



# COVID-19 Vaccination: Selected U.S. Data Sources

#### Updated April 11, 2022

The sources below can help congressional staff track the progress of the U.S. Coronavirus Disease 2019 (COVID-19) vaccination campaign at the national, state, and local levels.

Sources were selected for having commonly cited and frequently requested data. This list is not intended to be comprehensive. Because different resources use different methodologies, readers should check websites' notes and caveats, and use caution when comparing data. For help interpreting or analyzing these data, congressional staff should contact CRS (202-707-5700, or place an online request).

For an overview of considerations for Congress, see CRS Report R47024, *Immunization Information Systems: Overview and Current Issues* and CRS Insight IN11584, *Tracking COVID-19 Vaccines: U.S. Data Systems and Related Issues.* For international sources, see CRS Insight IN11732, *International COVID-19 Data and Vaccine Distribution: Selected Resources.* 

Centers for Disease Control and Prevention's (CDC's) Vaccines for COVID-19 can assist constituents with questions about the vaccines.

Example sources on public attitudes toward vaccination include CDC's National Immunization Survey, COVIDVaxView, and State of Vaccine Confidence Insights Report, Kaiser Family Foundation, Carnegie Mellon University, Johns Hopkins, and scholarly articles.

Vaccines.gov maps vaccination sites. Vaccine Equity Planner (Ariadne Labs) helps identify "vaccine deserts" that lack convenient access to vaccination.

## **About Vaccine Data**

In the COVID-19 vaccine program, jurisdictions (e.g., states, territories, tribes, and local entities), federal agencies, and pharmacy partners determine the number and types of doses to be shipped to vaccination sites. Doses are then *delivered* (i.e., distributed) to vaccination administration sites such as vaccination clinics, doctors' offices, and pharmacies. Providers then *administer* doses to patients and report administration data to jurisdictions and CDC. (See CDC's About COVID-19 Vaccine Delivered and Administration Data.) Federal health care programs (e.g., Veterans Health Administration) manage vaccine data through a similar process.

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FDA has approved or authorized three vaccines for the prevention of COVID-19 in different age groups, summarized in **Table 1**.

Table 1. COVID-19 Vaccines Approved or Authorized by FDA

(as of April 11, 2022)

	Pfizer-BioNTech	Moderna	J&J/Janssen
Primary Series	Two doses given three weeks apart	Two doses given four weeks apart	One dose
FDA Approval / Licensure	Yes, approved under the name Comirnaty as a two-dose regimen for individuals 16+	Yes, approved under the name Spikevax as a two-dose regimen for individuals 18+	Not approved
Emergency Use	Yes, authorized as a	Yes, authorized as a	Yes, authorized as a
Authorization (EUA)	<ul> <li>two-dose regimen in individuals 5+ (with a lower dose authorized for children 5-11),</li> <li>third dose for certain immunocompromised individuals 5+,</li> <li>single booster dose to be given at least five months after the primary series in individuals 12+, and</li> <li>second booster dose to be given at least four months after first booster dose in individuals 50+ and in certain immunocompromised</li> </ul>	<ul> <li>two-dose regimen for ages 18+,</li> <li>third dose for certain immunocompromised individuals 18+,</li> <li>single booster dose (half dose) to be given at least five months after the primary series in individuals 18+, and</li> <li>second booster dose to be given at least four months after first booster dose in individuals 50+ and in certain immunocompromised individuals 18+.</li> </ul>	<ul> <li>single-dose regimen in individuals 18+, and</li> <li>single booster dose to be given at least two months after first dose in individuals 18+.</li> </ul>

Source: Agata Bodie, Analyst in Health Policy, CRS, based on FDA's documents at COVID-19 Vaccines.

Any of the available vaccines can be used as a "mix and match" booster dose in eligible individuals. CDC recommends the Pfizer-BioNTech or Moderna vaccines to be given as a booster shot two months after receiving the J&J/Janssen vaccine or five months after completing the Pfizer-BioNTech or Moderna vaccination series. Additionally, CDC recommends that adults who received J&J/Janssen as both their primary vaccine and booster dose at least four months ago may receive a second booster dose using the Pfizer-BioNTech or Moderna vaccines.

### **CDC Sources**

CDC provides data on doses and people vaccinated. Some aggregated national data are available for federal entities (Bureau of Prisons, Department of Defense, Indian Health Service, and Veterans Health Administration; see "Data Table"). CDC also tracks rates of COVID-19 cases, deaths, and hospitalizations by vaccination and booster status. CDC continues to study vaccine effectiveness in real-world conditions.

CDC (click map) compiles links to state dashboards, which may also track local data.

## **Non-CDC Sources**

Non-CDC sources provide different visualizations and analyses of CDC data and incorporate data from various jurisdiction-specific sources:

- Bloomberg
- Covid Act Now (and Harvard analysis with congressional district estimates as of September 2021)
- Johns Hopkins University & Medicine (JHU)
- Kaiser Family Foundation (KFF)
- Washington Post (WP)
- Centers for Medicare & Medicaid Services (CMS) posts nursing home-reported data.

## **Vaccination Data Sources**

Table 2 links to websites containing specific vaccination statistics.

**Table 2. Vaccination Data** 

(links to selected resources)

Measure	National	State	Local
Doses delivered			
Number	CDC	CDC	_
Per capita	CDC download Data Table)	CDC	_
By vaccine type (J&J/Janssen, Spikevax/Moderna, Comirnaty/Pfizer- BioNTech)	CDC	CDC (download Data Table)	_
Doses administered			
Number	CDC (also trend)	CDC (also trend)	Harvard (congressional
	JHU	JHU	district) <sup>a</sup>
Per capita	CDC (download Data	CDC	_
·	Table) `	Bloomberg (also trend)	
	Bloomberg (also trend)		
Per day (daily count and 7-day	CDCb	CDCb	_
average, trend)	WP	WP	
By vaccine type	CDC	CDC (download Data Table)	_
Percentage of delivered doses that have been administered	Bloomberg ("Supply used")	Bloomberg ("Supply used")	_
Booster doses administered in last 7 days	CDCc	CDCc	

Measure	National	State	Local
People vaccinated			
People who received ≥I dose (number)	CDC (also trend) <sup>b</sup>	CDC (also trend) <sup>b</sup>	CDC (county) CDC (CBSA)d
•			Harvard (congressional district) <sup>a</sup>
People who received ≥1 dose	CDC	CDC	CDC (county)
(percentage)	Covid Act Now	Covid Act Nowe	CDC (CBSA)d
			Covid Act Now (county, metro area)e
			Harvard (congressional district) <sup>a</sup>
People fully vaccinatedf (number)	CDC (also trend)b	CDC (also trend)b	CDC (county)
	JHU	JHU	CDC (CBSA)d
	WP	WP	Harvard (congressional district) <sup>a</sup>
People fully vaccinated (percentage)	CDC	CDC	CDC (county, also case
	JHU	Covid Act Nowe	rates and testing positivity map)
	WP	JHU	CDC (CBSA)d
		WP	Covid Act Now (county, metro area)e
			Harvard (congressional district) <sup>a</sup>
			WP (county)
People fully vaccinatedf by vaccine type	CDC	CDC (download Data Table)	_
People who received additional	CDCg (also trendh)	CDC (download Data	CDC (county)
(including booster) doses	WP	Tableg) (also trendh)	CDC (CBSA)d
		Covid Act Nowe WP	Covid Act Now (county, metro area)e
People eligible for booster who have not yet received it	CDC ("First booster eligibility")	_	_

Measure	National	State	Local
Demographics <sup>i</sup>	CDC (race/ethnicity, sex, age; also trends) CDC (booster uptake by race/ethnicity) CDC (aged 65+) CDC (trends by age, alongside cases) CDC (disability status and age, race/ethnicity) CDC (pregnant people by race/ethnicity, trend) CDCi (urban/rural, trend) KFF (race/ethnicity) WP (race/ethnicity, age trends)	CDC (sex, age, trends) CDC (aged 65+) CDCc (age) CDCi (urban/rural, trend) KFF (race/ethnicity)	CDC (age, county and CBSA) <sup>d</sup> CDC (aged 65+, county) CDC (social vulnerability, urban/rural, county)
Nursing homes			
Percentage of residents and staff vaccinated	CDC (trend) CMS	CDC (trend) CMS	CMS (facility-level data in "Search for a nursing home")  Medicare.gov (facility-level data)

Source: CRS based on sources as of April 11, 2022.

Notes: Some sources report similar data, but with different visualizations and analysis.

- a. Data were last updated September 2021 but may be of historical interest.
- b. See also 7-day average trend alongside cases or deaths, see "View (right axis)."
- c. Scroll to Excel spreadsheets under "Attachments."
- d. Scroll to Excel spreadsheets under "Attachments." Metropolitan and Micropolitan Statistical Areas are collectively known as Core-Based Statistical Areas (CBSAs).
- e. Search state, city, or county, then scroll to "% Vaccinated" for trend.
- f. As defined in these data sources, "fully vaccinated" people have received the second dose of a two-dose vaccine or one dose of a single-shot vaccine (CDC).
- g. Includes number, percentage, and by vaccine type.
- h. Select "People Receiving a Booster Dose" or "Vaccination Coverage."
- i. Not all states report demographics on vaccine recipients.
- j. View "Urbanicity Chart."

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