



COVID-19

Reporting COVID-19 Vaccinations in the United States

Updated Oct. 6, 2021

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CDC's COVID Data Tracker provides COVID-19 vaccination data in the United States. Please visit the [About COVID-19 Vaccine Delivered and Administration Data](#) to better understand the IT systems behind the COVID-19 Data Tracker.



COVID-19 Data Tracker

View data on [COVID-19 Vaccinations in the United States](#)

Census Data Used for COVID-19 Vaccine Data Tracker

The National Census Population Estimates from the 2019 Vintage [US Census Bureau Annual Estimates of the Resident Population for the United States](#) [↗](#) (including the District of Columbia [DC]) and Puerto Rico and 2018 CIA World Factbook data for US territories and freely associated states (American Samoa, the Federated States of Micronesia, Guam, the Commonwealth of Northern Mariana Islands, Republic of Palau, the Republic of the Marshall Islands, and US Virgin Islands).

To estimate the 12+, 18+ and 65+ populations for US territories, CDC assumes that the proportions of people aged 12 years and older, 18 years and older and people aged 65 years and older in the territories are the same as in the aggregate of the 50 states, DC, and Puerto Rico (85%, 78% and 17%, respectively).

Federal Agency Data

CDC COVID Tracker publicly displays federal agency data individually by agency and incorporates federal agency vaccination data into national and jurisdictional progress metrics.

- Federal agency data are included as part of the national total for each metric presented. These data exclude the Department of State.
- Federal agency data are presented in aggregate by agency in call-out boxes in the COVID-19 Vaccine Data Tracker. To avoid duplicate counts, the data in the agency call-out boxes should not be combined with other data.
- Federal agency data are also included, without agency affiliation, as part of jurisdiction, state, or territory aggregate metrics.
- When a federal agency has agreed to provide the denominator representing the population served by the agency, the rate per 100,000 is calculated. When the denominator data are not available, the rate per 100,000 is not included.

Fully Vaccinated and Johnson and Johnson's Janssen Vaccine

The number of people fully vaccinated by the Johnson and Johnson Janssen vaccine does not equal the total number of Johnson and Johnson's Janssen vaccine doses administered because some persons were reported to have received one or more mRNA vaccines prior to receiving the single-dose Johnson and Johnson's Janssen vaccine. The algorithm CDC uses to determine whether a person is fully vaccinated is based on the manufacturer of the doses a person received.

Timing of Updates

Data will be updated after review and verification, usually before 8:00 pm ET. Note: Daily updates might be delayed due to delays in reporting.

- Data on doses of vaccine distributed and administered include data received by CDC as of 6:00 am ET on the day of reporting.
- Vaccination data on CDC's COVID Data Tracker are updated daily between 1:30 pm and 8:00 pm ET.
- Updates will occur the following day when reporting coincides with a federal holiday.

COVID-19 Vaccinations in the United States Data Definitions

Total Doses Delivered; Total Count

The total number of vaccine doses that have been delivered. Doses delivered include those that the:

- jurisdiction (state, territory, tribe, or local entity) partner clinics,
- retail pharmacies,
- long-term care facilities,
- dialysis centers participating in the Federal Dialysis Center Program,
- Federal Emergency Management Agency (FEMA) partner sites,
- Health Resources and Services Administration (HRSA) partner sites, and federal entity facilities (e.g., Department of Defense, Veterans Health Administration, Indian Health Service, and Bureau of Prisons) in that jurisdiction.

Data for each federal entity are also reflected at the national level in the agency callout boxes on the map; combining these data with jurisdiction-level doses delivered data will result in double counting.

For states, Washington DC, the US Virgin Islands, and Puerto Rico, total counts of COVID-19 vaccine doses include doses delivered since December 14, 2020.

For the Republic of Palau, the Federated States of Micronesia, the Republic of the Marshall Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands, total counts of COVID-19 vaccine doses include doses marked as shipped in VTrckS since December 13, 2020.

Doses Delivered; Rate per 100,000

The total number of vaccine doses delivered for every 100,000 people (overall, per the population aged 12 years and older, per the population aged 18 years and older, and per the population aged 65 years and older). This allows comparison between areas with different population sizes.

Total Doses Administered; Total Count

The total number of vaccine doses that have been given to people in the United States since December 14, 2020, the date when the first dose was administered to a person in the United States under the Emergency Use Authorization as a non-clinical trial. Doses administered in a jurisdiction (state, territory, tribe, or local entity) include those administered in:

- jurisdictional (state, territory, tribe, or local entity) partner clinics,
- retail pharmacies,
- long-term care facilities,
- dialysis centers participating in the Federal Dialysis Center Program,
- Federal Emergency Management Agency (FEMA) partner sites,
- Health Resources and Services Administration (HRSA) partner sites, and
- federal entity facilities (e.g., Department of Defense, Veterans Health Administration, Indian Health Service, and Bureau of Prisons) in that jurisdiction.

Data for each federal entity are also reflected at the national level in the agency callout boxes on the map; combining these data with jurisdiction-level doses administered data will result in double counting. For this measure, CDC's COVID Data Tracker attributes each dose to the jurisdiction in which the person received the dose.

Total Doses Administered; Rate per 100,000

The total number of vaccine doses given for every 100,000 people (overall, per the population aged 12 years and older, per the population aged 18 years and older, and per the population aged 65 years and older). This allows comparison between areas with different population sizes.

People Receiving at Least One Dose (Formerly "Receiving 1 or More Doses"); Total Count*

Represents the total number of people who received at least one dose of COVID-19 vaccine, including those who received one dose of the single-shot Johnson and Johnson's Janssen COVID-19 vaccine.

- This metric includes everyone who has received only one dose and those who received more than one dose.
- For this measure, CDC's COVID Data Tracker attributes each dose to the jurisdiction (state, territory, tribe, or local entity) in which the person resides.

People Receiving at Least One Dose; Percent (%) of the Population*

Represents the percent of people who received at least one dose of COVID-19 vaccine, including those who received one dose of the single-shot Johnson and Johnson's Janssen COVID-19 vaccine. This metric includes everyone who has received only one dose and those who received more than one dose.

- For this measure, CDC's COVID Data Tracker attributes each dose to the jurisdiction (state, territory, tribe, or local entity) in which the person resides. This includes doses administered by FEMA partner sites, HRSA partner sites, and federal entity facilities.
- Estimates for the total population, population of those aged 12 years and older, population of those aged 18 years and older, and population of those aged 65 years and older are used as the denominators to calculate percentages.

People Who Are Fully Vaccinated (Formerly "Receiving 2 Doses"); Total Count*

Represents the number of people who have received the second dose in a two-dose COVID-19 vaccine series or one dose of the single-shot Johnson and Johnson's Janssen COVID-19 vaccine.

- For this measure, CDC's COVID Data Tracker attributes each dose to the jurisdiction (state, territory, tribe, or local entity) in which the person resides.
- Estimates for the total population, population of those aged 12 years and older, population of those aged 18 years and older, and population of those aged 65 years and older are used as the denominators to calculate percentages.

People Who are Fully Vaccinated; Percent (%) of the Population*

Represents the number of people who have received the second dose in a two-dose COVID-19 vaccine series or one dose of the single-shot Johnson and Johnson's Janssen COVID-19 vaccine.

- For this measure, CDC's COVID Data Tracker attributes each dose to the jurisdiction (state, territory, tribe, or local entity) in which the person resides. This includes doses administered by FEMA partner sites, HRSA partner sites, and federal entity facilities.
- Estimates for the total population, population of those aged 12 years and older, population of those aged 18 years and older, and population of those aged 65 years and older are used as the denominators to calculate percentages.
- This definition differs from the current [CDC Interim Clinical Considerations](#) in two ways:
 1. According to the interim guidance, the second dose of Pfizer-BioNTech and Moderna vaccines should be administered as close to the recommended interval as possible, but not earlier than recommended (i.e., 3 weeks [Pfizer-BioNTech] or 1 month [Moderna]). However, second doses administered within a grace period

of 4 days earlier than the recommended date for the second dose are still considered valid. If it is not feasible to adhere to the recommended interval and a delay in vaccination is unavoidable, the second dose of Pfizer-BioNTech and Moderna COVID-19 vaccines may be administered up to 6 weeks (42 days) after the first dose. Currently, only limited data are available on efficacy of mRNA COVID-19 vaccines administered beyond this window.

2. To ensure adequate time for an immune response to occur, a person is considered fully vaccinated greater than or equal to 2 weeks after completion of a two-dose mRNA series or single dose of Janssen vaccine.

People Who Received a Booster Dose

Represents the total number of fully vaccinated people who later received another dose of any COVID-19 vaccine on or **after August 13, 2021**. This measure does not consider how much time has passed since the recipient was vaccinated or whether the vaccine recipient is immunocompromised, has an underlying medical condition, or is at high-risk from occupational and institutional exposure to COVID-19. People who are fully vaccinated are those who received the second dose in a two-dose COVID-19 vaccine series or one dose of the single-shot COVID-19 vaccine.

This definition of booster doses differs from the current [Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Approved or Authorized in the United States](#) in the following ways:

According to the CDC guidance,

- people 65 years and older and residents in long-term care settings **should** receive a booster shot of Pfizer-BioNTech's COVID-19 vaccine at least 6 months after their Pfizer-BioNTech primary series,
- people aged 50–64 years with underlying medical conditions **should** receive a booster shot of Pfizer-BioNTech's COVID-19 vaccine at least 6 months after their Pfizer-BioNTech primary series,
- people aged 18–49 years with underlying medical conditions **may** receive a booster shot of Pfizer-BioNTech's COVID-19 vaccine at least 6 months after their Pfizer-BioNTech primary series, based on their individual benefits and risks, and
- people aged 18-64 years who are at increased risk for COVID-19 exposure and transmission because of occupational or institutional setting **may** receive a booster shot of Pfizer-BioNTech's COVID-19 vaccine at least 6 months after their Pfizer-BioNTech primary series, based on their individual benefits and risks.

On **September 30th, 2021** the language was changed to reflect the recommendation for booster doses. People who received an additional dose since August 13th are included in this count.

Rates per 100,000

Represent the rate of total doses delivered, the rate of total doses administered, the rate of people receiving at least one dose, and the rate of people who are fully vaccinated per 100,000. The total population, population of those aged 12 years and older, population of those aged 18 years and older, and population of those aged 65 years and older are used as estimates to calculate rates for total doses delivered and total doses administered. In some limited circumstances, people might receive vaccinations outside the jurisdiction (state, territory, tribe, or local entity) where they live. These rates currently account for vaccinations that occur in the jurisdiction where the vaccination was administered.

Rates per 100,000 and Percent of the Population Metrics

Measures of vaccination are calculated among the entire population (i.e., all ages), the population who are aged 12 years and older, the population who are aged 18 years and older, and the population who are aged 65 years and older.

Percent of the Population

Represents the percent of people receiving at least one dose and the percent of people who are fully vaccinated. The total population, population of those aged 12 years and older, population of those aged 18 years and older, and population of those aged 65 years and older are used as denominators to calculate the percent of the total population, the percent of the population aged 12 years and older, the percent of the population aged 18 years and older, and the percent of the population aged 65 years and older who have received at least 1 dose or who are fully vaccinated. The percent of the total population was derived using the location of residence.

CDC has capped the percent of population coverage metrics at 99.9%. These metrics could be greater than 99.9% for multiple reasons, including census denominator data not including all individuals that currently reside in the jurisdiction (e.g., part time residents) or potential data reporting errors.

Texas

Texas has historically provided aggregate vaccination data to CDC, which impacted the ability to report metrics requiring information at the individual dose level. Texas and CDC collaborated to update how Texas submits aggregate vaccination data for improved reporting of Texas on CDC COVID Data Tracker at the national, state, and county levels.

Previously, CDC estimated the number of people with at least one dose and the number of people who are fully vaccinated for the populations aged ≥ 12 , ≥ 18 , and ≥ 65 years of age to represent Texas alone and in national level metrics. Further, Texas was omitted from several demographic and county-level graphics pages. Additional updates will be posted here as they become available.


- Beginning September 28, 2021, age-based metrics for Texas are directly reported rather than estimated.
- Beginning September 28, 2021, the national counts for additional dose data include Texas.

Texas residents who received a vaccination in a different state or territory are not attributed to Texas' population-based metrics.

*CDC determined the **number of people receiving at least one dose** and the **number of people who are fully vaccinated** based on information that state, territorial, tribal, and local public health agencies and federal entities reported to CDC on dose number, dose manufacturer, administration date, recipient ID, and date of submission. Because the method used to determine dose numbers needs to be applied across multiple jurisdictions (states, territories, tribes, or local entities) with different reporting practices, **CDC's dose number estimates might differ from those reported by jurisdictions and federal entities. People receiving doses are attributed to the jurisdiction in which the person resides. When the vaccine manufacturer is not reported, the recipient is considered fully vaccinated with two doses.**

Historical Updates

- On **July 1, 2021**, data review and reporting adjustments resulted in a larger-than-usual increase in the number of vaccine doses administered for Arizona and Puerto Rico of 258,590 and 465,704 doses respectively. The adjustment is the result of CDC and the jurisdictions actively working to correct data transmission errors.
- On **June 30, 2021**, data review and reporting adjustments resulted in an increase in the number of vaccine doses administered for North Carolina of 621,198 doses since December 2020. The adjustment is the result of updates to how pharmacies report data to CDC and/or the jurisdictions.
- On **June 25, 2021**, data review and reporting adjustments resulted in a decrease in the number of vaccine doses administered for New Jersey of 331,640 doses and a smaller-than-usual increase for New Hampshire of 6,449 doses. The adjustments are the result of updates to how pharmacies report data to CDC and/or the jurisdictions.
- During a system upgrade, CDC identified vaccine administration records from files that were previously received but not fully processed. Completion of processing on **June 14, 2021** has resulted in a net increase of 339,047 vaccine administration counts. By jurisdiction, the net increases are: CT (+39), DC (+4,528), FL (+132,008), GU (+1,607), ID (+8,081), IHS (+42), IL (+62,731), IN (+37,621), LA (+19,321), MA (+2,594), MH (+285), MN (+118), MO (+36,582), MT (+37), NY (+1,571), OK (+15,370), TN (+32,588), VA (+305), VI (+94), WI (+2,645), WV (+1,489). Vaccine administration counts for the following jurisdictions will decrease: NJ (-20,609).
- On **June 14, 2021**, CDC corrected an error in the Census denominators used to calculate percentage-based metrics for the U.S. population aged 12 years and older, 18 years and older, and 65 years and older. No other population groups were affected.
 - The census counts for the population aged 12 years and older increased from 280,216,744 to 283,545,812 people (+3,329,068).
 - The census counts for the population aged 18 years and older increased from 258,130,580 to 258,259,833 people (+129,253).
 - The census counts for the population aged 65 years and older decreased from 54,696,898 to 54,696,581 people (-317).

- On **June 10, 2021**, a data synchronization error resulted in a number of records missing the 6 AM ET cutoff for inclusion the same day on CDT. Records were instead being included on CDT the following day. The issue has been resolved and data are correctly synchronized as of June 17, 2021.
- On **June 6, 2021**, the total number of administered doses for New Mexico was incorrectly reported as 1,903,485 due to a data processing error, which has been amended. The correct total for NM on June 6, 2021, was 2,175,419 administered doses.
- On **May 27, 2021**, the total doses administered data posted to COVID Data Tracker for Vermont showed a decrease in doses administered. This is an accurate reflection of the data and is the result of ongoing efforts to improve the data quality of records reported from Vermont.
- On **May 27, 2021**, the New Hampshire 'at least one dose' values posted to Tracker appeared lower than that reported the day prior (May 26, 2021). This correction is accurate and is due to New Hampshire and CDC collaboratively correcting data transmission errors.
- On **May 25, 2021**, the 7,836,063 administered doses reported for Long-Term Care Facilities (LTCF), were fewer by 4,105 records compared to the 7,840,168 reported on May 24, 2021. This was due to an error in data processing that has now been corrected. The data for May 26, 2021 accurately reflect total LTCF doses.
- On **May 16, 2021**, the total number of administered doses for the US and New Hampshire were incorrectly reported. This was due to an error in data processing. The data for May 16, 2021 have been updated and now correctly report the total administered doses of 272,925,411 for the US, and 1,211,530 for New Hampshire.
- On **May 13, 2021**, CDC updated its methodology for calculating age-based metrics for Texas. Effective May 13, 2021, to calculate age-based metrics, CDC assumes: Residents of Texas who receive a vaccination in a different state or territory are not attributed to Texas in their population-based metrics but are still included in national-level metrics. All people receiving vaccinations in Texas are considered Texas residents of Texas. The percentage of total doses that were administered to people in each age group (aged 12 years and older, aged 18 years and older, and aged 65 years and older) is the same as both the percentage of people who received at least one dose and the percentage of fully vaccinated people within each age group. CDC estimates the "at least one dose" metric for these populations of Texas by first obtaining the percentage of the three population groups who have received 'at least one dose' from Texas. CDC then multiplies this percentage by the count for the total population receiving at least one dose in Texas. CDC repeats the same calculations to estimate the "fully vaccinated" metrics for the three population groups. These values will also be included in the topline national totals for 12+, 18+, and 65+.
- On **May 7, 2021**, the COVID-19 Vaccine Tracker was updated to reflect the revised Moderna emergency use authorization (EUA) to account for the new 14 dose vial as authorized by the [Food and Drug Administration \(FDA\)](#) . Moderna deliveries to a jurisdiction on or after May 7, 2021, will reflect this combination of fourteen dose and ten dose vials; historical data will not be updated. The change to the Moderna dosage increases the number of doses delivered relative to the number of doses administered.
- On **May 7, 2021**, the New Hampshire "total doses administered" value posted to Tracker was lower than that reported on the two prior days (May 5 and 6, 2021). This downward correction is accurate and is due to New Hampshire and CDC collaboratively correcting data transmission errors. Updates will be provided as available.
- On **May 6, 2021**, the total doses administered data posted to Tracker for New Hampshire was the same as those reported the day before (May 5, 2021). New Hampshire and CDC are actively working to reconcile counts at this time. Updates will be provided as available.
- On **April 19, 2021**, the population metrics for 65+ Texas residents dropped from the metrics reported on April 18, 2021. This was due to a schedule delay in updating the calculation used to infer the 65+ population metrics. The issue was resolved on April 19, 2021 and metrics accurately reflect the total doses administered. This did not affect any other states, but did affect the total US estimates for 65+.
- On **April 13, 2021**, the total doses administered data posted to Tracker inadvertently included 221,081 duplicate doses affecting Vermont (6,605), Georgia (102,711), Illinois (64,886), West Virginia (60), and Maine (46,819). The issue has since been resolved and totals for April 14, 2021 accurately reflect the total doses administered.
- On **April 2, 2021**, New York State showed a higher than usual increase in doses administered. This is an accurate reflection of the data and is the result of a delay in records reported from New York.
- Since **March 29, 2021**, the total number of doses delivered, and total number of doses administered by dialysis centers participating in the Federal Dialysis Center Program are reflected in national totals and in jurisdictional totals.
- Due to a delay in data syncing on **March 13, 2021**, 4,575,496 new doses administered were initially reported, which included records that were reported after 6:00 AM ET (the regular cutoff time for daily reporting). The site has since been updated to reflect the totals reported as of March 13 at 6:00 AM ET. Totals for **March 14, 2021** reflect the number of doses reported through the regular daily reporting period.

- Dose counts for the state of Connecticut were updated **March 13, 2021** to correct for data transmission errors that began on February 20, 2021. Since that date, first doses have been slightly overcounted and second doses have been slightly undercounted.
- As of **March 12, 2021**, to calculate national population estimates, CDC uses, as a denominator, a combination of:
 - The [2019 National Census Population Estimates](#) from the [US Census Bureau Annual Estimates of the Resident Population for the United States](#) (including the District of Columbia [DC]) and Puerto Rico and the US Census Bureau 2018 population estimates and CIA World Factbook for US territories and freely associated states (American Samoa, the Federated States of Micronesia, Guam, the Commonwealth of Northern Mariana Islands, Republic of Palau, the Republic of the Marshall Islands, and US Virgin Islands).
 - To estimate the 18+ and 65+ populations for US territories, CDC assumes that the proportions of people aged 18 years and older and people aged 65 years and older in the territories are the same as in the aggregate of the 50 states, DC, and Puerto Rico (78% and 17%, respectively).
- On **March 5, 2021**, doses were removed from the delivered doses totals for Maryland (98,475 doses), Pennsylvania (239,900 doses), and Virginia (91,950 doses) because it was determined that the doses, while delivered to federal facilities in those states, were not intended for vaccinating persons living in the region.
- On **February 28, 2021**, CDC released an official recommendation to use the Johnson and Johnson's Janssen COVID-19 vaccine for people aged 18 and older. Shipments to jurisdictions began on March 2, 2021.
- On **February 23, 2021**, the total numbers of national doses delivered show larger-than-typical daily increases. This is an accurate reflection of the data and is the result of recent weather events causing a backlog of vaccine delivery to many parts of the United States.
- On **February 19, 2021**, and **February 20, 2021**, the total numbers of national aggregate doses delivered were incorrect. That's because deliveries to federal entities were inadvertently counted twice; the totals should have been 74,108,895 and 74,979,165, respectively.
- On **February 15, 2021**, the COVID-19 Vaccine Tracker was updated to reflect the revised Pfizer-BioNTech emergency use authorization (EUA) to allow the use of a sixth dose, if present in a vial, as authorized by the [Food and Drug Administration \(FDA\)](#). Pfizer-BioNTech deliveries to a jurisdiction on or after February 15, 2021, will reflect this increase to six doses per vial compared to five doses; historical data will not be updated. The change to the Pfizer-BioNTech dosage increases the number of doses delivered relative to the number of doses administered.
- **The total doses administered can be greater than the total doses distributed.** This is because vials of the Pfizer-BioNTech COVID-19 vaccine officially contain at least five doses but can contain an additional sixth dose. Use of this sixth dose, if present, is authorized by FDA. Before **February 15, 2021**, the sixth dose was not reflected in the doses delivered totals; however, if administered, doses were reflected in the doses administered totals.
- From **December 21, 2020** through **January 13, 2021**, Virginia transferred 17,550 doses and Maryland transferred 16,000 doses to the District of Columbia (DC) for administration to persons from the region who were vaccinated in DC. This approved transfer of inventory is reflected in the totals presented on the CDC COVID Data Tracker to accurately reflect the inventory made available to each jurisdiction. Because of how and when (i.e., early in the vaccination program) these transfers occurred, they may not be reflected in totals presented within other inventory management systems (e.g., the Vaccine Tracking System [VTrckS]).

Reporting COVID-19 Vaccination Demographics

Demographic data are currently collected by the jurisdiction and reported to CDC. Not all states and territories report to CDC demographic data on vaccine recipients; the laws in each state or territory dictate whether the state can collect or report demographic data. For more information on vaccine distribution and administration demographic data, see [Demographic Characteristics of Persons Vaccinated During the First Month of the COVID-19 Vaccination Program — United States, December 14, 2020–January 14, 2021](#)

Downloading Data

Users can download .CSV files of all data presented on CDC's COVID Data Tracker. Additional vaccination data sets for COVID-19 and other diseases can be found at <https://data.cdc.gov/browse?category=Vaccinations>.

More Information

COVID-19 Vaccine Data Systems

How COVID-19 Vaccines Get to You

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