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# THE COVID STATES PROJECT: A 50-STATE COVID-19 SURVEY REPORT #81: CHILD VACCINATION RATE

USA, February 2022

Kristin Lunz Trujillo, Northeastern University  
Hong Qu, Northeastern University  
Roy H. Perlis, Harvard Medical School  
David Lazer, Northeastern University  
Alauna C. Safarpour, Harvard University  
Matthew A. Baum, Harvard University  
Katherine Ognyanova, Rutgers University

James Druckman, Northwestern University  
Mauricio Santillana, Harvard Medical School  
Ata Uslu, Northeastern University  
Alexi Quintana, Northeastern University  
Jon Green, Northeastern University  
Caroline Pippert, Northwestern University  
Jennifer Lin, Northwestern University



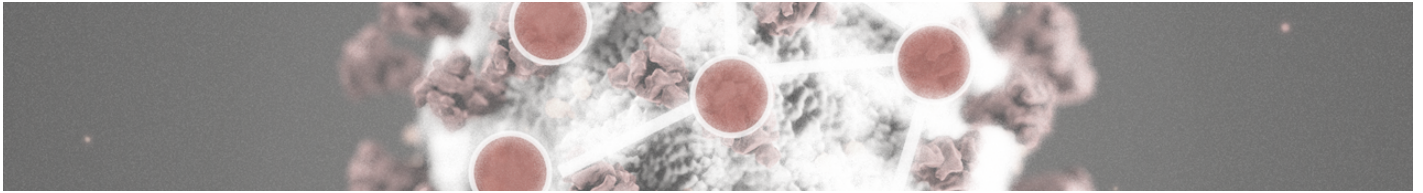
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**Report of February 4, 2022, v.1**

***The COVID States Project***

**From:** The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States

***A joint project of:***

Northeastern University, Harvard University, Rutgers University, and Northwestern University

**Authors:** Kristin Lunz Trujillo (Northeastern University); Hong Qu (Northeastern University); Roy H. Perlis (Harvard Medical School); David Lazer (Northeastern University); Alauna C. Safarpour (Harvard University); Matthew A. Baum (Harvard University); Katherine Ognyanova (Rutgers University); James Druckman (Northwestern University); Mauricio Santillana (Harvard Medical School); Ata Uslu (Northeastern University); Alexi Quintana (Northeastern University); Jon Green (Northeastern University); Caroline Pippert (Northwestern University); Jennifer Lin (Northwestern University)

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# COVER MEMO

## Summary Memo — February 4, 2022

### *The COVID States Project*

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### **Note on methods:**

Between December 22, 2021, and January 24, 2022, we surveyed 22,961 individuals across all 50 states and the District of Columbia. The survey was conducted by PureSpectrum via an online, nonprobability sample, with state-level representative quotas for race/ethnicity, age, and gender (for methodological details on the other waves, see [covidstates.org](https://covidstates.org)). In addition to balancing on these dimensions, we reweighted our data using demographic characteristics to match the U.S. population with respect to race/ethnicity, age, gender, education, and living in urban, suburban, or rural areas. This was the latest in a series of surveys we have been conducting since April 2020, examining attitudes and behaviors regarding COVID-19 in the United States.

### **Contact information:**

For additional information and press requests contact:

- Roy H. Perlis at [rperlis@mgh.harvard.edu](mailto:rperlis@mgh.harvard.edu)
- David Lazer at [d.lazer@neu.edu](mailto:d.lazer@neu.edu)
- Matthew A. Baum at [matthew\\_baum@hks.harvard.edu](mailto:matthew_baum@hks.harvard.edu)
- Katherine Ognyanova at [katya.ognyanova@rutgers.edu](mailto:katya.ognyanova@rutgers.edu)
- James Druckman at [druckman@northwestern.edu](mailto:druckman@northwestern.edu)
- Mauricio Santillana at [msantill@fas.harvard.edu](mailto:msantill@fas.harvard.edu)

Or visit us at [www.covidstates.org](https://www.covidstates.org).

# Parent-reported child COVID-19 vaccination rates and likelihood of child COVID-19 vaccination

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It has been approximately 9 months since [the FDA authorized youth ages 12 to 17](#) to receive the Pfizer/BioNTech COVID-19 vaccine, and 3 months since authorization for [kids ages 5 to 11](#). After each authorization, vaccination rates initially [surged](#) among those age groups. Now that more time has elapsed - along with the spike in cases due to the Omicron variant - how have vaccination rates fared among minors, and how have parents' likelihood of vaccinating their kids changed? Understanding these trends may also allow predictions about vaccination uptake among younger children, now that Pfizer has asked the FDA to approve the COVID-19 vaccine [for children under 5](#).

## Key Takeaways

- The parent-reported COVID-19 vaccination rate for youth ages 12-18 has very slightly risen from 54% in September 2021 to 57% in January 2022.
- The parent-reported COVID-19 vaccination rate for kids ages 5-11 has increased from 27% in November 2021 to 36% in January 2022.
- However, the rise of the Omicron variant over the winter holiday season does not appear to increase the reported likelihood that parents would vaccinate their children against COVID-19; if anything, likelihood of vaccinating kids under 12 *decreased* between November 2021 and January 2022.<sup>1</sup>
- Parental vaccination likelihood for youth ages 12-18 increased from September to November 2021, then stabilized from November 2021 to December 2022 at just over two-thirds of parents expressing likelihood.
- Partisan gaps have increased from September 2021 to January 2022 - in all child age groups, this gap has widened to over 30 percentage points in the most recent wave.
- Parents of kids under 5 report the lowest percent likelihood of vaccinating their kids: only 54% of parents with kids under 5 said they would likely vaccinate their children against COVID-19.
- Significant demographic differences emerge among parental likelihood of vaccinating their kids against COVID-19; these relative cross-subgroup differences roughly hold for all childhood age groups.

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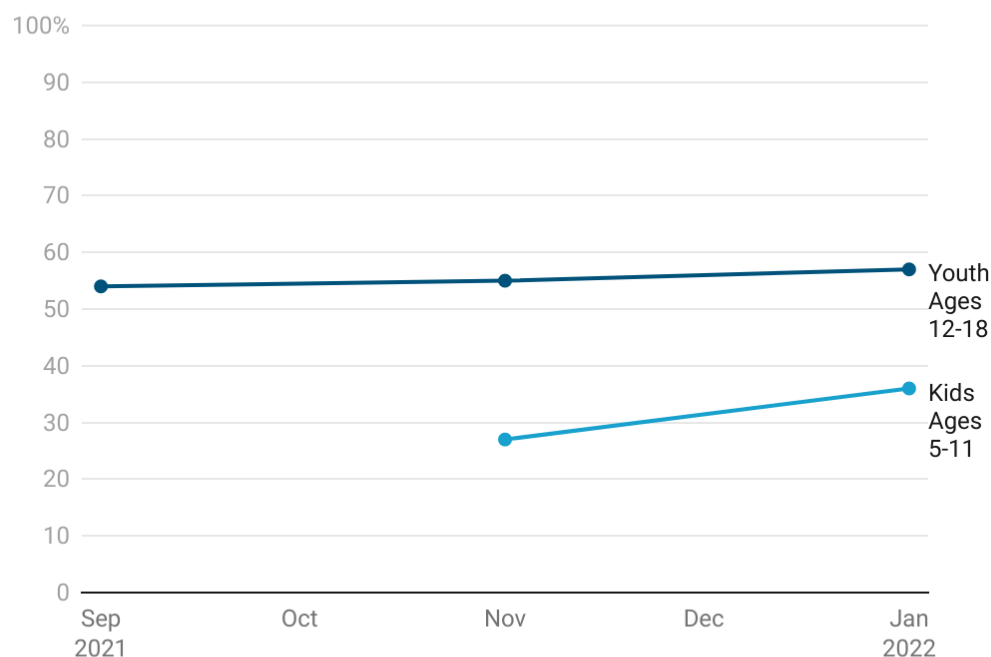
<sup>1</sup> Vaccination likelihood is measured via the response to two questions: 1) whether the parent said vaccinating their kids against COVID-19 was somewhat likely or very likely, and 2) whether the parent said their kids already received at least one vaccine against COVID-19. If they said it was likely **or** that they had already vaccinated their kids at least once, the parents were coded as "likely" to vaccinate their kids.

## I. Parent-reported child COVID-19 vaccination rates

For youth ages 12-18, the COVID-19 vaccination rate has barely moved upward over the last four months (Figure 1). In September 2021, 54% of parents said their child in this age group had gotten at least one vaccine, compared to 55% in November 2021 and 57% in January 2022. Greater increases occurred for kids ages 5-11 in the past two months: 27% of parents reported their child in this age group getting at least one vaccine, versus 36% in January 2022. Overall, the vaccination rate among kids ages 5-11 remains lower than the rate among youth ages 12-18—not surprising, given that kids ages 5-11 could only start getting vaccinated in early November 2021—but the gap between these age groups is closing. In both groups, a substantial number of individuals remain unvaccinated against COVID-19.

### Parent Reported Child COVID-19 Vaccination Rates

*Percent of parents who said at least one of their kids in the specified age group got at least one COVID-19 vaccine.*



*U.S. parents only, data weighted to population benchmarks. Data wave information:  
Wave 21: N = 2545 (Ages 5-11), N = 2337 (Ages 12-18), Time period: 12/22/2021-01/24/2022  
Wave 20: N = 3230 (Ages 5-11), N = 2724 (Ages 12-18), Time period: 11/03/2021-12/03/2021  
Wave 19: N = 2222 (Ages 12-18), Time Period: 08/26/2021-09/27/2021*

Source: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States (A joint project of: Northeastern University, Harvard University, Rutgers University, and Northwestern University), [www.covidstates.org](http://www.covidstates.org). • Created with Datawrapper

**Figure 1.**

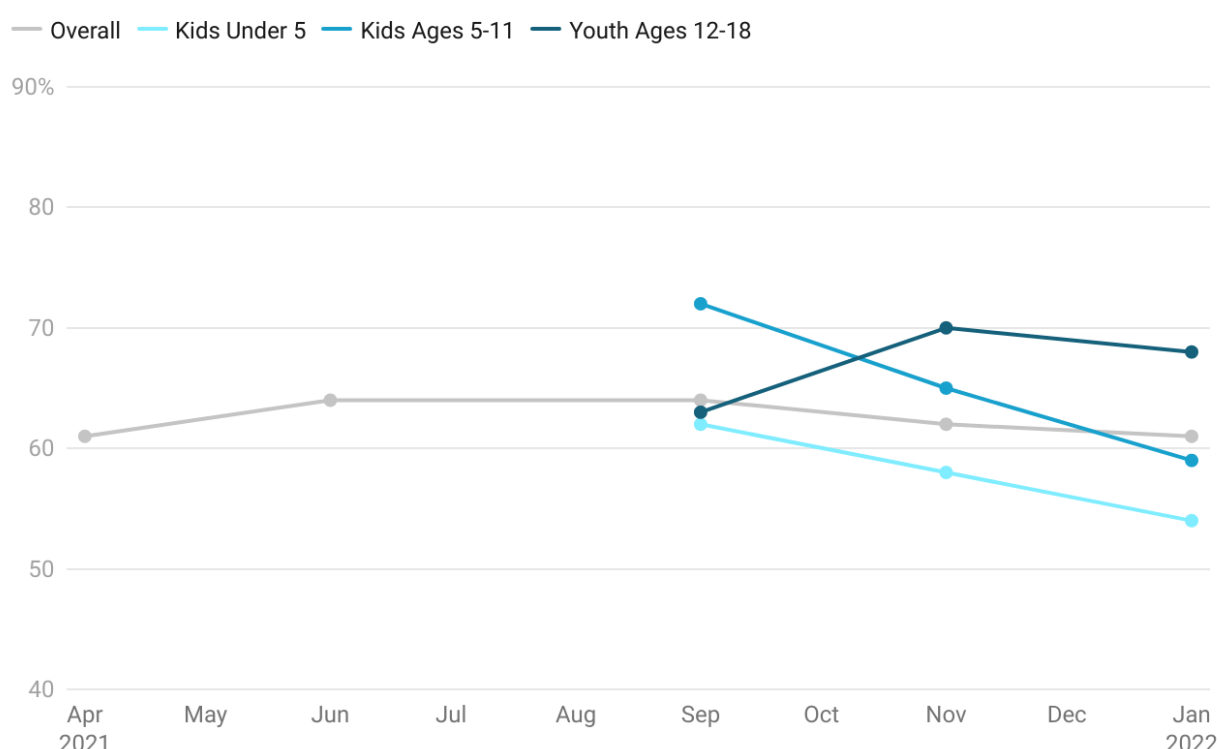


## II. Parent-reported child COVID-19 vaccination likelihood

Despite the fairly low rate of vaccination among minors against COVID-19 so far, a majority of parents say that they are likely to vaccinate their children (or they already have) (Figure 2). Among all parents, 61% said they would likely vaccinate their kids against COVID-19 in April 2021. This increased to 64% in June and September 2021, then fell to 62% in November 2021 and then 61% in January 2022.

### Parent Reported Child COVID-19 Vaccination Likelihood

*Percent of parents who said they were somewhat or very likely to vaccinate their kids, or who said at least one of their kids in the specified age group got at least one COVID-19 vaccine.*



*U.S. parents only, data weighted to population benchmarks. Data wave information:*

*Wave 21: N = 2352 (Ages Under 5), N = 2549 (Ages 5-11), N = 1941 (Ages 12-18), Time period: 12/22/2021-01/24/2022*

*Wave 20: N = 2728 (Ages Under 5), N = 3240 (Ages 5-11), N = 2399 (Ages 12-18), Time period: 11/03/2021-12/03/2021*

*Wave 19: N = 442 (Ages Under 5), N = 2229 (Ages 5-11), N = 3305 (Ages 12-18), Time Period: 08/26/2021-09/27/2021*

*Source: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States (A joint project of: Northeastern University, Harvard University, Rutgers University, and Northwestern University), [www.covidstates.org](http://www.covidstates.org). • Created with Datawrapper*

**Figure 2.**

However, this overall trend masks differences in how old parents' children are. Among parents of youth ages 12-18, 63% said it was likely their children would get vaccinated against COVID-19 (or already did so) in September 2021. This rose to 70% of parents with youth ages 12-18 in November 2021 and flatlined at 68% in January 2022.

Among parents of kids ages 5-11, 72% said they would likely vaccinate their kids against COVID-19 in September 2021, compared to 65% in November 2021 and back down to 59% in January 2022. Finally, the parental group least likely to say they will vaccinate their children against COVID-19 are those with kids under 5. In September, 62% of these parents said it was likely they would vaccinate their kids. This fell to 58% in November 2021, and then fell again to 54% in January 2022.

### **III. Parent-reported COVID-19 vaccination likelihood of 12-to-18-year-olds, by demographic group**

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The results shown in Figure 2 mask significant differences in demographic characteristics and political preferences, however. Figure 3 displays parents' reported likelihood of vaccinating their teenagers against COVID-19 (or have already done so) for the last three survey waves by parent partisanship, race, gender, age, income level, region, and urban-rural location.

In terms of partisan differences, there has been a big jump in the gap between Democrats and Republicans, from Democrats being 13 points more likely to vaccinate their children in September to 30 points more likely in January. The shift went from 72% of Democrats to 81% during the four months examined. Similarly, in September 55% of Independents said vaccination was likely versus 61% in January. However, among Republicans, vaccination likelihood decreased from 62% of parents in September to 54% of parents in January.

Asian parents have expressed the highest likelihood of vaccinating their teenager against COVID-19, but the proportion of parents in this group expressing likelihood plateaued in September and decreased in January.<sup>2</sup> Hispanic vaccine likelihood has also remained relatively high and increased slightly over time. Among Black parents, the likelihood of vaccinating their teenagers has increased 18 percentage points from September to January, with two-thirds saying vaccination was likely (or that their children were already vaccinated) in the most recent wave. Finally, among white parents, vaccine likelihood has increased slightly from September to January, but peaked in November.

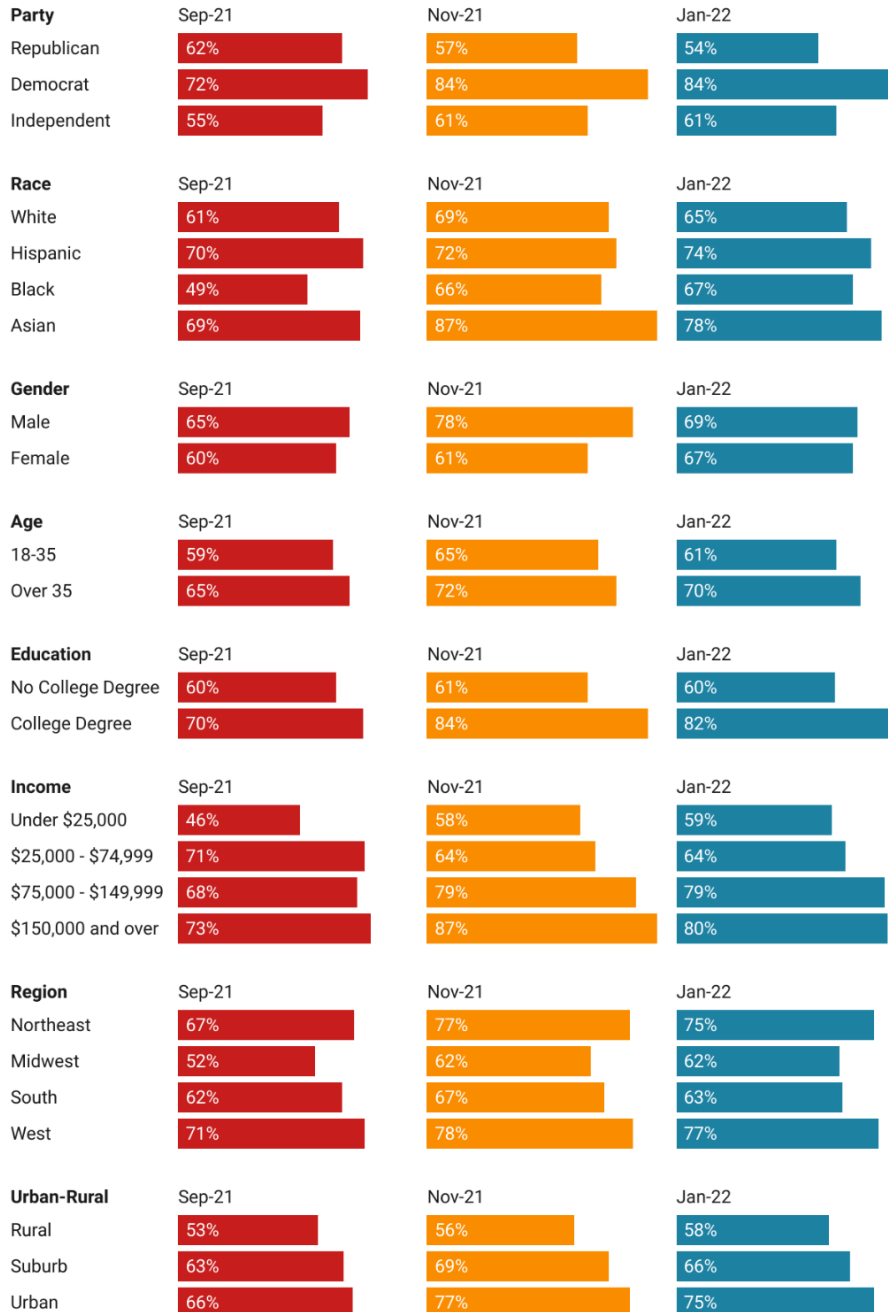
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<sup>2</sup> Note that these estimates have small subsample sizes for non-whites in particular, making the standard errors fairly large. For instance, there were 50 Black parents of teenagers in the September 2021 wave, so the 49% estimate (+/- 7%) is somewhere between 42% and 56% (versus 332 in the January 2022 wave, with a 67% estimate [+/- 3%], or 64% to 70%). So, there is very likely an increase in likelihood over time among this parental group, though the magnitude is not clear from the relatively small sample sizes.

## Parent Reported Child COVID-19 Vaccination Likelihood for Youth Ages 12-18, by Wave and Parental Demographic Groups

Percent of parents who said they have a child ages 12-18, and who were somewhat or very likely to vaccinate their kids or who said at least one of their kids in the specified age group got at least one COVID-19 vaccine.

■ Sep-21 ■ Nov-21 ■ Jan-22



U.S. parents of kids ages 12-18 only, data weighted to population benchmarks. Data wave information: Wave 21: N = 1941, Time period: 12/22/2021-01/24/2022 | Wave 20: N = 2399, Time period: 11/03/2021-12/03/2021 | Wave 19: N = 3305, Time Period: 08/26/2021-09/27/2021

Source: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States (A joint project of: Northeastern University, Harvard University, Rutgers University, and Northwestern University), [www.covidstates.org](http://www.covidstates.org). • Created with Datawrapper

**Figure 3.**



A gender gap has existed among parental vaccination likelihood for their 12-to-18-year-olds, but this gap appears to have closed in the most recent wave.

Mothers have slightly but consistently increased their expressed likelihood of vaccinating their teenagers over the four months from 60% to 67%. Fathers have also increased their reported likelihood of vaccinating their teenager over the four months from 65% to 69%—but their reported likelihood peaked in November and decreased from there.

Figure 3 also shows socio-economic differences in youth COVID-19 vaccination likelihood (or actual vaccination) among parents of kids ages 12-18. The college educated are much more likely to express likelihood of vaccinating their teens against COVID-19 and have increased in proportion expressing this over time (from 70% in September to 82% in January). Conversely, non-college educated parents have plateaued in expressed likelihood, remaining around 60% throughout the three waves examined.

Similarly, lower-income parents are less likely to have expressed likelihood to vaccinate their teens, though likelihood has increased significantly over time from 46% in September to 59% in January. High-income parents (households making \$150,000 a year or more) remain high in likelihood and have increased in proportion over time (from 73% in September to 80% in January). However, among high-income parents, likelihood peaked in September at 87% and fell from there.

Parents' reported likelihood of vaccinating their 12-to-18-year-olds also varies by geographic location. The percent of parents of all regions reporting likelihood increased from September to January. However, likelihood in the Northeast and South peaked in November and fell afterwards, while likelihood in the Midwest and West peaked in November and then plateaued. Currently, the likelihood of vaccination for teenagers is highest in the Northeast (75%) and West (77%), and lowest in the Midwest (62%) and South (63%).

Finally, rural parents have consistently had the smallest proportion of parents saying they would or have already vaccinated their teens. In September 53% of rural parents said they would do so for their teens, versus 58% in January.

Urban parents have the highest proportion expressing likelihood, increasing from 66% in September to 77% in November, then plateauing (or slightly decreasing) to 75% through the winter holiday season. Suburban parents followed a similar trend to urban parents, ranging from 63% in September up to 69% in November, and then decreasing to 66% in January.

## **IV. Parent-reported COVID-19 vaccination likelihood of 5-to-11-year-olds, by demographic group**

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In contrast to the general trend of vaccination likelihood among parents of teens, parents of 5-to-11-year-olds have been less likely to say they would vaccinate their kids against COVID-19 over time (and in general) (Figure 4). Broken down by parent partisanship, Republican parents are less likely to say they would vaccinate their kids (42% in January) compared to Independents (55%) and Democrats (76%). However, among all three groups the proportion of parents decreased steadily between September to January.

Among parents of 5 to 11 year olds, Asians expressed the greatest likelihood of vaccinating their children against COVID-19 (78% in January), but this is down from 89% in September. Likelihood among White parents of kids in this age group decreased too, from 70% in September to 58% in January. Decreases were also found among Hispanic parents (78% in September to 65% in January) and Black parents (66% in September to 52% in January).

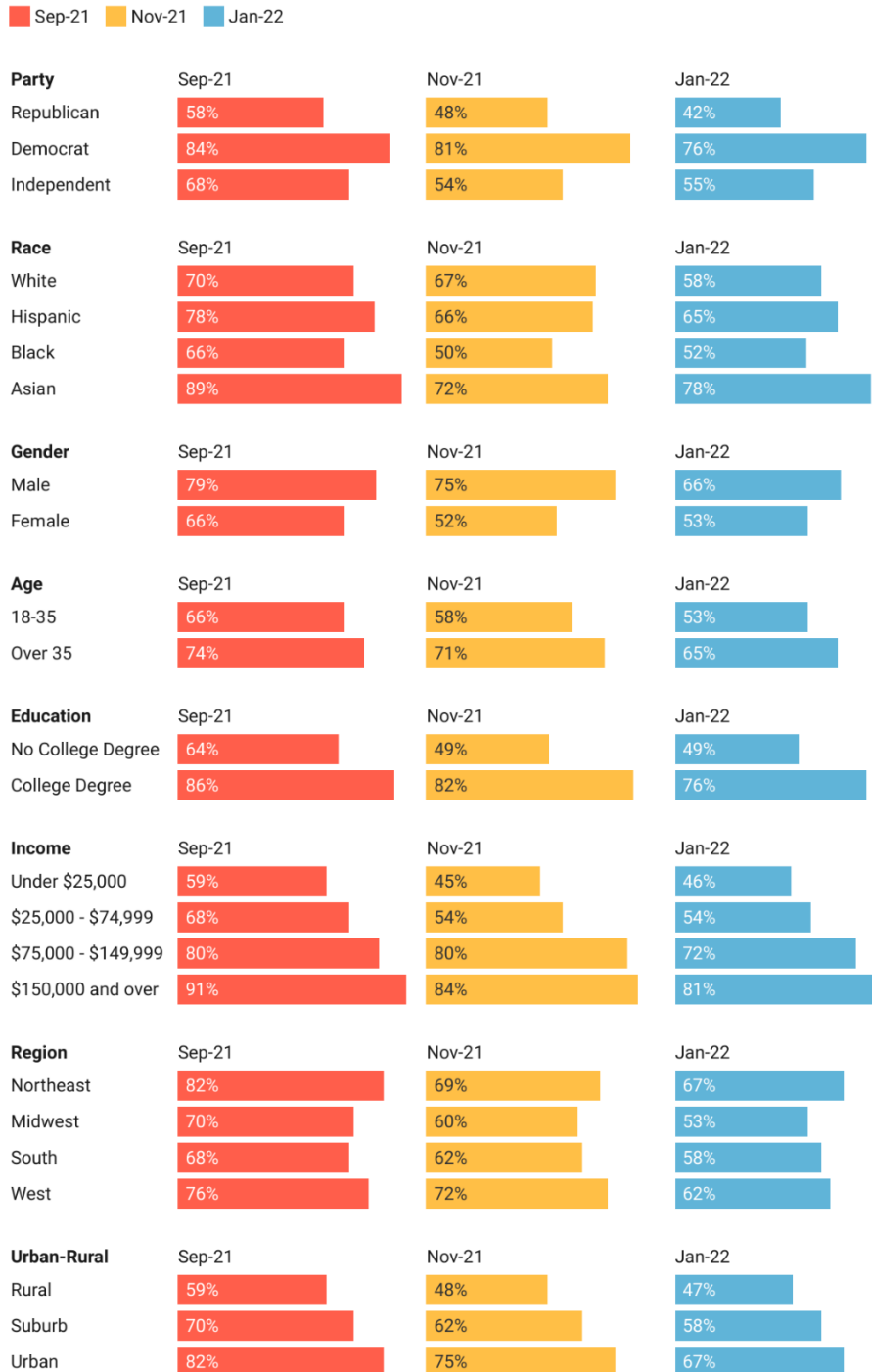
Figure 4 also shows significant gender splits remaining, unlike the teenage group of parents. Mothers are less likely to say they would vaccinate their kids (or already have) compared to fathers (53% compared to 66%, respectively, in January). Likelihood decreased over time for both genders who have kids between 5 and 11. Similarly, declines in likelihood have occurred by parent age, though older parents (35 and older) are more likely to express likelihood of vaccination (65%) compared to younger (under 35) parents (53%).

Some of the largest differences can be seen across socioeconomic status. The college educated are more likely to express likelihood to vaccinate their kids compared to those without college degrees (76% versus 49%, respectively, in January 2022). However, the proportion over time has decreased for both groups, as has been the overall trend. The proportion of parents saying they will vaccinate their kids in this age group is greater among those making the highest household income (\$150,00 a year or more)—at 81% in January—compared to those making the lowest (less than \$25,000 a year)—at 46% in January. Although all income level groups were proportionally lower in January versus September, for those in households making less than \$75,000 a year, the proportion has plateaued between November and January.

Finally, like parents of teenagers, parents of kids ages 5 to 11 vary in their likelihood to vaccinate their kids against COVID-19 along geographic lines. All regions experienced a drop in likelihood of vaccination for this child age group between September 2021 and January 2022. The region with parents expressing the greatest likelihood in January is the Northeast (67% of parents), followed by the West (62%), the South (58%), and the Midwest (53%).

## Parent Reported Child COVID-19 Vaccination Likelihood for Kids Ages 5-11, by Wave and Parental Demographic Groups

Percent of parents who said they have a child ages 5-11, and who were somewhat or very likely to vaccinate their kids or who said at least one of their kids in the specified age group got at least one COVID-19 vaccine.



U.S. parents of kids ages 5-11 only, data weighted to population benchmarks. Data wave information:  
Wave 21: N = 2549, Time period: 12/22/2021-01/24/2022 | Wave 20: N = 3240, Time period: 11/03/2021-12/03/2021 | Wave 19: N = 2229, Time Period: 08/26/2021-09/27/2021

Source: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States (A joint project of: Northeastern University, Harvard University, Rutgers University, and Northwestern University), [www.covidstates.org](http://www.covidstates.org).  
Created with Datawrapper

**Figure 4.**

An urban-rural split has also persisted, with rural areas being much more hesitant to vaccinate their kids (47% in January), compared to suburban parents (58%) and urban parents (67%). The proportion of all urban, suburban, and rural parents decreased from September to January, though this number has essentially plateaued for rural areas.

#### **IV. Parent-reported COVID-19 vaccination likelihood of kids under 5 years old, by demographic group**

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The hospitalization rate among children under 5 recently [skyrocketed](#) due to the Omicron variant, underscoring the need for COVID-19 vaccine approval for this age group. This age group is not authorized to get the COVID-19 vaccine, though [Pfizer sought approval](#) for children under 5 in early February, with [some experts predicting](#) that kids under 5 will receive authorization in March 2022. Authorization for this age group has been delayed due to [failed clinical trials](#) where the vaccine was found to be low in effectiveness for this age group.

Against this backdrop, we find that the level of childhood COVID-19 vaccine hesitancy expressed by parents is greatest among parents of kids under 5, compared to parents with teens or grade-school children. Figure 5 shows the proportion of parents with kids under 5 who say they will likely vaccinate their kids against COVID-19, segmented by different parental demographic and political groups.

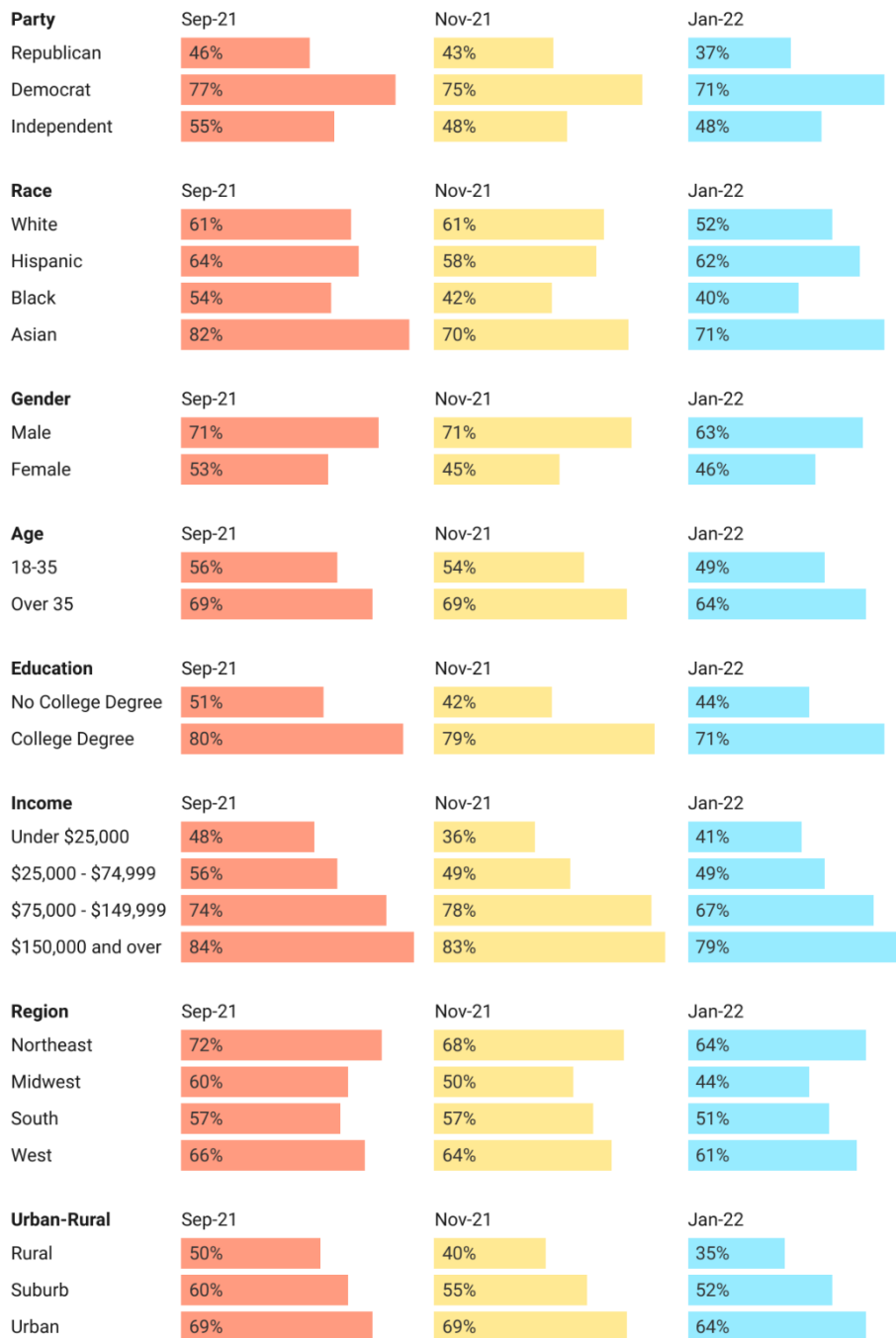
The over-time and comparative group trends are similar to those of parents with kids ages 5 to 11, with expressed likelihood of vaccination decreasing—sometimes substantially—for every single subgroup between September 2021 and January 2022. That said, vaccination likelihood among some demographic groups (Black parents, parents without a college degree, lower-middle income parents, and mothers) have plateaued between November and January.

Once again, childhood vaccination likelihood varies by parent partisan identity. The partisan group with the consistently highest vaccination likelihood rate are Democrats (71% of parents in January), followed by Independents (48%), and then Republicans (37%). Asian parents are the most likely to say they will vaccinate their children against COVID-19 (71% of parents in January), compared to Hispanic parents (62%), White parents (52%), and Black parents (40%). A gender gap has also consistently remained among parents of young children, with 63% of fathers saying vaccination is likely in January 2022 versus 46% of mothers. Parental age also presents a consistent gap: 64% of parents over 35 said vaccination was likely in January versus 49% of parents 18 to 35 years old.

## Parent Reported Child COVID-19 Vaccination Likelihood for Kids Under 5, by Wave and Parental Demographic Groups

Percent of parents who said they have a child under 5, and who were somewhat or very likely to vaccinate their kids.

Sep-21 Nov-21 Jan-22



U.S. parents of kids under 5 only, data weighted to population benchmarks. Data wave information:  
Wave 21: N = 2352, Time period: 12/22/2021-01/24/2022 | Wave 20: N = 2728, Time period: 11/03/2021-12/03/2021 | Wave 19: N = 442, Time Period: 08/26/2021-09/27/2021

Source: The COVID-19 Consortium for Understanding the Public's Policy Preferences Across States (A joint project of: Northeastern University, Harvard University, Rutgers University, and Northwestern University), [www.covidstates.org](http://www.covidstates.org). \* Created with Datawrapper

**Figure 5.**

Socioeconomic status also relates to child COVID-19 vaccination likelihood for parents of kids under 5. In January 2022 71% of these college-educated parents said they would likely vaccinate their children, versus 44% of these parents without college degrees. Similarly, in January 79% of parents with annual household incomes of over \$150,000, versus 41% of parents in the lowest income households. Further, college educated parents of under-five children dropped in stated likelihood much more than parents of other minors over these three waves.

Lastly, like parents of older minors, parents of under-five in the Northeast and West are more likely to say vaccination is likely (64% of parents and 61% of parents, respectively, in January). Likelihood is lowest in the Midwest (44% of parents in January), with parents in the South in the middle (51% in January). There is also a nearly 30-point urban-rural gap in January among parents of kids under five, which has widened from a 20-point gap in September 2021. Of all parental subgroups, rural parents of under-fives are the least likely to vaccinate their children (35% in January).

## Appendix: Additional Tables

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**Table A1. Percentages for Figure 1.**

<b>Vaccination rates</b>	<b>Sep-21</b>	<b>Nov-21</b>	<b>Jan-22</b>
Kids 5-11	-	27%	36%
Youth 12-18	54%	55%	57%

**Table A2. Percentages for Figure 2.**

<b>Vaccination likelihood</b>	<b>Apr-21</b>	<b>Jun-21</b>	<b>Sep-21</b>	<b>Nov-21</b>	<b>Jan-22</b>
Overall	61%	64%	64%	62%	61%
Kids Under 5	-	-	62%	58%	54%
Kids Ages 5-11	-	-	72%	65%	59%
Youth Ages 12-18	-	-	63%	70%	68%