

DATA GRAPHICS

From zero to 500 million: America's vaccination effort in 4 charts

Nearly three-quarters of Americans are vaccinated. Here's how we got there.



— People receive Covid-19 vaccines at the Lumen Field Event Center in Seattle on March 13, 2021.

Lindsey Wasson / Reuters file

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By Elliott Ramos

It was a long road to half a billion.

BioNTech-Pfizer Exhibit 1201

BioNTech SE and Pfizer Inc. v. ModernaTX, Inc. IPR2023-01359

More than 500 million Covid-19 vaccinations have been administered since the United States began its efforts little over a year ago, with shots going into the arms of nearly 75 percent of the U.S. population.

But the path hasn't been straightforward, as the vaccination campaign has faced several challenges over the past year. It started with a limited supply of shots and various eligibility restrictions, and then moved to convincing – and sometimes mandating – holdouts to get their shots as the coronavirus mutated and spread faster.

By April, the U.S. produced enough vaccines for all adults, leading to the peak rate of the vaccination effort, when an average of 3.3 million shots were administered each day. At that point, 35 percent of the population had received at least one dose. But summer saw vaccinations take a dive, with average daily vaccinations falling to just over 600,000 shots. The vaccination rate would only go back up when the booster shot became a reality.

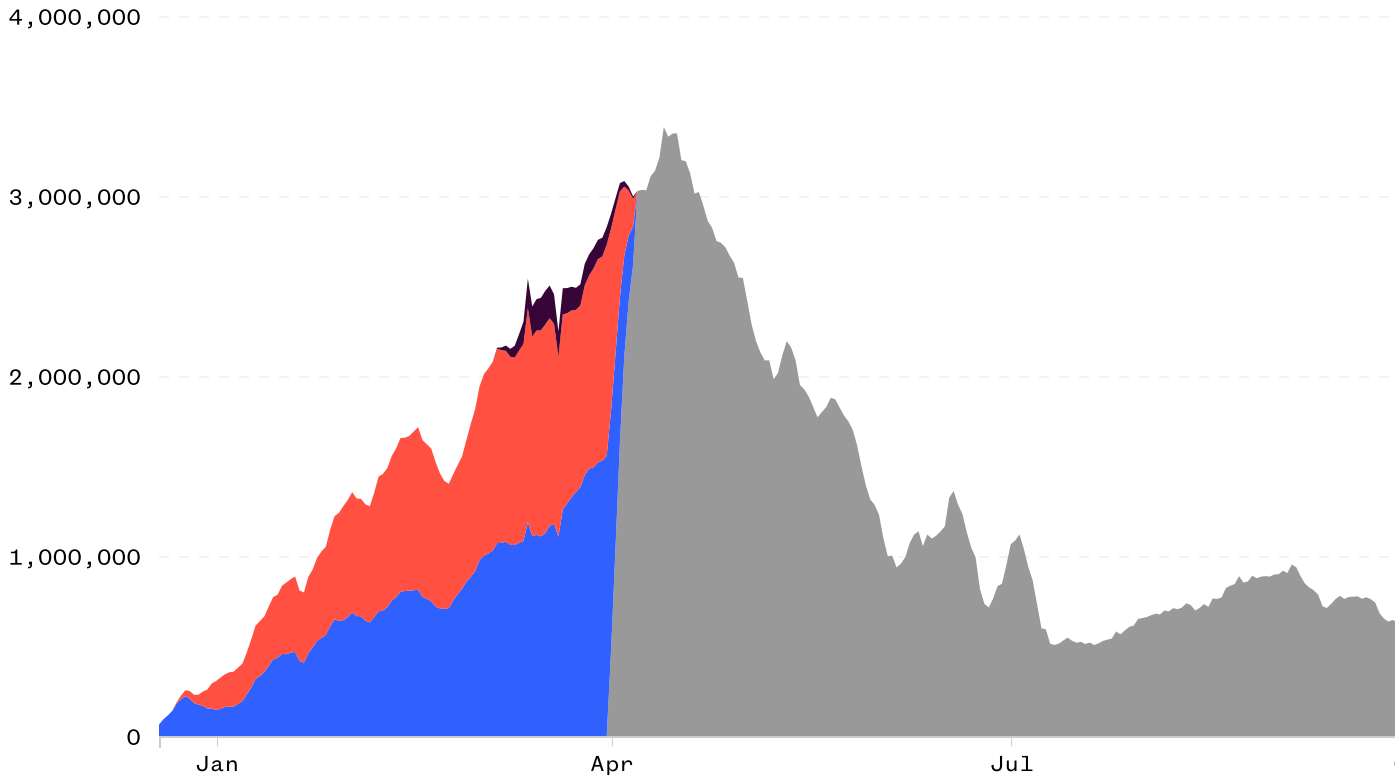
These four charts illustrate the victories and setbacks of reaching the 500-million milestone.

The start: 3 vaccines, tight supply

Quick ramp-up of vaccine supply

While vaccines were tight at the end of 2020, supplies increased significantly in the early spring.

Share of average daily doses: Pfizer Moderna Johnson & Johnson



Notes

Vaccination data was unavailable during the Thanksgiving holiday. Those vaccinations appear on Nov. 29.

Source: NBC News analysis of Centers for Disease Control and Prevention data

The effort began with Operation Warp Speed under the Trump administration, and came to fruition on Dec. 11, 2020, when the Food and Drug Administration [authorized the Pfizer-BioNTech](#) vaccine; the [Moderna vaccine](#) was approved one week later.

Because of limited supply and immediate risk to those living in nursing homes, seniors and essential workers were allotted the first shots. As supplies increased after the first month, states determined which groups of people, such as grocery store workers, firefighters and other essential workers, would be next in line to get the shot.

President Joe Biden had pledged 200 million Covid vaccinations in his first 100 days in office, and [met that goal in April](#).

The U.S. [added hundreds of millions of more doses](#) of the two available vaccines in the country in December 2020, and added even more when the single-dose Johnson & Johnson [vaccine was approved in February](#).

To date, the U.S. has delivered more than 600 million doses, administering nearly 500 million doses, or 82 percent of the distributed supply. Of the shots given, 58 percent have been Pfizer-BioNTech shots, 38 percent Moderna and 3.5 percent Johnson & Johnson.

The spring: Cases drop to new lows as adults get shots

In April, Biden announced a deadline to [make all adults eligible for the vaccine](#). At that time, [about 1 in 4 U.S. adults](#) had completed their vaccination series.

In May, the Food and Drug Administration [authorized the Pfizer vaccine](#) for children ages 12 to 15. New Covid cases continued to drop that month, and by the end of May half of all adults completed a vaccination series.

For a fleeting moment in May, the Centers for Disease Control and Prevention said that [vaccinated people could finally ditch their masks](#).

"We have all longed for this moment when we can get back to some sense of normalcy," CDC Director Dr. Rochelle Walensky said. "That moment has come for those who are fully vaccinated."

By June, [new Covid cases had dropped to the lowest point](#) since the start of the pandemic, averaging 10,000 new cases a day, down from a winter spike that saw a quarter-million cases in a day.

But the reprieve did not last, as a new Covid variant, first detected in India, began to take up a greater share of cases.

When the [delta wave](#) started, only 60 percent of the adults were vaccinated at the beginning of July.

As of Dec. 29, about 188 million people over the age of 18 have completed a vaccination series, or 73 percent of the U.S. adult population. (The number does not include those getting boosters.)

The summer: delta and holdouts

By July, vaccinations began to slow as hesitancy took root, and [mask guidance returned](#), even for vaccinated people. That month, [the more contagious delta variant became the dominant strain](#) in the country, and hospitalizations and cases began to rise in [states such as Texas and Florida](#). And while breakthrough infections popped up, [they remained rare](#).

By September, the [FDA would approve a booster shot](#) for seniors and workers in high-risk settings. Before that, only those with compromised immune systems were eligible for an additional dose.

Cities such as New York and Los Angeles began issuing vaccine mandates for city employees, raising the ire of some unions, which encouraged protests against the mandates.

Data would eventually show the [mandates had the effect of boosting municipal employee](#) vaccinations at a higher rate than that of the city in which they worked.

In cities like Chicago, nearly 80 percent of municipal workers are vaccinated, [according to recent data](#). The majority of holdouts are from the city's police department, according to city data.

The [Supreme Court is expected to hear arguments on challenges](#) to Biden's vaccine and mask mandates in early 2022.

The winter: U.S. needs a boost

In October, booster shots [began outpacing initial vaccinations](#) as [breakthrough infections](#) became more common. [Hospitalizations of vaccinated people](#) also began to rise.

Studies would eventually show that vaccine effectiveness would drop [six months after](#) the second shot, but still offered [protection against severe illness](#), spurring calls to expand boosters.

Also in October, the FDA would [approve boosters for those who received the Johnson & Johnson vaccine](#), which [was shown to be less effective](#) than the other vaccines.

In November, a new wave of vaccinations began: the FDA approved the Pfizer [vaccine for use in children ages 5-11](#). Shortly after, the agency [signed off on Pfizer and Moderna boosters for all adults](#).

Still, most of America was heading into the winter months [with reduced immunity](#) to the virus.

On Dec. 1, the first U.S. omicron case was detected and in a matter of weeks it [became the dominant variant](#).

Hospitals again started to fill up, [largely with unvaccinated Covid patients](#). Currently, about 1 out of every 4 Americans are still unvaccinated, according to data from the CDC.

As Biden sought to address concerns about the omicron variant last Tuesday, he made another push for vaccines.

“Get vaccinated now. It’s free. It’s convenient. I promise you, it saves lives,” the president said.

“I, honest to God, believe it’s your patriotic duty.” 

—Elliott Ramos

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