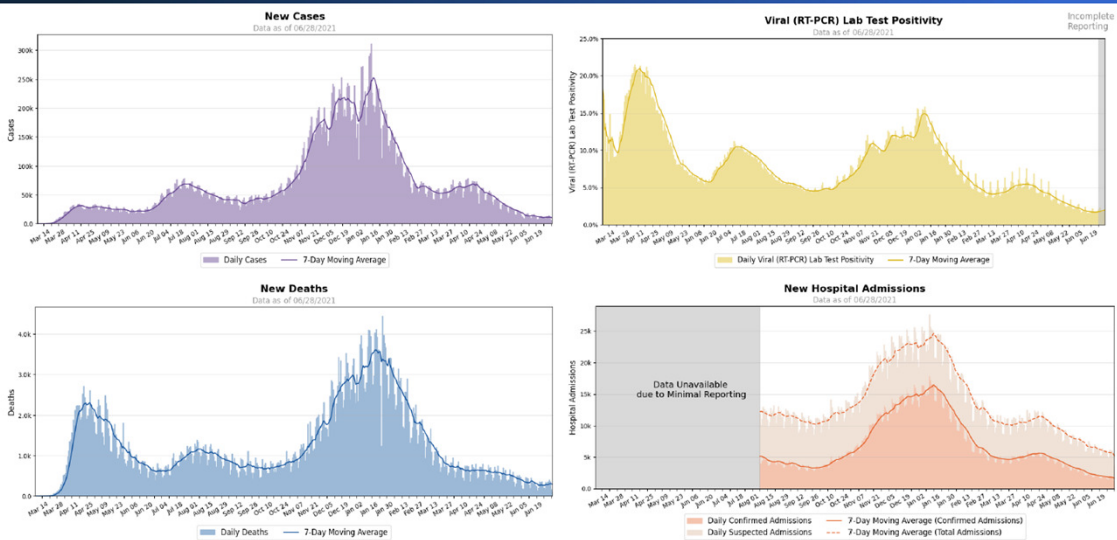
- Choropleth showing community transmission levels across the United States, August 2020 to June 2021
- The community transmission metric was introduced in late July 2020
- Peak transmission (>90% counties in “High”) was in December 2020 and January 2021



<https://healthdata.gov/Community/COVID-19-State-Profile-Report-Combined-Set/5mth-2h7d>

5

NATIONAL TIME SERIES



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

INITIAL PUBLIC RELEASE // SUBJECT TO CHANGE

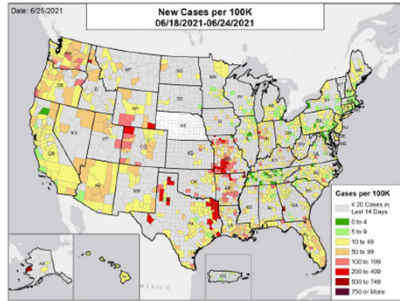


<https://healthdata.gov/Health/COVID-19-Community-Profile-Report/gqxm-d9w9>

6

National Picture: Cases

NEW CASES PER 100,000



NEW CASES PER 100,000 IN THE WEEK:



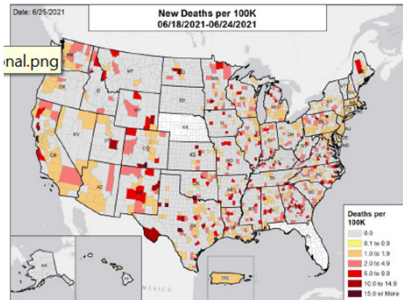
<https://healthdata.gov/Community/COVID-19-State-Profile-Report-Combined-Set/5mth-2h7d>

- June 18 to June 24, 2021; data as of June 25, 2021
- New cases/week per 100,000 population, by county (aggregate reporting)
- Previous three months are shown below
- Movement towards fewer counties in the red zones (100 to 199 per 100,000) and (200 to 499 per 100,000) over the last three months

7

National Picture: Deaths

NEW DEATHS PER 100,000



NEW DEATHS PER 100,000 IN THE WEEK:



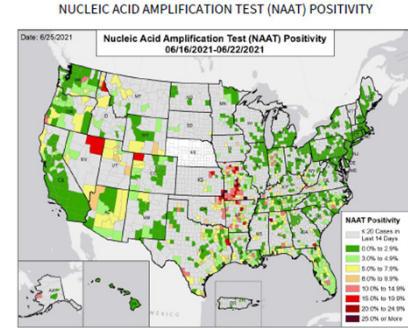
<https://healthdata.gov/Community/COVID-19-State-Profile-Report-Combined-Set/5mth-2h7d>

- June 18 to June 24, 2021; data as of June 25, 2021
- New deaths/week per 100,000 population, by county (aggregate reporting)
- Previous three months are shown below
- Can track specific geographic areas where deaths are still elevated

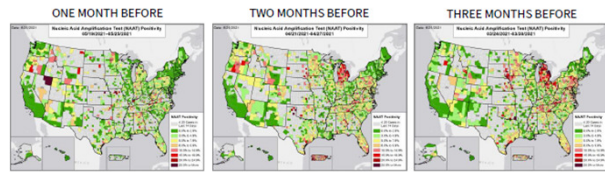
8

National Picture: NAAT Positivity

- June 16 to June 22, 2021; data as of June 25, 2021
- NAAT Test positivity, by county
- Previous three months are shown below
- Movement towards fewer counties in the red zones (>10.0 % positivity) over the last three months



NUCLEIC ACID AMPLIFICATION TEST (NAAT) POSITIVITY IN THE WEEK:



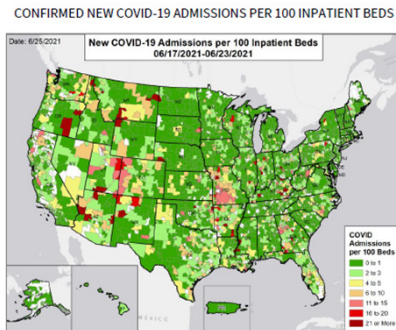
*NAAT: nucleic acid amplification test

<https://healthdata.gov/Community/COVID-19-State-Profile-Report-Combined-Set/5mth-2h7d>

9

National Picture: Hospital Admissions

- June 17 to June 23, 2021; data as of June 25, 2021
- Confirmed COVID-19 hospital admissions per 100 inpatient beds, by county
- Previous three months are shown below
- Movement towards fewer counties in the red zones (>11 admissions per 200 inpatient beds) over the last three months



CONFIRMED NEW COVID-19 ADMISSIONS PER 100 INPATIENT BEDS IN THE WEEK:

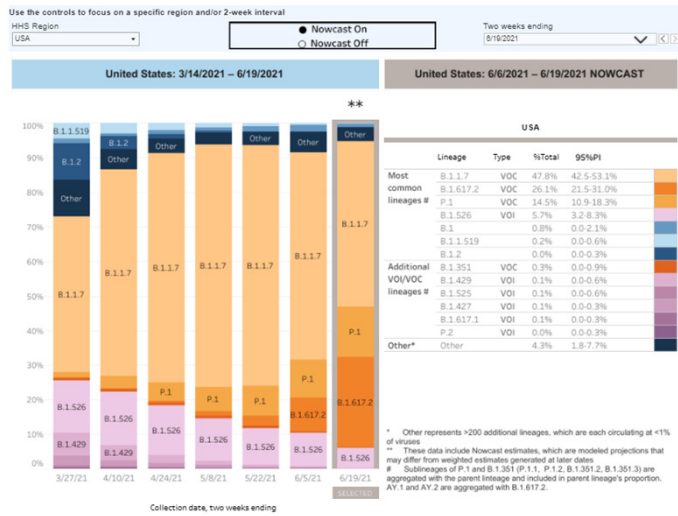


<https://healthdata.gov/Community/COVID-19-State-Profile-Report-Combined-Set/5mth-2h7d>

10

SARS-CoV-2 Variants

- Multiple variants of SARS-CoV-2 are circulating globally and within the United States.
- The B.1.1.7 (Alpha), B.1.351 (Beta), P.1 (Gamma), B.1.427/B.1.429 (Epsilon), and B.1.617.2 (Delta) variants circulating in the United States are classified as variants of concern (VOC).



<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>

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

11

National Picture, Vaccinations as of June 30, 2021

Total Vaccine Doses

Delivered 381,949,830

Administered 326,521,526

Learn more about the distribution of vaccines.

154.9M

People fully vaccinated

About these data

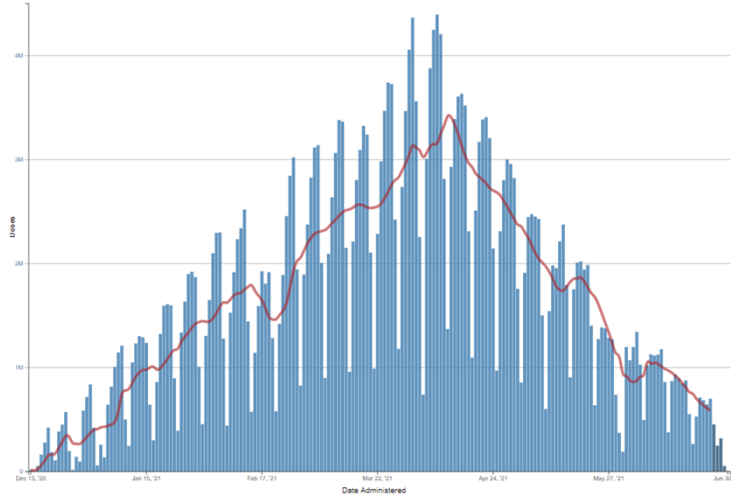
| People Vaccinated | At Least One Dose | Fully Vaccinated |
|-----------------------------------|-------------------|------------------|
| Total | 180,674,739 | 154,884,686 |
| % of Total Population | 54.4% | 46.7% |
| Population ≥ 12 Years of Age | 180,460,119 | 154,764,916 |
| % of Population ≥ 12 Years of Age | 63.6% | 54.6% |
| Population ≥ 18 Years of Age | 171,722,777 | 148,256,556 |
| % of Population ≥ 18 Years of Age | 66.5% | 57.4% |
| Population ≥ 65 Years of Age | 48,074,073 | 42,661,789 |
| % of Population ≥ 65 Years of Age | 87.9% | 78% |

CDC | Data as of: June 30, 2021 6:00am ET. Posted: Wednesday, June 30, 2021 4:07 PM ET

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

12

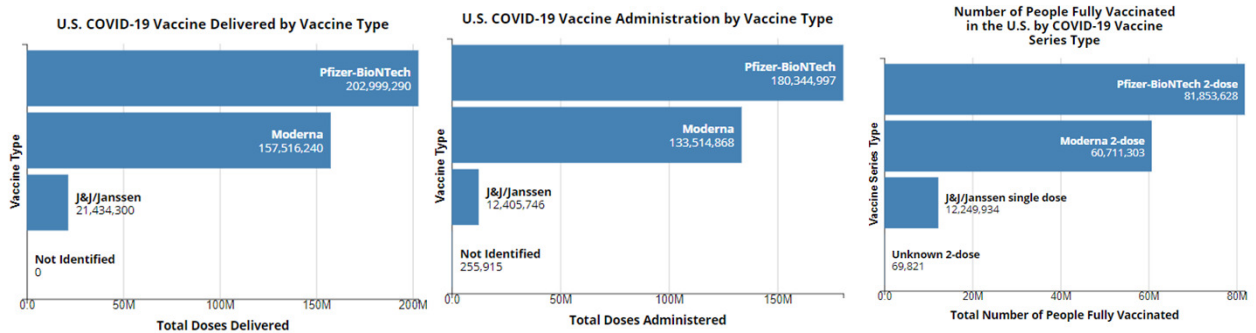
Daily count of total doses administered and reported to CDC, by date administered, United States; data as of June 30, 2021



<https://covid.cdc.gov/covid-data-tracker/#vaccination-trends>

13

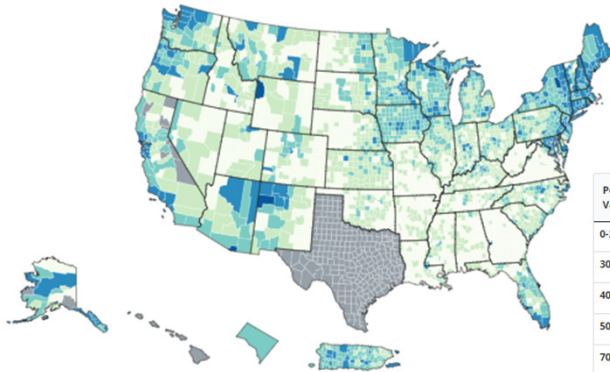
Vaccinations in the United States, as of June 30, 2021



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

14

Total population fully vaccinated, as of June 30, 2021



| Percent of Total Population Fully Vaccinated | Number of U.S. Counties at this Level | Percent of U.S. Counties at this Level |
|--|---------------------------------------|--|
| 0-29.9% | 1,085 | 36% |
| 30-39.9% | 969 | 32% |
| 40-49.9% | 666 | 22% |
| 50-69.9% | 274 | 9% |
| 70%+ | 8 | 0% |

○ 0-29.9% ○ 30-39.9% ○ 40-49.9% ○ 50-69.9% ○ 70%+ ○ No Data

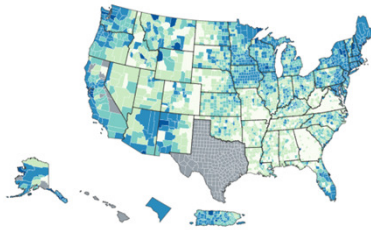
TX is excluded in these figures as they submit data in aggregate and cannot be stratified by dose # when looking at demographics.

<https://covid.cdc.gov/covid-data-tracker/#vaccinations-county-view>

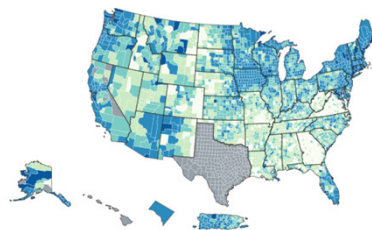
15

Percent of population (12+, 18+, and 65+) fully vaccinated, by county, as of June 30, 2021

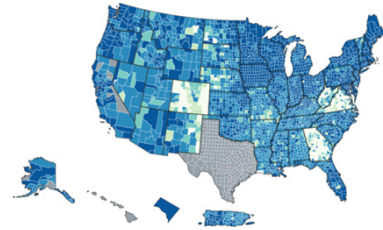
Percent of population 12+, fully vaccinated



Percent of population 18+, fully vaccinated



Percent of population 65+, fully vaccinated

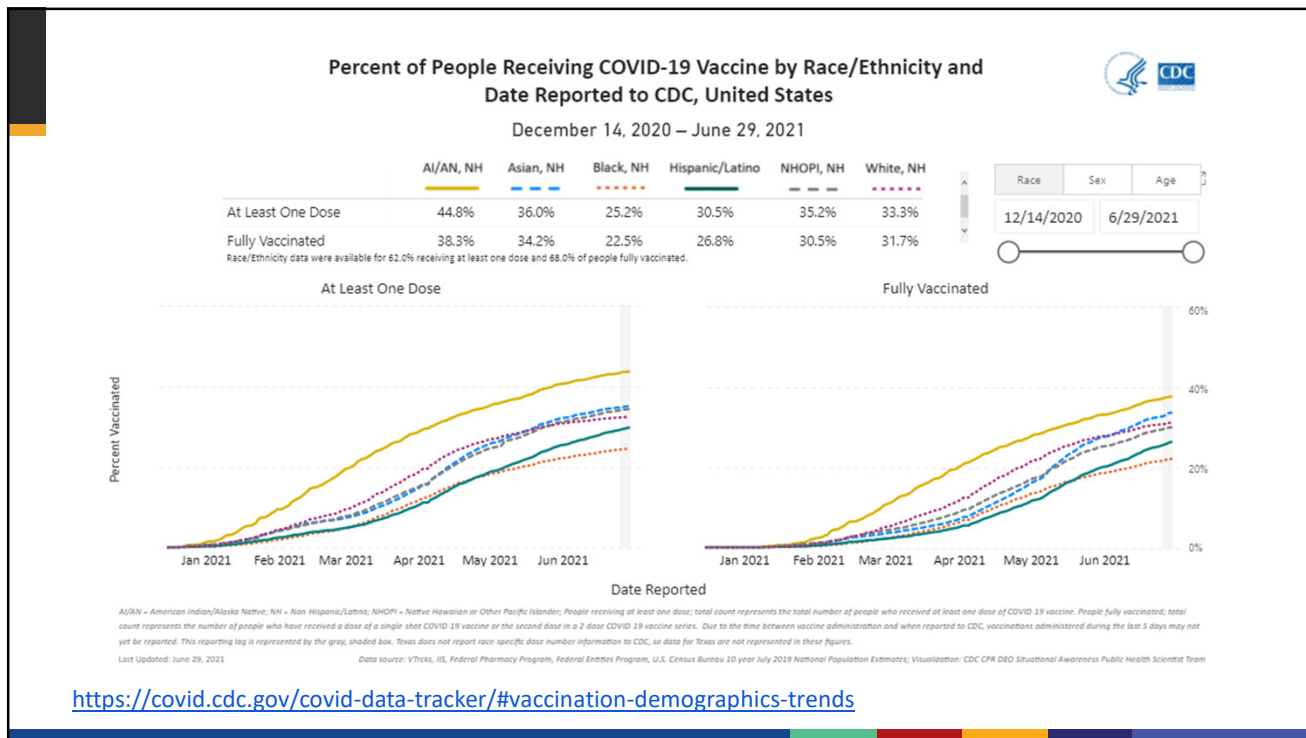


○ 0-29.9% ○ 30-39.9% ○ 40-49.9% ○ 50-69.9% ○ 70%+ ○ No Data

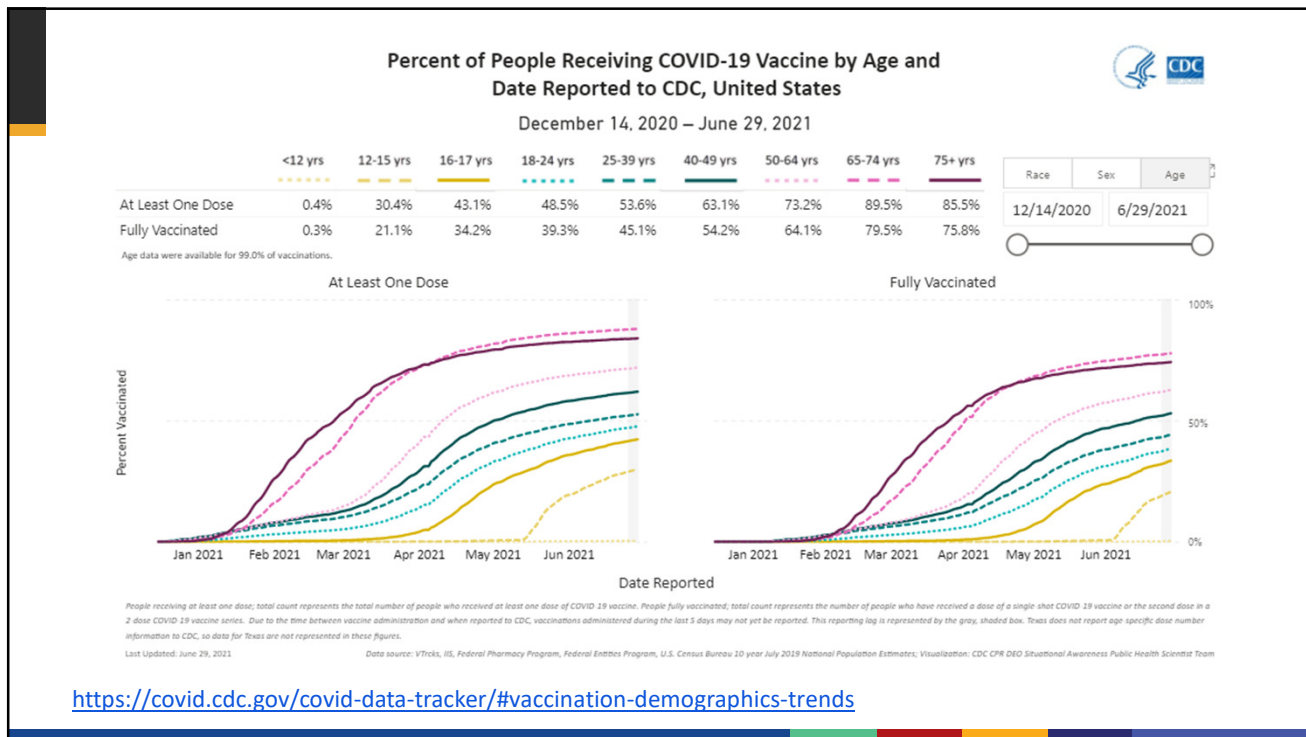
TX is excluded in these figures as they submit data in aggregate and cannot be stratified by dose # when looking at demographics.

<https://covid.cdc.gov/covid-data-tracker/#vaccinations-county-view>

16



17



18

Recent MMWR publications – COVID-19 vaccination, June 2021

- **June 25, 2021**
 - [COVID-19 Vaccination Coverage Among Adults — United States, December 14, 2020–May 22, 2021](#)
 - [COVID-19 Vaccination Coverage and Intent Among Adults Aged 18–39 Years — United States, March–May 2021](#)
- **June 18, 2021**
 - [COVID-19 Vaccination Coverage Among Pregnant Women During Pregnancy — Eight Integrated Health Care Organizations, United States, December 14, 2020–May 8, 2021](#)
- **June 11, 2021**
 - [Impact of the COVID-19 Pandemic on Administration of Selected Routine Childhood and Adolescent Vaccinations — 10 U.S. Jurisdictions, March–September 2020](#)
 - [Decreases in COVID-19 Cases, Emergency Department Visits, Hospital Admissions, and Deaths Among Older Adults Following the Introduction of COVID-19 Vaccine — United States, September 6, 2020–May 1, 2021](#)
- **June 4, 2021**
 - [Patterns in COVID-19 Vaccination Coverage, by Social Vulnerability and Urbanicity — United States, December 14, 2020–May 1, 2021](#)



https://www.cdc.gov/mmwr/Novel_Coronavirus_Reports.html

19

Recent MMWR publications – COVID-19 vaccination, May 2021

- **May 28, 2021**
 - [COVID-19 Vaccine Breakthrough Infections Reported to CDC — United States, January 1–April 30, 2021](#)
- **May 21, 2021**
 - [The Advisory Committee on Immunization Practices' Interim Recommendation for Use of Pfizer-BioNTech COVID-19 Vaccine in Adolescents Aged 12–15 Years — United States, May 2021](#)
 - [Interim Estimates of Vaccine Effectiveness of Pfizer-BioNTech and Moderna COVID-19 Vaccines Among Health Care Personnel — 33 U.S. Sites, January–March 2021](#)
 - [Disparities in COVID-19 Vaccination Coverage Between Urban and Rural Counties — United States, December 14, 2020–April 10, 2021](#)
- **May 14, 2021**
 - [Modeling of Future COVID-19 Cases, Hospitalizations, and Deaths, by Vaccination Rates and Nonpharmaceutical Intervention Scenarios — United States, April–September 2021](#)
 - [Demographic and Social Factors Associated with COVID-19 Vaccination Initiation Among Adults Aged ≥65 Years — United States, December 14, 2020–April 10, 2021](#)
- **May 7, 2021**
 - [Effectiveness of Pfizer-BioNTech and Moderna Vaccines Against COVID-19 Among Hospitalized Adults Aged ≥65 Years — United States, January–March 2021](#)
 - [Safety Monitoring of the Janssen \(Johnson & Johnson\) COVID-19 Vaccine — United States, March–April 2021](#)
 - [Anxiety-Related Adverse Event Clusters After Janssen COVID-19 Vaccination — Five U.S. Mass Vaccination Sites, April 2021](#)



https://www.cdc.gov/mmwr/Novel_Coronavirus_Reports.html

20

COVID Data Tracker Weekly Review

COVID DATA TRACKER WEEKLY REVIEW

Print

Interpretive Summary for June 11, 2021

Subscribe to the Weekly Review

Healthier Together

Long-standing systemic health and social inequities have put many people from racial and ethnic minority groups at increased risk from COVID-19. These inequities can also undermine a person's physical, social, economic, and emotional health. Since the beginning of the pandemic, some racial and ethnic minority groups have experienced higher rates of COVID-19 infection, severe illness, hospitalization, and death.

Conditions in the places where people live, learn, work, play, worship, and age affect a wide range of health risks and outcomes. These and other conditions are known as social determinants of health. Some of the many inequities in the social determinants of health that put racial and ethnic minority groups at increased risk of getting sick and dying from COVID-19 include discrimination, healthcare access, occupation, gaps in education or income, and housing. These factors and others may have also contributed to higher rates of some medical conditions that increase a person's risk of severe illness from COVID-19. In addition, community strategies to slow the spread of COVID-19 might cause unintentional harm, such as lost wages, reduced access to services, and increased stress for some racial and ethnic minority groups.



View Larger

<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>

21

COVID DATA TRACKER WEEKLY REVIEW

Print

Interpretive Summary for June 25, 2021

Subscribe to the Weekly Review

Keep Variants at Bay. Get Vaccinated Today.

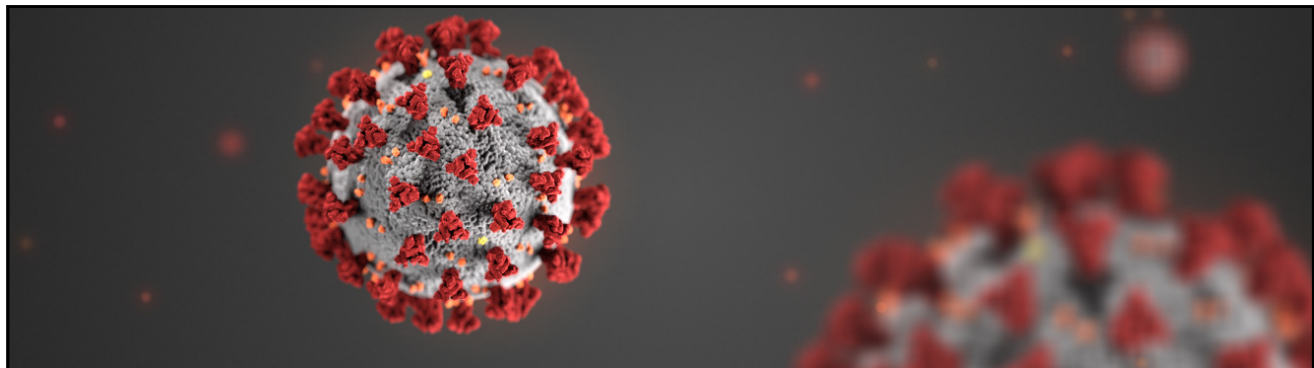
The virus that causes COVID-19 is constantly changing through mutation, leading to new variants, including ones classified as variants of concern (VOCs). VOCs have the potential to spread more easily and quickly than other variants, which could lead to more cases of COVID-19. A recent CDC study found that the circulation of SARS-CoV-2 variants in the United States changed rapidly from December 2020 to May 2021, demonstrating how quickly a new variant can emerge, spread, and become the dominant strain.



View Larger

Currently, several variants are found around the world, including in the United States. On June 15, 2021, the B.1.617.2 (Delta) variant was classified as a VOC because it spreads from person to person more easily than other variants and may cause more severe disease. B.1.617.2 has been reported in 27 countries and in the United Kingdom has become the main variant in COVID-19 cases. In the United States, the proportion* of B.1.617.2 for the 2-week period ending June 19, 2021, is predicted to increase to 20.6% nationally and be higher in regions 2, 6, 7, 8, and 9.

The more a virus circulates in a population, the more opportunities it has to transform itself and can reduce the effectiveness of our vaccines. Recent studies have shown that the vaccines available in the United States are effective against variants currently circulating, including B.1.617.2. Vaccines interrupt the ability of the virus that causes COVID-19 to move between people and mutate, so it is important for everyone to get vaccinated as soon as they're eligible. If you have questions or concerns about vaccines, please contact your healthcare professional, state or local health department, or local pharmacist or visit the CDC website. To find a place in your community to get a vaccine, visit [vaccines.gov](https://www.cdc.gov/vaccines) or your local public health department website.



For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



22

Appendix: June 2021 MMWR publications related to COVID-19 vaccinations in the United States



23

“COVID-19 Vaccination Coverage and Intent Among Adults Aged 18–39 Years — United States, March–May 2021”

- https://www.cdc.gov/mmwr/volumes/70/wr/mm7025e2.htm?s_cid=mm7025e2_x
June 25, 2021
- Overall, 34% of adults aged 18–39 years reported having received a COVID-19 vaccine.
- Adults aged 18–24 years, as well as non-Hispanic Black adults and those with less education, no insurance, and lower household incomes, had the lowest reported vaccination coverage and intent to get vaccinated.
- Concerns about vaccine safety and effectiveness were commonly cited barriers to vaccination.



https://www.cdc.gov/mmwr/Novel_Coronavirus_Reports.html

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“COVID-19 Vaccination Coverage Among Adults Aged 18–39 Years — United States, March–May 2021”

- https://www.cdc.gov/mmwr/volumes/70/wr/mm7025e1.htm?s_cid=mm7025e1_w
June 25, 2021
- By May 22, 2021, 57.0% of U.S. adults aged ≥ 18 years had received ≥ 1 vaccine dose; coverage was lower and increased more slowly over time among younger adults.
- If the current rate of vaccination continues through August, coverage among young adults will remain substantially lower than among older adults.



https://www.cdc.gov/mmwr/Novel_Coronavirus_Reports.html

25

“COVID-19 Vaccination Coverage Among Pregnant Women During Pregnancy — Eight Integrated Health Care Organizations, United States, December 14, 2020–May 8, 2021”

- https://www.cdc.gov/mmwr/volumes/70/wr/mm7024e2.htm?s_cid=mm7024e2_w
June 18, 2021
- As of May 8, 2021, 16.3% of pregnant women identified in CDC’s Vaccine Safety Datalink had received ≥ 1 dose of a COVID-19 vaccine during pregnancy in the United States.
- Vaccination was lowest among Hispanic (11.9%) and non-Hispanic Black women (6.0%) and women aged 18–24 years (5.5%) and highest among non-Hispanic Asian women (24.7%) and women aged 35–49 years (22.7%).



https://www.cdc.gov/mmwr/Novel_Coronavirus_Reports.html

26

“Decreases in COVID-19 Cases, Emergency Department Visits, Hospital Admissions, and Deaths Among Older Adults Following the Introduction of COVID-19 Vaccine — United States, September 6, 2020–May 1, 2021”

- https://www.cdc.gov/mmwr/volumes/70/wr/mm7023e2.htm?s_cid=mm7023e2_w
June 11, 2021
- By May 1, 2021, 82%, 63%, and 42% of adults aged ≥ 65 , 50–64, and 18–49 years, respectively, had received ≥ 1 vaccine dose.
- From November 29–December 12, 2020 to April 18–May 1, 2021, the rate ratios of COVID-19 incidence, emergency department visits, hospital admissions, and deaths among adults aged ≥ 65 years (≥ 70 years for hospitalizations) to adults aged 18–49 years declined 40%, 59%, 65%, and 66%, respectively.



https://www.cdc.gov/mmwr/Novel_Coronavirus_Reports.html

27

“Impact of the COVID-19 Pandemic on Administration of Selected Routine Childhood and Adolescent Vaccinations — 10 U.S. Jurisdictions, March–September 2020”

- https://www.cdc.gov/mmwr/volumes/70/wr/mm7023a2.htm?s_cid=mm7023a2_w
June 11, 2021
- Analysis of immunization information systems data from 10 U.S. jurisdictions indicated a substantial decrease in administered vaccine doses during March–May 2020 compared with the same period during 2018 and 2019.
- Although administered doses increased during June–September 2020, this increase was not sufficient to achieve catch-up coverage.



https://www.cdc.gov/mmwr/Novel_Coronavirus_Reports.html

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“Patterns in COVID-19 Vaccination Coverage, by Social Vulnerability and Urbanicity — United States, December 14, 2020–May 1, 2021”

- https://www.cdc.gov/mmwr/volumes/70/wr/mm7022e1.htm?s_cid=mm7022e1_w
June 4, 2021
- Disparities in county-level vaccination coverage by social vulnerability have increased as vaccine eligibility has expanded, especially in large fringe metropolitan (areas surrounding large cities, e.g., suburban) and nonmetropolitan counties.
- By May 1, 2021, vaccination coverage among adults was lower among those living in counties with lower socioeconomic status and with higher percentages of households with children, single parents, and persons with disabilities.



https://www.cdc.gov/mmwr/Novel_Coronavirus_Reports.html