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THE COVID STATES PROJECT: A 50-STATE COVID-19 SURVEY

REPORT #49: VACCINATING AMERICA'S YOUTH

USA, May 2021

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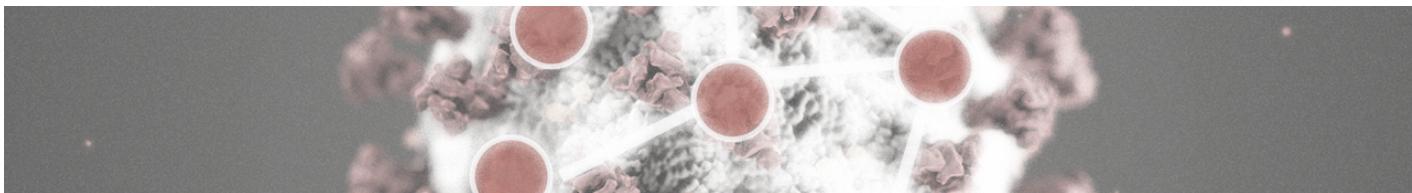


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Report of May 4, 2021, v.1

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: Matthew Simonson (Northeastern University); Hanyu Chwe, Northeastern University; David Lazer (Northeastern University); Katherine Ognyanova (Rutgers University); Matthew A. Baum (Harvard University); James Druckman (Northwestern University); Roy H. Perlis (Harvard Medical School); Mauricio Santillana (Harvard Medical School); Jon Green (Northeastern University); Ata Uslu (Northeastern University); Adina Gitomer (Northeastern University); Alexi Quintana (Northeastern University), and Jennifer Lin (Northwestern University)

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COVER MEMO

Summary Memo — May 4, 2020

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From April 2020 through May 2021, we conducted multiple waves of a large, 50-state survey, some results of which are presented here. You can find previous reports online at covidstates.org.

Note on methods:

Between April 1 and May 3, 2021, we surveyed 21,733 individuals across all 50 states plus 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). 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.

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Prospects for Vaccinating America's Youth

With Pfizer's COVID-19 vaccine [soon to be available to 12-15-year-olds](#), how prepared are Americans to vaccinate their children? And do they support requiring that children be vaccinated before returning to in-person school? In this report, we examine three aspects of childhood vaccinations: parents' resistance to vaccinating their children, support among all adults for making vaccinations a requirement in schools, and attitudes towards vaccination among youth. Below are our key findings:

- **Since February, the gap in attitudes between fathers and mothers has widened.** While fathers became marginally less resistant, falling from 14% to 11% since February, over a quarter of mothers still say they are "extremely unlikely" to vaccinate their children.
- **Educational, income, and partisan divides in childhood vaccination attitudes have become more pronounced.** Parents in households making less than \$25,000 per year, parents without a college degree, and Republican parents have become more resistant to vaccinating their children. Resistance has decreased for college-educated, high income, and Democratic parents.
- **Parents of teenagers are less resistant to having their children vaccinated than parents of small children, and—in the case of mothers—slightly more supportive of school vaccination requirements.**
- **Support for school vaccination requirements has grown slightly** from 54% to 58%. This increase holds for most gender, race, and income categories. However, among Republicans, support remains virtually unchanged.
- **Mothers are less likely to support school vaccination requirements** than other women, while fathers are *more* likely to support school vaccination requirements than other men.
- Among youth who are old enough to get vaccinated without parental consent (18-21-year-olds), one in five are vaccine resistant.

All charts below show a dot for the best (that is, "mean") estimate, surrounded by a bar to indicate uncertainty in where the true percentage lies (that is, 95% confidence intervals). All differences reported in the text are statistically significant unless noted.

Note: For the purposes of this report, we define "parent" loosely as any respondent who has children under the age of 18 living with them. We acknowledge that this may include other caretakers such as grandparents, that some adults in the household may have relatively little childcare responsibilities, and that some respondents without children in their home may be parents as well.

Parents' Resistance Toward Vaccinating Children

From February to April, we observe a small reduction in fathers' resistance toward vaccinating their children but no overall change among mothers. Resistance among fathers has dropped to 11% (down from 14% in February), while the percentage of vaccine resistant mothers continued to hover at 27%.¹ This is particularly notable since initial research suggests that mothers' attitudes appear to have a stronger influence than those of fathers on whether their children get vaccinated.² As the following two sections illustrate, vaccine resistance is particularly pronounced among mothers who are younger and less educated.

GENDER AND AGE

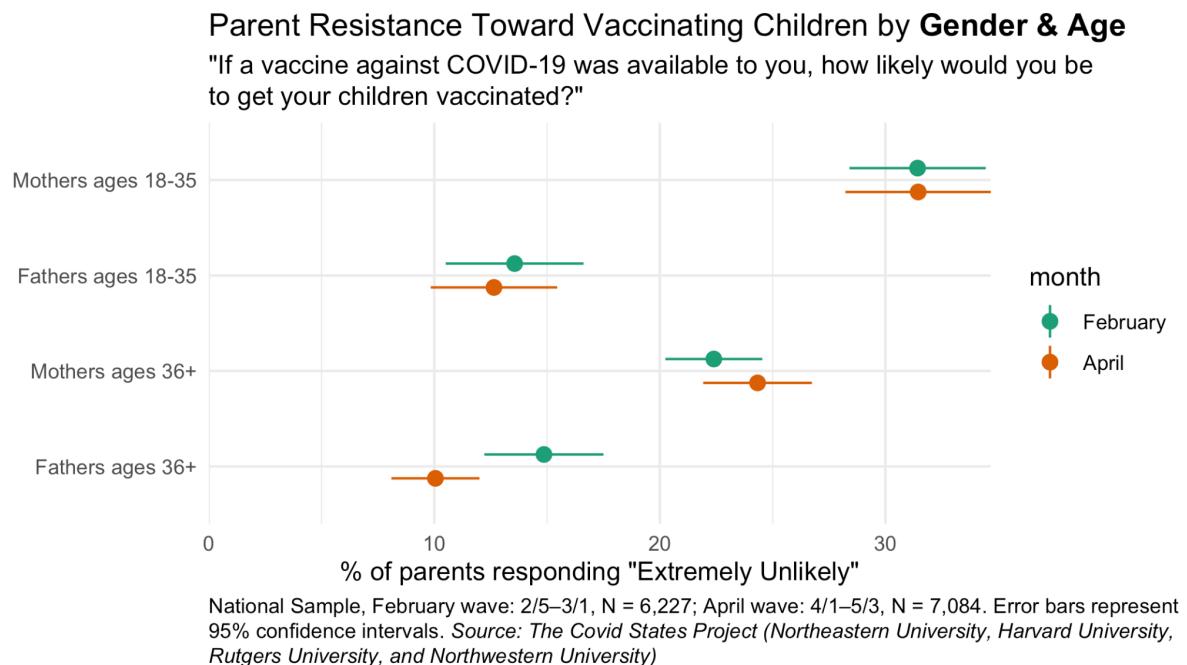


Figure 1.

Younger mothers are substantially more resistant to vaccinating their children than older mothers. Nearly a third (31%) of adult mothers under 36 say they are extremely unlikely to vaccinate their children, compared with a quarter (25%) of older mothers.

¹ Our February estimate for mothers was 26.3%, but the margin of error ranged from 24.5% to 28.1%, so we do not consider the new estimate (27.2%) to be a statistically significant increase.

² A large [2016 study](#) in New Zealand found a strong correlation between mothers' attitudes during pregnancy and subsequent vaccination of the child; the relationship between fathers' attitudes and child vaccination was much weaker. A smaller [2020 study](#) in New Zealand found fathers' attitudes had no effect. To our knowledge, there has yet to be any research comparing the impact of mothers' and fathers' attitudes on vaccination rates of children in the U.S. or on COVID-19 vaccines specifically.

Among fathers, age does not make a big difference. However, older fathers appear to be the only gender-age group to become less resistant since February, with resistance decreasing by a third (from 15% to 10%).

GENDER AND EDUCATION

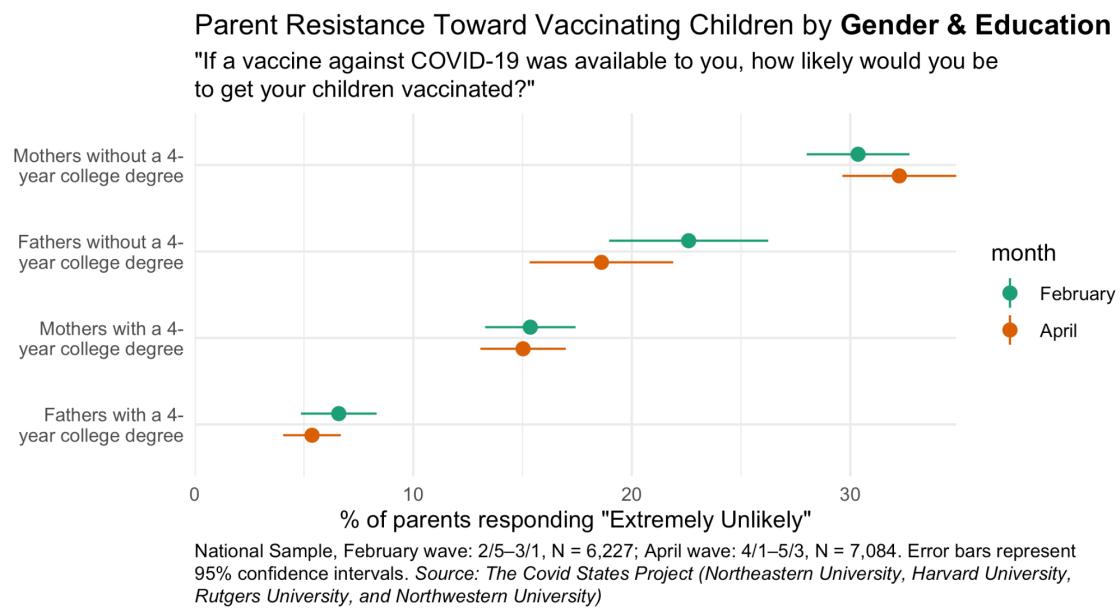


Figure 2.

We continue to observe large gender and education gaps. Parents with a four-year college degree are less resistant to vaccinating their children than parents without one, and within both education strata, fathers are less resistant than mothers.

AGE OF CHILDREN

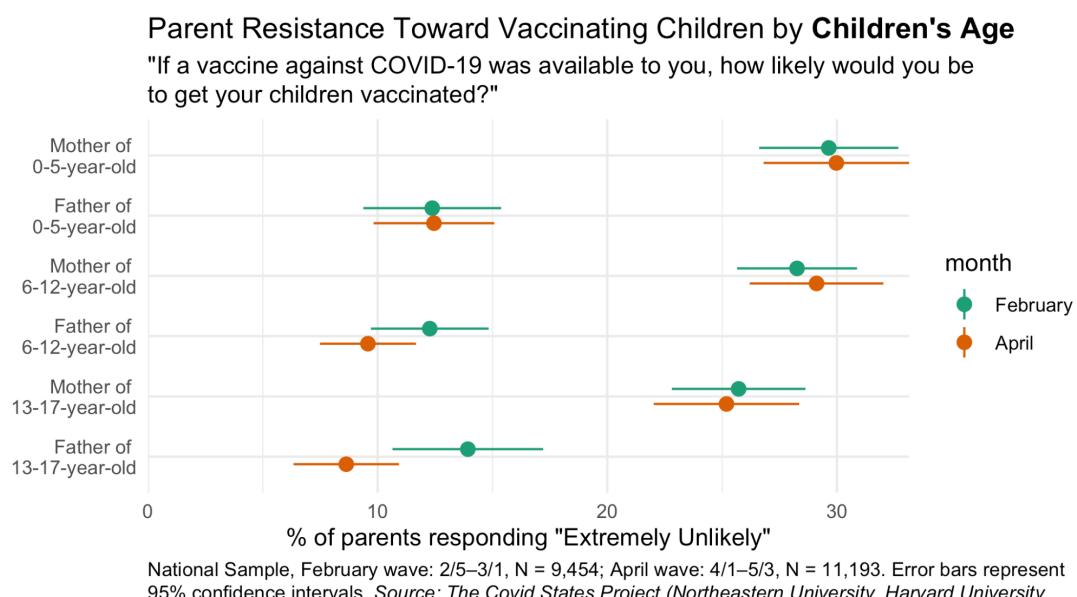


Figure 3.

Parents of teenagers 13-17 are slightly less resistant than parents of younger children.³ Among parents of infants and preschoolers, 30% of mothers and 12% of fathers are resistant toward vaccinating their children, compared to 25% and 9% among mothers and fathers of teenagers respectively. Fathers of teenagers have become substantially less resistant since February (from 14% to 9%), while resistance of fathers of 6–12-year-old children dropped as well (13% to 10%). In contrast, we do not see any decrease in resistance among fathers of children under 6 or mothers, no matter what the age of their kids.

RACE

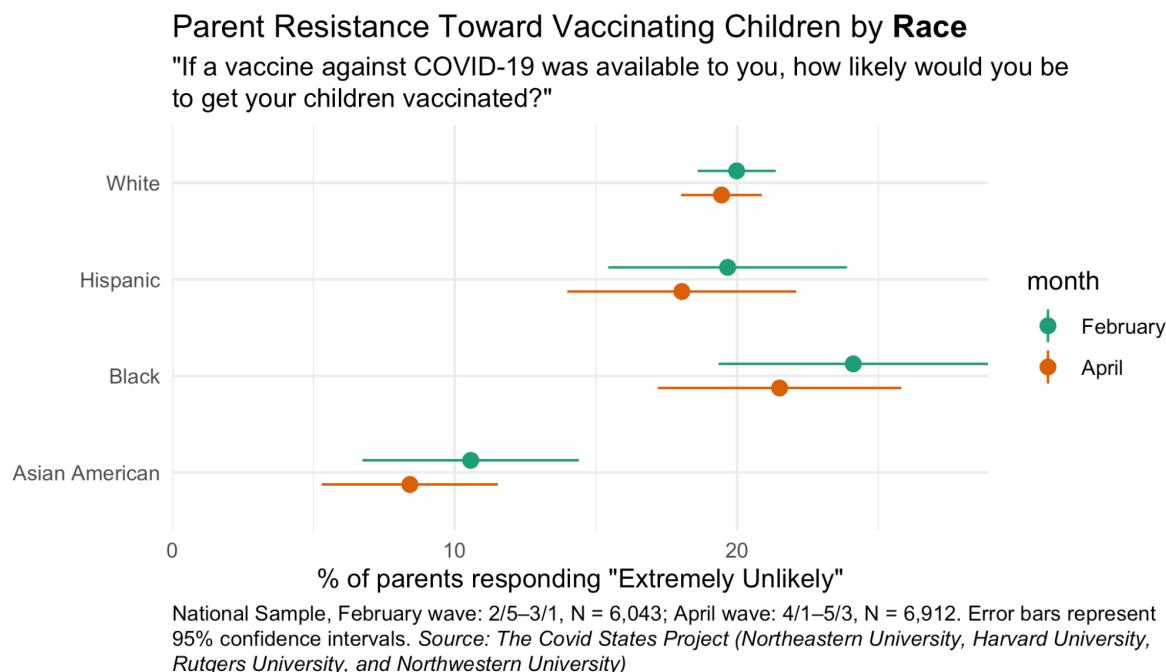


Figure 4.

Among the racial and ethnic groups that we have sufficient data for, Asian American parents continue to be the least resistant, with only 8% saying they would be extremely unlikely to vaccinate their children. Resistance rates among White, Hispanic, and Black parents all hover around 20%, with no statistically significant differences among them. No racial or ethnic group has become more resistant toward vaccinating their children since February.

³ A parent with multiple children may fall into more than one group.

HOUSEHOLD INCOME

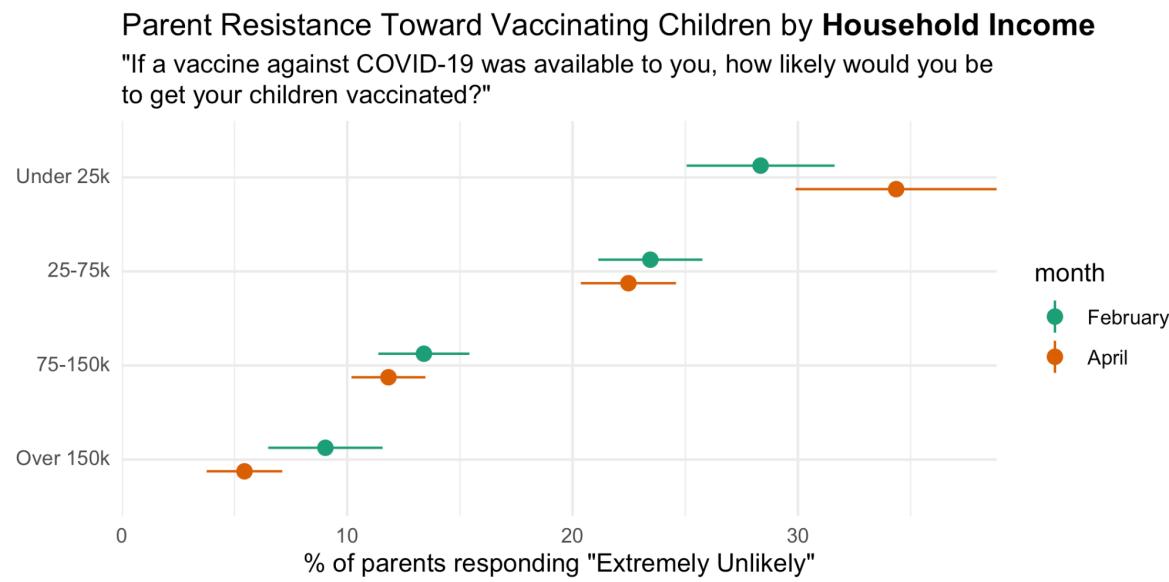


Figure 5.

Higher-earning parents remain far less resistant toward vaccinating their children. While only 5% of parents earning over \$150,000 per year are resistant, over a third (34%) of those earning less than \$25,000 per year say they are extremely unlikely to have their children vaccinated. While the highest earners have become less resistant since February (from 9% to 5%), those in the lowest income bracket have likely become *more* resistant (from 28% to 35%).

PARTY

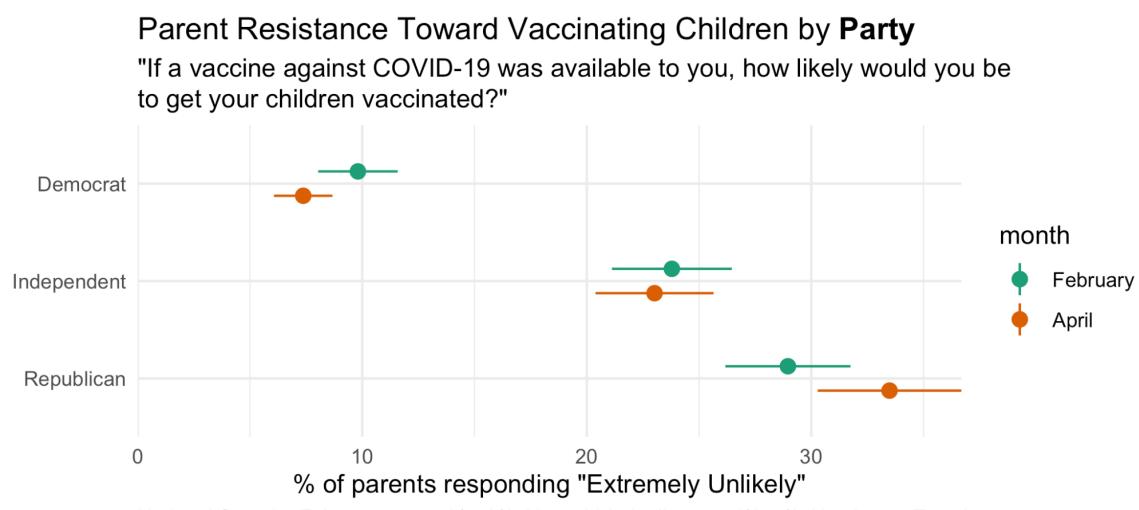


Figure 6.

Since February, the gap between Democratic and Republican parents has widened. Resistance to vaccinating children among Democratic parents dropped from 10% to 7%, while among Republican parents it grew from 29% to 33%. Republican parents are now over four times as likely as Democrats to be resistant to vaccinating their children.

School Vaccination Requirements

Support of requiring children to be vaccinated in order to attend school in person rose slightly from 54% in February to 58% in April. Support rose among nearly all demographic groups. However, Americans remain heavily divided on the issue along gender, socioeconomic, and party lines, as shown in the charts below.

PARENTS AND NONPARENTS

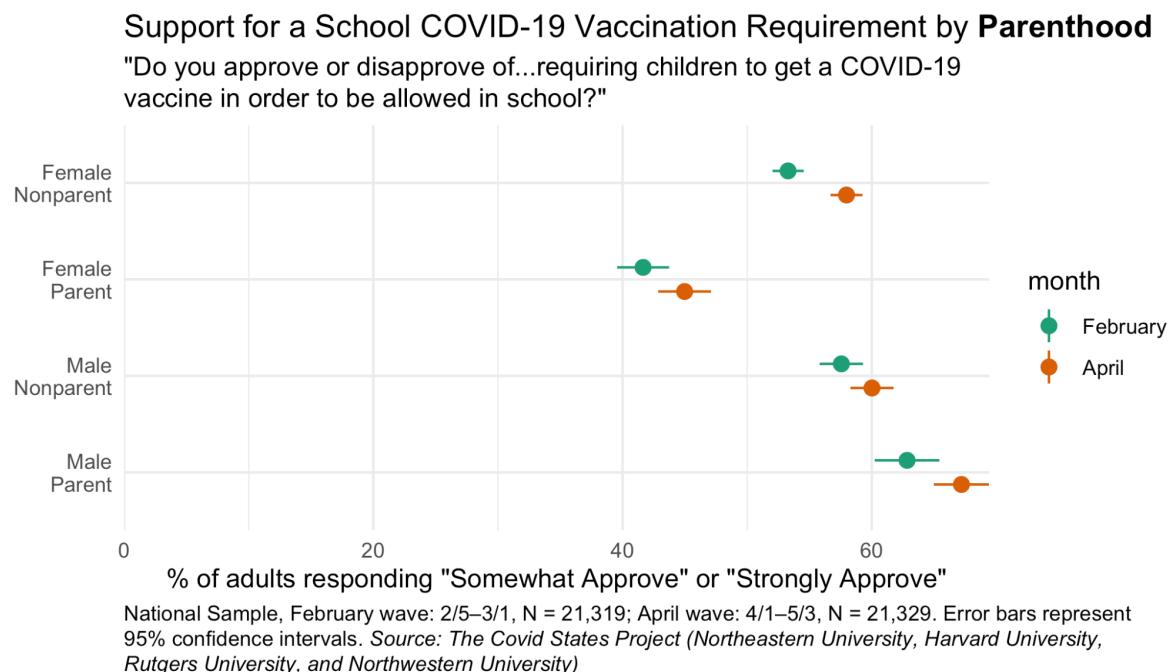


Figure 7.

Nationwide we see a slight increase in support for requiring vaccinations in order for children to return to school: 56% of parents and 59% of nonparents support school vaccine mandates, in both cases a 4 percentage-point increase from February to April. However, parenthood has opposite effects for men and women: mothers are much less likely to support school vaccine mandates than other women, while fathers are more likely to support school vaccine mandates than other men. Among all four groups, however, support has grown since February.

PARTY AND RESIDENCE

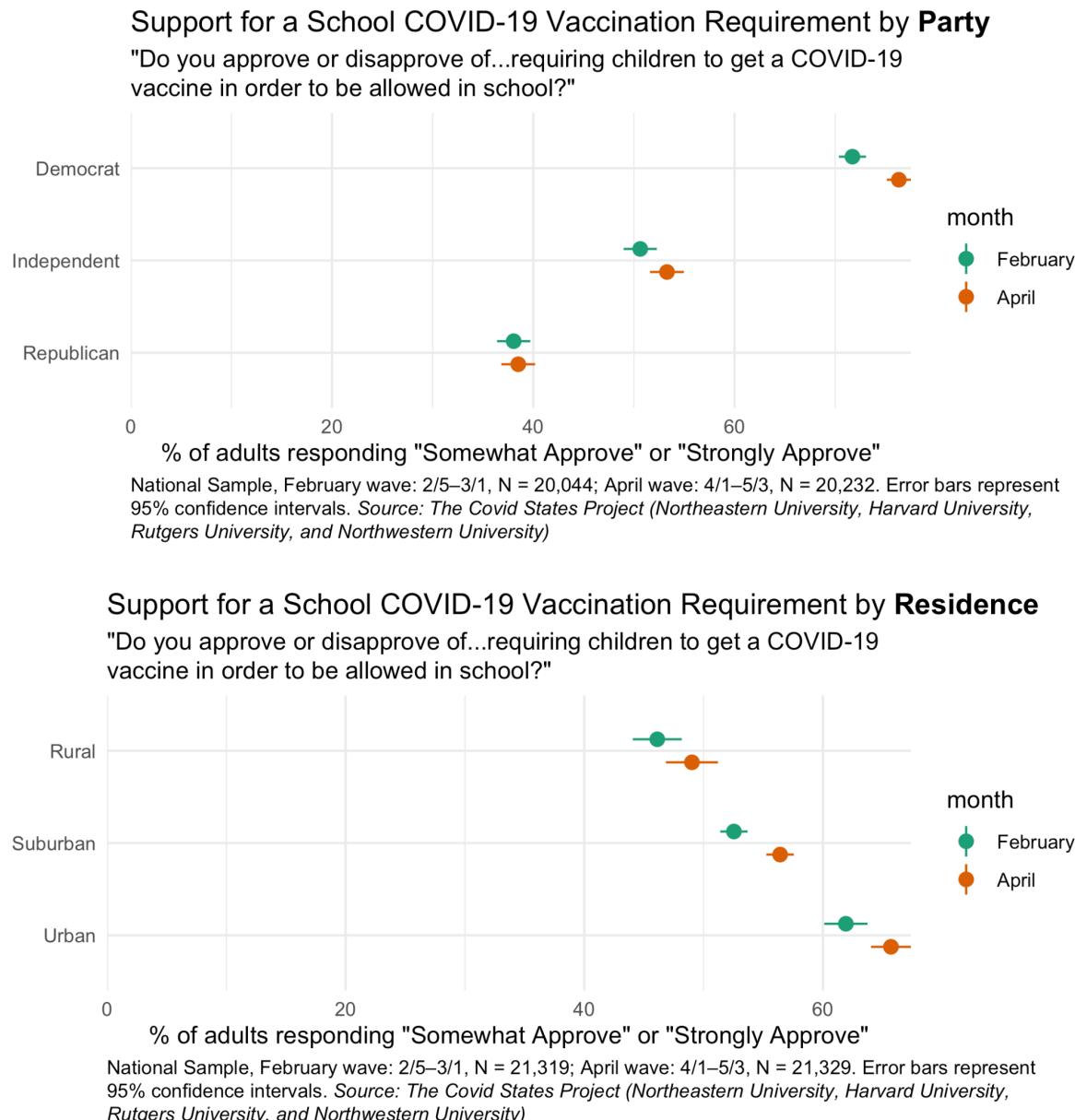


Figure 8.

Support for school vaccine mandates has grown incrementally among Democrats (from 72% to 76%) and Independents (from 51% to 53%), while Republican support continues to hover around 38%. We see a growth in support among rural, suburban, and urban dwellers alike, though support continues to be higher in denser areas: 66% for urban residents, 56% for suburban residents, and 49% for rural residents. This is significant because school policy is generally set on a state and local level. Thus, **we may be more likely to see vaccine mandates implemented in urban areas and Democratic-leaning states and school districts than in more rural and Republican states.**

RACE

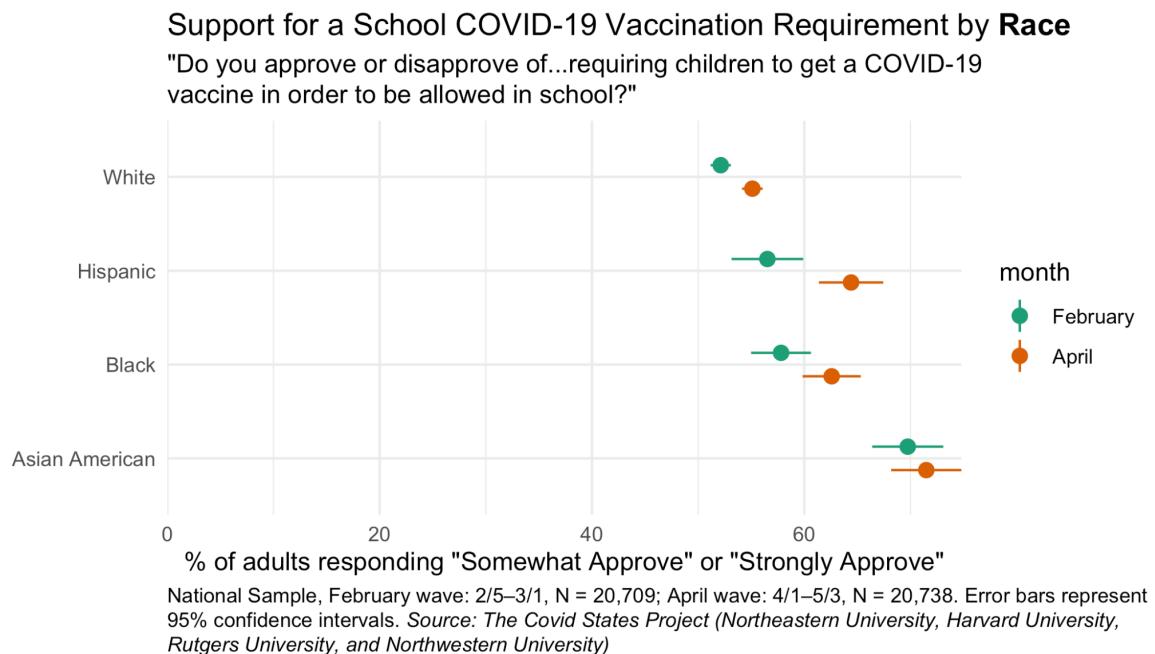


Figure 9.

Support for school vaccination requirements has increased among all four racial groups that we have sufficient data for except among Asian Americans, where support remains the highest (71%). Notably, we see large gains among Hispanics (from 57% to 64%) and Blacks (from 58% to 63%), both of whom are more supportive than Whites (now at 55%).

EDUCATION AND INCOME

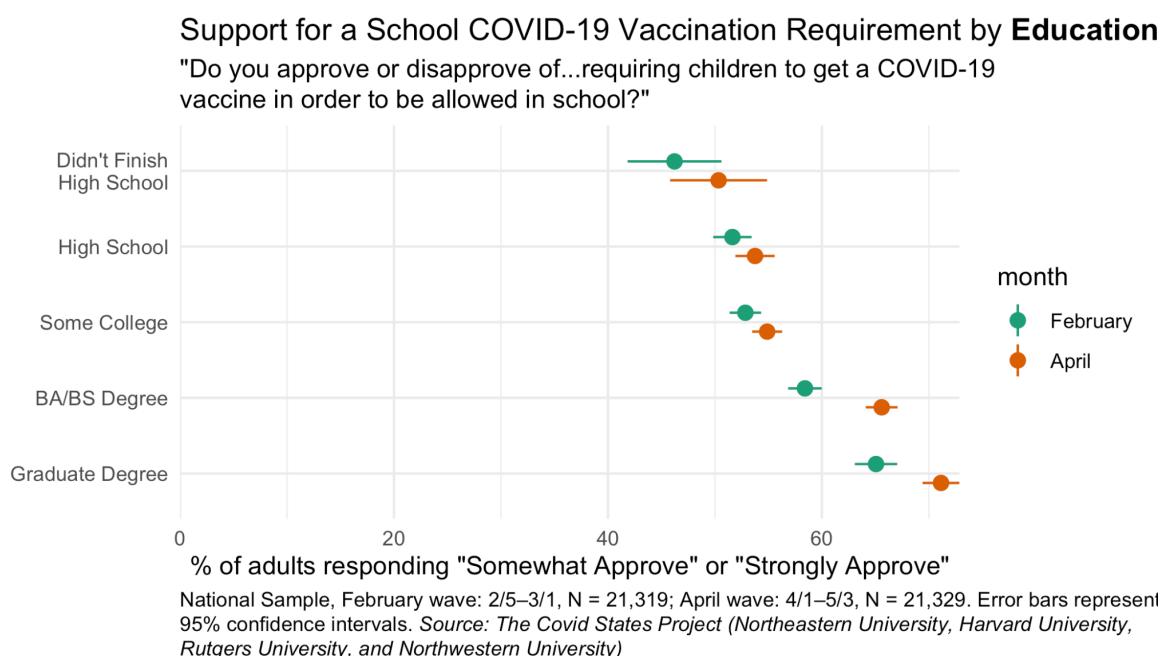


Figure 10.

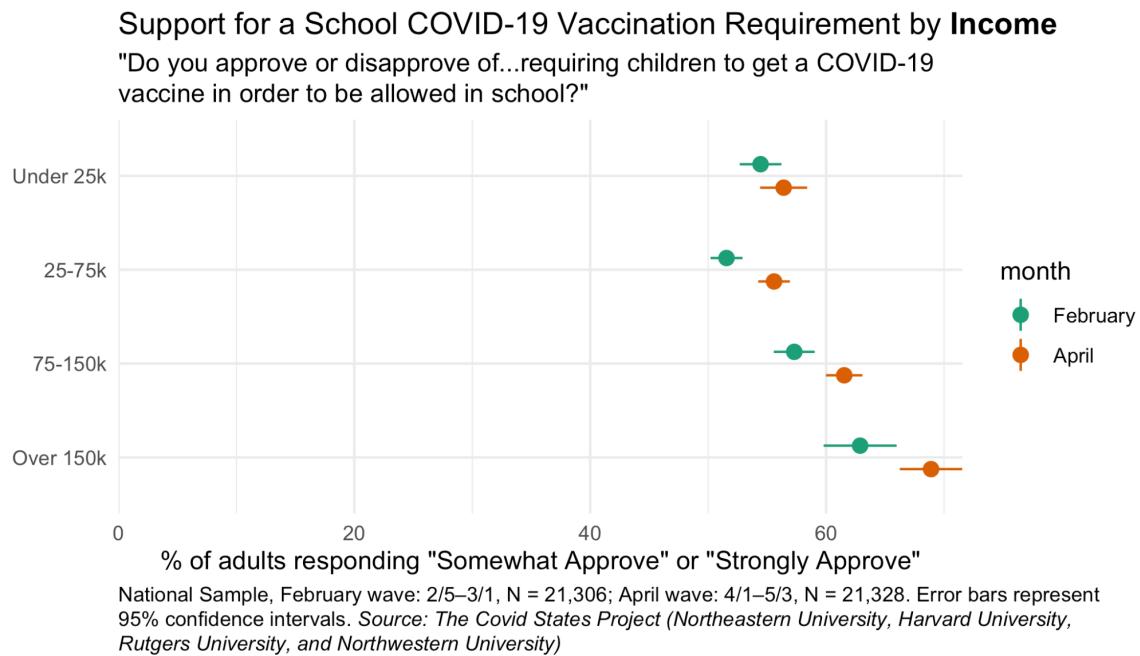


Figure 11.

The more educated and high-earning an individual, the more likely they are to support school vaccination requirements. Only half (50%) of adults without a high-school diploma support school vaccination requirements, compared to nearly three-quarters (71%) of adults with a graduate degree. The gap between high and low earners is more modest but follows a similar trend: 56% in the lowest income bracket compared to 69% in the highest. **We see little change in support from February to April among the lowest education and income groups, but notable increases in support among the highest groups.**

AGE OF CHILDREN

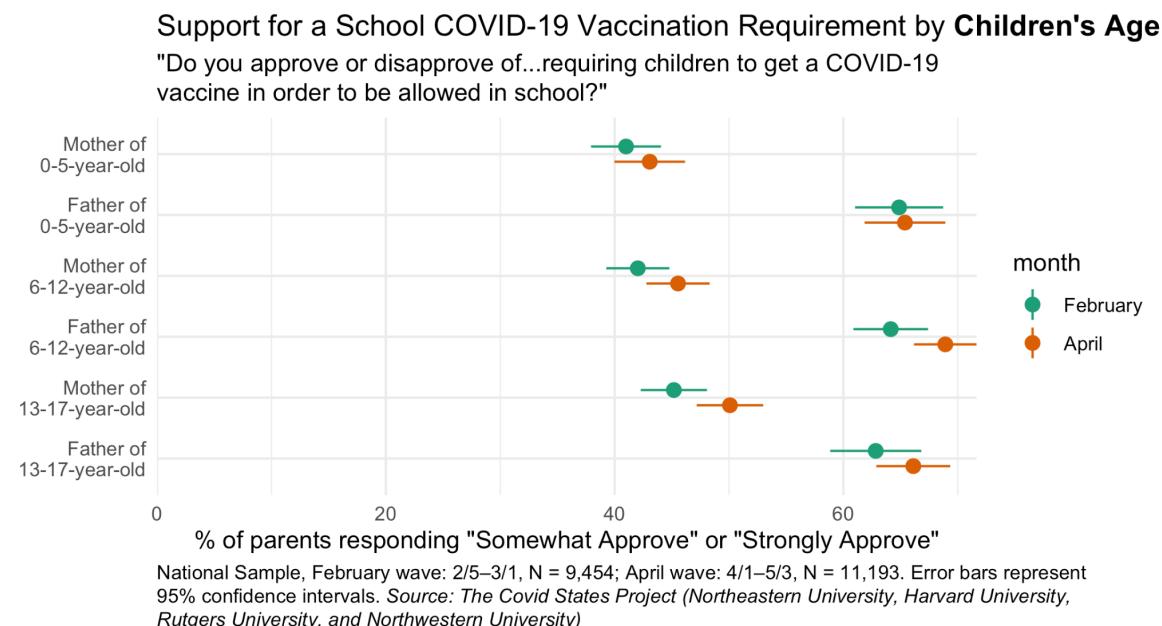


Figure 12.

Among parents, mothers of older children tend to be more willing to support school vaccination requirements than mothers of younger children. Half (50%) of mothers of 13-17-year-old teens support school vaccination requirements, compared to 43% of mothers of children under 6. Mothers of teenagers have increased their support since February (from 45% to 50%). Fathers are more supportive of such requirements than mothers regardless of their children's age.

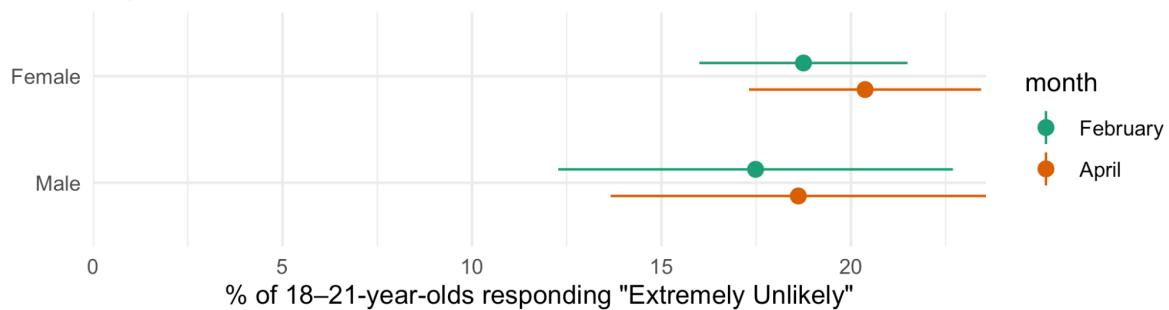
Vaccine Resistance Among Youth

How do adolescents themselves feel about getting vaccinated? Although we cannot survey minors without parental consent, attitudes among 18-21-year-olds provide a clue to how adolescents' attitudes toward vaccination are changing. Below, we show breakdowns in youth attitudes by gender, race and party.⁴

GENDER

Vaccine Resistance in 18-21-Year-Olds by Gender

"If a vaccine against COVID-19 was available to you, how likely would you be to get vaccinated?"



National Sample, February wave: 2/5–3/1, N = 1,155; April wave: 4/1–5/3, N = 1,420. Error bars represent 95% confidence intervals. Source: *The Covid States Project (Northeastern University, Harvard University, Rutgers University, and Northwestern University)*

Figure 13.

Unlike their parents, we do not observe a meaningful gender gap among youth. About one in five 18-21-year-old adolescents is vaccine resistant.⁵ These numbers are lower than resistance rates among mothers of teenagers (25%) but higher than among fathers of teenagers (9%). Resistance has not changed significantly since February among youth of either gender.

⁴ We omit income and education, since the income and education of independent young adults is unlikely to be indicative of their younger peers who are still in school and living with their parents.

⁵ Technically 20.4% for women and 18.6% for men, but the margins of error overlap substantially, so the difference is not meaningful.

RACE

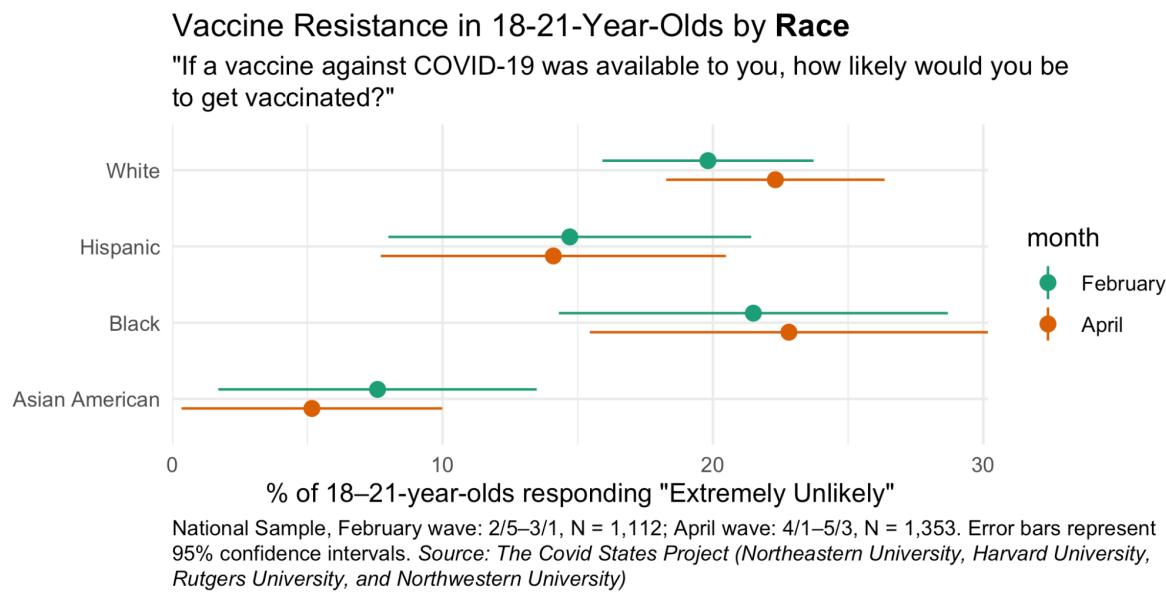


Figure 14.

As in the parent population, we see less resistance among Asian Americans than other racial or ethnic groups.

PARTY

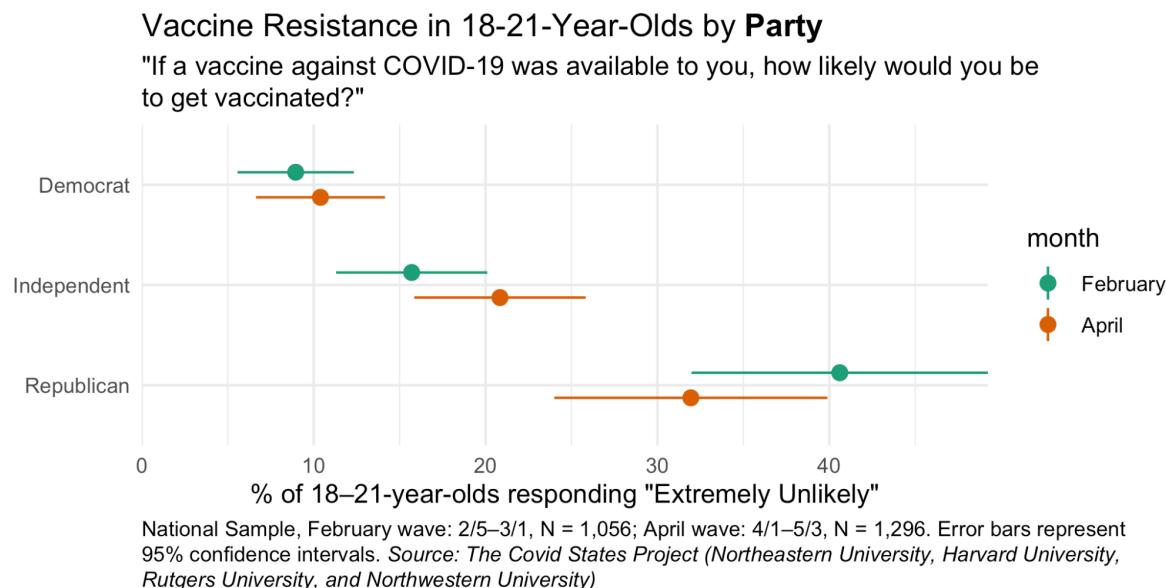


Figure 15.

In contrast to their parents, vaccine resistance has declined among Republican youth, falling from 41% in February to 32% in April. Changes among Democrats and Independents are not statistically significant. Overall, Democratic youth remain far less resistant to getting vaccinated (10%).