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

REPORT #48: ASSESSING THE IMPACT OF THE PAUSE IN J&J VACCINE USE ON COVID VACCINATION INTENT

USA, April 2021

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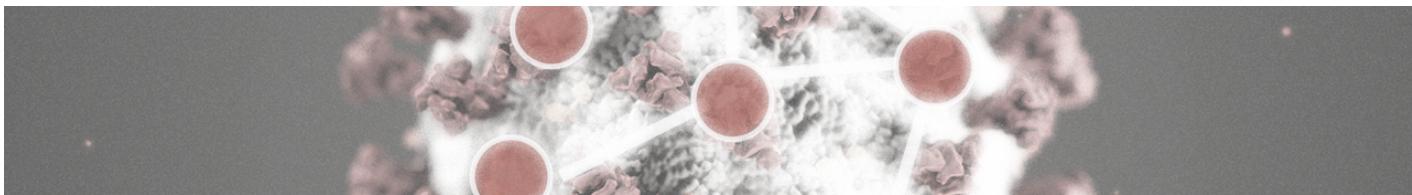
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Report of April 30, 2021, v.1

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

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COVER MEMO

Summary Memo — April 30, 2020

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From April 2020 through April 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:

From April 1 to 26, 2021, we surveyed 18,752 individuals across all 50 states plus the District of Columbia. We recontacted 1,143 non-vaccinated respondents on April 17 to 19 after the Johnson & Johnson vaccine pause. 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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Assessing the impact of the pause in Johnson & Johnson vaccine use on COVID-19 vaccination intent in the U.S.

On April 13, the FDA and CDC recommended a pause in the use of the Johnson and Johnson (J&J) COVID-19 vaccine. This followed reports of a rare type of blood clot emerging in a small number of individuals following the use of the vaccine. This action raised serious concerns and criticisms of these agencies that the pause might lead to an increase in vaccine hesitancy and resistance in the United States.¹

In this report, we evaluate the likely impact of the pause on vaccine resistance. We do this through two types of analyses, both of which took advantage of the fact that we began fielding our survey on April 1st, collecting over 8,000 responses before the April 13th pause, and continued beyond the April 23 suspension of the pause. The first analysis compares responses of individuals who participated in the survey before the pause to those who participated after the pause, to assess whether there was a post-pause change in intentions to vaccinate. For the second analysis, we conducted a smaller “panel” survey following the pause, re-interviewing a subset of respondents who had participated in our survey before April 13th and indicated that they were not yet vaccinated. This allows an evaluation of whether particular individuals changed their view toward vaccination from shortly before the pause to shortly after the pause. Below, we first evaluate the public awareness of the pause, and then turn to analyses of changes in vaccine attitudes in each of these samples.

Awareness of the pause

Awareness of the J&J pause was quite high. Shortly after the pause, we began asking a question regarding the accuracy of the statement, “The FDA and the CDC have recommended a pause in the use of the Johnson and Johnson vaccine.” 74% of respondents (reweighted) indicated that this statement is accurate; compared to only 6% who said it was inaccurate. That is, an overwhelming share of respondents had heard about the pause of the Johnson and Johnson vaccine.

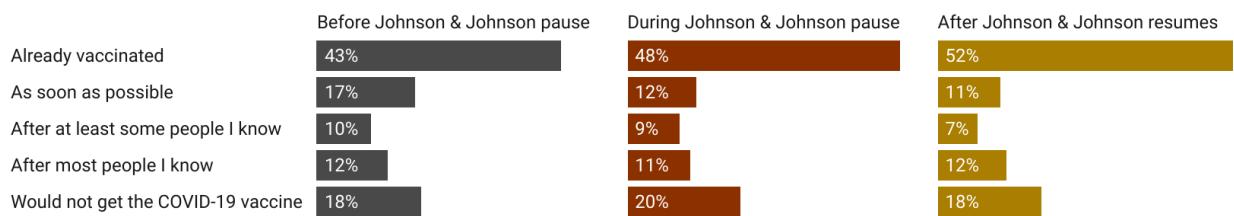
¹ Note that we define a respondent as vaccine hesitant if they say that they will seek a vaccine only after some or most of the people they know are vaccinated, and as resistant if they say they will not seek a vaccine.

Impact of the pause on vaccine intentions

Comparing Across Respondents Before vs. After the Start of the Pause: In order to evaluate the impact of the CDC/FDA pause of the J&J vaccine, we take advantage of the fact that our survey was already in progress when the pause occurred. In figure 1, we compare average vaccine hesitancy/resistance responses of the 8,268 individuals who responded between April 2 and April 12, to the 7,072 individuals who responded between April 14 and 23 (when the pause was suspended), and 1,748 respondents who completed the survey on April 25-26. We omit responses from April 13 and 24 for a clean comparison of before vs. after. The advantage of the comparison immediately before and after (as compared to, say, responses from a month before) is that attitudes regarding vaccines have been rapidly changing through the spring. The comparison of attitudes right before and after therefore allows a more confident attribution that any change is due to the pause.

Attitudes towards COVID-19 vaccines and Johnson & Johnson temporary pause

If you were able to choose when to get a COVID-19 vaccine, would you get it...



National sample, N = 18,752, Time: 04/01/2021-04/26/2021

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

* Created with Datawrapper

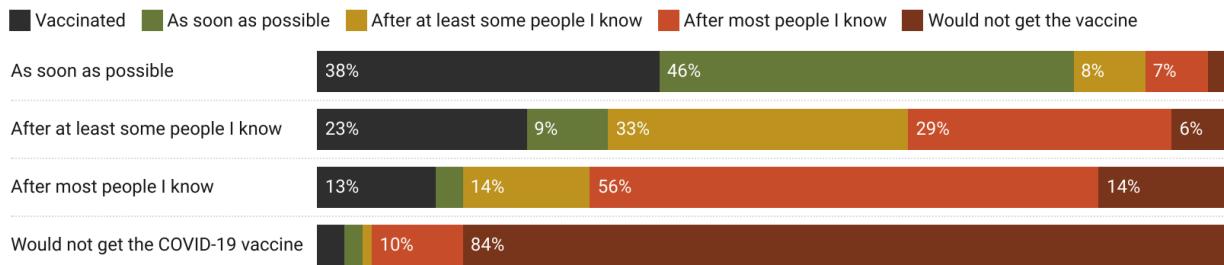
Figure 1.

Figure 1 reveals that there were not significant changes in aggregate opinion over these three periods, except for decreases in the number of individuals who indicate that they wanted to get vaccinated as soon as possible or after at least some people I know, and an increase in the number of individuals who were already vaccinated. Indeed, the sum of vaccinated and the two most vaccine enthusiastic categories is essentially constant through the 3 periods (70%, 69%, 70%).

Comparing the Same Respondents Before vs. After the Pause Began: As an additional evaluation of attitudinal change, we re-interviewed the individuals who had responded to the survey before the pause, and who were not yet vaccinated, about their vaccine attitudes. This type of within-subjects comparison is particularly powerful for understanding how individuals with specific attributes changed their attitudes around vaccination over a period of a couple of weeks.

COVID-19 vaccine attitudes before and after the Johnson & Johnson pause

If you were able to choose when to get a COVID-19 vaccine, would you get it... (excluding vaccinated respondents)
 [Rows: respondent attitudes before the Johnson & Johnson pause; Color: same respondent attitudes after the pause]



National sample, N = 1,143, Time 1: 04/01/2021-04/12/2021; Time 2: 04/17/2021-04/19/2021

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
 * Created with Datawrapper

Figure 2.

Figures 2 and 3 show the shares of respondents who transitioned from one intention to another in this short period. In fact, attitudes were generally stable (pluralities or majorities in every category stayed the same), and, in contrast to the comparison of the cross sectional snapshots, showed an overall (if modest) tendency to shift in the *pro-vaccine* direction.

Attitudes among unvaccinated Americans before and after Johnson & Johnson pause

If you were able to choose when to get a COVID-19 vaccine, would you get it...

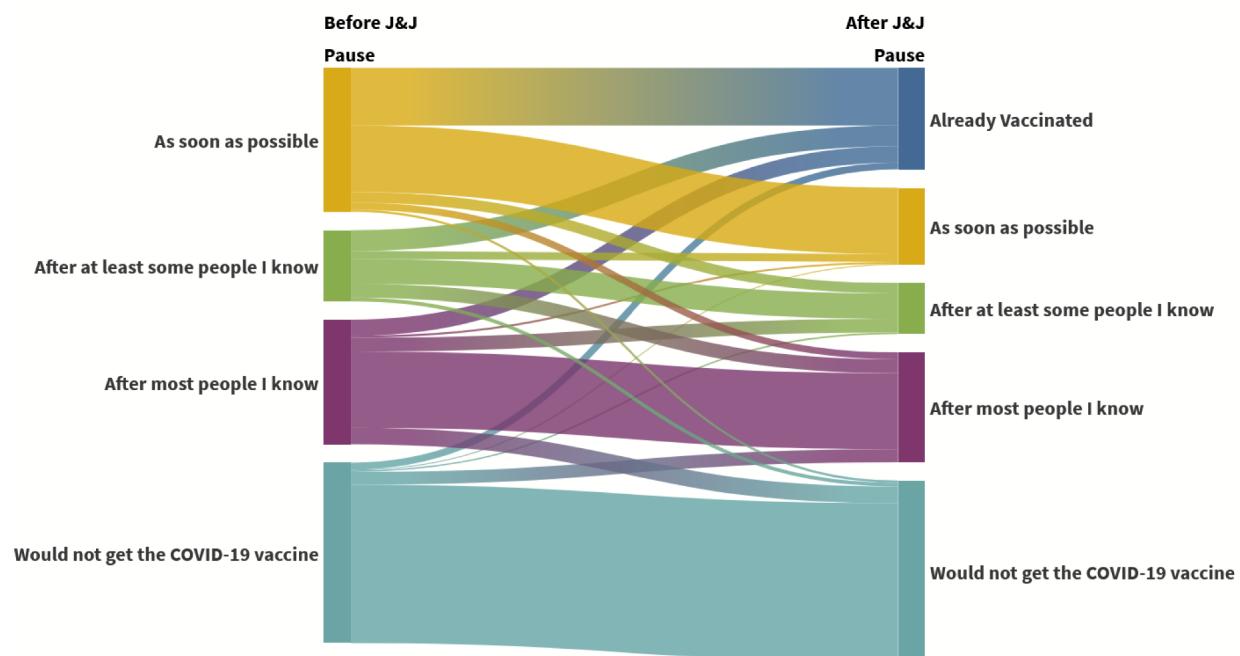


Figure 3.

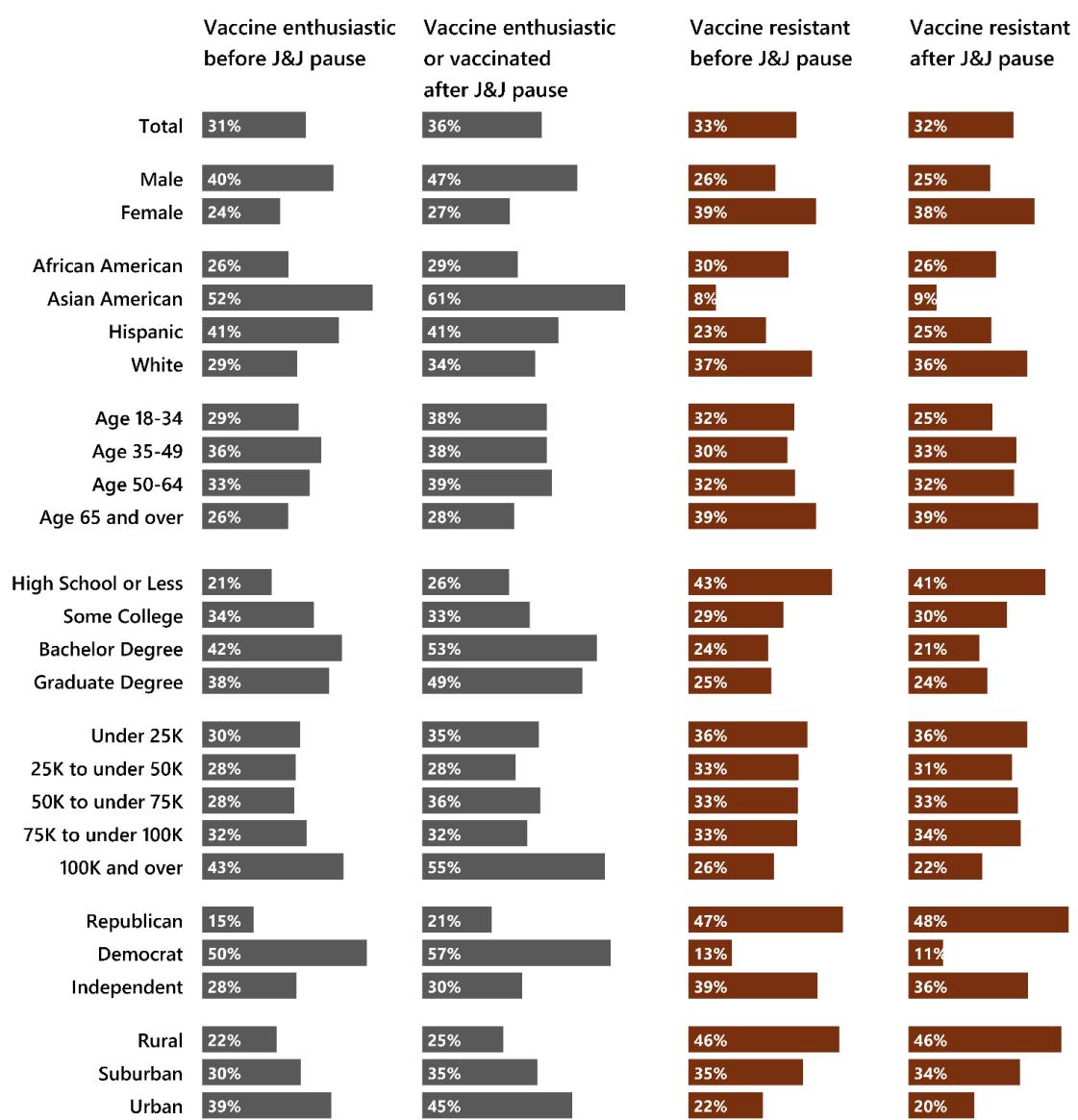
Figure 3 also highlights why vaccination rates are starting to slow down in the United States: individuals who wish to get vaccinated "as soon as possible" or "after at least some people I know" are rapidly getting vaccinated, and these groups are "refilling" with previously vaccine skeptical individuals much more slowly than they are emptying.

Vaccine hesitance and resistance before and after the Johnson & Johnson vaccine pause

If you were able to choose when to get a COVID-19 vaccine, would you get it...

Enthusiastic: "As soon as possible"; Resistant: "Would not get the vaccine"

Percents refer to the same group of respondents surveyed before and after the Johnson & Johnson vaccine pause (all not vaccinated when first polled).



National sample, N = 1,143, Time period: 04/17/2021-04/19/2021

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

Figure 4.

In figure 4, we evaluate the shift of a variety of demographic subgroups with respect to vaccine resistance and enthusiasm. The figure highlights the general shift toward vaccination/vaccine enthusiasm (people who indicate they want to be vaccinated as soon as possible or have been vaccinated) in the period straddling the J&J pause. In the period immediately after the pause the sum of vaccinations and vaccine enthusiasm *increased* across almost every demographic subgroup that we examined within this sample.

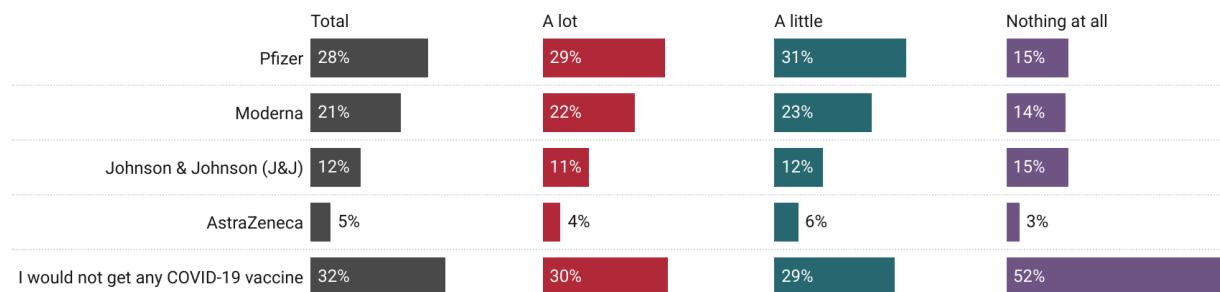
Impact on vaccine preference

Beyond overall attitude toward vaccination, the CDC and FDA-ordered pause could impact attitudes towards specific vaccines differentially. In order to evaluate the relationship of the news on vaccine preferences, we also asked individuals, "If you were able to choose which COVID-19 vaccine to get, would you get..." with possible responses of Pfizer, Moderna, Johnson & Johnson (J&J), AstraZeneca, and "I would not get the COVID-19 vaccine", and compared the responses of people who reported hearing "a lot", "a little", or "nothing at all" about the pause (unfortunately, we did not ask this question before the pause). This allowed us to estimate the association between knowledge of the pause and vaccine preferences, in figure 5.

Preferred vaccine brand and familiarity with Johnson & Johnson's vaccine pause

ROWS: If you were able to choose which COVID-19 vaccine to get, would you get... (Multiple answers allowed)

COLUMNS: Prior to reading this, how much had you heard about the recommended pause in using the Johnson & Johnson vaccine?



National sample, N = 1,143, Time period: 04/17/2021-04/19/2021

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

* Created with Datawrapper

Figure 5.

Notably, among those who reported hearing a lot or a little, there is a very clear preference ordering: Pfizer is preferred by more people than Moderna, which in turn is preferred by more people than J&J (with AstraZeneca, not yet approved in the US, lagging far behind). Among those who report hearing nothing at all, the 3 vaccines are equally preferred; and notably, vaccine resistance is far higher in this last group. We would be cautious attributing a causal relationship here; e.g., the higher level of vaccine resistance in this last group likely reflects higher vaccine resistance levels that predated the pause.

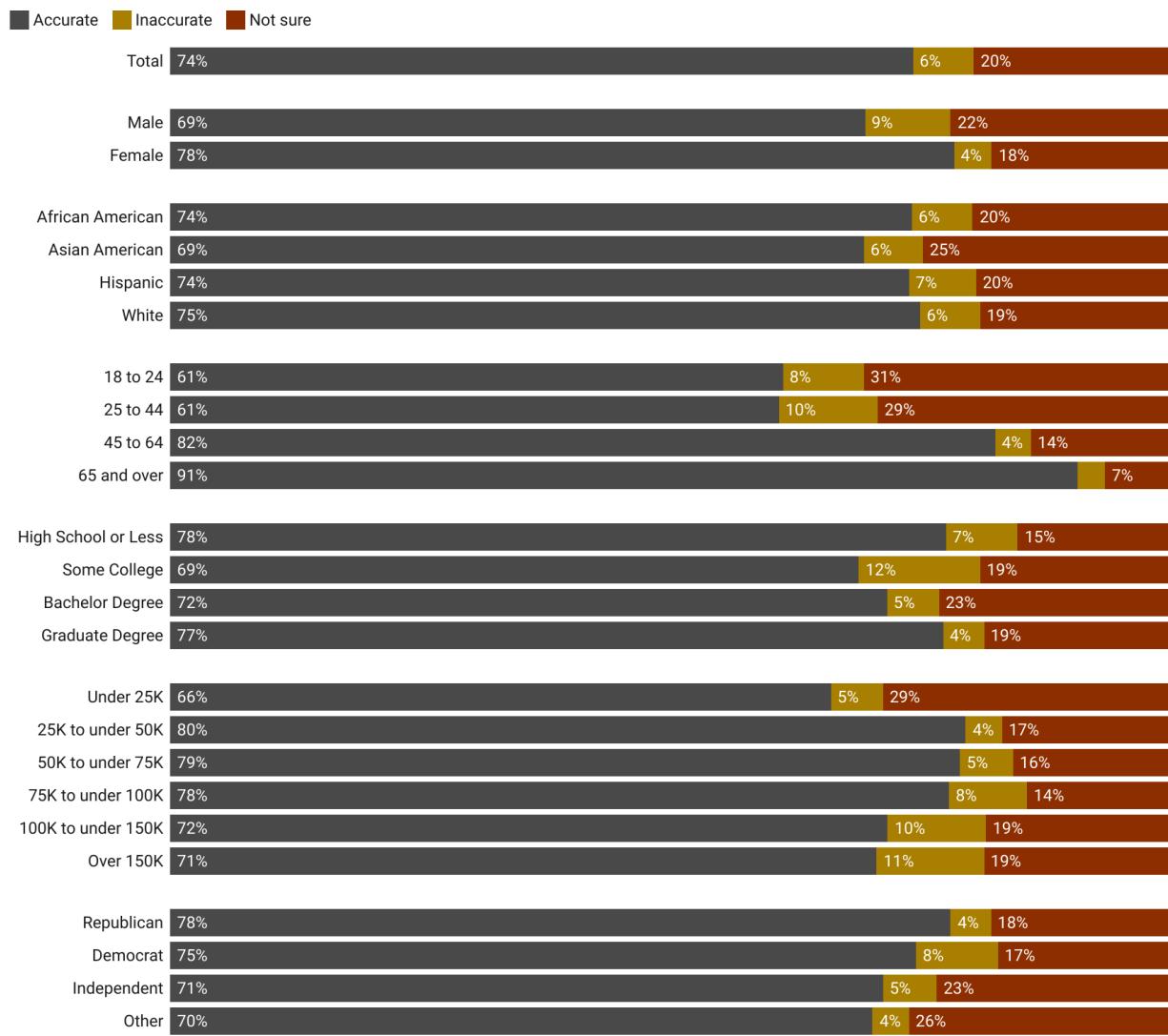
Conclusion

Our survey suggests that awareness of the J&J pause was extremely high. Despite this, vaccine hesitancy/resistance did not increase for responses received after the pause, and our analysis of repeat respondents suggests a small but systematic shift decrease, largely because a fair number of people who were vaccine hesitant in early April were vaccinated by late April. In short, it seems very unlikely that the pause had major negative effects on vaccine attitudes. Our confidence in this finding is increased by the observation that we see these effects using two different kinds of analysis: comparing over-time changes across different subjects and, separately, within the same subjects interviewed before and after the pause. Still, it is highly likely that vaccine rates will continue to decelerate over the next few months as those who intend to get the vaccine as soon as they can are able to do so.

Appendix: J&J vaccine pause awareness by group

Awareness of Johnson & Johnson vaccine pause by demographic characteristics

Below are some statements about the COVID-19 vaccines that are currently being distributed. To the best of your knowledge, are those statements accurate or inaccurate? - The FDA and the CDC have recommended a pause in the [use of the Johnson & Johnson vaccine. [Respondents who completed the survey during the Johnson & Johnson vaccine pause, April 12 - April 23 2021]



National sample, N = 7,072, Time: 04/01/2021-04/26/2021

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
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