

The Message Guide We Need Right Now:

TALKING WITH YOUR FRIENDS AND LOVED ONES ABOUT COVID-19 VACCINATION



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You are a powerful force in the effort to stop COVID-19

Your conversations with your close friends, family and coworkers are essential to building their confidence in the COVID-19 vaccines. But if you've searched for help online to guide you in those conversations, you know there aren't many evidence-based resources for people who want to talk to people around them about getting vaccinated.

Our choices and behavior are heavily influenced by the people we trust and see as “like us.” These trusted friends, family members and colleagues are the people we most enjoy being around. They are the ones we confide in or turn to for help. Expert researchers at universities throughout the world studying communications refer to these kinds of people as our “in-group.” David Featherstonhough, a behavioral psychologist, said, “When we hear messages from our in-groups, it's like a free pass, because it's our friend, parent or faith leader.”

This guide offers simple tools to help you have these conversations with people who trust you and rely on you for insight and guidance. We've brought together what we learned from our interviews with 16 researchers who study how to communicate about the COVID-19 vaccines and insights from a nationwide survey of more than 4,000 Americans. We include templates that can guide you in these conversations and that you can share with others.

Most people are confident about having these kinds of discussions. In our survey we saw that about half of Americans (51.6%) are “very confident” talking to others about COVID-19 vaccines. Around 40 percent (37.8%) said they are “somewhat confident,” and just 1 in 10 (10.6%) said they were “not confident.” Our hope with this guide is to make you more confident in talking about the vaccine and to realize your value for reaching your loved ones about vaccination.

Let's get started.

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SECTION 1:

Why aren't people getting vaccinated?

People are not getting vaccinated for two main reasons: access and hesitancy. Access issues are easier to resolve. Hesitancy is harder.

ACCESS

Getting the vaccine can be inconvenient. Someone who is unvaccinated may work long hours or multiple jobs, be a caregiver or have other obligations that mean they don't have time to get vaccinated, or that they don't want to spend scarce free time tracking down a shot or getting to an appointment.

They may not know how or where to make an appointment, or they may not have easy transportation to a vaccination site. Getting a vaccine may not be convenient in their community, they may not have a regular doctor who they trust, or they may not have resources like child care.

HESITANCY

In our review of the literature, we saw eight different mindsets among people who have not yet chosen to get vaccinated. When you talk to people in your life about vaccination, it is helpful to listen for which mindset they have. You can usually identify which mindset someone has by their reasoning for not getting the vaccine. Each mindset needs a different type of response, which we offer you in this guide. If you do not see the mindset of your loved ones here, don't worry. Our recommendations can still be helpful to you as they are generally effective with people who live in America.

Chart: People who are hesitant trust their families, friends, and local health care professionals most.

Q: Regarding their advice on taking a COVID-19 vaccine, who do you trust? (check all that apply)

My family	53%
My closest friends	30%
Local health care professionals (your nurses and doctors)	25%
Centers for Disease Control and Prevention (CDC), the federal government agency that makes recommendations about who should get COVID-19 vaccines	12%
My church leaders	12%

Total in sample: 768

Notes on survey: All percentages are rounded from decimals. Percentages exceed 100% because respondents could choose multiple responses. Percentage points are rounded to the nearest whole number or decimal place. Percentages below 0.50% were rounded down and those that were 0.50% or above were rounded up (e.g., after rounding, 6.49% = 6% and 6.51% = 7%).

In this survey, we asked the following question to determine if someone was unsure about getting a COVID-19 vaccine: “Please read the following sentence and indicate your agreement or disagreement: If a vaccine for COVID-19 were available to me and cost nothing, I would get it.” From their answers, 19.27% were considered to be vaccine hesitant, while 80.73% were vaccine confident.

It’s helpful to focus on understanding the psychographic factors that affect an individual’s beliefs and actions—someone’s attitudes, values, aspirations, and interests. Psychographics offer a way to understand and empathize with where a person is coming from and how they see the world. Your conversation about vaccination will be much more effective if you connect to their mindset. Their mindset includes how they see themselves, what’s important to them, and what they worry about.

It’s important to understand this concept because otherwise, your assumption about why someone hasn’t chosen to get vaccinated may be informed by biases or assumptions. You might otherwise assume that they aren’t choosing to get vaccinated because they lack information or haven’t been educated enough on the importance of vaccines. But this research underscored that lack of information is rarely the problem.

People offer a range of reasons for choosing not to get vaccinated. These reasons are rooted in their mindsets. For example:

- They don't think they are at risk for COVID-19 because they believe they won't get it, or if they do their case will be mild.
- Their political, moral, or ethical views lead them to think that getting a vaccination violates individual rights and gives government too great a role in their lives.
- They may believe they can stay healthy through exercise, healthy eating and other individual actions.
- They may not trust institutions like the media, government, large corporations and the medical care system.
- They believe vaccination will cause harm to them or their loved ones.
- They don't know what the process will look like and how they might manage short-term side effects—or they're afraid of long-term side effects.
- They don't know what to trust, see information sources as biased or have accepted certain misinformation as truth.
- Some people do not engage at all with the health care system or may worry about cost because they don't have health insurance.
- Some are worried about hidden costs associated with the vaccines, like lost wages.
- They are taking a “wait and see” approach.
- They are worried about experiencing unpleasant or serious side effects, that side effects will cause them to miss work or limit their ability to care for their loved ones.
- They have “chosen sides.” Vaccinations are deeply politicized. Any attempt to convince—or require—them to get vaccinated can feel like a threat to their identity and requires them to make a choice that is different from people they seem as similar to them.

Before you have this conversation, ask yourself:

Are you a trusted messenger to the person you're trying to convince? Science tells us that we see friends and family who are part of our “in-group” as more trustworthy than other people in our lives. Our in-group is made up of the people we talk to every day, the people we see as sharing our values and our confidantes. Trusting our in-group members offers a mental shortcut for making difficult decisions. We see what they share or say as credible, and we don't tend to fact-check it. Our trusted friends and family are influential communicators because their actions and stories shape what we see as socially acceptable or taboo. Chances are, if your loved one is hesitant to get the vaccine, others in their life who they identify with are influencing their beliefs and actions.

The good news about that is that if you're part of someone's in-group, you're far more likely to be able to influence their behavior and choices than someone who isn't. Holding empathetic one-on-one conversations is a good way to increase their confidence in COVID-19 vaccination. Of course, there are people who will never be convinced. And it's pretty likely you won't be able to sway anyone in a single conversation. But, for those wavering, the science says conversations with trusted messengers—like you—are our best hope for increasing vaccination rates.

To figure out whether you're a trusted messenger for someone you're hoping to convince, ask yourself:

- Do they like spending time with you?
- Do they seek out your opinion?
- Do they turn to you for information or guidance?
- Have they followed your advice in the past—even for something as minor as a TV show recommendation or recipe?
- Do they confide in you when they are facing a challenge?
- Do you share identities, values, or views?

If your answer to most of these questions is “no,” your attempt to convince that person to get vaccinated could make things worse. But, if you answered “yes” a few times, you may be able to help them think about it in new ways.

In our survey, we found one in four vaccine hesitant respondents wanted to learn about COVID-19 vaccines from people from their community rather than distant experts. When vaccine hesitant respondents were asked specifically who they trusted for advice about the vaccine, they were much more likely to name local sources.

SECTION 2:

How to talk with people you love about COVID-19 vaccines

Once you've determined that you are a trusted messenger, you're ready to start preparing for one-on-one conversations. And don't worry if that first conversation doesn't convince them—you may need to have several conversations to move someone to action. Be patient. Don't be pushy. Don't get angry. They may need time to think about what you said and come to their own conclusions.

We've developed a simple formula to help you talk with people who trust you about getting the COVID-19 vaccine. It's Informed by our research and interviews with academic experts across a range of disciplines.

Listen, Affirm, Share, Ask, Offer

LISTEN

While you may know the person you are talking to really well, it's important not to assume you know the reason (or reasons) they haven't gotten a vaccine. Come ready to listen.

Approach your conversation with empathy, curiosity, and an open mind.

Listen for the values, beliefs, or identities that are driving their hesitancy. What do they see as right and wrong? How do they see themselves or describe themselves? What

are they proud of? Once you have a real understanding of their concerns and what's important to them, you will be able to communicate with them more effectively.

“My first strategy would be to listen. . . to come in with an open mind and zero judgments, respecting this person’s autonomy and their lived experience and just ask ‘What do you think about the vaccine?’ ‘Do you think you’ll get one?’ ‘Why do you feel that way?’ Because it’s a good communication strategy if you know your audience, but it also helps build trust and build the relationship too, to show that you really do care about this person and what they think.”

– **SHAWN BURNS**, PhD, social psychologist,
California Polytechnic State University at San Luis Obispo

Prepare yourself for how these conversations might go.

Stay calm and don't react to defensiveness. Resist the urge to be patronizing, judgmental, or condescending. No finger-wagging or shaming.

If someone is being defensive, it may be because they feel you are talking down to them. Tell them you don't mean to offend them and that you don't disrespect them.

“Show what’s called realistic empathy like, yeah, I can see this is a sensitive topic, I don’t mean any disrespect. You’re sort of de-escalating, turning the temperature back down and getting things back on track. And sometimes then you need to reframe a little bit even then, to get them to buy back in.”

– **SHAWN BURNS**, PhD, social psychologist,
California Polytechnic State University at San Luis Obispo

AFFIRM

People seek affirmation, not information. We're looking for information that reinforces what we already believe. So trying to change someone's mind may challenge their deeply held beliefs, including how they see themselves and the decisions they have made in the past. This phenomenon is central to why it can be so hard to change people's minds or their behavior.

Instead of trying to change someone's mind, **acknowledge their perspective, beliefs**

and identities. Research resoundingly confirms that when we communicate one-on-one, we have to listen to and affirm existing concerns, especially when they are deeply tied to someone's identity, values, and how they believe the world works. Help them see how their choice to get vaccinated is consistent with their previous choices.

While it's important to listen compassionately and affirm people's perspectives, **do not confirm or repeat misinformation or conspiracy theories.** Instead, affirm that you are listening and pivot quickly to a positive story or offer a new perspective. Before doing so, ask them if they would be "open" to hearing what you know. Research tells us that if they say, yes they are open, they will be more receptive to your ideas. If they say they're not, you might wait for a moment when they seem more open, or just accept that for this person, you're not a trusted messenger on the topic. You should also help them see how vaccination aligns with decisions they have made in the past. For example, "you got your vaccines so you could go to school."

- If the person you're talking with works in health care you might say something like, "You are in the medical field. You're the type of person who would be open to a new perspective if you had the evidence," and then offer evidence.
- If you're talking with a person who is conservative, you might say something like, "You make decisions that are in the best interest of you and your family. There is consensus among doctors and scientists that this vaccine is the best way to protect yourself so you can take care of your family."

"Analyze your audience first. Figure out what they care about, what they value, what's important and motivating to them. Then tailor your message based on what motivates them."

- **AMY CHADWICK**, PhD, communications scholar, Ohio University

"I think you can harness the internal feeling of connection and caring that everyone has: Reminding them, 'you are a good, rational human who has these relationships with people. You would surely want to make the best decision both for yourself and for them.' I think that that approach helps people become more open to information. And, we've seen that a lot with COVID and things like conspiracy beliefs: that you can combat some misinformation and open them to correct information by playing to their identity and the norms. Like, the idea that I believe you're a rational person, and I think that you're a good person, it goes a long way."

- **JENNIFER HOWELL**, PhD, social psychologist, University of California, Merced

Take a “yes, and. . .” approach. “Yes, and. . .” is a classic approach to improvisational comedy in which an actor affirms what another actor says and builds the scene from what they have shared. As you listen to someone sharing what is driving their hesitancy, affirm that you respect their perspective. Once you offer that affirmation, quickly address, redirect or offer new information to help the person see differently.

“Once you’re eliciting the reasons for why this person is feeling hesitant about the vaccine, then you can perhaps start to address those, again, in a super non-judgmental way. And sometimes you might find that the reason for the vaccine hesitancy is fairly simple, or maybe just due to a missing piece of information.”

– **MEGHAN BRIDGID MORAN**, PhD, health communications scholar, Johns Hopkins University.

SHARE

People have heard lots of different stories about the vaccines—including how they were created, what’s in it, the motivations of those promoting it, or side effects that aren’t documented by science. Hearing these from the people closest to us or people we admire makes them especially believable. The stories people believe about vaccination drive hesitancy. Replace those harmful stories with positive ones that resonate with the person’s values and views of the world. These stories can help someone see that people like them are getting vaccinated.

“Share messages that are likely to resonate with the people you are speaking with”

– **BRENDAN NYHAN**, PhD, political scientist, Dartmouth College

Share your vaccination story, including why you chose to get vaccinated and the benefits you’ve experienced.

Other stories you can tell:

- Stories that are funny
- Stories that create a sense of pride
- Stories that help people think about how much they love their family and friends
- Stories that offer hope and relief for the future
- Stories that show people like them are getting vaccinated and have benefited from it
- Stories of people returning to what is personally meaningful to them.

“It will be helpful to emphasize hopeful messages that align with your audience’s future personal goals.”

– **AMY CHADWICK**, PhD, communications scholar, Ohio University

Different emotions motivate us to do different things. Fear and shame might backfire and they can make people defensive or want to disengage.

- Use positive emotions that invoke:
- Love of kids, family, friends, or community.
- Pride in vaccination as an action associated with an identity that’s important to them.
- Hope for getting back to a life they can be excited about.
- Awe as a way to open people to new ideas or ways of seeing the world. Talking with someone while you’re on a walk or a hike or after you’ve watched a powerful film together might be a good way to activate this emotion.

Connect to what is familiar. If someone is concerned about the side effects of the vaccine, describe how side effects let you know your body is “warming up” to fight COVID-19 if it crosses its path. You might also compare the side effects to a cold, body aches, or headache.

If they are anxious about getting a shot, help them see that getting a vaccine or experiencing side effects is something they have done before, have managed, and can do again.

“People’s instinct is going to be to use fear to promote perceptions of severity and susceptibility. Fear messages are just SO messy. I’d be careful with how you frame this. I think it’s better to emphasize side-effects as proof the vaccine is working and how temporary they are and then talk about all of the positive personal benefits (safety, traveling on planes, getting to go to concerts, etc.).”

– **HEIDI LAWRENCE**, PhD, vaccine rhetoric scholar, George Mason University

ASK

Approach the conversation with curiosity. Ask questions to help you better understand someone’s perspective and reasons for not getting the vaccine and that show you are genuinely listening. Questions can draw out these reasons, but also help the person explore why they feel as they do and analyze their own perspective on the vaccine.

You might ask:

- “What inspired that thinking?”
- “Tell me how you came to your perspective.”
- “I’d love to better understand why you think that.”
- “What about that story stuck with you?”

“Keep things in the frame of a question, like, “What do you think, and what is your experience? Whoa, that’s really interesting, tell me more about that,” trying to really understand and not place a bunch of group-based assumptions onto somebody.”

– **HEIDI LAWRENCE**, PhD. vaccine rhetoric scholar, George Mason University

Psychologists use a number of strategies to help people manage the anxiety that stops them from taking important actions by asking questions that help them reflect.

- For example, you might ask, “Have you gotten a shot before or had to get medical treatment—how did you manage that? How can you do that again this time?”
- You might also use the behavioral cognitive technique of asking, “What is the worst thing that will happen? What is the best thing that will happen? What will likely happen?” This approach helps those who experience “worst-case-scenario thinking” when they are anxious.

Asking questions can help you go deeper into what is driving someone’s hesitancy, and surface insights about the person that might open them to vaccination. Organizational behavior scholar Adam Grant has written on motivational interviewing and says, “[It requires a genuine desire to understand people’s motivations and help them reach their goals.](#)”

OFFER

Listen for moments where someone seems willing to consider getting a vaccine.

Once people are open to getting a vaccine or at least confirm they are open to hearing what you are saying, give them a strong call to action to encourage them to follow through.

- Calls to action should be specific and actionable. Instead of suggesting that someone schedule a vaccine appointment, send them a link and ask them to sign up this week, or offer to help schedule an appointment for them right then and there. Follow through by asking them about the appointment as it is coming up, or offering to go with them.
- Make it as easy as possible. Help people overcome barriers to getting the

WHAT NOT TO SAY OR DO

- ✘ Cutting them off or abruptly discounting a point they are making
- ✘ Telling someone they are wrong, stupid or not looking at the evidence
- ✘ Using guilt or shaming people in your language
- ✘ Arguing for a vaccine mandate
- ✘ Making a simplistic moral case for vaccination (such as saying to someone “Getting the vaccine is the right thing to do”)
- ✘ Saying getting the vaccine is one’s duty to the country
- ✘ Emphasizing that the vaccine will give back control over one’s life

vaccine. Ask if you can help them make an appointment, drive them there, hang out with them while they recover, or watch their kids.

- Gently nudge them to ensure they follow through. Send them text reminders or offer specific periods of time you will go with them to get the vaccine.

“Help people act on their intention to get vaccinated by making an appointment with them or taking them to get their shot”

– **BRENDAN NYHAN**, PhD, political science, Dartmouth College

- Emphasize that getting vaccinated is a norm--something that most people who are like them are doing. Remind them that millions of people like them are making appointments and benefiting from getting the vaccine.
- Emphasize the difference it will make in their lives and the lives of others to evoke feelings like pride and hope.
- Talk about the things getting a vaccine will allow them to do without worrying about how it will affect their health or that of vulnerable loved ones--such as international travel, working at certain jobs, attending some events.
- Celebrate together. Ask them to share their vaccination experience or a picture with you. You might ask them to share on social media if they are comfortable doing so.

Each one-on-one conversation you have will be different, even if it’s with the same person. Adapt the Listen, Affirm, Share, Ask and Offer formula to each conversation. You will probably have to have multiple conversations with someone.

Conversations don't necessarily occur linearly—be prepared to move back and forth between listen, affirm, share, ask and offer. For example, consider how you might affirm someone's perspective throughout the conversation, not just at the beginning. Share a variety of positive stories and ask genuine questions as the conversation evolves. Listen for opportunities to offer resources or support.

A FEW MORE INSIGHTS ABOUT BETTER WAYS TO TALK ABOUT VACCINATION

People who are vaccine hesitant—regardless of their demographics or psychographics—agreed most with statements that emphasize individual choice or collective action. Here are a few recommendations to guide your conversations:

1. **Emphasize personal choice, and make the verb “choose” your new favorite word.** Across all of the groups in our survey of Americans, people agreed with messages that emphasize personal choice the most. Those who are vaccine hesitant are likely to agree that people should have a choice regarding whether to take a COVID-19 vaccine. The following data are results from only those who are vaccine hesitant.

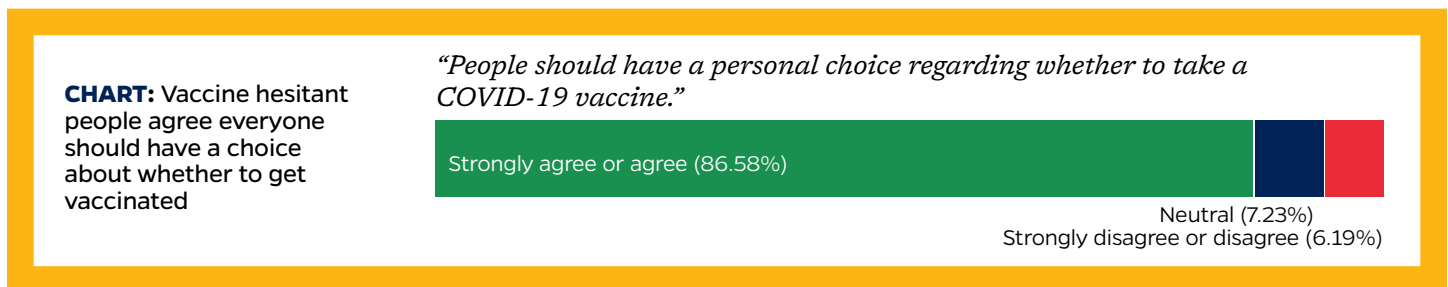


Chart from results of a survey of 4,024 people nationwide in June 2021. These responses from the 775 classified as “vaccine hesitant.”

2. **Emphasize collective action.** Across all groups in our survey, people agreed with statements about the importance of vaccination as a collective action to fight disease. These kinds of statements might include “we’re all in this together,” or, “we’re doing this to take care of our colleagues.”

Among vaccine hesitant survey participants, it was rare for more than 25% of the respondents to agree with a statement about the positive role of vaccines. These low percentages reflect the reality that many who are vaccine hesitant aren't going to agree with most statements that promote the vaccine. This message had the most positive response among vaccine-hesitant survey participants.

SECTION 3:

Going deeper: The eight mindsets you may encounter

Across our research, we identified eight mindsets of people who are more hesitant than others. We also identified the beliefs they tend to share. If you are talking to someone with one of these eight mindsets, it will be helpful to have a deeper sense of what is driving their hesitancy.

Vaccine hesitant mindset	What research tells us about reaching them
<p>Conservative Republicans or Personal Freedom Advocates: This group sees vaccination as an individual choice. Some see their freedoms and liberties as threatened by perceived coercion to get a vaccine. Many see health as a result of individual actions, and believe it is each person’s responsibility to keep themselves safe.</p>	<p><i>“People that are oriented around notions of liberty and are really concerned with autonomy and don’t want anybody telling them what to do, those people are going to be more concerned with the response. Whether or not they believe [the virus is] real or not is almost irrelevant, because they want to be left alone regardless.”</i></p> <p>– ADAM KOON, Ph.D.</p> <p>Conservatives have strong beliefs in personal responsibility and believe that preventative behaviors are not impactful (Lee, 2021).</p>

Vaccine hesitant mindset	What research tells us about reaching them
<p>Wellness and alternative medicine communities: This group may see vaccination as an individual choice. Many believe it will cause harm to their or their loved ones’ bodies. It is seen as unnatural. They have concerns about the ingredients. Some think they can manage fine by staying healthy.</p>	<p>Many people who prefer natural or alternative medicine believe that all things natural are good, whereas science-driven medicine is bad (McNamara, 2021). Medicine makes some people sick, so they turn to natural remedies (Bell, 2020).</p> <p>Individuals are hesitant about vaccines because they fear they’re not safe (Wiley et al., 2020; Leader et al., 2021).</p>
<p>People who believe misinformation, rely on alternative information sources, and are more likely to believe conspiracies: People who believe misinformation believe stories about vaccinations that stops them from getting vaccinated.</p>	<p>It is easier to access anti-vaccine groups and information through social media than pro-vaccine groups (anti-vaccine groups are more prolific on social media) (Bradshaw et al., 2020b; Johnson, et al. 2020).</p> <p>Digital platforms allow people most resistant to vaccination to promote their own messages to a wide range of audiences. Pregnant women and “fence-sitters” (usually parents and women) are some of the most targeted for misinformation regarding vaccines (Bradshaw, 2020).</p> <p>Misinformation is a tactic commonly used by conspiracy theorists. They isolate specific details and create a hyper focus on a piece of information, ignoring other relevant information. For example, they hone in on something negative (e.g., “patient dies of heart attack after receiving vaccine”), but fail to include other pertinent details (e.g., patient was an older individual who had prior cardiovascular issues) (Welch, 2021).</p>

Vaccine hesitant mindset	What research tells us about reaching them
	<p>People are more likely to remember and believe false information if it is repeated often and shared by their friends and family (Fazio, 2020).</p>
<p>People anxious about the process: People may experience anxiety about either the vaccination process or side effects, which stops them from getting vaccinated. This is especially true for people who have medical phobias.</p>	<p>Social psychologists studying why people avoid important health information have found that people will go out of their way to avoid information if it makes them feel bad (scared, anxious, sad), obligates them to do something they don't want to do, or seems hard (like getting a medical exam, getting a shot, feeling sick, etc.), or threatens how they see the world and themselves. If vaccination creates negative emotions for a person, like anxiety, they will find a way to avoid information or the situation (Sweeny et al., 2010).</p>
<p>People who prize tight-knit, rural communities: People who live in rural communities often have conservative, individualistic worldviews. Many do not necessarily see the risk of COVID-19 to themselves or their communities. Some believe vaccination is a personal health decision, and that if you get sick, it is your own fault.</p>	<p>A common sentiment among rural residents is a lack of urgency (Woelfel, 2021); this demographic does not see the seriousness of COVID-19 and believes related information to be a bit exaggerated in terms of its severity. There's a perception from data that rural communities perceive urban dwellers to be more at risk due to a more shared public environment.</p> <p>According to the Kaiser Family Foundation polling, rural communities are among the most vaccine hesitant.</p>

Vaccine hesitant mindset	What research tells us about reaching them
<p>People who face systemic barriers to access: Many communities do not have easy access to vaccines. There may be cultural and structural barriers stopping them from securing vaccinations. The barriers they face may include a shortage of clinics and health care options, lack of internet access to find and make appointments, lack of childcare, insufficient time off from work, and inadequate transportation.</p>	<p>A survey by the organization Surgo Ventures found that some people (14%) do not get the vaccine because it is too costly, or perceived to be costly.</p> <p>The Kaiser Family Foundation poll shows that Black people in rural communities report greater barriers to access COVID-19 vaccines. They also found that people in some Hispanic communities have been asked to provide health insurance documentation or a government-issued identification card. This can be a barrier for those who do not have these documents.</p>
<p>People who do not trust the government or are skeptical of other institutions: People who are vaccine hesitant tend not to trust the government, media or medical institutions for various reasons. For many the vaccine is seen as an extension of an institution and is susceptible to its biases and agendas.</p>	<p>Many African American people report not trusting medical systems due to a long history of medical abuses (Gamble, 1997; Jaiswal & Halkitis, 2019). Research suggests this line of thinking has led to reluctance (Bogart et al., 2021; Freimuth et al., 2017; Kolar et al., 2015).</p> <p>Republicans tend to have less trust in government and the CDC (and other government entities disseminating vaccine information) (Rainosek, 2021; Latkin et al., 2021).</p> <p>There is a “perception gap” about vulnerability (stemming from Republican leaders who downplayed the virus), which resulted in less compliance with safety protocols (Lee, 2021).</p> <p>Perceptions of trustworthiness (in organizations/leaders disseminating</p>

Vaccine hesitant mindset	What research tells us about reaching them
	information) are an important factor related to increasing trust in getting vaccinated (Baumgaertner et al., 2018; Latkin et al., 2021).
<p>People who perceive COVID-19 risk to be low: This group does not believe they are at risk of getting severely sick from COVID-19. They believe they can manage fine without the shot, and often emphasize a low chance of death from COVID-19. Many do not recognize the threat they pose to others by not getting vaccinated.</p>	<p>Low perception of risk continues to drive hesitancy among communities, particularly those that have had COVID-19 and were fine and those that have been able to manage so far.</p> <p>According to a Kaiser Family Foundation poll, a quarter of young people are going to wait and see before they get a vaccine and people 18-29 are the least likely to say they are vaccinated or intend to do so.</p>

HOW TO IDENTIFY MINDSETS

Understand the identities that are important to the people you're talking with

Get in the habit of listening to people to learn which aspects of their lives or personalities they're most proud of. Listen for how their reasoning aligns with how they see themselves. Do they emphasize their good health and fitness as a reason not to get the vaccine? Physical fitness may be an important aspect of their identity that you can connect to. Sharing stories from health and fitness influencers who chose to get vaccinated might change their perception of whether vaccination is a norm among people like them. If someone is a health care worker and they emphasize their passion for taking care of people, then you can connect vaccination to that identity and highlight stories of health care workers who chose to get vaccinated out of their concern for others.

Their values, worldviews and motivated reasoning may be influencing their perspective

People have different values that shape how they see the world. People who are more conservative tend to value respect for authority, preserving the sacred and protecting people they see as one of them. People who are more liberal tend to value fairness and justice. And people have different worldviews that shape how they think the world

works and influence how they see problems and their solutions. Some people are more individualistic (“what’s good for me is good for everyone else”), while others are more collectivist (“what’s good for everyone else is good for me”). As people share their perspective with you, listen for these different mindset differences to understand what is likely shaping their beliefs about the vaccine. It is important to talk about vaccination in ways that resonate and connect with their values and worldview.

We all engage in motivated reasoning

People seek out information and content that affirms what they already believe to be true. Scientists refer to this as “motivated reasoning.” We are motivated to consume content that reflects the world as we see it. This is why we see polarization in media, politics, and even COVID-19. Listening for what people already believe and who they trust will help you offer information from sources that align with their beliefs, or offer a perspective that connects to those existing beliefs.

CHART: Which messages work best for each mindset?

Here’s how people with different mindset respond to different messages:

	Personal Choice	Collective Action	Clear Instructions to get vaccine	Regret (child gets sick with COVID-19)	Gather with loved ones	Vaccines are effective for saving lives	Back to normal and reopening the economy
Vaccine hesitant mindsets you may encounter	<i>“My personal choice about getting a COVID-19 vaccine is very important to me. I feel a sense of responsibility to get a COVID-19 vaccine as getting it will make those around me less likely to catch COVID-19.”</i>	<i>“Vaccination is a collective action to prevent the spread of diseases.”</i>	<i>“Getting simple instructions about how to access a vaccine would be helpful and valuable..”</i>	<i>“If I chose not to have my child vaccinated with a COVID-19 vaccine, and they became ill, I would feel regret.” (NONE included who “do not have any children”).”</i>	<i>“COVID-19 vaccines will help us gather with loved ones once again.”</i>	<i>“Vaccines are effective at preventing populations from being affected by disease (e.g. polio) and have saved many human lives around the world, therefore if I take a COVID-19 vaccine this would also save lives and end the pandemic..”</i>	<i>“The COVID-19 vaccine provides a pathway towards getting back to normal and reopening the economy.”</i>
Conservatives	Most effective	Not very effective	Not very effective	Not very effective	Not very effective	Not very effective	Not very effective

	Personal Choice	Collective Action	Clear Instructions to get vaccine	Regret (child gets sick with COVID-19)	Gather with loved ones	Vaccines are effective for saving lives	Back to normal and reopening the economy
Vaccine hesitant mindsets you may encounter	"My personal choice about getting a COVID-19 vaccine is very important to me. I feel a sense of responsibility to get a COVID-19 vaccine as getting it will make those around me less likely to catch COVID-19."	"Vaccination is a collective action to prevent the spread of diseases."	"Getting simple instructions about how to access a vaccine would be helpful and valuable.."	"If I chose not to have my child vaccinated with a COVID-19 vaccine, and they became ill, I would feel regret." (NONE included who "do not have any children")."	"COVID-19 vaccines will help us gather with loved ones once again."	"Vaccines are effective at preventing populations from being affected by disease (e.g. polio) and have saved many human lives around the world, therefore if I take a COVID-19 vaccine this would also save lives and end the pandemic.."	"The COVID-19 vaccine provides a pathway towards getting back to normal and reopening the economy."
Wellness and alternative medicine	Most effective	Somewhat effective	Somewhat effective	Not very effective	Not very effective	Not very effective	Not very effective
People who tend to believe conspiracies	Most effective	Somewhat effective	Somewhat effective	Not very effective	Not very effective	Not very effective	Not very effective
Rural residents	Most effective	Somewhat effective	Not very effective	Somewhat effective	Not very effective	Not very effective	Not very effective
Facing systemic barriers to access	Most effective	Effective	Effective	Effective	Somewhat effective	Somewhat effective	Not very effective
Do not trust institutions (government)	Most effective	Somewhat effective	Somewhat effective	Somewhat effective	Not very effective	Not very effective	Not very effective
Low risk perception for COVID-19	Most effective	Somewhat effective	Somewhat effective	Not very effective	Not very effective	Not very effective	Not very effective

Criteria: All data is from those who are vaccine hesitant and are also categorized as being in the mindsets listed below (see analysis above for survey question for each mindset. NOTE: we did not have enough participants who reported being "People anxious about the process" in our survey so results are not reported for them here).

Most effective=the top scoring type of message for the mindset (vaccine hesitant). These messages may not always score above 50%.

Very effective=over 50% of the mindset agree with the type of message (vaccine hesitant).

Effective=between 49-25% of the mindset agree with the type of message (vaccine hesitant).

Somewhat effective=24%-15% of the mindset agree with the type of message (vaccine hesitant).

Not very effective=15-6% of the mindset agree with the type of message (vaccine hesitant).

Do not use=below 5% of the mindset agree with the type of message (vaccine hesitant).

SECTION 4:

A guide for one-on-one conversations

We shared with you some of the frequent arguments used by people who haven't gotten the COVID-19 vaccine and research-backed insights for talking to loved ones to increase their vaccine confidence. Now, let's put those in action. Here we offer some paths for your one-on-one conversations that draw on what we learned through research. Each conversation path aims to address a specific belief, but it is only a starting point.

LISTEN <i>If they say...</i>	AFFIRM <i>You say...</i>	SHARE <i>You share...</i>	ASK <i>Try asking:</i>	OFFER <i>Offer real help</i>
<p>“I don’t know who to trust for information.”</p>	<p>“Finding the information you can trust can be hard these days. There are so many sources.”</p>	<p>“I consider who I trust very carefully. Before I got vaccinated, I did a lot of reading on the topic, and I trust organizations that are non-partisan and stick to the facts, like the CDC or FDA. I trust my personal doctor, too. My doctor also agrees with what the CDC and FDA are saying about the safety of the vaccines.”</p>	<p>“There is so much information out there. What information do you find hard to trust?”</p> <p>“Who do you turn to for professional health advice?”</p>	<p>“I’m happy to share what I know and some of the resources I used to make my decision. They might help you make a decision for you and your family too.”</p>
<p>“I heard [misinformation or conspiracy theory]...”</p> <p>“It’s true that [misinformation or conspiracy theory]...”</p>	<p>“There is a lot of information out there, and sometimes it can be hard to figure out what’s right or wrong so we can make the best decisions for ourselves.”</p>	<p>“I had a lot of questions about the vaccine before I made my decision, and it wasn’t always easy to find the answers. I wanted to know the facts; that’s why I turned to the CDC and FDA. I asked my doctor too, and she agrees that the vaccines are safe.”</p> <p>“Everyone is sharing information on social media, but</p>	<p>“Where do you go for information about the vaccine?”</p> <p>“Who do you trust for vaccine information?”</p> <p>“Who do you turn to for professional health advice?”</p>	<p>“I’m happy to share what I know and some of the resources I used to learn more about vaccination. They might help answer your questions too.”</p> <p>“It is certainly your personal choice regarding whether to get the vaccine or not”</p> <p>“I am proud of being part of the collective effort</p>

SECTION 4: A GUIDE FOR ONE-ON-ONE CONVERSATIONS

LISTEN <i>If they say...</i>	AFFIRM <i>You say...</i>	SHARE <i>You share...</i>	ASK <i>Try asking:</i>	OFFER <i>Offer real help</i>
		<p>I don't always trust it because anyone can say anything they want. When it comes to information about the vaccine, I turn to the CDC, the FDA, and my doctor because I want to know the facts."</p>		<p>vaccines offer to help us combat this virus."</p>
<p>"I don't know how or where to get the vaccine." "I'm overwhelmed by everything you need to do to get the vaccine."</p>	<p>"I understand. It was harder to access a COVID-19 vaccine when they first became available, but now you can get a vaccine at your doctor's office, health clinic, or pharmacy."</p>	<p>"I made an appointment online at [insert location]. The process was easier than I imagined! Once I got there, I [describe the process]. They wrote down my information in the vaccination card and included my next appointment date right there too." Or "When I was last at my doctor's office, I called ahead and was able to make sure I could get a vaccine during my visit. It was easy."</p>	<p>"Have you tried scheduling with a local health provider or your doctor?" "Have you tried making an appointment online?" "What is most overwhelming to you about the process?"</p>	<p>"Would it be OK if I booked an appointment for you and your family? We can do it together so you can find the date and time that works best for you."</p>

LISTEN <i>If they say...</i>	AFFIRM <i>You say...</i>	SHARE <i>You share...</i>	ASK <i>Try asking:</i>	OFFER <i>Offer real help</i>
<p>“I don’t have the resources or time to get the vaccine.”</p> <p>“[Barrier] is stopping me from getting the vaccine.”</p> <p>“I would get the vaccine if [barrier] wasn’t stopping me.”</p>	<p>“It’s not always easy to get the vaccine. Going to work or taking care of our families might take priority. But getting the vaccine can be another way to protect those you love.”</p>	<p>“I counted on the help of my family and friends to get the vaccine. They helped me make a plan and even book the appointment. It takes a village! Count on me to help you too.”</p>	<p>“What would make it easier for you to get the vaccine?”</p> <p>“How can I help you get the vaccine?”</p>	<p>What you offer will depend on the particular barrier identified and how you can help (e.g. if the barrier is transportation, you can offer to drive them or find a bus route. If the barrier is not having paid time off, you can suggest checking with their employer about their options).</p> <p>People facing access issues tend to be vaccine confident in that they are likely to want to take the vaccine, yet how they do so can be a challenge to them, including distrust of the health care system due to cost.</p>

SECTION 4: A GUIDE FOR ONE-ON-ONE CONVERSATIONS

LISTEN <i>If they say...</i>	AFFIRM <i>You say...</i>	SHARE <i>You share...</i>	ASK <i>Try asking:</i>	OFFER <i>Offer real help</i>
<p>“Getting the vaccine is my business.”</p> <p>“My body, my choice.”</p> <p>“No one has a right to know if I’m getting the vaccine.”</p>	<p>“Choosing to get a vaccine certainly is a personal choice.”</p> <p>“Yes, it is important that medical issues are kept private for those who want it that way.”</p>	<p>“I chose to get the vaccine because I read the science and believe it will allow us to get back to normal and hang out with my family again without fear.”</p>	<p>“Would you be interested in a more private way to get your vaccine?”</p> <p>“Would you like to know more about the vaccine and how to set up an appointment? I am happy to share what I know.”</p>	<p>“Lots of people have chosen to get the vaccine. It was the right choice for me. If you are interested, there are ways you can privately access the vaccine. Your doctor’s office could be a good place to ask about that option.”</p>
<p>“I don’t want to put anything unnatural in my body.”</p> <p>“Putting a foreign substance in my body just doesn’t seem natural.”</p>	<p>“Yes, putting things in our bodies that we do not want to can be difficult.”</p> <p>“I can see how it could feel weird, or even scary, to put a new vaccine into your arm. When I think about it, I don’t always know what’s in all the medicine I take, but I trust the science and the millions of medical professionals who have received it.”</p>	<p>“I try to be careful about what I put in my body too. The vaccine is built off of other vaccines that have been around for a long time. They naturally build up our antibodies to protect us if we ever come face to face with COVID-19.”</p>	<p>“Have you gotten any vaccines or shots in the past? What was that experience like?”</p>	<p>“COVID-19 is a foreign disease that your body is not ready to fight. A vaccine will start the process of creating antibodies to fight it. I feel more protected since my body is ready to fight off COVID.”</p>

LISTEN <i>If they say...</i>	AFFIRM <i>You say...</i>	SHARE <i>You share...</i>	ASK <i>Try asking:</i>	OFFER <i>Offer real help</i>
<p>“I don’t need the vaccine because I’m healthy.”</p> <p>“If I get COVID-19, I’ll be able to fight it off.”</p> <p>“I’m not going to die from COVID-19.”</p>	<p>“I can understand that. I feel strong and my immune system works, but I don’t want to give COVID-19 to someone I care about who isn’t as strong or healthy.”</p>	<p>A personal story about protecting a specific family member or loved one who is at higher risk for COVID-19 can be shared here.</p>	<p>“Are there people around you that would feel safer if you got the vaccine?”</p> <p>“Would you get the vaccine if it helped someone you loved feel safer?”</p>	<p>“Talking to your doctor about the vaccines might help answer your questions about your risk and chance of spreading COVID-19 to others—especially if you are asymptomatic.”</p>
<p>“I don’t want to be a guinea pig.”</p>	<p>“Yes, that is understandable. I don’t want to be either. But now that nearly 300 million people in the U.S. have received the vaccine and we can see it is effective, I felt confident to get the vaccine.”</p>	<p>“I was amazed at how quickly the vaccine was developed. But they were built off of existing vaccine ingredients and technologies that have been through rigorous clinical trials.”</p> <p>“Seeing that hundreds of millions of people are now vaccinated, including [name in-group members], made me feel more confident.”</p>	<p>“Are you worried about certain side effects? Long-term effects?”</p> <p>“Have you seen reports that scientists are now applying this technology to inoculating against other diseases, like AIDS and the flu?”</p>	<p>“Talking to your doctor about the vaccines might help answer your questions.”</p>

People who have experienced racism in medical care

African American people report not trusting medical systems due to a long history of medical abuses (Gamble, 1997; Jaiswal & Halkitis, 2019). Research suggests this line of thinking has led to reluctance (Bogart et al., 2021; Freimuth et al., 2017; Kolar et al., 2015).

LISTEN <i>If they say...</i>	AFFIRM <i>You say...</i>	SHARE <i>You share...</i>	ASK <i>Try asking:</i>	OFFER <i>Offer real help</i>
<p>“I have experienced racism when I access health care and I just try to avoid it at all costs”</p> <p>“I just do not trust the health care system and do not want to put anything else into my body made by them”</p>	<p>“I hear you. There have been many instances over history where the medical field has abused people from non-white backgrounds.”</p> <p>“Yes, the medical field has a long history of taking advantage of low-income people in unsafe studies, especially non-whites.”</p>	<p>“I was worried about this earlier in the pandemic when the vaccines were new. I’ve now learned these vaccines have been taken by hundreds of millions of people around the world. It is also telling that high income people have higher rates getting the vaccine, both within countries and globally.”</p>	<p>Did you know the vaccine was developed by scientists of color and millions of people have safely taken it?”</p>	<p>“Can I share a story with you I think you might find interesting?”</p> <p>“Would you like me to go with you when you get the vaccine?”</p>
<p>“I’m worried about the side effects of the vaccine.”</p> <p>“Getting the vaccine will be worse than getting COVID-19.”</p>	<p>“Some people do experience side effects from COVID-19 vaccines. They might range from nothing to temporary side effects such as body aches, headaches, or a slight fever. But,</p>	<p>A personal story about the side effects you experienced and how you managed those can be shared here.</p> <p>“Most people have mild side effects, such as a</p>	<p>“I planned ahead in case I experienced any side effects. I made sure to have Tylenol and childcare ready if I needed it. Have you thought about making a plan in case you experience side effects?”</p>	<p>“I can help you make a plan to deal with potential side effects of the vaccine.”</p> <p>“I can help [e.g. drive you there, take care of your child, etc.] when you get the vaccine.”</p>

LISTEN <i>If they say...</i>	AFFIRM <i>You say...</i>	SHARE <i>You share...</i>	ASK <i>Try asking:</i>	OFFER <i>Offer real help</i>
	<p>you have had flu-like symptoms before and you were able to get through that. This is at worst 1 or 2 days of that.”</p>	<p>headache, sore arm or tiredness. I felt [insert side effects here] for [# of days], but it was worth it to know I can now safely be with my family and friends again. I feel relieved.”</p>		
<p>“I don’t trust the government/ media/health care industry.”</p> <p>“The government/ media/health care industry seems to be blowing this out of proportion.”</p>	<p>“Finding information you can trust can be hard these days.”</p>	<p>“I consider who I trust very carefully. Before I got vaccinated, I did a lot of reading on the topic, and I trust organizations like the CDC and FDA. They are non-partisan and stick to the facts. I trust my doctor, too. My doctor also agrees with what the CDC and FDA are saying about the safety of the vaccines.”</p>	<p>“Is there specific information you find hard to trust?”</p> <p>“What or who do you trust instead?”</p>	<p>“I know it can be hard to trust [government/ media/ health care], but I know how much you trust your friends and family, just like I do. I’m happy to share what I know and some of the resources I used to make my decision. They might help you make a decision that feels right for you and your family too.”</p>

Methodology

1. Identify the hesitant

We started by identifying who is hesitant and why. To do that, we tracked existing polling data on vaccine hesitancy, including polls from Kaiser Health News, CNN, and Surgo Ventures, and we conducted a media scan to identify hesitant communities and their reasons for hesitance.

From there, we identified personas that represent people who are vaccine hesitant and who we thought might be moved by one-on-one conversations with people they trust and think are like them. These initial personas include:

- Doctors or medical staff who have said they don't plan to get the vaccine and may be encouraging others—including their patients—to wait or avoid it entirely.
- Black Americans, who are reported to be one of the least confident groups due to legitimate concerns about historic and current abuse and marginalization within the medical care system.
- Wellness communities, who have been targeted by well-organized groups of people who explicitly oppose vaccination. These groups connect to individuals' fears about putting what some see as unnatural substances in their bodies. This group focuses on natural solutions and purity.
- Conservative Republicans. According to polling data, conservative individuals are more likely to opt out of getting a COVID-19 vaccine. This can be associated with beliefs about personal freedom and an "anti-establishment" mindset, a belief that vaccines should only be used for people who are at especially high risk, or a deeper fear of government control.
- People between 18 and 26 years old. Developmental psychologists refer to this group as early adulthood. They are more likely to be asymptomatic or have less serious symptoms. Their serious risk is low,

and they were among the last to have access to a vaccine.

- People who are anxious or nervous about the process. They may have anxiety about doctors, the medical system or needles. They might not admit it publicly, and often cite other reasons for their concerns. Their fear affects their interactions, or lack thereof, with medical experts.
- People who have been exposed to misinformation and are sharing conspiracy theories. Those who share conspiracies are often looking for answers in a historic moment of profound uncertainty.
- People who have not scheduled their second shot or did not receive one that was scheduled. Ensuring that everyone who receives their first dose also receives a second is critical to avoiding variants that could render the vaccine ineffective. Getting a second shot is inconvenient, and there are reports that the side effects are more substantial.
- People who believe they've already been infected and recovered. People who work in high-risk positions—such as health care workers—or people who live in social or crowded situations. This includes people who have had it and are uncomfortable saying it, but believe they are protected.

2. Review the Scholarship

After identifying each persona, we reviewed literature from a range of disciplines to understand COVID-19 vaccine beliefs among these groups and to look at psychological, cultural and political factors driving their hesitancy. We used our insights to surface questions for interviews with academic experts.

We recorded, transcribed and analyzed the interviews for themes, particularly those related to barriers to vaccination, strategies and messages offered by the scholars. We

synthesized those insights into findings that we shared back with the scholars for them to confirm, adjust and review.

How did we identify scholars?

First, we looked at existing polling data, academic research and news media to identify the most hesitant communities. We then identified scholars studying these communities or factors driving their hesitancy. Many scholars working on vaccine communications are working hard to support current vaccine efforts or conduct timely research. We sent out requests for interviews to more than 50 diverse scholars from a range of disciplines. We were able to interview 16 of them, including:

- * **Jonah Berger**, PhD, professor of marketing, University of Pennsylvania.
- * **Shawn Burn**, PhD, professor of psychology, California Polytechnic State University at San Luis Obispo
- * **Amy Chadwick**, PhD, professor of communications, Ohio University
- * **Joshua Hart**, PhD, professor of psychology, Union College
- * **Jennifer Howell**, PhD, professor of psychological science, University of California, Merced
- * **Amelia Jamison**, MPH, doctoral student in health, behavior, and society at Johns Hopkins Bloomberg School of Public Health
- * **Adam Koon**, PhD, professor of health policy, Johns Hopkins University
- * **Heidi Lawrence**, PhD, professor of rhetoric, George Mason University.
- * **Rupali Limaye**, PhD, professor of public health, Johns Hopkins University
- * **Emily Mendenhall**, PhD, professor of anthropology, Georgetown University
- * **Tom Mueller**, PhD, professor of geography and environmental sustainability, Utah State University
- * **Matt Motta**, PhD, professor of political

science, Oklahoma State University

- * **Brendan Nyhan**, PhD, professor of political science, Dartmouth University
- * **Jon Roozenbeek**, PhD, postdoctoral fellow, Cambridge University
- * **Joe Smyser**, PhD, CEO, The Public Good Project
- * **Andrew Whitehead**, PhD, professor of sociology, Indiana University-Purdue University

3. Survey to understand beliefs and test messages

We created a survey to better understand the views of people who are hesitant to get a COVID-19 vaccine and to test which messages and messengers might be most effective at increasing their vaccine confidence. We developed messages based on the insights and tested them with a sample of 4,024 people nationwide in June 2021.

To the best of our knowledge, this survey is the first of its kind to ask about the COVID-19 vaccine specifically focusing on psychographics and people's willingness to use certain messages to talk about the vaccine with others. We employed a quota sample of the population that mirrors the diverse makeup of the U.S., taking into consideration gender, geography, race, income, education and age of the population.

The survey asked a series of demographic and psychographic questions and explored a wide range of areas, including media use, trust in the government and previous experience with COVID-19, before respondents saw a series of messages.

Data for this survey was collected using Qualtrics panels employing a quota sampling method where people volunteered to take the survey and were chosen randomly from samples. The final random samples were composed of groups that mirrored the U.S. population for various categories (see list below). A

quota sample is a technique used to ensure a diverse sample by using a quota to block too many from any single category from completing the survey. 4,024 respondents qualified and completed the survey while it was in the field (May 25—June 27, 2021)¹. Before

the survey, we reviewed the messages with participating scholars to ensure that they reflected the research insights, and then added them to the survey to see which performed highest, and which didn't seem to connect.

¹ Over 7,400 responses were collected, most of which did not qualify for the survey, and participants were removed for other reasons regarding data quality (1024 failed attention check questions, 172 failed the 'speeding checks' of finishing under 7 minutes, and were removed from the final analysis).

Breakdown of survey respondents compared with their representation in the US population Census figures

Race/Ethnicity	Gender	Age	Education
White (non-Hispanic) 66% Census figure 2020: 57.8%	Female 50% Census figure 2020: 50.8%	18-34 32% KKF data: 21.2%	Did not complete a four year degree 57% Census figure 2019: 67.9%
Latinx or Hispanic 13% Census figure 2020: 18.7%	Male 48%	35-54 34% KKF data: 25.5%	Completed a four year college or university degree 43%. Census figure 2019: 32.1%
Black (non-Hispanic) 13% Census figure 2020: 12.1%	Self described or prefer not to say 3%	55+ 34% KKF data: 29.7%	
Asian 6% Census figure 2020: 5.9%		13.3% were under 26 years of age	
Other 3%			

Income	Geographic location	Locale type	Political preference
\$30,000 and below 21% 2019 Social Security Administration data: 46.1%	South 39% Census figure 2019: 38.3%	Suburban 48% Pew Research 2018 county data: 55%	Democrat 39%
\$30,001-\$50,000 15% 2019 Social Security Administration data: 21%	West 23% Census figure 2019: 23.9%	Urban 30% Pew Research 2018 county data: 31%	Republican 26%
\$50,001-\$100,000 34% 2019 Social Security Administration data: 22.2%	\$50,001-\$100,000 34% 2019 Social Security Administration data: 22.2%	Rural 22% Pew Research 2018 county data: 14%	Independent 24%
\$100,001 and above 30% 2019 Social Security Administration data: 9.4%	Northeast 18% Census figure 2019: 17.1%	13.3% were under 26 years of age	No preference 8%; Don't know 1%; Other (please specify) 1%.

NOTES on the survey: Percentages rounded from decimals and totals may not equal 100% due to rounding or due to a “check all that apply answer.” Percentage points are rounded to the nearest whole number or decimal place. Percentages below 0.50% were rounded down and those that were 0.50% or above were rounded up (e.g., after rounding, 6.49% = 6% and 6.51% = 7%). In this survey, we asked the following question to determine if someone was unsure about getting a COVID-19 vaccine: “Please read the following sentence and indicate your agreement or disagreement: If a vaccine for COVID-19 were available to me and cost nothing, I would get it.” From their answers 19.27% were considered to be vaccine hesitant, while 80.73% were vaccine confident.

4. How we refined personas and effective messages

We used the following survey responses to identify effective messages and identify the archetypes of the vaccine hesitant:

<p>Wellness communities and wellness types</p> <p>Sample size 391 of vaccine hesitant.</p> <p>Question used to identify these respondents: “I prefer natural or alternative medicines than a COVID-19 vaccine for preventing me from getting Covid-19.”</p> <p>Those choosing “Agree” or “Strongly agree.”</p>
<p>People who believe misinformation, and are more likely to believe conspiracies</p> <p>Sample size 358 of vaccine hesitant.</p> <p>Question used to identify these respondents: “Using the following scale ranging from 1 to 9, where 1 means Completely false and 9 means Completely true, please indicate your view of the following statement: ‘I think that the official version of the events given by the authorities very often hides the truth’.”</p> <p>Those responding 8 or 9.</p>
<p>People who live in rural areas.</p> <p>Sample size 274 of vaccine hesitant.</p> <p>Question used to identify these respondents: “If you had to categorize the area where you live, which best describes it?”</p> <p>Those choosing “rural.”</p>
<p>People who do not trust institutions</p> <p>Sample size 608 of vaccine hesitant.</p> <p>Question used to identify these respondents: “Do you trust the government?”</p> <p>Those saying “no” and “not very much.”</p>

<p>People who face systemic barriers to access</p> <p>Sample size 84 of vaccine hesitant.</p> <p>Question used to identify these respondents: “Considering how you and your family access health care now, if a COVID-19 vaccine becomes available to you, will you have a difficult time getting it? In other words, are there barriers you face in getting medical care, including cost, transportation, which will impact you getting a COVID-19 vaccine?”</p>
<p>People who do not think they are at risk for COVID-19</p> <p>Sample size 536 of vaccine hesitant.</p> <p>Question used to identify these respondents: “Do you personally feel at risk for getting a serious case of COVID-19?”</p> <p>Plus: Vaccine hesitant--Q 16 (slightly disagree, disagree, and strongly disagree).</p>

Survey results about comfortability using different messages

In our survey we asked people who said they had gotten or were going to get the vaccine about their comfort using different types of messages to encourage people close to them to get vaccinated. This group can be called vaccine confident and are vital for increasing vaccine uptake among those that have not gotten vaccinated.

Vaccine confident people felt most comfortable using messages that emphasized taking the vaccine for one’s family, friends, or community.

Messages about their doctor saying it was safe were popular. Vaccine confident people said they would be comfortable using messages about the efficacy of the vaccines at preventing COVID-19 and messages saying the vaccines were part of a collective effort to end the pandemic.

On the other hand, people felt less comfortable using messages bringing up bi-partisanship, or the government.

In general, most vaccine confident re-

spondents were comfortable or somewhat comfortable talking about the vaccine with others:

Level of comfortability	Responses	Percentage
Very comfortable	1,881	58%
Somewhat comfortable	1,206	37%
Not comfortable	156	5%

Responses: 3,246; 3 did not respond.

Vaccine confident people felt most comfortable using the following messages.

Messages about family, friends, and community

I am comfortable using the following message to talk to someone about getting a COVID-19 vaccine: *“I would be willing to take the COVID vaccine for my family.”*

Level of agreement	Responses	Percentage
Agree	2,916	90%
Disagree	67	2%
Neutral	262	8%

Responses: 3,245; 0 did not respond.

I am comfortable using the following message to talk to someone about getting a COVID-19 vaccine: *“I would be willing to take the COVID vaccine for my community.”*

Level of agreement	Responses	Percentage
Agree	2,670	82%
Disagree	129	4%
Neutral	444	14%

Responses: 3,243; 0 did not respond.

Vaccine confident people felt comfortable using messages saying doctors, or their doctor, said the vaccine was safe and effective.

I am comfortable using the following message to talk to someone about getting a COVID-19 vaccine: *“The vast majority of doctors—including my doctor—say the COVID vaccine is safe and effective.”*

Level of agreement	Responses	Percentage
Agree	2,710	84%
Disagree	105	3%
Neutral	430	13%

Responses: 3,245; 0 did not respond.

Vaccine confident people felt comfortable using messages about vaccines working and taking them is a form of collective action.

I am comfortable using the following message to talk to someone about getting a COVID-19 vaccine: *“The COVID-19 vaccines are our best chance of ending this pandemic and everyone should contribute by getting the vaccine.”*

Level of agreement	Responses	Percentage
Agree	2,660	82%
Disagree	120	4%
Neutral	456	14%

Responses: 3,244; 0 did not respond.

NOTES on the survey: All percentages rounded from decimals and totals may not equal 100% due to rounding. Percentage points are rounded to the nearest whole number or decimal place. Percentages below 0.50% were rounded down and those that were 0.50% or above were rounded up (e.g., after rounding, 6.49% = 6% and 6.51% = 7%). In this survey, we asked the following question to determine if someone was unsure about getting a COVID-19 vaccine: “Please read the following sentence and indicate your agreement or disagreement: If a vaccine for COVID-19 were available to me and cost nothing, I would get it.” From their answers 19.27% were considered to be vaccine hesitant, while 80.73% were vaccine confident.



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