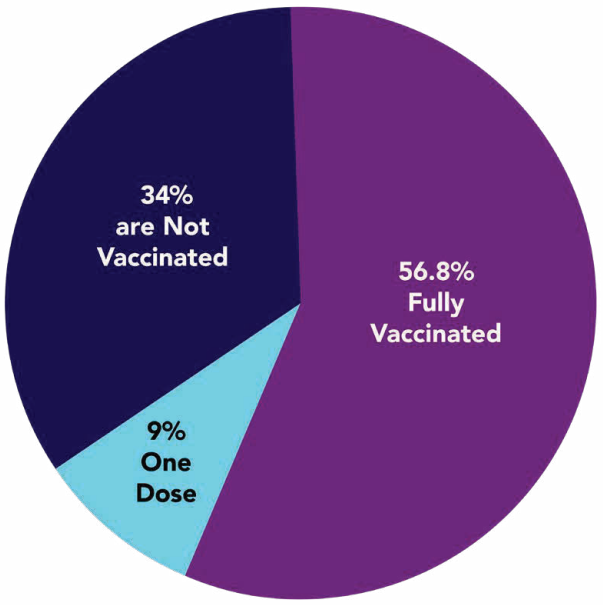
COVID-19 Vaccines and Public Opinion

The Council of State Governments
BROWN The Policy Lab

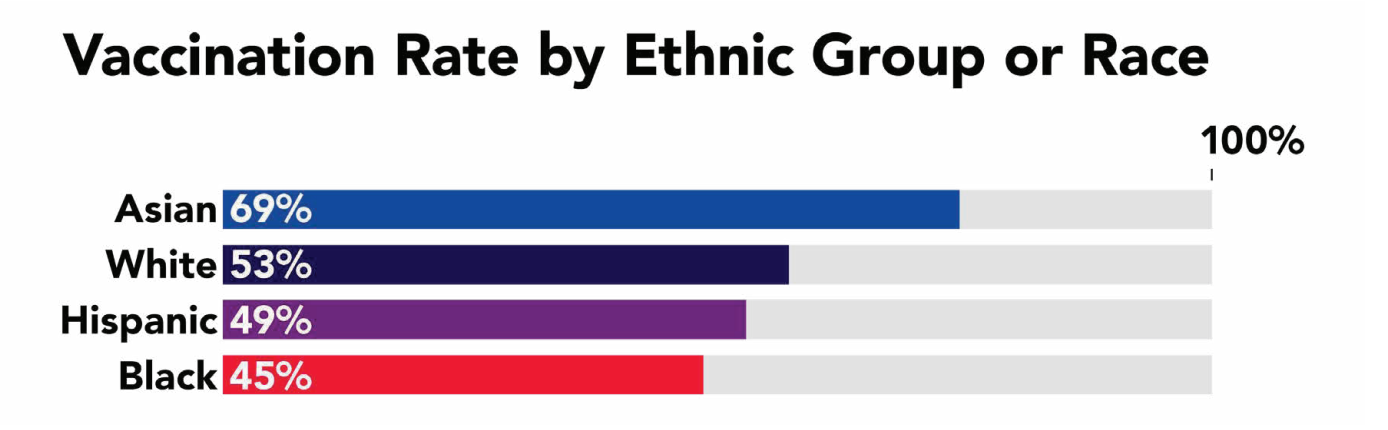
COVID-19 Vaccination Rates for Adults



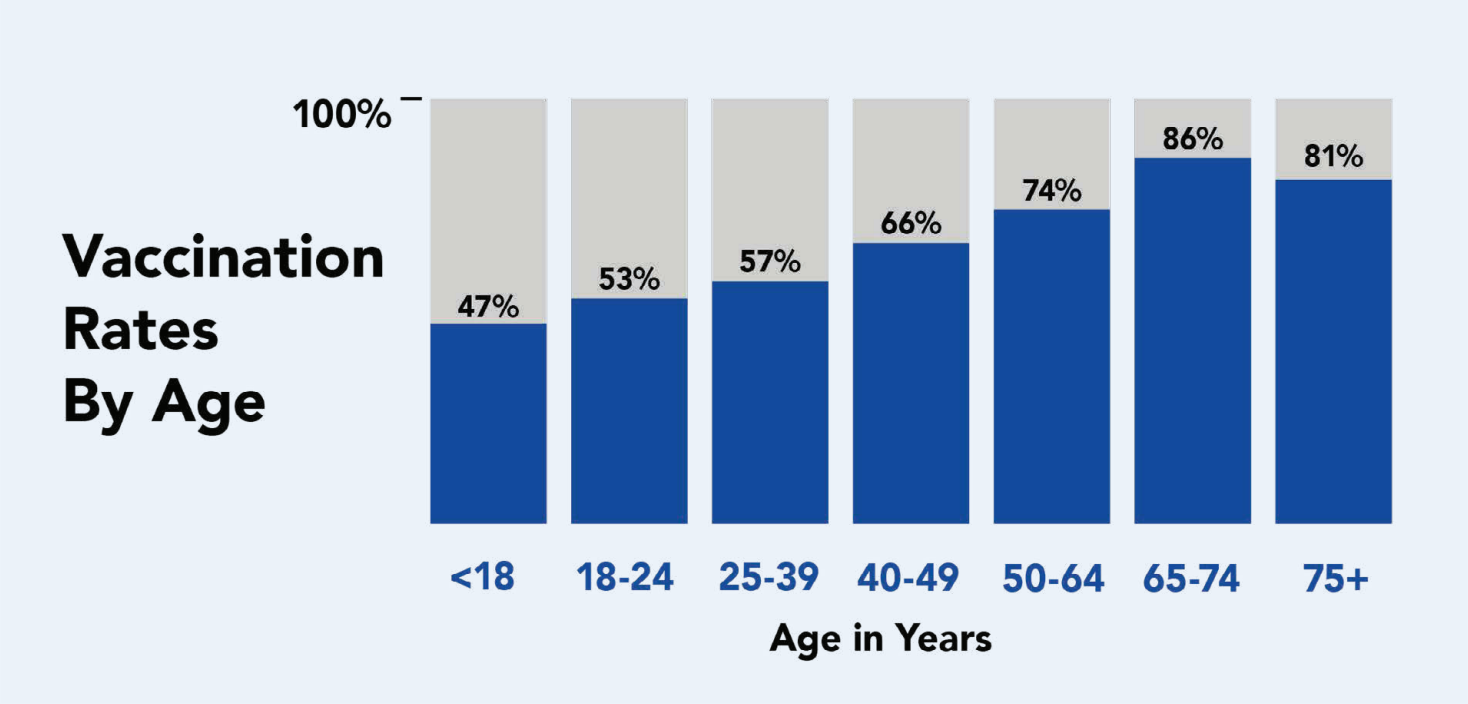
As of October 15, 2021, 56.8% of all U.S. residents have been confirmed to be fully vaccinated against COVID-19, while another 9% of the population has been given at least one dose.* The rate of new vaccinations had slowed considerably, though the emergence of the Delta variant and spikes in cases have led to vaccination increases in some parts of the country. Experts at the Centers for Disease Control and Prevention estimate herd immunity will require 80% or more of the population to be fully vaccinated. However, based on public opinion polling, 14-24% of adults do not want to be vaccinated and another 11-19% of adults report wanting to "wait and see" or that they will only be vaccinated if required.

* Keep in mind that this figure includes all residents in the US. Children under 12 are not currently eligible to be vaccinated.

COVID-19 vaccines have been available in the U.S. since December of 2020. The rollout began with older adults and other vulnerable populations before vaccines became more widely available. Since early April 2021, people 16 and older have been eligible. In May, people age 12 to 15 became eligible for vaccination. There are differences in vaccination rates by partisan affiliation, race/ethnicity, age, income, and geographic location.



As of September 20, 2021, 69% of Asian and 53% of white individuals in the U.S. have been vaccinated, compared to 49% of Hispanic and 45% of Black individuals (in states that track and report data by race/ethnicity). However, these racial gaps in vaccination rates have been narrowing in recent weeks. For a thorough breakdown of vaccination, case, and death rates and more, see this resource from the Kaiser Family Foundation.



Respondents ages 18-24 have a vaccination rate of just 53%, compared to the 86% vaccination rate observed in residents ages 65-74.

COVID-19 Vaccination status correlates with income as well. Among adults, 79% of those with incomes greater than $90k per year have had at least one dose, compared to 68% or those making less than $40k per year. For those age 18 to 39 who report being vaccinated or definitely intending to get vaccinated, 61.4% named their primary care provider as a trusted source of vaccine information. However, among those in that age group unsure about being vaccinated, only 39% trusted their primary care provider. Only 23.1% of those not planning to be vaccinated trust their primary care provider.

Income

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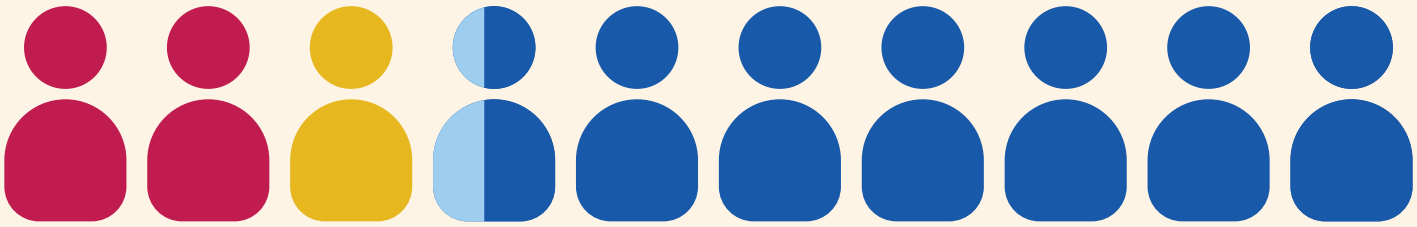
Public Opinion on COVID-19 Vaccines for Adults

According to CDC estimates, roughly 70% of American adults have had at least one dose of a vaccine for COVID-19. Public opinion data matches that figure, with 66 to 70% of respondents to recent surveys saying they have been vaccinated. **About 14 to 24% report they won't likely be vaccinated, depending on how questions are worded in the survey**. If a poll offers a "wait and see" option, 9 to 10% report wanting to wait. 3 to 4% say they will get vaccinated quickly but have not done so yet. Differences in vaccination opinion, much like vaccination rates, correlate with partisan affiliation, race/ethnicity, gender, geography, and other factors.

In a group of 10 American adults:



Two will not be getting vaccinated (14-24%);

One will want to wait and see (9-10%);

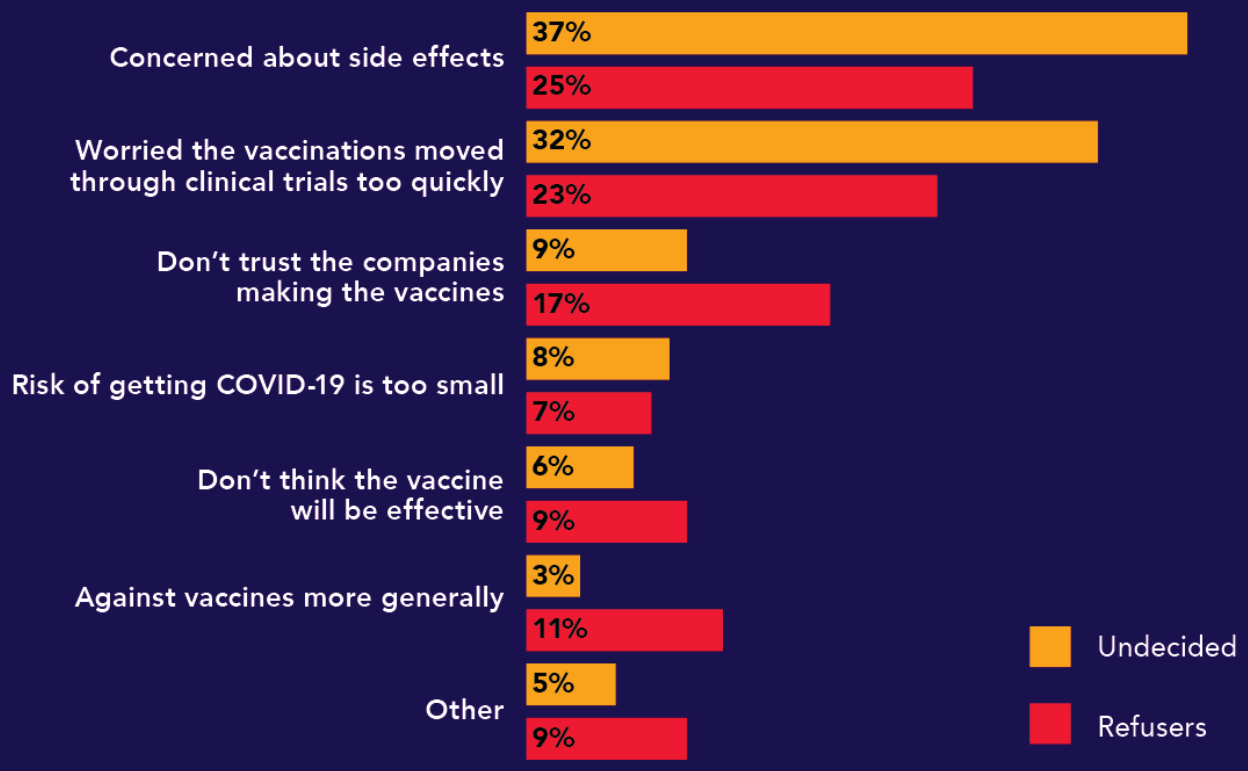
It is likely that someone in the group wants to get vaccinated soon, but hasn't yet (3-4%).

Already vaccinated

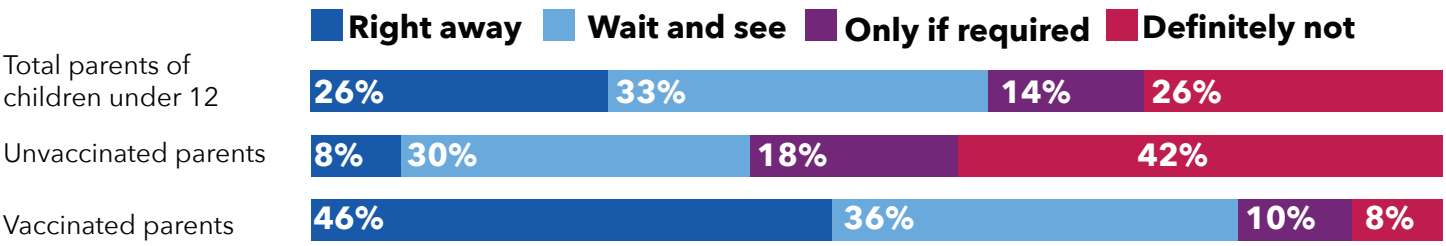
Among the unvaccinated, a few key concerns are cited.

According to public opinion data from the Kaiser Family Foundation, 44% of those who reported wanting to "wait and see" said they would be more likely to get vaccinated if the vaccines are granted full approval. Both surveys were conducted prior to the U.S. Food and Drug Administration (FDA) granting full approval for those 16 and up to the Pfizer-BioNTech vaccine August 23.

Top Concerns about Vaccines



Public Opinion on COVID-19 Vaccines for Children



In the coming months, people's attitudes about vaccinating younger children will almost certainly be an important factor in vaccination efforts. **People in the U.S. report a far greater degree of hesitancy about vaccinating children than they do about vaccinating themselves (and older children). In July, 45% of parents reported they were not likely to have their children vaccinated.** However, hesitancy among parents has been trending down, while hard opposition to vaccinating children has fallen four percentage points from mid-July to 25%.

Currently, children 12 to 17 are eligible to be vaccinated with the Pfizer vaccine (the other ones have not been approved for this age group). According to research from the Kaiser Family Foundation, 24% of parents with children in this age group report their child has received at least one dose of the vaccine, while 18% intend to have their child vaccinated right away. Twenty-one percent report they will "wait and see" how the vaccine is working before getting their child vaccinated; 14% will not get their child vaccinated unless their school requires it; and 22% will definitely not get their 12-17 year old vaccinated.

Parents are even more cautious when it comes to children under 12. According to the same survey, only 26% of parents with children under 12 say they will get their child vaccinated as soon as the vaccine is approved for their age group. One third report wanting to wait to see how the vaccine is working; 14% will only vaccinate their child if their school requires it; and 26% will definitely not have their child under 12 vaccinated.

Only 26% of parents with children under 12 intend to get their child vaccinated as soon as they are authorized to do so. Among vaccinated parents with children under 12, 46% intend to get their child vaccinated as soon as possible. Most unvaccinated parents do not want to vaccinate their children right away - only 8% report they will do so as soon as they are approved, while 30% report wanting to wait and see.

Parents commonly report multiple concerns about COVID-19 vaccines for children. 51% of US parents worry whether the vaccine was tested enough. 32% report major concern about whether vaccine companies wish to harm people. 16% are very concerned about religious objections. Note that these concerns differ based on how questions are asked, with closed questions showing higher prevalence of concerns than open ended questions.

Policymakers should be mindful that parents are more cautious about vaccines for their young children than they are about being vaccinated themselves. Ensuring parents have all the information they need about the safety and efficacy of vaccines for young children is critical for the U.S. vaccination effort.

Note on U.S. Food and Drug Administration (FDA) Approval for Vaccines for Children: The Pfizer vaccine was approved on May 10, 2021, for emergency use (not full approval) for children 12 and up, and is currently the only approved vaccine for children under 16 available in the US. On August 23, the FDA approved the Pfizer-BioNTech vaccine for individuals 16 years of age and older. Pfizer has applied for emergency use approval from the FDA for children 5 to 11. The Moderna vaccine is undergoing trials for full approval for those 16 and up, though the Moderna vaccine has not yet been approved for emergency use in children 12-17. The Johnson and Johnson (Janssen) vaccine has not yet applied for full FDA approval.

Vaccine Incentive Efforts

On July 29, President Joe Biden called on states, territories, and local governments to use American Rescue Plan Act funding to offer $100 incentives for individuals to get vaccinated. The U.S. Department of the Treasury offers technical assistance for states implementing such programs. The Centers for Disease Control and Prevention (CDC) also allows agency funds to be used for vaccine incentives in certain circumstances (see here for details).

Even before the president's call to action, states have been implementing creative incentives to get residents vaccinated:

Alabama: Talladega Superspeedway offered people the ability to drive on the racetrack if they agreed to be vaccinated.

Connecticut: Free drinks are available at some restaurants for vaccinated patrons.

Kentucky, **Ohio**, **Oregon** and the **Virgin Islands** (among others): Cash lotteries are held for vaccinated residents.

Maine: Vaccinated individuals are eligible for free fishing and hunting licenses.

Washington: The state's Liquor and Cannabis Board gave away marijuana to residents 21 and older.

West Virginia: The "Do it for Babydog" campaign features Governor Jim Justice's pooch, Babydog, as the mascot for a prize raffle for vaccinated residents.

For a list of state and local vaccine incentives, please see this resource compiled by the National Governors Association (NGA). While it is too early to tell how well these incentive programs work for encouraging vaccination, here we present a few preliminary studies which show a decidedly mixed picture in terms of effectiveness for these efforts.

General - Financial Incentives Do Not Work Equally For Everyone, Can Backfire

Available studies have found relatively little impact of financial incentives on vaccination rates (Thirumurthy et al. 2021). From a purely economic perspective, a financial incentive (cash, gift cards, vouchers, etc.) should increase vaccine uptake. However, psychologically, using incentives could potentially backfire. People intrinsically motivated to get vaccinated to protect others may be made uncomfortable by the motivation of external reward. Additionally, a payment or incentive might increase perceptions that the vaccine is risky.

Using a survey experiment, researchers at Boston University found that **financial incentives likely increase vaccine uptake, but they are not equally effective on all people**. In particular, these incentives do not work on self-identified Republicans or Independents but do show strong positive effects among self-identified Democrats. Black and Latino respondents were more likely to get vaccinated at lower levels of financial incentive ($1,000 or $1,500), but larger incentives produced the opposite effect, suggesting larger incentives signal larger risks to these populations.

Early results from a UCLA analysis suggest positive impacts for smaller incentives ($25, $50, or $100), but some are less likely to be vaccinated with the incentive than without. A similar study looking at smaller direct cash incentives ($100) found positive effects on uptake but reported no effects for lottery style incentives. Yet another study found no positive effects for $10 or $100 incentives, but reported a small negative effect for $20. Finally, public opinion data from the Kaiser Family Foundation suggests small percentages of those who have not gotten a vaccine say they would be more likely to do so if they were offered $100 from their state government (15%), free transportation from a ride sharing company (13%), free tickets to a sporting event or concert (11%), or a $20 coupon for items like food or drinks (10%). As with some other studies, these effects were more pronounced among Black and Hispanic adults compared to white adults, particularly for transportation incentives, reflecting the disproportionate impact of transportation access on those populations.

Rhode Island - Text Message Campaigns Not As Effective For COVID-19 Vaccines

Seasonal flu and early COVID-19 vaccination studies suggest short text messages can increase vaccination rates. However, when Rhode Island evaluated this strategy using a randomized controlled trial among unvaccinated residents from May to June of 2021, they found no impact (Rabb et al. 2021). This suggests early messaging efforts may have been helpful reminders for those already inclined to be vaccinated—and thus may be appropriate for the child vaccine rollout—but later messages are not effective at persuading holdouts.

Ohio - Vax-a-Million Lottery Potentially Effective but Evidence Mixed

Early studies of Ohio's lottery program to encourage vaccination present a mixed picture of its effectiveness. One study found that Ohio's lottery increased vaccination by 50,000 to 100,000 residents during the first two weeks, and cost about $75 per dose. Another study found the lottery increased vaccination rates by 1.5%, costing about $68 per person. However, a more recent study argues these earlier estimates failed to fully account for the impact of the expansion of eligibility to 12-15 year old residents, and that controlling for that change suggests the lottery did not have a significant positive impact on adult vaccination rates. More research will be needed to fully understand the possible impacts of lottery programs.