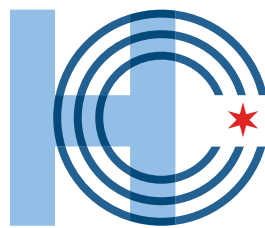


2021

COVID-19 VACCINES



HEALTH CARE COUNCIL
of Chicago

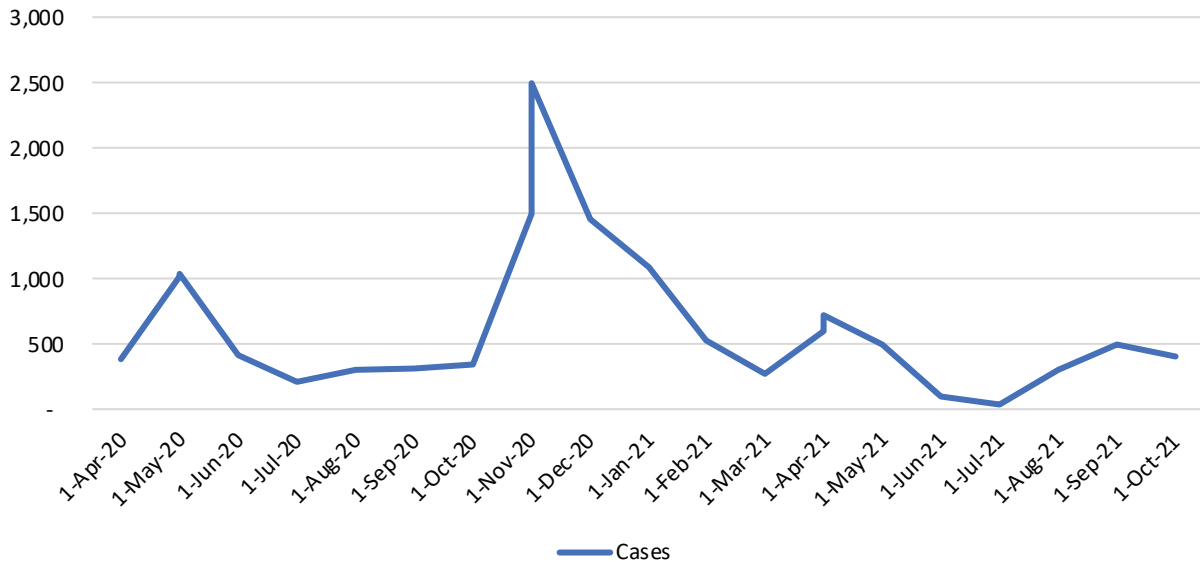
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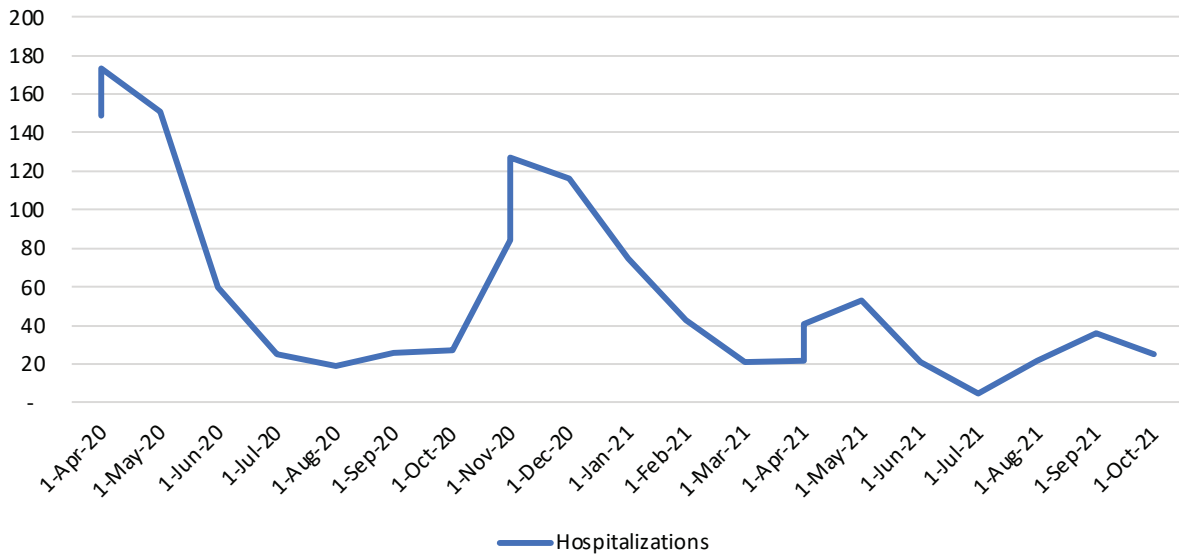
2021 COVID-19 TIMELINE

THE IMPACT OF COVID-19 ON CHICAGO

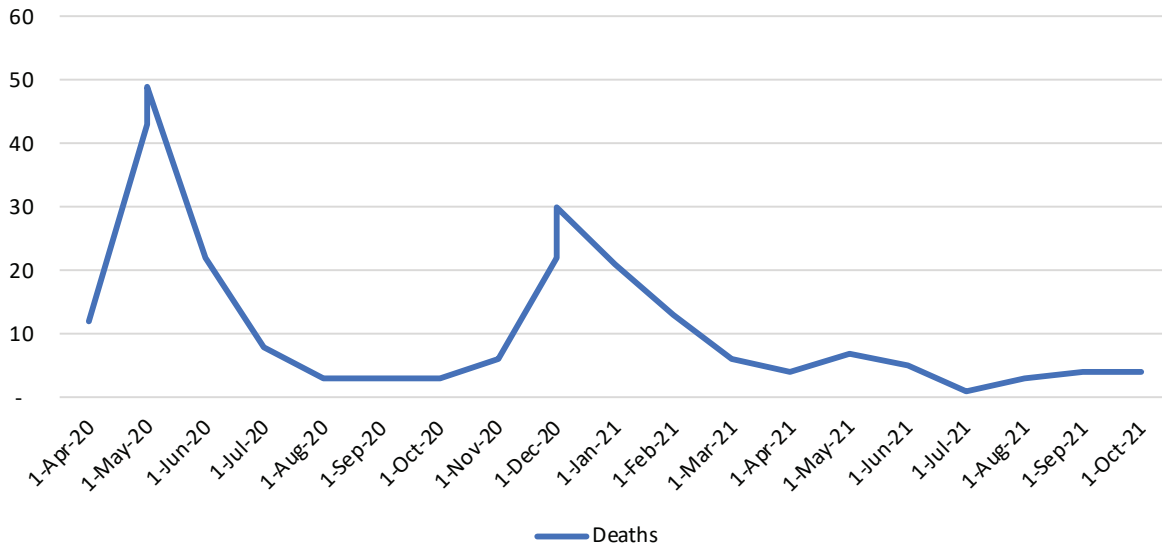
Chicago Average Daily COVID-19 Cases



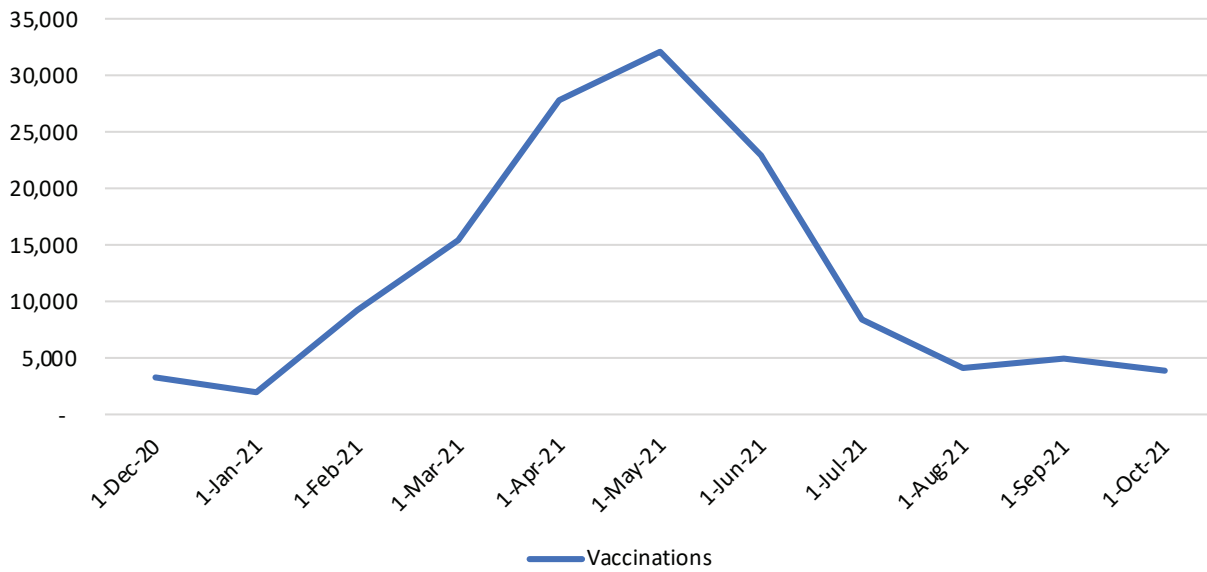
Chicago Average Daily COVID-19 Hospitalizations



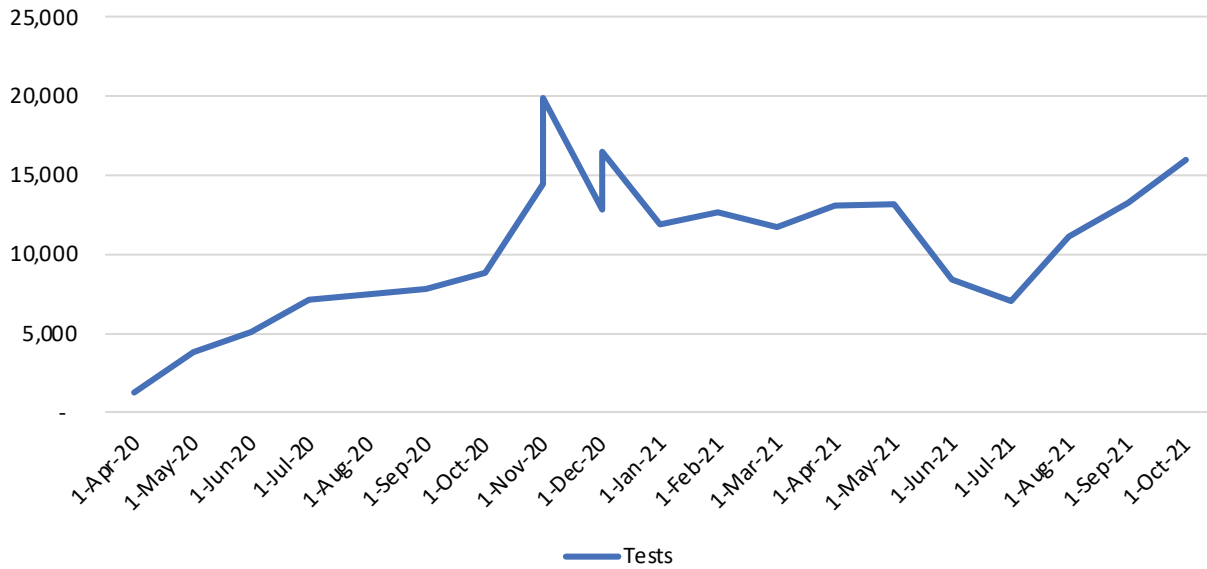
Chicago Average Daily COVID-19 Deaths



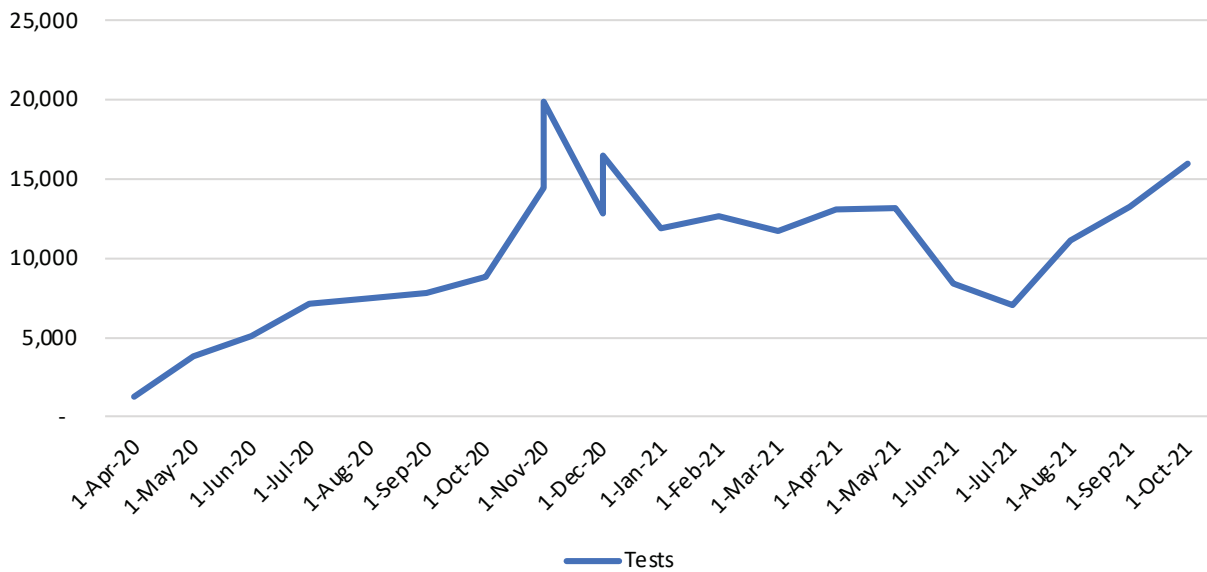
Chicago Average Daily COVID-19 Vaccinations Administered



Chicago Average Daily COVID-19 Tests Performed



Chicago Average Daily COVID-19 Positivity Rate



MONTHLY NEWS AND EVENTS

Key: ■ Vaccine News ■ Other Pandemic News

- JAN 1** More than 16,000 Illinoisans died in 2020 due to COVID-19 ([source](#))
- JAN 3** U.S. COVID-19 death toll rises over 350,000 ([source](#))
- JAN 5** Forty percent of Chicago Public School (CPS) teachers and staff defied mandate and did not report to school ([source](#))
- JAN 7** Total Illinois COVID-19 cases rise above one million ([source](#))
- JAN 10** Illinois COVID-19 death surpasses 17,500 ([source](#))
- JAN 13** – Americans are increasingly defying indoor dining bans as restaurants struggle ([source](#))
– 4,300 Americans die because of COVID-19 on the deadliest day yet ([source](#))
- JAN 15** Global COVID-19 death toll reaches two million ([source](#))
- JAN 23** Chicago restaurants begin to reopen as positivity rate is the lowest in three months ([source](#))
- JAN 25** First large vaccination site in Cook County suburbs opens up in Tinley Park ([source](#))
- JAN 27** 54,000 Illinoisans are being vaccinated daily ([source](#))
- FEB 3** Over one million vaccine doses have been administered in Illinois ([source](#))
- FEB 12** Ten percent of Illinoisans have at least one dose of the COVID-19 vaccine ([source](#))
- FEB 15** Illinois COVID-19 death toll rises above 20,000 ([source](#))
- FEB 17** City of Chicago and RUSH partner in \$3.5 million project to track COVID-19 variants ([source](#))
- FEB 22** U.S. COVID-19 death toll rises above 500,000 ([source](#))
- FEB 23** Chicago Park District announces plan to reopen long-time closed lakefront, other areas ([source](#))
- FEB 26** The Chicago City Council gives the green light for nearly \$400 million in federal stimulus dollars, even though Mayor Lori Lightfoot used \$280 million to cover police payroll costs earlier in the pandemic ([source](#))
- FEB 27** House passes \$1.9 trillion COVID-19 relief bill ([source](#))
- MAR 1** – J&J single shot vaccine is set to arrive in Chicago in early March ([source](#))
– CPS announces that all students will receive \$450 food allocation through the Pandemic Electronic Benefits Transfer program ([source](#))
- MAR 2** – Chicago Mayor Lori Lightfoot announces that restaurants and bars are allowed to have 50 percent capacity indoors ([source](#))
– The United Center opens a mass vaccination site, with appointments available for seniors ([source](#))
- MAR 3** 900,000 Illinoisans are fully vaccinated ([source](#))
- MAR 6** Senate passes \$1.9 trillion relief bill ([source](#))
- MAR 8** The Centers for Disease Control and Prevention (CDC) say that fully vaccinated people can gather safely without masks in certain settings ([source](#))
- MAR 9** First vaccines administered at the United Center despite hiccups ([source](#))

- MAR 10** CPS receives \$1.8 billion from the recently passed federal stimulus package ([source](#))
- MAR 16** CVS begins to offer vaccines in Cook County ([source](#))
- MAR 18** Loretto Hospital no longer getting vaccines after allowing ineligible Trump Tower workers to be vaccinated at the hospital ([source](#))
- MAR 19** Loretto Hospital vaccinated members of CEO's church, over 200 members ([source](#))
- MAR 20** Nearly 1.7 million Illinois residents are fully vaccinated ([source](#))
- MAR 22** Mass vaccination site opens in Forest Park ([source](#))
- MAR 27** – New COVID-19 cases are on the rise as two million Illinois residents are vaccinated ([source](#))
– Loretto plagued by vaccine scandals while West Side leaders defend the hospital ([source](#))
- MAR 29** Real-world study shows Pfizer and Moderna vaccines are 90 percent effective ([source](#))
- APR 2** Cases rise in Illinois as over six million shots have been given ([source](#))
- APR 6** Chicago plans to meet April 19 national deadline for all adults to be eligible for the vaccine ([source](#))
- APR 12** Illinois hits the highest daily vaccination rate at 133,000 ([source](#))
- APR 13** J&J vaccine suspended due to minimal side effects, Commissioner of the Chicago Department of Public Health (CDPH), Dr. Allison Arwady says not to worry ([source](#))
- APR 17** Johns Hopkins University data indicates that more than three million people have died worldwide due to COVID-19 ([source](#))
- APR 22** DePaul and Columbia announce that they both will require fall semester students to be fully vaccinated ([source](#))
- APR 23** Illinois public health officials authorize J&J vaccine once again authorized for use ([source](#))
- APR 27** Lack of tax revenue from conventions has cost Chicago and Illinois \$233 million ([source](#))
- APR 30** U.S. nears 100 million fully vaccinated Americans ([source](#))
- MAY 1** Illinois hits lowest daily vaccination rate – 88,753 – in two months ([source](#))
- MAY 3** Walgreens begins to offer walk-in COVID-19 vaccines and a mobile clinic for underserved communities in Chicago ([source](#))
- MAY 4** – Mayor Lori Lightfoot sets July 4 as the date to fully repeal Chicago COVID-19 regulations ([source](#))
– President Biden announces goal of having 70 percent of adult Americans vaccinated by July 4 ([source](#))
- MAY 7** Fans return to the United Center for the first time since the pandemic began ([source](#))
- MAY 9** Thirty-five percent of Illinoisans are vaccinated ([source](#))
- MAY 12** Northwestern announces that in-person students in the fall must be vaccinated ([source](#))
- MAY 13** CDC releases new guidance that vaccinated individuals don't need to wear masks indoors in all situations ([source](#))
- MAY 17** Illinois eviction moratorium to end in August, federal grant to help residents with rent ([source](#))
- MAY 23** Forty-eight percent of Illinoisans are vaccinated ([source](#))
- MAY 27** Illinois positivity rate falls below 2 percent, mass vaccination sites begin to close as a result ([source](#))

- JUN 1** Illinois cases lowest in one day since March 25, 2020 ([source](#))
- JUN 3** Chicago looks to June 11 for a full reopening of the city ([source](#))
- JUN 8** Illinois positivity rate breaks record low again as June 11 reopening creeps closer ([source](#))
- JUN 11** Chicago is back to “normal” as the city reopens ([source](#))
- JUN 15** U.S. COVID-19 death toll reaches 600,000 ([source](#))
- JUN 16** CPS release spending plan for federal stimulus money ([source](#))
- JUN 25** Total number of fully vaccinated Illinoisans reaches 6 million ([source](#))
-
- JUL 2** Public health officials want Illinoisans to celebrate July 4, but with caution ([source](#))
- JUL 6** Illinois proud to report zero daily deaths due to COVID-19, first time since March 2020 ([source](#))
- JUL 9** Fully vaccinated students and teachers do not have to wear masks in Illinois ([source](#))
- JUL 13** COVID-19 cases rise across the U.S., doubling over three weeks ([source](#))
- JUL 15** As vaccine demand decreases, last mass Cook County vaccination site to close next week ([source](#))
- JUL 22** Reversing a previous order, CPS to require masks for all, regardless of vaccination status ([source](#))
- JUL 27** CDPH Commissioner Dr. Allison Arwady says Lollapalooza event can continue, despite valid reservations from many ([source](#))
-
- AUG 2** A month later than hoped, the U.S. hits the 70 percent vaccination mark ([source](#))
- AUG 3** – Mayor Lori Lightfoot publicly states she doesn’t regret allowing Lollapalooza to happen, even amid a large surge in cases ([source](#))
– CDC extends eviction moratorium to October 3 ([source](#))
- AUG 6** – United Airlines announces it will require vaccines for all employees ([source](#))
– COVID-19 deaths spiked 64 percent in a week because of the Delta variant ([source](#))
- AUG 9** Chicago claims that 70 percent of adult residents have had at least one vaccine ([source](#))
- AUG 11** Illinois becomes a “high risk” state according to CDC thresholds after hitting a four-month high in COVID-19 cases ([source](#))
- AUG 13** CPS mandates vaccines for all teachers and district staff ([source](#))
- AUG 16** NorthShore Health announces a vaccine mandate ([source](#))
- AUG 20** Cases in Illinois reach a seven-month high ([source](#))
- AUG 23** – The Food and Drug Administration (FDA) fully approves Pfizer’s COVID-19 vaccine ([source](#))
– Mayor Lori Lightfoot announces city employees must be vaccinated ([source](#))
- AUG 24** AMITA Health announces vaccine mandate for employees ([source](#))
- AUG 25** Northwestern Medicine to mandate vaccines, joining all other major Chicago-area systems ([source](#))
- AUG 27** COVID-19 cases continue to surge as ICUs fill up ([source](#))

SEP

- SEP 3** Chicago Transit Authority (CTA) announces it will require all employees to be vaccinated ([source](#))
- SEP 8** Illinois nears a seven-month high in COVID-19 deaths ([source](#))
- SEP 9** President Biden announces that federal employees must get vaccinated ([source](#))
- SEP 14**
 - COVID-19 relief funds lifted millions out of poverty according to census data ([source](#))
 - Over 5,600 CPS students forced into quarantine in the first two weeks of school ([source](#))
- SEP 20** Governor J.B. Pritzker announces \$327 million set aside for low-income people affected by the pandemic ([source](#))
- SEP 21** Chicago COVID-19 numbers begin to improve ([source](#))
- SEP 23** Chicago announces new plan to have 77 percent of all residents vaccinated by end of 2021 ([source](#))
- SEP 24** The CDC approves boosters for certain vulnerable populations ([source](#))
- SEP 28** United Airlines fires almost 600 people because they won't get vaccinated ([source](#))
- SEP 30** Chicago to release \$2.3 million to artists and creative workers who have been impacted by COVID-19 ([source](#))

OCT

- OCT 1**
 - Brett Kavanaugh, Supreme Court Justice, tests positive for COVID-19 days before new session ([source](#))
 - September was the deadliest month in Illinois since winter of 2020, numbers improve ([source](#))
- OCT 3** The COVID-19 policy that placed a moratorium on evictions in Illinois ends ([source](#))
- OCT 8**
 - City workers can opt into regular testing, but will not be paid if not tested or vaccinated ([source](#))
 - COVID-19 cases lowest in Illinois since August ([source](#))
- OCT 12** The Chicago Fraternal Order of Police (FOP) President encourages Chicago Police Department (CPD) officers to ignore vaccine mandate on the same day that the former FOP president dies of COVID-19 ([source](#), [source](#))
- OCT 16** Time restricted for CPD officers as Chicago fights union on vaccine mandate ([source](#))
- OCT 18** Vaccine mandate compliance among city workers worst with firefighters and police officers ([source](#))
- OCT 21** CDC expands eligibility of COVID-19 booster shots ([source](#))
- OCT 29** A bid from Chicago city employees, led by firefighters, to block the vaccine mandate for Chicago city employees is denied by a federal judge ([source](#))

NOV

- NOV 3** Following authorization from the FDA, children in Chicago ages 5 to 11 begin to receive COVID-19 vaccinations ([source](#))
- NOV 8** Illinois Governor J.B. Pritzker signs regulation to ban individuals from objecting to receiving the vaccine for moral reasons, citing public safety as the highest concern ([source](#))
- NOV 12** Illinois experiences a 30 percent weekly increase in COVID-19 cases (17,000 to 22,000 cases) ([source](#))

VACCINE ADOPTION RATES

DISTRIBUTION

As vaccination efforts rolled out early this year, the state of Illinois and city of Chicago implemented various strategies to ensure accessibility and promote vaccination adoption. In the beginning phases of the rollout, mass vaccination centers were established at Chicago State University, Wrigley Field, and the United Center. By March, The United Center was regularly [providing](#) COVID-19 shots to 6,000 people per day. Across the state, Walgreens and Jewel-Osco locations [offered](#) vaccinations or opened up appointments for eligible residents, with Walgreens offering 92 vaccination sites statewide.

After the state’s community health centers (CHCs) were not included in the first phase of the vaccine rollout, Senators Dick Durbin and Tammy Duckworth wrote the Biden administration, urging that Illinois CHCs be immediately prioritized to receive vaccines in order to address racial and ethnic health disparities. This [ultimately led to an expanded federally qualified health center \(FQHC\) program](#), which included 26 CHC’s and FQHC’s across the state in the distribution of vaccine.

By late spring, Cook County [began to consolidate](#) mass vaccination sites in favor of expanding community-based COVID-19 vaccination initiatives that would have a

greater focus on meeting hard-to-reach residents where they are. The city of Chicago also shifted its vaccine efforts, closing the largest mass vaccine site at the United Center in June and announcing plans to focus on “hyper-local” vaccine events to better reach communities. These campaigns specifically targeted residents who remained too hesitant or busy to get a vaccine.

VACCINATION RATES

Entering into the fall season, Illinois had administered at least one dose of the vaccine to 8,800,432 people, covering 81.2 percent of the eligible population. At least 6,887,994 were fully vaccinated by late September. Jo Davies, DuPage, and Lake counties had the [highest vaccination rates](#), while Fayette, Pope, and Alexander counties had the lowest rates.

Racial and ethnic disparities have been prevalent in vaccine distribution and adoption both in the state of Illinois and nationally. [According to a Kaiser Family Foundation \(KFF\) report of 43 states](#), as of November 15, 2021, 56 percent of White people received at least one COVID-19 dose while 49 percent of Black people and 54 percent of Hispanic people had received the first shot. These trends are consistent with what has been seen in Illinois, as shown in the following table presenting COVID-19 vaccine doses by race/ethnicity.

Chicago Rates

Fully Vaccinated Chicago Adults - Rates by Race				
Chicago Total Adult Population:		2,128,241		
Chicago Adults Fully Vaccinated Total:		1,637,014		
Percent of fully vaccinated Chicago Adults:		77%		
	Percent Vaccinated	Count Vaccinated	Percent Vaccinated out of Chicago’s Total Population	Percent vaccinated out of Chicago’s Vaccinated Population
Black	46.10%	354,595	17%	22%
Latinx	55.30%	429,449	20%	26%
Asian	67.50%	124,682	6%	8%
White	63.90%	575,997	27%	35%

Sources: [City of Chicago](#), [United States Census Bureau](#)

Illinois Rates

Fully Vaccinated Illinois Adults - Rates by Race	
Illinois Total Adult Population:	9,884,020
Illinois Fully Vaccinated Total:	6,957,219
Percent of fully vaccinated Illinois Adults:	70%

	Percent Vaccinated	Count Vaccinated	Percent Vaccinated out of Illinois' Total Population	Percent vaccinated out of Illinois Vaccinated Population
Black	43.55%	805,658	8%	10.70%
Latinx	49.45%	1,096,566	11%	14.60%
Asian	66.96%	500,615	5%	6.68%
White	46.63%	4,537,943	46%	60.50%

Sources: [State of Illinois](#), [United States Census Bureau](#)

National rates

Fully Vaccinated Illinois Adults - Rates by Race	
US Total Adult Population:	256,026,828
US Fully Vaccinated Total:	151,055,829
Percent of fully vaccinated US Adults:	59%

	Percent Vaccinated	Count Vaccinated	Percent Vaccinated out of US Total Population	Percent vaccinated out of of US Vaccinated Population
Black	38.51%	13,212,735	5%	12.40%
Latinx	45.51%	21,553,922	8%	17.20%
Asian	52.72%	7,963,528	3%	5.80%
White	51.01%	78,489,707	31%	61.20%

Source: CDC [COVID-19 Tracker](#) As of November 12, 2021

SPECIAL POPULATIONS

Children

On November 2, the CDC [endorsed](#) children ages 5-11 to receive the Pfizer COVID-19 vaccine. Kids in this age group were less likely to suffer severe illness from the coronavirus, however, [four out of 10 children](#) ages 5-11 have been infected with the coronavirus. Of those

children, about 150 have died from COVID-19, and more than 8,000 have been hospitalized. A third of those patients had no prior medical complications. As schools opened for in-person learning in the fall, millions of parents have had to face the worrisome hardship that their kids may come home sick, infect someone else, or quarantine at home for several days at a time.

Illinois FQHC Patients

[According to the Health Resources & Services Administration \(HRSA\)](#), as of October 8, 2021, more than 88 percent of patients completed a vaccine protocol through one of Illinois' 52 Federally Qualified Health Center (FQHC) qualified as a racial or ethnic minority. Moreover, over 69 percent of patients receiving an extra dose of the vaccine also qualified as a racial or ethnic minority. This data underscores the critical reach of Illinois' FQHCs in underserved communities. See the table below for additional FQHC patient data.

National rates

METRICS	VALUE
COVID-19 Immunization Series Initiated	4,183
Racial and/or Ethnic Minority Patients Who Initiated COVID-19 Immunization	88.02%
COVID-19 Immunization Series Completed	4,218
Racial and/or Ethnic Minority Patients Who Completed COVID-19 Immunization	88.25%
COVID-19 Immunization Series Additional	552
Racial and/or Ethnic Minority Patients Who Received an Additional Dose of COVID-19 Vaccine	69.31%

Illinois Nursing Home Residents

In the initial days of the pandemic, nursing homes became ground zero for the rapid spread of COVID-19. It comes as no surprise, therefore, that tracking vaccine adoption among nursing home patients is crucial to stopping the

pandemic. The federal Centers for Medicare & Medicaid Services (CMS) tracks nursing home data on a weekly basis. [As of October 17, 2021](#), an average of 85.9 percent of residents and 71.2 percent of staff per facility had been vaccinated, nationally. In Illinois, those numbers are slightly above average at 87.3 percent residents and 72.5 percent of staff per facility respectively.

Illinois Behavioral Health Facilities

As of December 2021, no public data was available on the adoption of vaccines among individuals receiving services in one of Illinois' Community Mental Health Centers (CMHCs) or substance use disorder (SUD) treatment centers. However, on September 16, 2021, the Illinois Department of Human Services (DHS) promulgated emergency rules requiring both CMHCs and SUD treatment centers to:

- Post signage notifying staff that the entity makes available opportunities for staff to be fully vaccinated against COVID-19. The signs must be constructed on 8.5 by 11-inch white paper, with text in Calibri (body) font, and 26-point type in black letters and posted throughout the entity, including at points of entry and exit and each hallway.
- Provide its staff educational materials on the benefits and potential risks associated with the COVID-19 vaccine.
- Maintain a record of the following:
 - o weekly census of staff;
 - o weekly census of staff who are fully vaccinated against COVID-19;
 - o weekly census of staff who are not fully vaccinated against COVID-19;
 - o weekly census of staff who not fully vaccinated for COVID-19 and are tested for COVID-19 (regardless of where testing occurred), including the number of individuals who test positive; and
 - o verification that all staff have been provided education on the benefits and potential risks associated with the COVID-19 vaccine.

Source: [2021 Illinois Rules of Government Agencies, Volume 45, Issue 40](#)

According to the [Illinois Association for Behavioral Health](#), these rules apply to all mental health and SUD providers that are certified and/or licensed by Illinois DHS Departments of Mental Health or Substance Use Prevention & Recovery. Finally, the emergency rules further require within 45 business days after rule adoption (October 31, 2021), each entity shall attest to the department that they have made available opportunities for staff to be fully vaccinated against COVID-19 and is making testing available to staff that are not fully vaccinated in accordance with the section. Unfortunately, while the rules require these behavioral health providers to maintain the records noted above, they are not required to make this information available to the public.

City of Chicago Employees

In August, the city of Chicago [announced](#) that all city employees must be fully vaccinated by October 15, 2021, ensuring city staff and their workplaces are safe from the spread of COVID-19. Days before the October deadline, Mayor Lori Lightfoot weakened her stance [announcing](#) that all employees who are not vaccinated against COVID-19 will be allowed to stay on the job after October 15 if they take a test for COVID-19 twice a week — on their own time and at their own expense — until December 31. Until that time, [Lightfoot said](#) she and other city leaders would “continue to do everything at our disposal to educate employees with true scientific data and research as well as continue our conversations with our unions and labor partners.”

On November 1, a Cook County judge paused Chicago’s COVID-19 vaccine mandate for police officers. Under this order, officers are required to still follow some parts of the mandate, including reporting their status and getting tested if they are not fully vaccinated, or the city could discipline them. But the city would not be able to fire officers who did not get their shots before the December 31 deadline as negotiations continue.

As of November 15, more than 90 percent of city workers reported their COVID-19 vaccination status. In all, 90.93 percent have reported their status and of those workers, 80.3 percent are fully vaccinated. The police department

remains the least-compliant city agency, with 81.6 percent of its employees having reported their status. Of those, 75.78 percent are fully vaccinated.

Additional Data Needed

At least three categories of interest lack data on vaccine adoption: Department of Corrections (DOC)/Criminal Justice populations, Department of Children & Family Services/Foster Care, and Community Integrated Living Arrangements (CILAs). [Illinois tracks](#) COVID-19 infections by DOC facility but not vaccine adoption rates. Similar infection rates can be found for CILAs, without corresponding vaccine data. Other long-term care, including Intermediate Care Facilities for Individuals with Intellectual or Developmental Disabilities, currently are not required to report this data to CMS or the Illinois Department of Public Health (IDPH). We urge the state of Illinois to adopt consistent reporting mechanisms to gather a complete picture of vaccine adoption across Illinois’ health care facilities.

COST OF THE VACCINE

NATIONAL

The COVID-19 pandemic resulted in an immeasurable economic cost across the entire U.S. Before COVID-19 vaccines were approved, hospitals and other care sites were overrun with patients who had the virus. However, after vaccines began to be approved, experts marketed the vaccine to not just limit one’s chances of getting the virus but assured the public that the vaccines were likely to make the severity of symptoms in breakthrough cases less severe, keeping most individuals out of hospitals. This, of course, both benefits individuals and providers. Recently, KFF [reported the estimated cost](#) of caring for unvaccinated individuals to the U.S. health care system. In August 2021 alone, KFF estimates that unvaccinated individuals cost the system \$3.7 billion. From June through August, the estimated total cost was \$5.7 billion. Their [analysis is based on data](#) from the CDC, CMS, and the U.S. Department of Health and Human Services (HHS).

On December 11, 2020, the FDA [issued an Emergency Use Authorization \(EUA\) for the first COVID-19 vaccine. The vaccine, manufactured by Pfizer-BioNTech, was authorized for individuals 16 years of age and older.](#) One week later, the [FDA issued a second EUA](#) for Moderna's vaccine. In February 2021, the Biden administration [announced](#) it would purchase an additional 200 million doses of Moderna and Pfizer vaccines, bringing the country's total purchase to 600 million, or enough to vaccinate 300 million people. In late February, the FDA [granted](#) an EUA to the third COVID-19 vaccine, manufactured by Johnson & Johnson (J&J). J&J began sending their one-shot vaccines to states beginning on March 1.

The U.S. [paid more for vaccines](#) than other countries, particularly those in Europe. The European Union paid about \$14.70 per dose from Pfizer while the U.S. paid \$19.50. Pfizer gave various reasons for the difference; however, the most likely contributor to this price hike was former President Trump's delay in acknowledging the pandemic's seriousness, which led to U.S. purchasing vaccines later than other areas of the world.

In February 2021, the Chief Financial Officer of Pfizer, Frank D'Amelio, [commented](#) that they had generously offered "pandemic pricing" to groups buying vaccines. But D'Amelio was not certain those prices would stay, saying that he expected the cost to increase from around \$20 to "\$150, \$175 per dose." The U.S. paid \$19.50, \$15, \$16, and \$10 per Pfizer, Moderna, Novavax, and J&J dose, respectively. If those doses were to skyrocket in price, the U.S. and other parts of the world would undoubtedly see less adoption of COVID-19 vaccines and boosters. Pfizer Q3 earnings report unsurprisingly [showed](#) a 133 percent growth from the year previous. Revenue was also up 134 percent, with both earnings and revenue exceeding forecasted financials. Of Pfizer's total business, purchases of the COVID-19 vaccine [resulted](#) in 60 percent of total sales in Q3.

ILLINOIS

[According to a document from the Federal Emergency Management Association \(FEMA\)](#), the average cost to run a mass vaccination site in Illinois was \$400,000 a day. However, the costs per site varied greatly based

on many variables, including setting and size. For example, a site in a smaller community like Quincy – where there are less people to vaccinate, less hours, and smaller sites – only cost \$175,000 a month to run. As a large site example, the United Center in Chicago cost a minimum estimated \$2 million a month to run. The IDPH expects to be fully reimbursed by the federal government, which is a burden off Illinois' back as budget concerns constantly loom.

BREAKTHROUGH INFECTIONS

NATIONAL

President Joe Biden [set a goal to have 70 percent](#) of U.S. adults receive at one vaccine dose by July 4. However, in early March, he moved that goal up to the end of May based on the recent acquisition of more vaccines and EUA of the J&J vaccine. In the same announcement, President Biden [announced](#) that teachers would be prioritized in the next wave of the vaccine rollout. However, uptake was slower than expected, and the [goal was not met until August 2](#).

This led to some fully vaccinated individuals getting COVID-19 in what is referred to as a "breakthrough" case. The CDC and other experts were not surprised by breakthrough COVID-19 cases, even [acknowledging](#) that fully vaccinated people are still at risk of spreading the virus to others. Experts reiterated that fully vaccinated individuals who get COVID-19 after being vaccinated are less likely to have symptoms. Although serious cases of COVID-19 popped up in patients who were fully vaccinated, most fully vaccinated individuals stayed out of the hospital because of vaccine effectiveness.

ILLINOIS

[As of October 22, 2021](#), 2,373 fully vaccinated individuals were hospitalized because of COVID-19, which is 0.033 percent of fully vaccinated Illinoisans. There have been 727 deaths of fully vaccinated Illinois residents, which is 0.010 percent of fully vaccinated Illinoisans. Of those who are fully vaccinated and have died because of COVID-19, 0 were under 17, 89 were between 18 and 65, and 638 were over 65.

CHICAGO

The weekly rate of fully vaccinated Chicago residents acquiring COVID-19, in what is colloquially referred to as a breakthrough case, naturally [rose as more received shots](#). Between March 6, 2021, and July 17, 2021, the amount of breakthrough cases per 100,000 Chicagoans never broke 25. However, from July 17 to August 14, that rate increased from 25 to nearly 100 cases per 100,000. Since the breakthrough case rate in Chicago hit that peak in August, it began to drop off until the beginning of November, when cases increased again.

BOOSTER SHOTS

NATIONAL

The CDC [approved](#) on September 24, 2021 COVID-19 boosters for certain populations. On October 21, the agency expanded the guidance, including booster shots of the COVID-19 from Pfizer-BioNTech, Moderna, and Johnson & Johnson and making them initially available for the following populations: Individuals over 65 and adults working in long-term care settings, who have underlying medical conditions, or work or live-in high-risk settings. Individuals in approved groups were told to wait until six months after they became fully vaccinated to receive a booster. The CDC also [recommended](#) that any of the 15 million people who received the one-shot Johnson & Johnson vaccine, and has had it for more than two months, should get a booster. Booster shots are especially important because 20 percent of America is not vaccinated, leaving fully vaccinated individuals exposed to the virus. After finishing a successful Phase 3 trial of their COVID-19 booster, Pfizer and BioNTech asked the FDA to authorize their booster shot for all adults on November 9. This [plea](#) from two companies came as federal health officials publicly announced concern that immunity from initial vaccinations may be waning as winter months crept closer.

ILLINOIS

The Illinois government and IDPH followed CDC guidelines regarding eligibility for booster shots. On September 24, 2021 [IDPH announced](#) that they would

adopt CDCs' recommendation to provide booster shots for individuals aged 65 and older, those with underlying medical conditions, and people working in high risk occupational and institutional settings. As booster shots were authorized for additional populations, the IDPH followed the FDA's and CDC's recommendations. On November 19, 2021 the IDPH expanded eligibility to anyone 18 years of age and older. "For continued, ongoing protection, we are urging everyone who is eligible to get a booster dose of COVID-19 vaccine to get one," [said IDPH Director Dr. Ngozi Ezike](#). "Scientific and medical experts have reviewed the data and found booster doses are beneficial. While we need more people who are completely unvaccinated to get their first doses, we cannot risk losing some of the protection the vaccines have already provided due to waning immunity."

CHICAGO

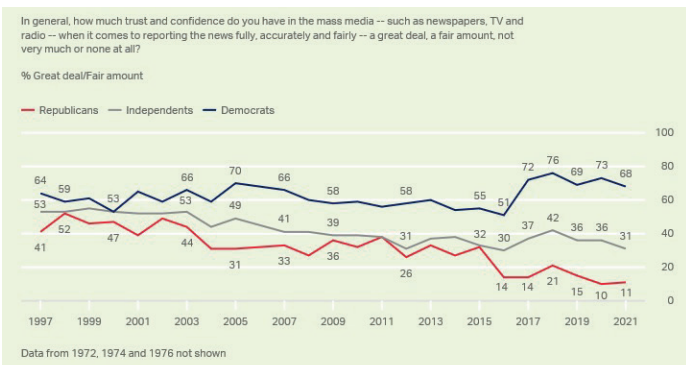
Shortly after the CDC's approval, the CDPH announced that eligible populations could receive a COVID-19 booster shot from one of the three approved pharmaceutical companies starting on Monday, October 25, 2021. [CDPH said](#) they would make the boosters available at pop-ups, events, and through their in-home vaccine service called Protect Chicago at Home. In mid-November, CDPH [publicly encouraged](#) all eligible Chicagoans to get their booster dose heading into the winter months and the holiday season.

COMMUNICATION

MISINFORMATION

The polarization of news sources coupled with the rapid pace of scientific findings around COVID-19 has advanced the spread of misinformation throughout the pandemic. [A 2021 Gallup poll showcases](#) that Americans' trust in the media to report the news accurately dropped to 36 percent, four percentage points lower than last year. A correlation with both vaccination status and partisanship around COVID-19 misinformation is much greater amongst unvaccinated adults and Republicans who are much more susceptible to believe or be unsure about false statements compared to vaccinated adults and Democrats.

Gallup: Americans' Trust in Mass Media, by Political Party.



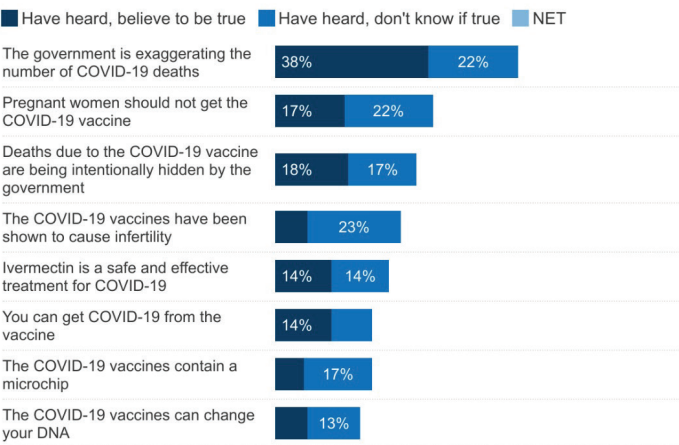
Source: [Gallup](#)

According to the [KFF COVID-19 Vaccine Monitor](#), 78 percent of adults reported that they have heard at least one of eight different false statements about COVID-19 and believe them to be true or are uncertain if it is true or false.

KFF: COVID-19 Vaccine Monitor

Nearly Eight In Ten Believe Or Are Unsure About At Least One Common Falsehood About COVID-19 Or The Vaccine

Have you heard anyone say or have you read anywhere that...? IF YES: To the best of your knowledge is that true or false, or do you not know whether it is true or false?



NET who have heard at least one of these myths, and either say it is true or are not sure if it is true 78%

NOTE: See topline for full question wording. SOURCE: KFF COVID-19 Vaccine Monitor (October 14-24, 2021)

KFF COVID-19 Vaccine Monitor

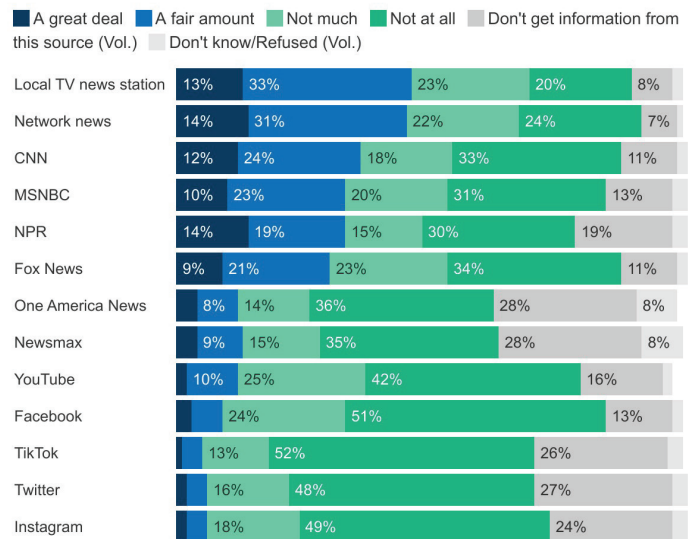
Source: [KFF](#)

Republicans' confidence in the media over the past five years is at unprecedented lows. However, Democratic trust remains well above where it was before Trump came into office and made attacks on the media as part of a core message of his presidency. And overall, there is no news source on COVID-19 that garners trust from a majority of the public.

KFF: COVID-19 Vaccine Monitor

Local TV News And Network News Are Most Trusted Media Sources For COVID-19 Information

How much do you trust information about COVID-19 that you see or hear on each of the following?



NOTE: See topline for full question wording. SOURCE: KFF COVID-19 Vaccine Monitor

KFF COVID-19 Vaccine Monitor

Source: [KFF](#)

Emphasizing the self-selection that now occurs in the news sources people trust, Democrats trust COVID-19 information from major outlets such as CNN, MSNBC, NPR, as well as network and local television. Republicans' most trusted news sources for COVID-19 information are Fox News, Newsmax, as well as a smaller interest than their Democratic counterparts in local and network news.

Disinformation Dozen

The Center for Countering Digital Hate [published a study](#) in May 2021 exhibiting the exact 12 people responsible for 65 percent of anti-vaccine misinformation on major social media platforms – Instagram, Facebook, and Twitter. The 12 individuals, referred to as the “[disinformation dozen](#),” are alternative health entrepreneurs, physicians, and a chiropractor. These individuals were identified because they have large numbers of followers (collectively 59 million) and produce high volumes of anti-vaccine content or saw rapid growth of their social media accounts during the earlier months of the vaccine rollout. The report [also highlighted](#) that in addition to their incredible influence and reach, they were targeting Black Americans by exploiting higher rates of vaccine hesitancy in that community to spread conspiracies and lies about the safety of COVID-19 vaccines.

With escalating cyberattacks on hospitals and health systems and the continued spread of health misinformation online, the health care industry is headed for an exit from the “trusted category” next year, [according to a recent Forrester report](#). The [report predicts](#) that even though public trust in health care has dropped by only 1 point to 66 percent in 2021, the continued erosion of trust in health care organizations will force more clinics to close and increase risks of worsening population health as patients will avoid treatment for conditions.

GOVERNMENT’S ROLE IN COMMUNICATION

In rolling out the vaccine in 2021, the U.S. repeated several of the same mistakes it made with testing in 2020. Some of the challenges were worries around supply and demand; however, the lackluster communications strategy from government has brewed a lasting distrust for many and ultimately a slow adoption of the vaccine. Federal leadership lacked involvement to coordinate the distribution of tests, and subsequently states had to take responsibility for setting up and staff testing sites, [which led to limited access and critical delays in getting results](#). The Biden administration came in exactly a year into the pandemic with plans to erase the brand name ‘Operation Warp

Speed’ and introduce a new structure and goal of vaccinating 100 million people by the 100th day of Biden’s presidency while working toward reopening most schools by spring.

Getting the shot to some 300 million Americans was never going to be trivial, but Donald Trump’s administration fell entirely short of its projections. The Trump team had boasted that by January 1, 2021, some 20 million Americans were expected to be vaccinated against COVID-19. Instead, just 3.5 million people had received the shot by the new year.

In March 2021, the Biden-Harris administration [announced a series of actions](#) to expand access to COVID-19 vaccines to the hardest-hit and highest-risk communities across the country. With funding in large part from the American Rescue Plan, HHS invested nearly \$10 billion to expand access to vaccines and better serve communities of color, rural areas, low-income populations, and other underserved communities in the COVID-19 response. The Biden administration [prioritized equity](#) at the center of their response and over the course of several months there were improvements to harder hit areas.

The rollout of the Biden administration’s “We Can Do This” campaign in March 2021 began as the number of vaccinations across the country were starting to increase, and the day after [Biden made the official announcement](#) of his goal to get 100 million vaccine doses in the arms of Americans by the end of his first 100 days in office. A week before the 100-day deadline, President Biden announced that Americans had received 200 million COVID-19 vaccinations since he took office, which double his initial goal of 100 million vaccinations in his first 100 days, and what he [called](#) “an incredible achievement for the nation.”

Illinois

In early October, Better Government Association (BGA) [reviewed](#) Illinois State Senator Terri Bryant’s claims that 75 percent of Illinois Republicans are vaccinated against COVID-19. On the day Bryant made her claim, 62 percent of Illinois residents aged 12 and older had been fully vaccinated against COVID-19, according

to IDPH data. In her statement, she also contrasted her figure with the fact that fewer than half of Black residents in predominantly Democratic Chicago were vaccinated. BGA [found that the statement does not align with state and national trends](#) and was likely false. Influential leaders are put on record frequently and their constituents put trust in what they are saying. This has remained a challenge at all levels of city, state, and federal municipalities, as data reported by certain leadership should be trusted, but it has been challenging throughout for the average citizen to disseminate trusted sources, when their own elected officials are fabricating data.

EDUCATION AND ADVOCACY

Throughout the city and state, several community-based and public health initiatives have been cultivated to address equity and access to the COVID-19 vaccine.

Vaccine Corps Partnership Month of Action: November 2021

The Vaccine Corps Partnership (VCP) is a [collaboration of multiple stakeholders](#) from across the Chicagoland community that formed early on in the pandemic to coordinate resources and learnings to ensure all Chicagoans can access the COVID-19 vaccine while strengthening a public health workforce to pursue health equity beyond this current pandemic. When vaccines for 5–11-year-olds became available, the Chicagoland Vaccine Partnership [designated](#) November 2021 a month of action to educate families about vaccines and promote vaccination for all.

Protect Their Health on the 12th

The City of Chicago doubled down on efforts to get all Chicagoans vaccinated following the federal approval of the Pfizer COVID-19 vaccine for children, ages 5 to 11. City health and shared updates on the best way Chicagoans can connect with lifesaving COVID-19 vaccines – and [encouraged everyone to get vaccinated](#) and “protect their health on the 12th.” On Friday, November 12, Chicago Public Schools (CPS) closed for Vaccination Awareness Day and City employees received

two hours paid leave to get COVID-19 vaccines for themselves and their families.

ImmUNITY Chicago

Sparked by the alarming national decline in vaccine rates across all age groups, ImmUNITY Chicago [was created](#) to encourage individuals to get vaccinated through informed communications and community engagement. Powered by a group of Chicago-based and national public health groups and civic organizations, this collaborative group represent a range of stakeholder groups who are committed to the health and wellbeing of the families of Chicago. This initiative is focused not only on COVID-19 outreach and education, but greater vaccine adoption.

UI Health CHAMPIONS Network

The UI Health Champions Network [aims](#) to provide work-based learning opportunities for high school youth and empowering them as health advocates to improve health outcomes in their communities. In the summer of 2021, they [launched](#) the COVID-19 youth ambassador program (YAP) to increase trust and equity in healthcare within communities that have experienced historical barriers through youth preventive health education. The COVID-19 YAP initiative aimed to offer participative knowledge, perspective, and tools to have empathetic, informative conversations with individuals and their networks and broader communities about COVID-19 and the vaccine.

INCENTIVES AND MANDATES

COMMUNITY/MUNICIPALITY

On July 13, CPS and CDPH [announced a plan](#) to vaccinate eligible students against COVID-19 beginning in summer 2021 and through the 2021-22 school year. The partnership with CDPH and approved health care partners allowed the district to convert three staff vaccination sites, vaccinate eligible students enrolled in summer programs, and provide vaccination opportunities at district-run community events, such as Back-to-School Bashes. In the early months of the initiative, the district focused its vaccination efforts on

communities that were disproportionately impacted by the pandemic as well as students in temporary living situations (STLS) and other vulnerable populations. In advance of the 2021-22 school year, CPS provided multiple opportunities to expand access to vaccines in a convenient way for students and their families, such as standing vaccination sites in trusted school locations and making vaccines available at existing CPS events and other locations that attracted high numbers of students. The district also employed mobile vaccination units to reach students in STLS and other vulnerable student populations.

On August 26, Governor J.B. Pritzker [issued an executive order](#) mandating all individuals in Illinois who are at least two years old and medically able to be masked in indoor public spaces. The order also mandated that health care and education professionals and personnel, higher education students, and state employees receive at least the first dose of a two-dose or single-dose COVID-19 vaccine within 10 days of the announcement and be fully vaccinated within 30 days of their first dose in a two-dose vaccination series. Some individuals were excluded, including students who are completing coursework exclusively remotely and individuals who are present at the mentioned facilities for short periods of time (e.g., contractors making deliveries). Individuals who are unable or unwilling to receive the vaccine would be required to get tested for COVID-19 at least once a week. Governor J.B. Pritzker [announced the mandate](#) amid school openings and the spread of the delta variant that more younger people were susceptible to compared to previous variants. The increase in hospitalization among younger people and unvaccinated individuals led to a sevenfold increase in intensive care usage in the state between July and late August, which prompted the state to respond quickly before the health care system could face another catastrophic shortage of beds.

Shortly after Governor J.B. Pritzker ordered all teachers to get COVID-19 vaccinations, at least 130 CPS teachers [opposed the vaccine mandate](#). Some teachers believed the mandate stripped away some of their civil liberties. Others believed that the mandate was creating unnecessary tension, and they did not want to

have political interference in their health care decisions. Regardless, CPS warned employees that they would be ineligible to work if those without medical or religious exemption were not fully vaccinated by October 15, 2021. Although the Chicago Teachers Union supported the mandates, [they called for CPS to expand efforts](#) to “provide safety and recovery to school communities.”

Governor J.B. Pritzker [began offering incentives](#) in June to encourage residents to get vaccinated. The state created a new lottery, which offered \$7 million in cash prizes and \$3 million in scholarships, open to all residents who received at least one dose of the COVID-19 vaccine. Prizes ranged from \$100,000 to \$1 million and children could win a college savings plan worth \$150,000. Winners were announced every Thursday for eight weeks beginning on July 8.

Chicago [offered several incentives](#) to encourage people to receive the COVID-19 vaccine. In September, CDPH offered \$100 in Visa gift cards to residents in the city ages 12 and older who received the vaccine. On May 5, the city announced the launch of the [Protect Chicago Music Series](#), a monthly series of a variety of musical events across the city, exclusively for fully vaccinated Chicagoans. The musical events [were kicked off on May 22](#) by a partnership between the CDPH and the Chicago Department of Cultural Affairs and Special Events (DCASE). The [city also launched](#) the “Vax and Relax” partnership with it’s Official Barbershop in Englewood and Josephine’s Jet Set hair salon in South Shore, who provided free haircuts or gift cards to vaccinated people in June.

HEALTH CARE INDUSTRY

Governor J.B. Pritzker set a deadline for all Illinois health care workers to receive their first shots by September 19 and their second shots by October 19 or be obligated to test for COVID-19 weekly. The Equal Employment Opportunity Commission guidelines permit employers to not grant religious or medical exemptions if an unvaccinated person would pose a direct threat to others in the workplace, so many hospital systems implemented an all-or-nothing vaccine mandate without exemptions and weekly testing that would be burdensome for hospitals and staff. Some

hospital systems in the state, including Advocate Aurora, Rush University Medical Center, and Sinai Chicago, lost hundreds of employees who resigned or were terminated by late October because they would not get vaccinated. These losses were not a significant burden, however, as most hospitals still had vaccination rates of at least 90 percent and upwards of 99 percent. Many hospital systems also [launched initiatives](#) to persuade more workers to get vaccinated in advance of the deadlines. [Rush held educational town halls and meetings](#) and gave noncompliant workers a seven-day suspension to give them a chance to get vaccinated before they get terminated.

CORPORATE/BUSINESSES

President Biden's federal mandate that companies with 100 or more employees must require vaccinations or weekly COVID-19 testing gave employers cover when implementing vaccine requirements. The announcement serves as a catalyst for businesses who were seeking legal backing to implement vaccine requirements that are potentially divisive. However, the states and employees have challenged the mandate.

On November 29, [a federal court in Missouri blocked](#) the Biden administration from enforcing a COVID-19 vaccine mandate for health care workers at federally funded facilities in 10 states, including Missouri, Nebraska, Arkansas, Kansas, Iowa, Wyoming, Alaska, South Dakota, North Dakota, and New Hampshire are not subject to the mandate as the case moves forward, so long as the preliminary injunction remains in place. According to U.S. District Judge Matthew Schelp, CMS lacked the authority to implement the requirement. Just a few days later, [a federal court in Louisiana](#) blocked the Biden administration's vaccine requirement for health care workers across the country, except in the 10 states where the rule has already been paused. The Louisiana court considered limiting the injunction to the 14 states that brought the lawsuit; however, it concluded that unvaccinated health care workers in other states "also need protection" and that the government lacked "such powerful authority" to issue the mandate.

On December 15, [a federal appeals court effectively revived](#) the Biden administration's vaccine mandate for

health workers at hospitals that receive federal funding in roughly half of the U.S. The procedural ruling by the New Orleans-based U.S. Court of Appeals for the 5th Circuit temporarily scaled back a nationwide injunction put in place by the Louisiana-based federal judge in November, noting that the judge had given "little justification for issuing an injunction outside the 14 states that brought this suit." The court also rejected requests to initially review the Biden administration's vaccine or testing requirements for large private companies with a full complement of judges and will instead handle the case with the usual three-judge panel.

Chicago-based United Airlines was hit with a class action lawsuit in September 2021 by six employees claiming that the airline unlawfully denied religious and medical exemptions from the COVID-19 mandate by allegedly making it difficult for workers to apply for them. The lawsuit claims workers who sought exemptions were subjected to intrusive questions about their medical conditions or religious beliefs, including a requirement that they obtain letters from religious leaders. [United required](#) that workers receive at least the first dose of a two-dose series of the vaccine by September 27, 2021 or face termination. Other companies requiring proof of vaccination include United Airlines, CVS, Google, Microsoft, Facebook, Delta Air Lines, Tyson Foods, and Deerfield-based Walgreens. An August survey conducted by law firm Littler before Biden's announcement found that only nine percent of employers were mandating vaccines for some or all of their employees. However, [nearly two-thirds](#) were encouraging employees to get the vaccine.

One way that many companies, particularly larger corporations with national scale, have encouraged employees to get vaccines is by offering incentives to employees to get vaccinated. A few examples of incentives that corporations with [locations in Illinois](#) offered include:

1. **CVS** launched the #OneStepCloser Sweepstakes which began on June 1, 2021. The chain held weekly drawings for six weeks with prizes that included 50 gifts of \$500 and five gifts of \$5000; 100 weeklong cruises for two on Norwegian Cruise Line; five trips for two to Bermuda; a trip for two to the Super Bowl;

and 500 gift cards worth \$100 each, and more. People ages 18 and older who got a vaccine by CVS during the six weeks of drawings, registered to get vaccinated at CVS, or who were already vaccinated by CVS before the sweepstakes were eligible to enter.

2. **Krispy Kreme** gave out one free doughnut to anyone who showed their COVID-19 vaccination card, beginning on March 22, 2021.
3. **White Castle** gave customers who showed proof of vaccination a free fudge-dipped brownie, cheesecake, or birthday cake dessert through May 31, 2021.
4. **United Airlines** raffled off a round-trip flight for two and free flights for a year to any destination worldwide for MileagePlus members who showed proof of vaccination by June 22, 2021.

HC3 SURVEY RESULTS

HC3 conducted a survey with 19 member organizations regarding their companies' vaccine mandates and initiatives (Survey concluded October 31, 2021). Nearly half (47.4 percent) of the organizations surveyed were companies with at least 100 employees who would be required to be fully vaccinated under President Biden's federal vaccine mandate effective January 4, 2022. None of the organizations planned to push back on a state or federal mandate.

Of the 19 organizations surveyed, 11 have national reach, six have statewide reach, eight are regional, and five are local. Three organizations are global. All companies are primarily in the health sector, but the organization types are broadly distributed. Health care providers (e.g., hospital, FQHC) were the most prominent type with five organizations (26.3 percent) in this space. Other organization types included:

- Civic/social
- Financial services/investment banking
- Foundation/philanthropy
- Government/public health
- Insurance broker
- Law practice

- Managed care/Medicaid/Medicare
- Marketing/PR
- Manufacturing (e.g., medical devices)
- Pharmaceuticals
- Information Technology
- Professional services/consulting

The survey showed that more than 68 percent of companies had already enforced or were considering enforcing a vaccine mandate prior to the announcement of the state's mandate for health care workers in August 2021. Nearly 74 percent of organizations will have a vaccine mandate in place by the end of 2021, and ten percent were still considering it. About a quarter of companies had employees who either resigned or were laid off due to a vaccine mandate. Among the 16 percent of organizations who are not enforcing a vaccine mandate, most are currently using or plan on using workplace exposure tracing or other tools to limit exposure and transmission of COVID-19 (86 percent).

Only a quarter of companies surveyed had introduced incentives between April and October 2021 to encourage employees to get vaccinated. These incentives included raffles, gift cards, company "swag," and paid leave for days taken off to receive the vaccine or to recover from side effects without deducting from regular PTO days. Of these five organizations who introduced incentives, one believed incentives successfully boosted vaccine rates among their employees, and four organizations were unsure about their effectiveness.

HC3 VIEW

We concluded 2020 with a beacon of hope for the pandemic – the vaccine. Last December, front-line workers and at-risk populations were receiving their first round of shots and there was an encouraging outlook for 2021 to resume normal activities.

The development of effective vaccines in less than a year was a true testament to humanity, science, and what we can achieve through collaboration and innovation. There was no doubt it would take time, resources, and a tremendous amount of coordination to rollout

enough vaccines to reach herd immunity. Despite the less than perfect start to the vaccine rollout, supply has subsequently not been the issue in the U.S. So why are more people not vaccinated? One common theme to the hesitancy rhetoric of the unvaccinated is mistrust.

Many unvaccinated adults in the U.S. have been tending to their apprehensions, and verifying them with sources of information – whether reputable or not – to support their stance. The correlation of vaccinated versus unvaccinated to one's political leanings continues to fuel political conflicts and takes focus away from public health or science-based evidence. The elevated threats of variants has sounded an alarm; however, it has not yet been enough to completely turn the tide for the vaccination concentration required to move forward.

People are burned out and exhausted from cycling through the various stages of COVID-19 public health interventions. As we move to a new year, we are looking at the role of employers, local, state, and federal governments as well as the leadership of private businesses as to how we press onward.

Mass vaccination has become the primary means of seeking an end to the pandemic. Vaccine mandates are an effective means of promoting widespread vaccinations. They [have existed since the 19th century](#) and have historically led to better outcomes. Even today, school requirements to vaccinate against the measles and the mumps validates how we can indeed eliminate the spread of infectious disease. Hospitals that have a hard mandate around flu vaccines see a higher coverage rate than those who make it a soft mandate.

Less than a year in office, President Biden is retaining his ability to require vaccinations from the federal level. Several challenges have erupted despite the legal precedence that [laws can be](#) implemented in order to require businesses to comply with evidence-based federal health-safety standards. President Biden's federal vaccine mandates are being challenged in courts as we close out the year, and the continued frenzied political discourse around vaccines further compounds the issue of consistency that Americans have been missing since

the very beginning of the pandemic. European countries are now issuing more regulations for the unvaccinated, whereas in the U.S. state governments are [issuing executive orders](#) to ban private businesses from requiring vaccinations for employees or customers in direct defiance of the federal mandate.

In 2022, we expect to see a continuation of uphill challenges for the Biden administration to get a stronghold over the whole country's trajectory of how we collectively defeat our common enemy. Chicago and the state of Illinois have consistently remained aligned with federal policies and mandates, and anticipate this to continue. Although local and state governments have continued to advise around mask mandates, they have not yet played a role in mandates around proof of vaccine for dining and entertainment, but private business owners have implemented such rules. Other countries have implemented strict rulings around public activities, and so have larger municipalities in the U.S. like the city of New York. As businesses plan for office more concrete office reopenings, we foresee more direct policies around vaccination requirements in addition to testing protocols in the private sector. Travel restrictions and other protocols will continue to limit activities for the unvaccinated, leaving them with little freedoms. As such, the motivation may shift around vaccine adoption with the promise of resuming normal activities.

As is the case with pandemics, COVID-19 will not die. Our only hope is that it will likely (and hopefully) fade in 2022 with the exception of expected upticks in areas that are highly concentrated with those that are unvaccinated.

