

WHITE PAPER

# Shifting Trends in Vaccine Hesitancy

Greater Divergence in Attitudes, Growing Reticence Among Minorities



After a nine-month, headlong race to develop a vaccine for COVID-19, the extraordinary efficacy results for the first two candidates — Pfizer/BioNTech and Moderna — brought hope that life may soon begin to return to normal. However, significant hesitancy around vaccinations — as shown in our [white paper](#) published in early December — posed a risk to the chances for widespread vaccination.

The findings of that survey provided key insights into the level of vaccine hesitancy. Safety, efficacy, and adverse side effects were among the top reasons for hesitancy, along with the politicization of the pandemic, which also played a role. Moreover, hesitancy varied among different demographic, racial, and ethnic groups.

The results merited continued tracking, so we conducted another survey from January 8–11. The survey ran roughly a month after the U.S. Food and Drug Administration (FDA) granted Emergency Use Authorization (EUA) to the first of the vaccines, and the results of the Presidential elections were certified in Congress. It included 2,200 adults and comprised a representative sample of the U.S. population as described by the U.S. Census Bureau. The findings reveal some hopeful signs, as well as some concerning trends.

According to the survey, a quarter of all respondents say they are more likely to get vaccinated now than before the FDA granted EUA to the first two candidates. This is encouraging. In addition, while the overall willingness to get vaccinated at some point has not shifted significantly, a greater portion — 38 percent — of the population is now willing to get vaccinated without waiting until others do.

However, we also found that not only did the percentage of people who definitely **do not** intend to get vaccinated increase, but there are now even larger differences among racial/ethnic subgroups across the nation.

Here we share some key results from our survey, what they tell us about shifting perceptions regarding vaccination, and considerations for how we may be able to address them.



**Troy Brennan, MD**

Executive Vice President and  
Chief Medical Officer, CVS Health

**Sree Chaguturu, MD**

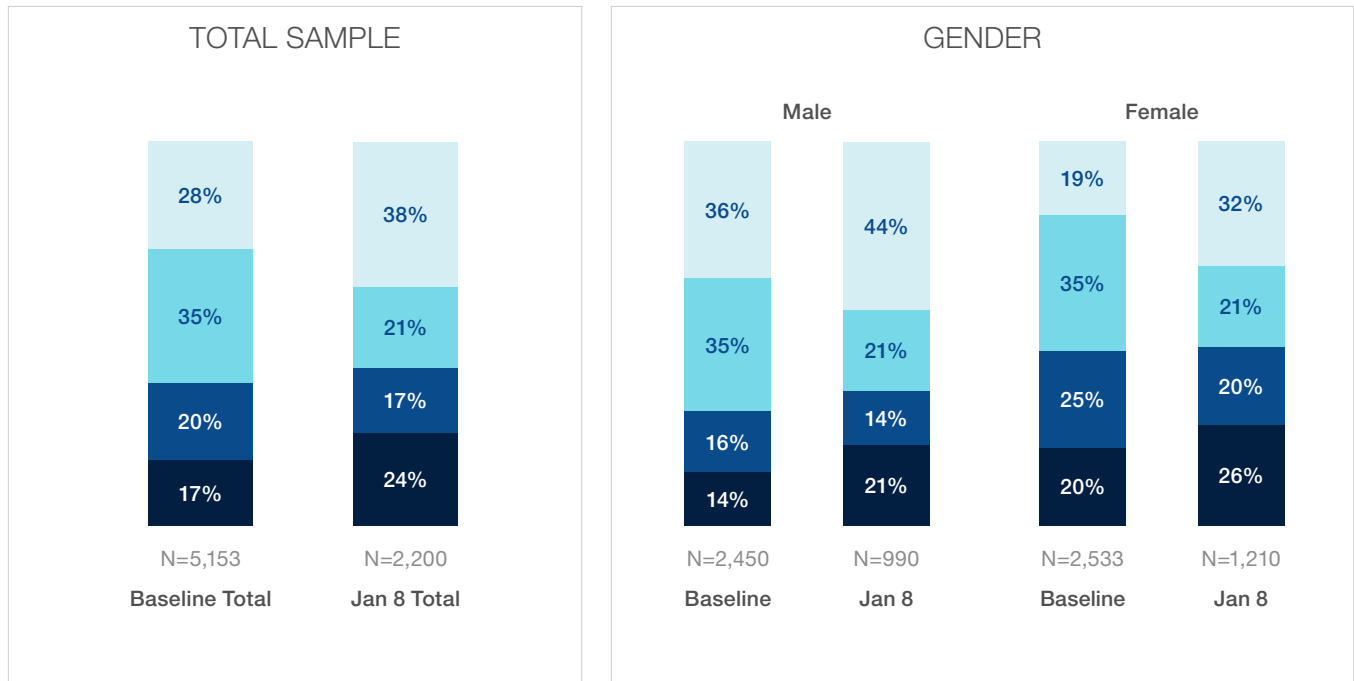
Senior Vice President, CVS Health,  
and Chief Medical Officer, CVS Caremark

**Kyu Rhee, MD**

Senior Vice President, CVS Health,  
and Chief Medical Officer, Aetna

# Overall Findings

The percentage of respondents planning to get vaccinated as soon as possible is up 10 percentage points from our initial survey, to 38 percent. Willingness to get vaccinated as soon as possible rose significantly among respondents of both genders: men (44 percent compared to 36 percent previously) and women (32 percent compared to 19 percent).



**I plan on receiving the new COVID-19 vaccine and I would like to get it soon after it becomes available to me**

**I plan on receiving the new COVID-19 vaccine but I want to wait until after a decent number of people have already gotten it**

**I am uncertain whether or not I would receive the new COVID-19 vaccine**

**I do not plan to receive the vaccine for COVID-19**

This likely indicates that seeing people in prioritized groups including health care workers and nursing home residents get vaccinated, without any significant, large-scale adverse events or side effects, is helping address vaccine hesitancy among many. It may be that those respondents who initially said they would get vaccinated, but would wait until others had received it, are feeling more confident now and want to be vaccinated themselves.

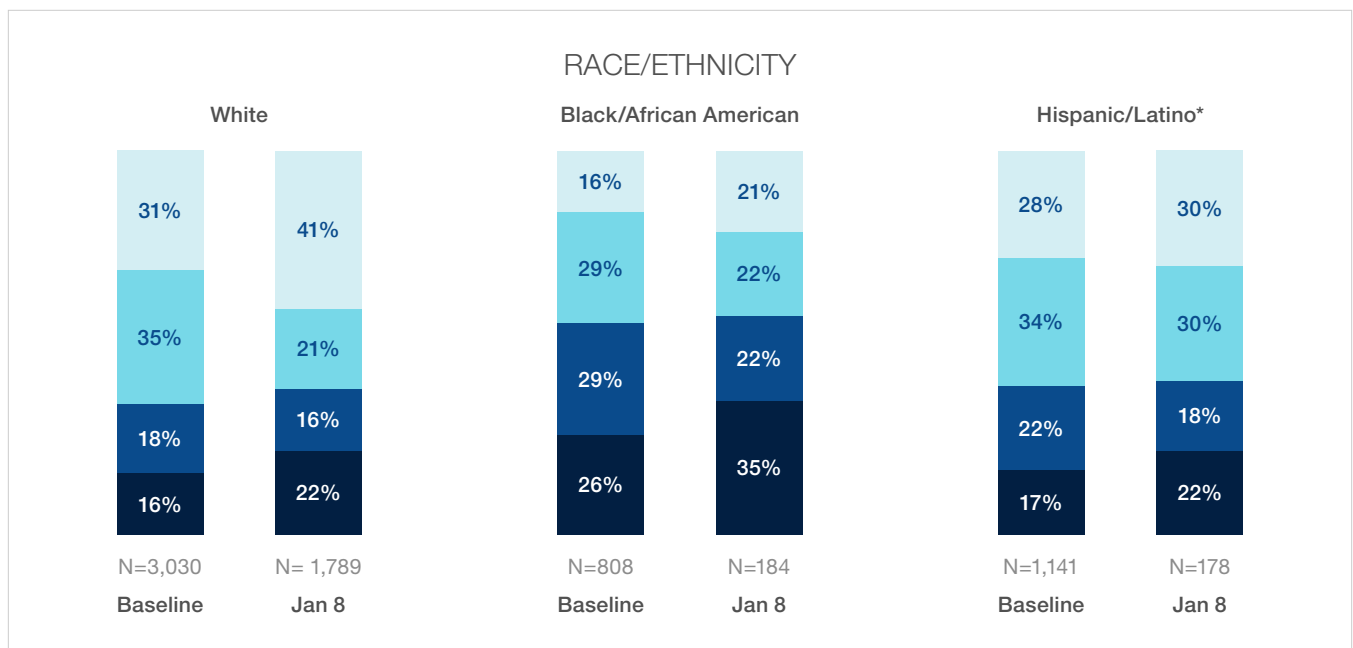
However, nearly a quarter of all respondents — up from 17 percent — still indicate they do not plan to get vaccinated.

**10** percentage point increase  
in those interested in getting vaccinated as soon as possible

**7** percentage point increase  
in those who do not plan to receive the vaccine

The COVID-19 pandemic has disproportionately impacted minority communities including Black/African American and Hispanic/Latino. There are many reasons for this inequity.

Making sure that the vaccines are widely distributed among minority populations is important to ensure equity and achieve herd immunity. However, our research revealed why that goal may be difficult to achieve: the percentage of Black and Hispanic respondents not planning on receiving a vaccine actually increased from November to January. Among Blacks, 35 percent of respondents say they are not planning to get a vaccine — up 9 percentage points from the previous survey, and the highest of any racial group. More than two in 10, or 21 percent, of Blacks say they are less likely to get a vaccine now than they were before the FDA granted EUA — twice the national average. Similarly, the percentage of Hispanic respondents not intending to obtain a vaccine rose five points to 22 percent. These results once again emphasize the need for targeted, community based awareness and education campaigns to help engender confidence among minority communities.



\*Includes English and Spanish speaking respondents

- I plan on receiving the new COVID-19 vaccine and I would like to get it soon after it becomes available to me
- I plan on receiving the new COVID-19 vaccine but I want to wait until after a decent number of people have already gotten it
- I am uncertain whether or not I would receive the new COVID-19 vaccine
- I do not plan to receive the vaccine for COVID-19

**9** percentage point increase  
in Black respondents who do not plan to get vaccinated

**5** percentage point increase  
in Hispanic respondents who do not plan to get vaccinated

# The Driving Forces Behind Attitudes Towards Vaccination

In this updated survey, we included questions to help shed light on the reasons why some people are more, or less likely, to get vaccinated. With better data, we hope to be able to focus education and awareness efforts on the most relevant topics and target those initiatives to the right population groups.

Concerns about the safety of the vaccines and potential side effects are dominant among those who say they are less likely to get vaccinated today than they were before, with 44 percent of respondents citing that as a reason. While there are historic underpinnings to a distrust of the health care system among Blacks, such safety concerns are, in fact, the highest among Hispanic respondents. The largest proportion of those concerned about side effects are Hispanic respondents (51 percent).

Nearly a third of all respondents — 30 percent — also state that they don't "like the idea of people being used as an experimental group," and a fifth, do not believe that vaccines work against COVID-19. At 33 percent, White respondents are most concerned about vaccines being experimental, while nearly a quarter — 24 percent — of Black respondents say they do not believe the vaccines protect against COVID-19.

We did find some encouraging news. Among those more likely to get vaccinated now than they were before, more than half — 54 percent — say they believed a vaccine was important "for life to return to normal." This belief is strongest among Black (59 percent) and White (55 percent) respondents. Of Hispanic respondents, 42 percent believe in the importance of the vaccine to help normalize things, and 36 percent think the disease is worse than any side effects.

We also found that health care workers getting the vaccine safely convinced 31 percent of all respondents of the vaccines' safety. Frontline and emergency workers who were vaccinated are a positive indicator for 28 percent of respondents.

The responses clearly show greater efforts are needed to help people better understand the process of vaccine development, how vaccines work, and of the safety measures in place to ensure they are safe and effective before being approved.

The data also indicate that continued success in the roll-out of the vaccination campaign, first among health care workers and then to other groups, will convince more people of the safety profile of the vaccines.

## Among those less likely to get vaccinated now:

**44%** are concerned the vaccine could have harmful side effects

**30%** don't like the idea of people being used as an experimental group

## Among those more likely to get vaccinated now:

**54%** believe a vaccine is important for life to return to normal

**36%** believe COVID-19 is worse than possible side effects



## Understanding the Vaccination Process, Cost

Our findings also demonstrate a lack of understanding regarding the vaccination process and the cost of a vaccine. Among adults 18–34, only 39 percent know that the vaccine is no cost to consumers, and less than half — 49 percent — were aware of the two-dose requirement or that vaccination requires an appointment.

*Awareness about the vaccination process and cost was much higher among older adults who are particularly vulnerable to the effects of the virus.*

Nearly 70 percent of respondents over age 65 know that getting vaccinated required an appointment, and 89 percent know that currently available vaccines need two separate shots. Of this group, 73 percent also are aware that the COVID-19 vaccine is available at no cost to consumers.

Helping consumers better understand how vaccinations are prioritized by the states, what they need to do to be vaccinated when it is their turn, and that the federal government is covering the cost of the vaccine for consumers would likely help convince more people to become vaccinated.

## Vaccine Concerns Among Minority Populations

As with the general population, concerns about side effects, the vaccines being experimental or not effective, and safe handling drove vaccine hesitancy among Black respondents. However, self-reported awareness about vaccine information, including administration and cost, was lower in this population than in the general population.

These findings are indicative of the disparities — including lack of access among disadvantaged populations — that exist in our health care system, as well as a mistrust of health care providers based on the historical experiences of the Black community. Only 42 percent of Black respondents reported being aware that they needed to make an appointment to get vaccinated compared to 55 percent of overall respondents, and just over half (51 percent) knew that it required two shots.

Awareness regarding administration was also lower among Hispanic respondents than the overall population — but higher than Black respondents — with 48 percent saying they understood it requires an appointment, and 61 percent aware that it required two shots. However, they were least likely — 42 percent compared to 53 percent overall — to be aware that the vaccine is available at no cost to them.



Tailored, targeted outreach campaigns that incorporate trusted voices to answer important questions in both Black and Hispanic communities could help turn the tide of growing vaccine hesitancy in these populations.

## Shifting Trends in Perceptions About Vaccination



- ✓ While a greater percentage of **people in all parts of the country** say they want to get vaccinated as soon as possible, the percentage who say they definitely will not get vaccinated also rose, indicating growing divergence in attitudes.
- ✓ The increase in the number of people who plan to get a vaccine as soon as possible is highest in the **Northeast** — up 22 percent to 46 percent — and smallest in the **South** at 33 percent, even though, in an encouraging sign, it increased 8 percentage points.
- ✓ The **Midwest** has the highest percentage of people — 30 percent — who definitely do not want to receive a vaccine.
- ✓ Higher percentages of **urban, suburban, and rural** respondents say they want to get vaccinated as soon as one becomes available for them, while the percent remains lowest among rural respondents.
- ✓ There is a significant shift among respondents who identify as **Democrats** toward getting vaccinated — 49 percent compared to 33 percent in the earlier survey.
- ✓ **Republicans** who say they will get vaccinated fell 3 percentage points to just 30 percent, while those who say they will not get vaccinated jumped 10 percentage points to 31 percent.
- ✓ Among **Hispanic** respondents, 34 percent are more likely to get vaccinated now than they were in November.



**61%**

**of all consumers who wanted to get vaccinated as soon as possible say they trust CVS Health to deliver the vaccine**

## The Role of Trusted Sources

Influencers and trusted sources will have a critical role to play in helping communities overcome hesitancy. Among survey respondents, clinicians remained the most trusted source.

However, among retailers, CVS Health led the way as the most trusted source in delivering vaccines with 61 percent of all consumers who wanted to get vaccinated as soon as possible saying they trusted the brand in vaccine administration. Our [2020 Path to Better Health Survey](#) demonstrated that 82 percent of people are very or somewhat likely to follow health recommendations from a pharmacist.

To that end, we are not only utilizing our own channels, but also through other broader coalitions, to mobilize awareness and education efforts. We are incorporating lessons learned from our community health programs, such as [Project Health](#), which offers no cost biometric screenings to help identify chronic conditions in communities nationwide, and our experience with the COVID-19 pandemic to date. We are also sharing factual information about the vaccine in our stores and business units to all the populations we serve. In addition, we plan to use public service announcements, mail, email and text outreach, and social and digital channels to engage consumers.

Given the documented racial disparities, we are also focused on local education efforts driven and delivered by trusted community leaders, advocates, faith-based organizations, nonprofits, and local, community based media.

For example, we are providing education kits to community partners including not-for-profits and faith-based organizations. Additionally, we plan to use Aetna, and other provider relationships, to conduct outreach to and support our provider network because our research shows that primary care physicians are a key influencer in the decision to get the vaccine for certain populations.

**64%**

**of all respondents say they trust their primary care provider to administer the vaccine**







From December through February 1, CVS Health has administered nearly 2.4 million doses — that's like giving one COVID-19 vaccine every 1.5 seconds.

## CVS Health Vaccine Initiatives

Since the start of the pandemic, we have been focused on the critical health care needs stemming from this crisis, including widespread access to testing and vaccinations, and addressing inequities in the communities most impacted by the virus.

We are one of the pharmacies participating in the Pharmacy Partnership for Long-Term Care Program. As part of the program, we are providing end-to-end management of the COVID-19 vaccination process, including cold chain management, on-site vaccinations, and fulfillment of reporting requirements to facilitate safe vaccination of this critical population, while reducing the burden on facilities and state and local health departments.

First doses at the more than 40,000 long-term care facilities that selected CVS Health to provide COVID-19 vaccinations will be complete by mid-February.

Starting Thursday, February 11, CVS Health will begin to offer COVID-19 vaccinations to eligible populations at a limited number of CVS Pharmacy locations across 11 states. Supply for the initial roll-out, which is sourced directly from the federal government through the pharmacy partnership program, will be approximately 250,000 total doses. As more supply becomes available the company will expand to additional states while increasing the number of stores offering vaccinations. We are also working directly with states to provide in-store vaccinations to eligible populations using state allocations, which is separate from the federal pharmacy partnership program but can run concurrently.

There are nearly 10,000 CVS Pharmacy locations nationwide, with almost half located in communities ranked high or very high in the Centers for Disease Control and Prevention Social Vulnerability Index.

More than 90,000 health care professionals including pharmacists, licensed pharmacy technicians, and nurses will participate in the vaccination effort, giving CVS Pharmacy the capacity to administer 20–25 million shots per month.



At CVS Health, we will continue our community engagement and education efforts while also leveraging our nationwide capabilities to help broaden the vaccination effort and ensure equitable distribution of the vaccines.

## Survey Methodology

This survey was initiated on January 8, two days after Congress certified the results of the November 3, 2020 Presidential election. The survey ran nationwide from January 8–11 among a national sample of 2,200 adults. The interviews were conducted online, and the data were weighted to approximate a target sample of adults based on age, educational attainment, gender, race, and region. Results from the full survey have a margin of error of plus or minus 2 percentage points.

We constructed our total sample to be representative of the U.S. population as described by the U.S. Census Bureau. Participants represent the general population and were not screened as customers of CVS Health. We ascribed weights based on gender, age, race/ethnicity, and region of residence. Participants had the option of choosing more than one race/ethnicity.

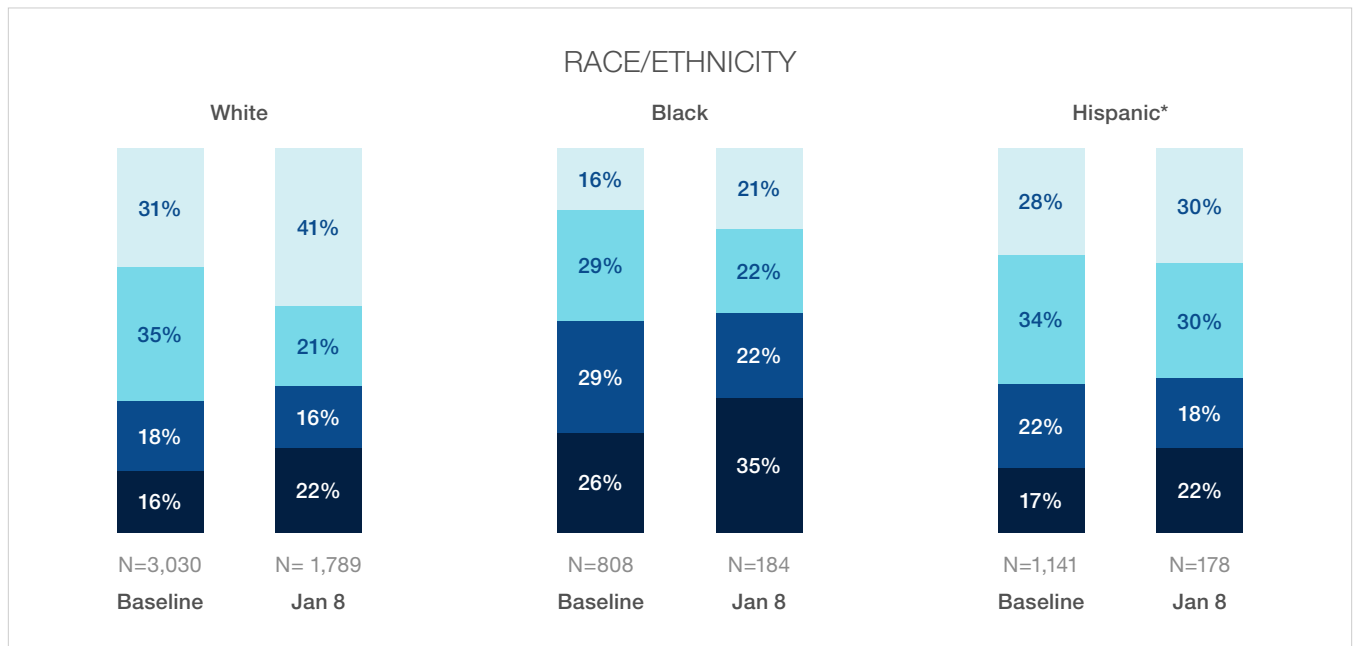
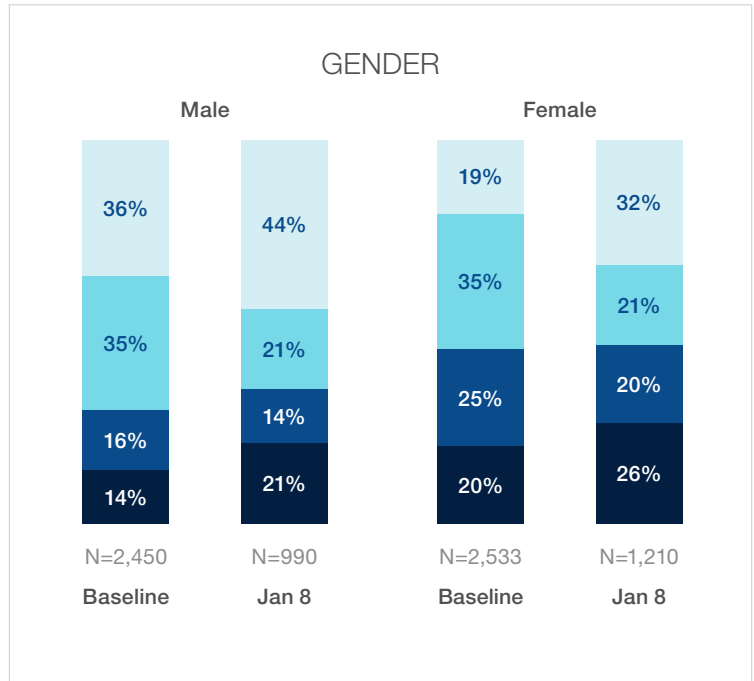
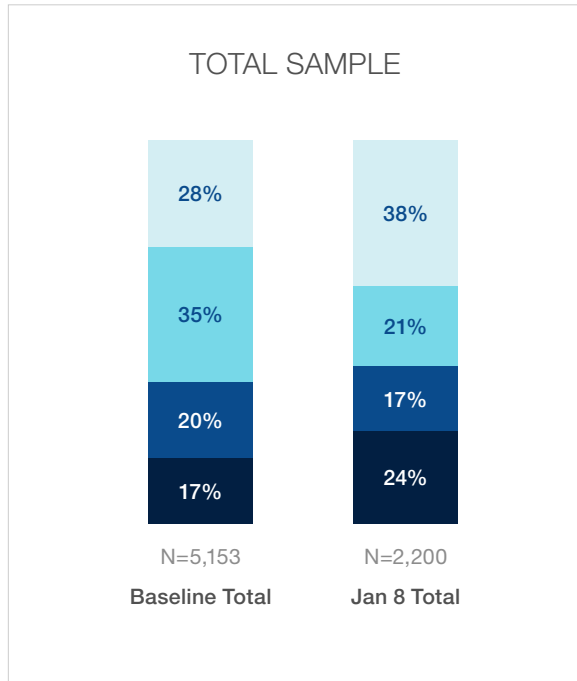
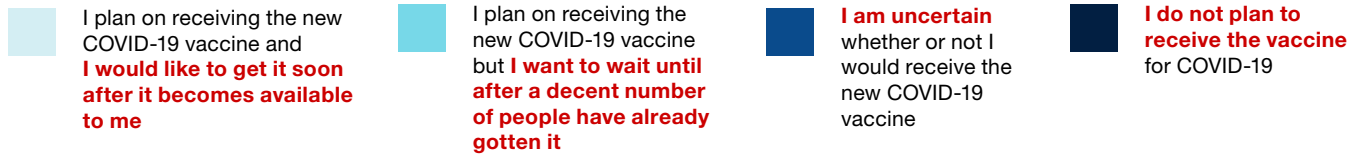
### In addition to **demographic factors**, we asked the following set of questions:

- Assuming that a vaccine is developed to protect against COVID-19, when, if at all, do you think you would want to receive the vaccine?
  - Right away
  - Wait until others get it
  - Uncertain about vaccination
  - Do not plan to get vaccinated
- Compared to before the COVID-19 vaccine was approved by the FDA in December 2020, would you say you are more or less likely to get the vaccine, or have your feelings not changed?
- Which, if any, of the following BEST describes why you are less likely to get the vaccine than you were before? Please choose up to 3. Shown among those who said they are less likely to get the vaccine since FDA approval.
- Which, if any, of the following BEST describes why you are more likely to get the vaccine than you were before? Please choose up to 3. Shown among those who said they are more likely to get the vaccine since FDA approval.
- Which of the following companies, if any, would you trust to deliver effective, safe vaccinations against COVID-19? Please select all that apply.
- Which of the following companies, if any, would you trust to deliver effective, safe vaccinations against COVID-19? Please select all that apply.
- Which, if any, of the following statements do you believe to be true? Please select all that apply.

The percentages are significance tested at the 95 percent and 90 percent levels of confidence using a Z-test. Due to a variety of reasons, including a respondent's choice not to answer and the option to choose more than one answer, data totals may vary and percentages may not add up to 100.

**Understanding vaccine hesitancy is critical to effective outreach, and ensuring widespread adoption across communities.**

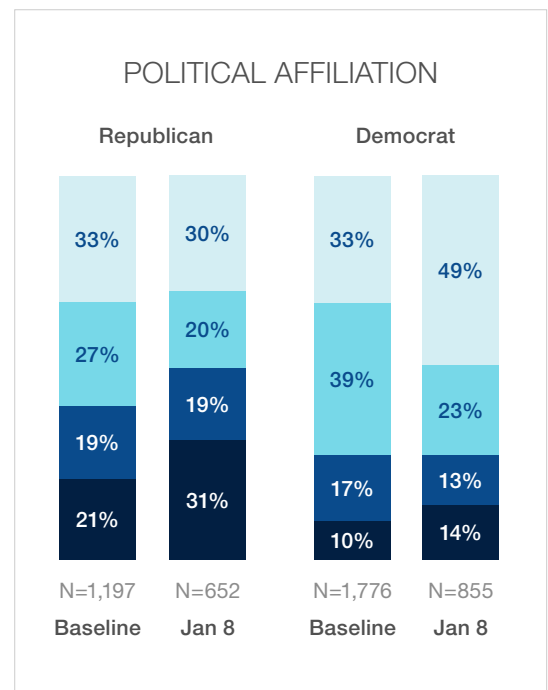
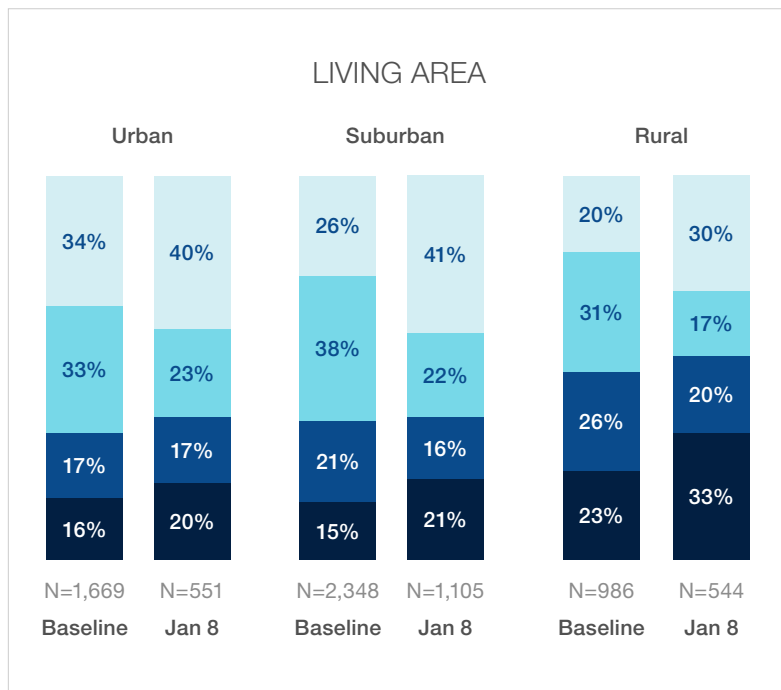
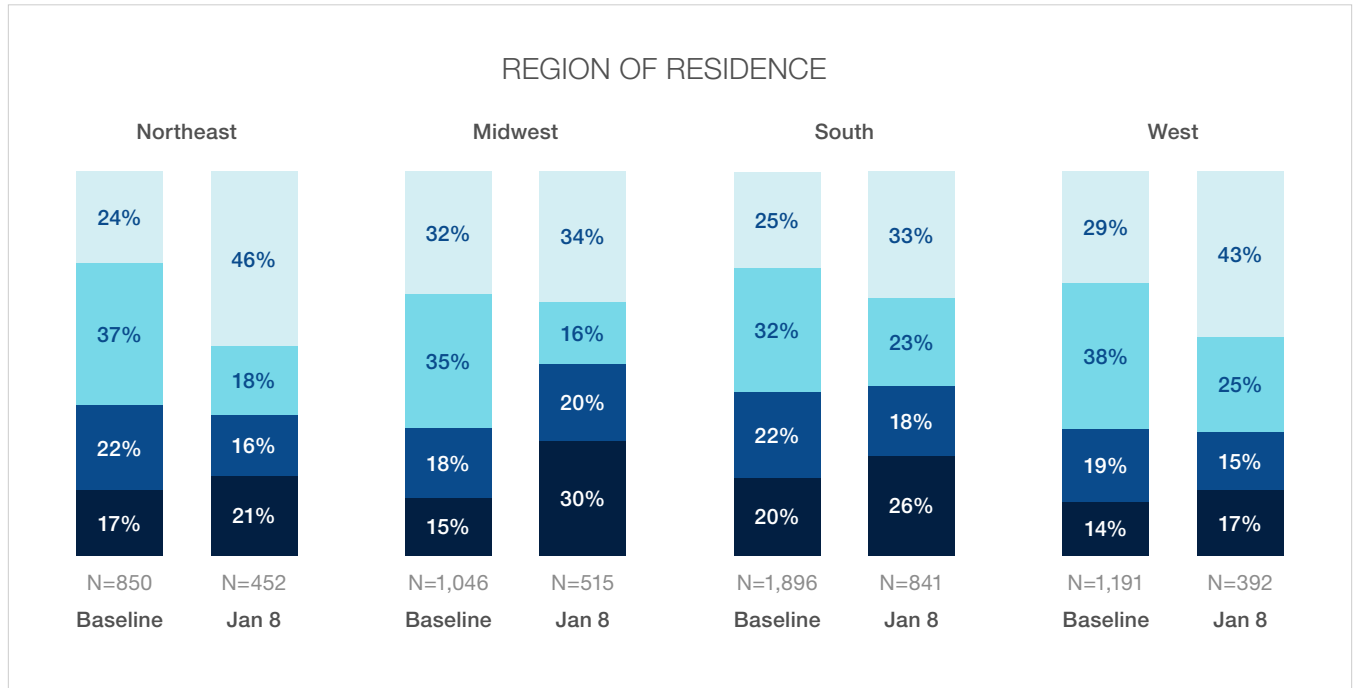
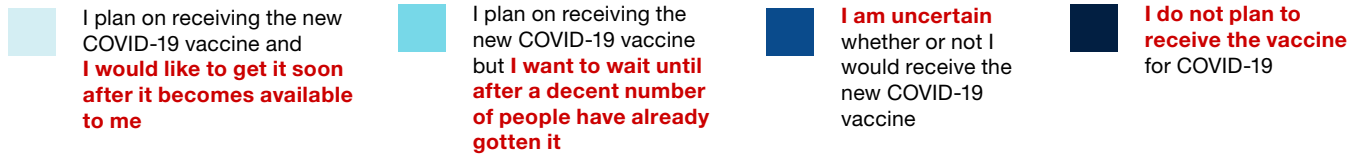
# Detail on Survey Responses



\*Includes English and Spanish speaking respondents

Due to a variety of reasons, including a respondent's choice not to answer and the option to choose more than one answer, data totals may vary and percentages may not add up to 100.

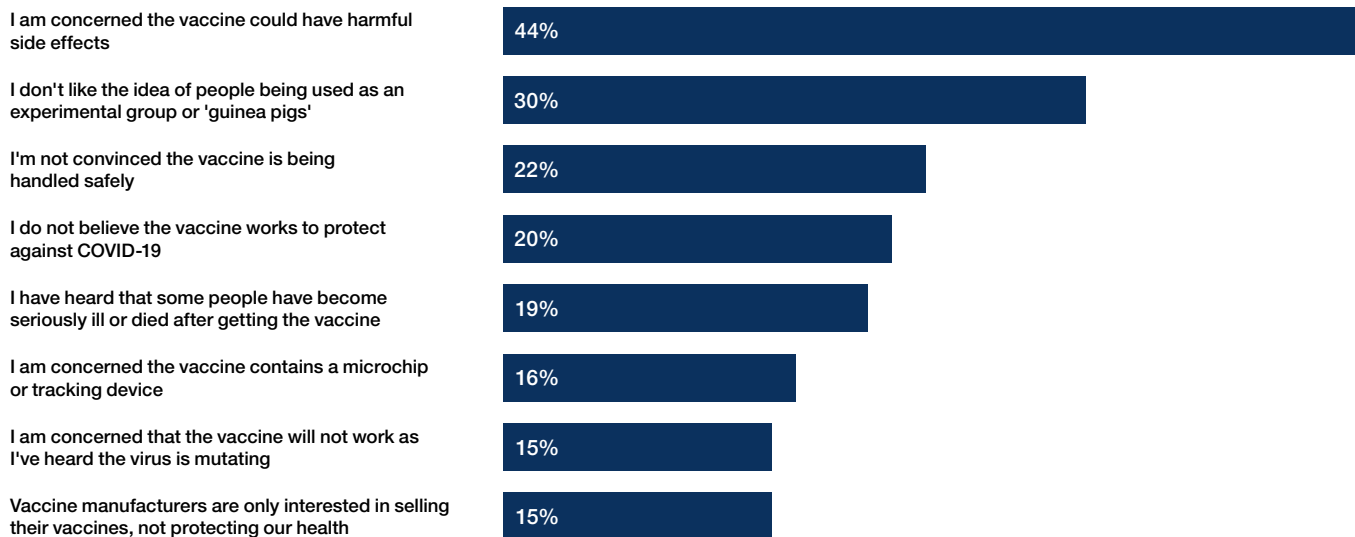
# Detail on Survey Responses



Due to a variety of reasons, including a respondent's choice not to answer and the option to choose more than one answer, data totals may vary and percentages may not add up to 100.

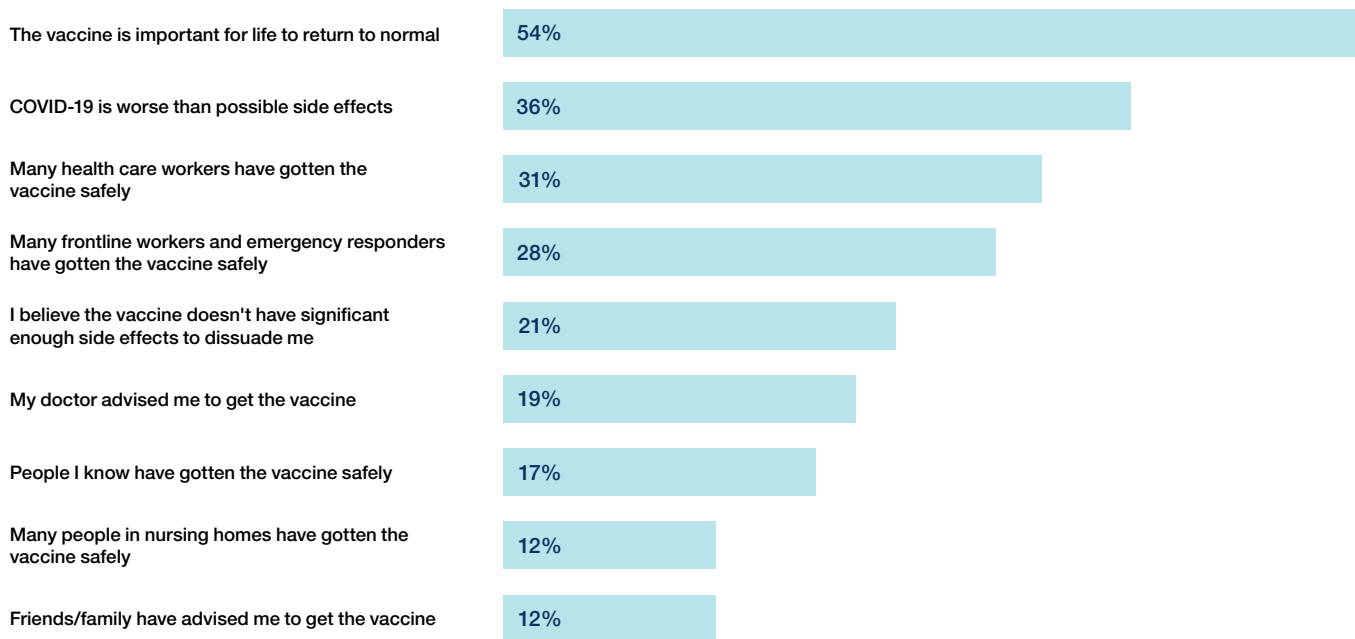
## Concern over side effects is the most common among people who say they are **less likely to get the vaccine now than they were before**

Which, if any, of the following BEST describes why you are less likely to get the vaccine than you were before? Please choose up to 3. Shown among those who said they are less likely to get the vaccine since FDA approval (N=187)



## Most of those who have become **more likely to get the vaccine** cite its importance in life returning to normal

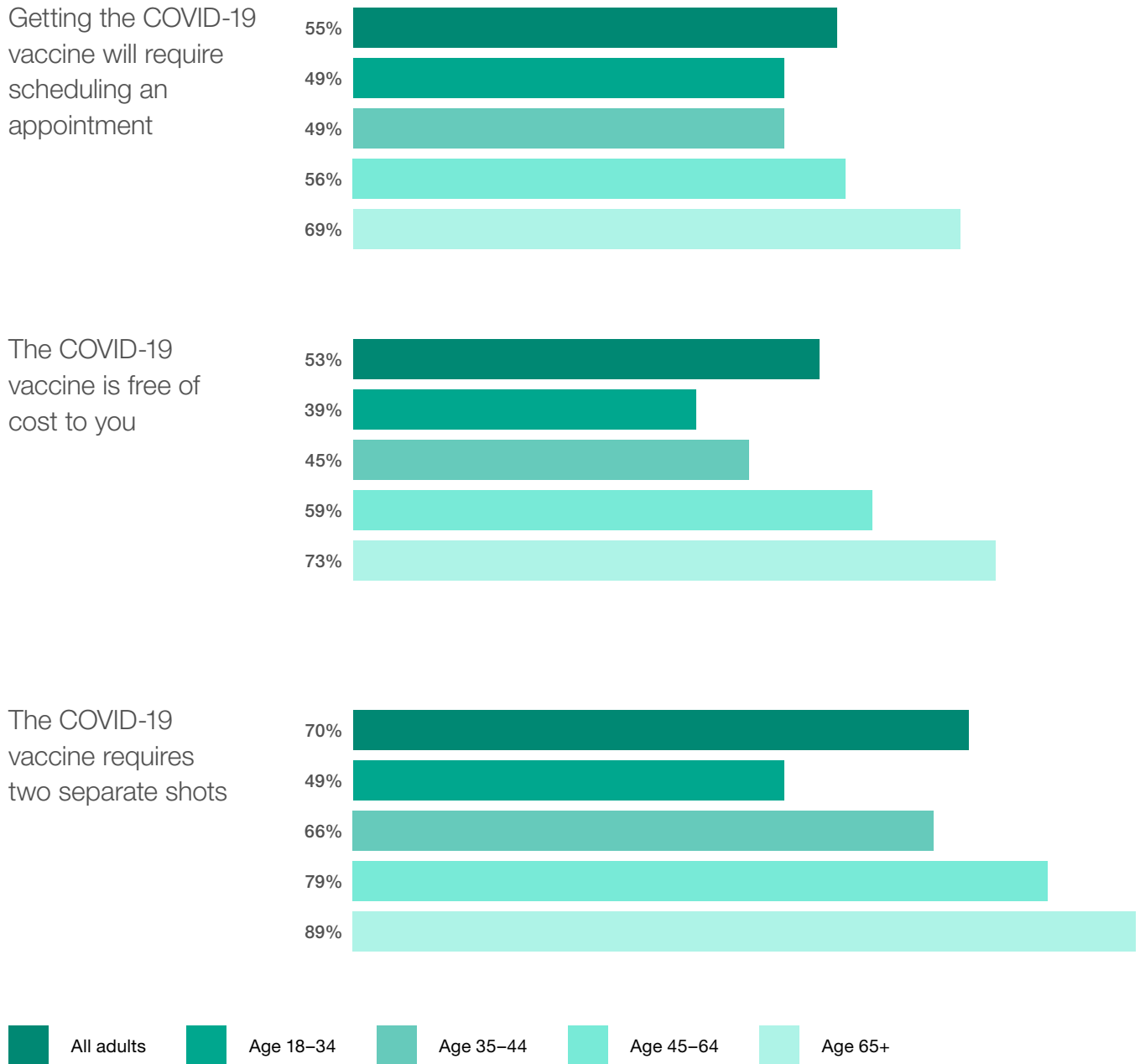
Which, if any, of the following BEST describes why you are more likely to get the vaccine than you were before? Please choose up to 3. Shown among those who said they are more likely to get the vaccine since FDA approval (N=576)



Due to a variety of reasons, including a respondent's choice not to answer and the option to choose more than one answer, data totals may vary and percentages may not add up to 100.

# Older adults (65+) are most likely to be aware of vaccine information; **almost all seniors (89%) know it is a two-shot series**

Which, if any, of the following statements do you believe to be true? Please select all that apply. Showing % Selected

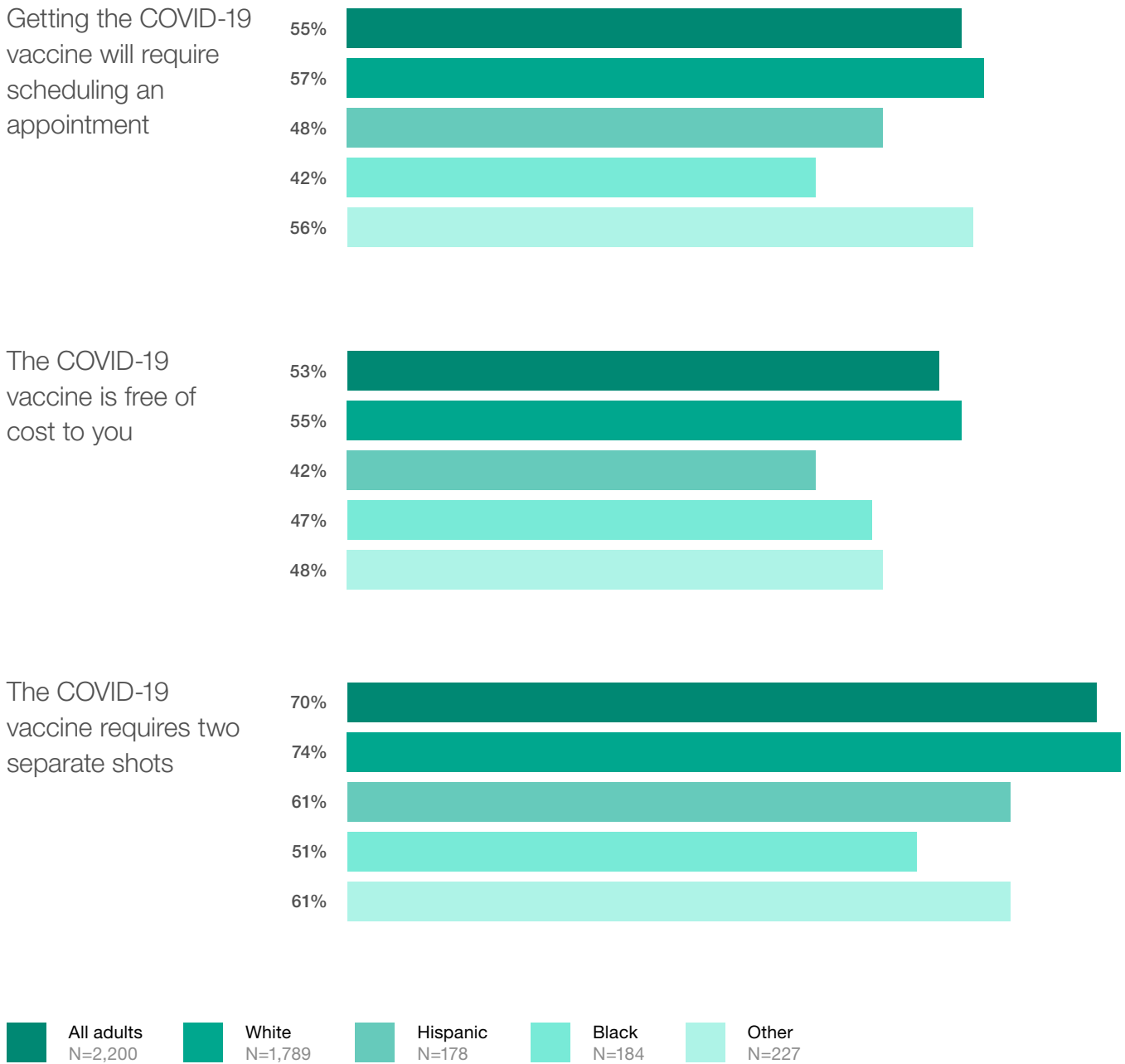


Due to a variety of reasons, including a respondent's choice not to answer and the option to choose more than one answer, data totals may vary and percentages may not add up to 100.



# Self-reported awareness of vaccine information is lower among Black respondents

Which, if any, of the following statements do you believe to be true? Please select all that apply. Showing % Selected



Due to a variety of reasons, including a respondent's choice not to answer and the option to choose more than one answer, data totals may vary and percentages may not add up to 100.

## Baseline Demographic Breakdown of Survey Participants

		N	%
	<b>Total Sample</b>	5,153	100%
<b>Gender</b>	Male	2,450	49%
	Female	2,533	51%
<b>Age</b>	18-24	800	16%
	25-34	800	16%
	35-44	802	16%
	45-54	800	16%
	55-64	801	16%
	65+	1,000	20%
<b>Race/Ethnicity</b>	White	3,030	57%
	Black	808	26%
	Native American (including Alaskan Native)	134	4%
	Asian (including South Asian)	340	7%
	Hispanic	1,141	22%
<b>Part of the Country</b>	Northeast	850	17%
	Midwest	1,046	21%
	South	1,896	38%
	West	1,191	24%

## January 8 Demographic Breakdown of Survey Participants

		N	%
	<b>Total Sample</b>	2,200	100%
<b>Gender</b>	Male	990	45%
	Female	1,210	55%
<b>Age</b>	18-34	550	25%
	35-44	396	18%
	45-64	773	35%
	65+	481	22%
<b>Race/Ethnicity</b>	White	1,789	81%
	Hispanic	178	8%
	Black	184	8%
	Other	227	10%
<b>Part of the Country</b>	Northeast	452	21%
	Midwest	515	23%
	South	841	38%
	West	392	18%

Due to a variety of reasons, including a respondent's choice not to answer and the option to choose more than one answer, data totals may vary and percentages may not add up to 100.

---

Unless otherwise noted, the source for all data cited in this paper is the Vaccine Hesitancy Pulse survey developed and analyzed by CVS Health Enterprise Insights. All data reported as "total sample" is based on English-speaking survey participants (including people who self-identify as Hispanic and speak English primarily).

CVS Health uses and shares data as allowed by applicable law, and by our agreements and our information firewall.

This page contains trademarks or registered trademarks of CVS Pharmacy, Inc. and/or one of its affiliates.

©2021 CVS Health. All rights reserved. 106-53861A 020421

