COVID-19 State of Vaccine Confidence Insights Report
Report 3 | March 15, 2021 | Date Range: February 16, 2021 – March 1, 2021

Summary

Findings. Since the introduction of a third authorized COVID-19 vaccine in the United States, many people feel optimistic that a return to normal life is within reach. However, people’s concerns about the effectiveness of Johnson & Johnson’s Janssen COVID-19 Vaccine raise new threats to vaccine confidence. Consumers are afraid that the J&J/Janssen COVID-19 vaccine is an inferior product and that it will be distributed to racial and ethnic minority groups, and people with lower incomes, underscoring the need for trusted messengers to amplify messages about the effectiveness of all three vaccines. The percentage of adults wanting to “wait and see” before getting vaccinated continues to decrease, but those who remain in this category are more likely to be from communities of color and younger adults. They are also less likely to know someone who has already been vaccinated. Those who are already vaccinated and those who are considering vaccination are confused about safety guidelines for life after vaccination. They are primarily concerned about whether those who are vaccinated can spread the virus that causes COVID-19 through asymptomatic transmission, if quarantine guidelines from states still apply, and whether vaccination offers protection from SARS-CoV-2 variants.

Recommendations. Federal, state, and local partners should continue to work together to increase transparency, respond to gaps in information, and confront misinformation with evidence-based messaging. The goal of these efforts is to increase confidence in COVID-19 vaccines and expand vaccine uptake more broadly. Effort should be made to find trusted messengers who can connect with these groups to better understand information gaps and voids, promote facts and dispel misinformation about COVID-19 vaccines, and ultimately improve vaccine confidence.

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The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention (CDC).
Aims and Methods

By rapidly reviewing and analyzing numerous sources and inputs (see Appendix), the biweekly COVID-19 State of Vaccine Confidence Insights Report emphasizes major themes influencing COVID-19 vaccine hesitancy and uptake, categorized by their level and type of threat to vaccine confidence, degree of spread, and directionality. By examining how consumers think and feel, social processes, and the practical issues around vaccination, the Insights Report seeks to identify emerging issues of misinformation, disinformation, and places where intervention efforts can positively impact vaccine confidence across the U.S.

The information in this report is a snapshot and certain populations may be underrepresented. Images and quotes are illustrative examples and are not meant to be comprehensive of all content related to the highlighted themes.

Theme Classification

<table>
<thead>
<tr>
<th>How do you classify this theme/information?</th>
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<tbody>
<tr>
<td><strong>High risk</strong></td>
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<tr>
<td>▪ May lead to vaccine refusals and decreased uptake</td>
</tr>
<tr>
<td>▪ Wide reach, pervasive</td>
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<tr>
<td><strong>Moderate risk</strong></td>
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<tr>
<td>▪ Potential to trigger hesitancy to vaccinate</td>
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<tr>
<td>▪ Moderate reach, modest dissemination</td>
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<tr>
<td><strong>Low risk</strong></td>
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<tr>
<td>▪ Concerning, but low risk to vaccine confidence</td>
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<tr>
<td>▪ Limited reach, limited dissemination</td>
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How has this theme/idea changed over time (since last report or over the course of multiple reports)?

<table>
<thead>
<tr>
<th>Increasing</th>
<th>Stable</th>
<th>Decreasing</th>
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<tbody>
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<td>Information spreading rapidly</td>
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<tr>
<td>Information remaining constant at prior level</td>
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</tr>
<tr>
<td>Information is not gaining further traction and there has been no indication of additional activity</td>
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Major Themes

Johnson & Johnson’s Janssen COVID-19 Vaccine raises concerns about equity for communities of color.

The introduction of a third vaccine was met largely with positivity and relief, with 62% of consumers in a recent survey saying that the worst of the pandemic may now be behind us. However, concerns about the J&J/Janssen COVID-19 vaccine’s effectiveness relative to the other two COVID-19 vaccines are driving fears that the vaccine is an inferior product and that it will be distributed to racial and ethnic minority groups, and people with lower incomes. In online conversations, 45% of J&J/Janssen COVID-19 vaccine mentions were related to vaccine effectiveness, and CDC-INFO inquiries on vaccine ingredients by brand increased by at least 10%. Because the single-shot vaccine is easier to store and administer, J&J/Janssen COVID-19 vaccine may offer a solution for reaching those without stable housing or living within the criminal justice system. But because people of color are overrepresented in both populations, such distribution plans may underscore the perception that the J&J/Janssen COVID-19 vaccine is prioritized for racial and ethnic minority groups, and groups and people with lower incomes.

Vaccine confidence may be threatened because people think that the J&J/Janssen COVID-19 vaccine is less effective compared to the Pfizer-BioNTech and Moderna COVID-19 vaccines. Others may have underlying distrust of the Johnson & Johnson company, given prior lawsuits regarding potential carcinogens. This could threaten vaccine confidence in the J&J/Janssen COVID-19 vaccine brand specifically. Baby boomers (age 55–75 years) are among the most skeptical of the J&J/Janssen COVID-19 vaccine, with 22% stating that the new vaccine is less effective; however, 26% of people in the “wait and see” group would get the J&J/Janssen COVID-19 vaccine over the other two vaccines and 64% of people say they would get the J&J/Janssen COVID-19 vaccine if it were available to them.

Short-term recommendations:
- Identify local, trusted messengers within communities of color to relay the message that all vaccines similarly prevent hospitalization, ICU admission, and death from COVID-19. Partner with healthcare providers to allay fears and communicate the effectiveness of all three vaccines to prevent COVID-19 disease and serious illness.
- Amplify messaging about vaccine effectiveness and efficacy, including how they are determined, what they mean, and how consumers should interpret the vaccine effectiveness statistics in vaccine branding.

Long-term recommendation:
- If a distribution plan for a community or population relies on a single vaccine, ensure that any appearances of inequitable distribution based on membership in a racial and ethnic minority group, or people with lower incomes are addressed head-on and with transparency. Partner with states and jurisdictions to evaluate the advantages of offering the J&J/Janssen COVID-19 vaccine from both accessibility perspective as only standard refrigeration temperatures are needed and a convenience perspective as it is the only 1-dose vaccine available, while also considering any long-standing trust concerns and historic and ongoing harms experienced by racial and ethnic minority groups.

“Wait and see” consumers need trusted messengers and champions to increase vaccine confidence.

The percentage of adults wanting to “wait and see” before getting vaccinated continues to decrease; those remaining in the “wait and see” category are more likely to be from communities of color and younger adults and are less likely to know someone who has been vaccinated.²

Some Americans, especially Generation Z, Millennial, and Black or African American persons, feel that vaccinating NBA players or other professional athletes is a good way to build public confidence in COVID-19 vaccines.³ However, many NBA players express concerns about the vaccines and whether they might negatively impact their performance.³ Side effects remain the top concern of those who want to “wait and see” before getting vaccinated, along with concerns about missing work due to side effects, concerns about the vaccine giving them COVID-19, and questions about the cost of vaccination.⁴ Black and Hispanic adults wanting to “wait and see” were also worried that they would not be able to get vaccinated in a place they know and trust.⁵

Additionally, consumers wanting to “wait and see” are more likely to be exposed to misinformation about COVID-19 vaccines, which undermines vaccine confidence and ultimately decreases vaccine uptake.⁶ Many Black and Hispanic adults express feelings of distrust in the government and the U.S. health system, and this lack of trust has been exacerbated by the pandemic, making outreach and communication via trusted messengers an essential tool to increase vaccine confidence.⁷

Short-term recommendations:

- Partner with states and jurisdictions to identify localized, community-based organizations and deploy trusted messengers to communicate key strategies and messages. Expand available toolkits to include innovative practices for identifying trusted community messengers and utilizing microinfluencers.
- Empower healthcare professionals to relay information about vaccine side effects, what to expect after vaccination, and how to prepare for vaccination appointments. Strengthen the capacity of healthcare professionals to have empathetic vaccine conversations, address myths and common questions, and provide tailored vaccine information to patients.

Long-term recommendation:

- Work with national organizations focused on Black and Hispanic persons to plan studies to better understand vaccine confidence among communities of color and develop consumer education campaigns based on findings and implications.
Concerns about vaccine effectiveness and lack of normalcy after vaccination are undermining vaccine confidence.

Vaccinated consumers and consumers considering vaccination are confused about guidelines and recommendations for life after vaccination, including those recently released by CDC. As a larger share of the population becomes fully vaccinated, people continue to be concerned about asymptomatic transmission. While some studies seem to report that the currently available vaccines may have an impact on asymptomatic transmission, there is a lack of consensus among the scientific community about what is known and not known about asymptomatic spread by vaccinated people.

Because of the uncertainty related to asymptomatic spread, vaccinated people continue to be confused about whether they should quarantine before or after travel or if they are in contact with unvaccinated people. Some people want to know if their vaccination status would replace the need for testing requirements before and after traveling, while others strongly oppose the concept of a “vaccine passport.”

Lastly, each new cluster of SARS-CoV-2 variants draws high levels of media coverage, with many outlets spotlighting concerns about vaccine effectiveness. Reports of “breakthrough” cases of COVID-19 among fully vaccinated healthcare workers are fueling vaccine skepticism and anxiety. Such media coverage underscores the perception that the risks of vaccination may not outweigh the benefits, which eventually reduces vaccine uptake.

Short-term recommendation:
- With the launch of CDC’s new web page for those who are fully vaccinated, continue to communicate what it means to be fully vaccinated, both what is known and what is unknown about COVID-19 transmission and variants, and the need for sustained preventive actions. Continue to share clear, complete, and accurate messages about COVID-19 vaccines to build trust in the vaccines and the health system. Provide regular updates on the benefits, safety, side effects, and effectiveness of vaccines.
Emerging Topics

Questions and conversations about mixing vaccine brands are growing.

Web searches and CDC-INFO inquiries indicate increased interest in “brand-mixing,” or attempts to be vaccinated with more than one brand of vaccine in an effort to increase vaccine efficacy and effectiveness.

**Short-term recommendation:**
- Continue to clearly communicate to consumers that they should not interchange vaccine brands and they should complete the vaccine series with a single vaccine brand. Develop messaging to de-bunk that mixing vaccine brands would increase protection against COVID-19 illness.

Rise in vaccine brand preferences and “vaccine shopping” among consumers.

Although media outlets have attempted to counteract perceptions that some vaccines are better than others, social media posts and web traffic indicate that those who are eligible for vaccination may adopt a consumer-driven approach and delay vaccination in order to receive the vaccine they believe is best and most effective.

**Short-term recommendation:**
- Underscore messaging about vaccine effectiveness and efficacy of the three vaccines, including how consumers should interpret the vaccine effectiveness statistics in vaccine branding.

Misinformation about people “shedding” the virus that causes COVID-19 after vaccination is growing.

While volume is currently low, confusion about whether people can spread or “shed” the virus that causes COVID-19 as a result of being vaccinated is beginning to slowly increase on social media and through calls to CDC-INFO.

**Short-term recommendations:**
- Expand messaging and content about how vaccines work, especially the new viral vector vaccine, to explain how virus “shedding” is not possible.
- Engage healthcare personnel and professional healthcare and advocacy organizations around this topic, including content and tools to pre-bunk this myth before online conversation volume on this topic increases.

Good Evening, If I receive the vaccine, can I spread covid to others based off of the shot itself? I will keep socially distancing, masking, washing hands and all protocols in place, but I was wondering if I get the vaccine and go straight home after, are my parents at risk for contracting the virus since I got the shot? This might make 0 sense, but my sister has me concerned about "shedding" Plz help.

email to CDC-info, 2/26
Confusion is growing about the use of fetal cells in the J&J/Janssen COVID-19 vaccine.

One archdiocese called for parishioners to avoid J&J/Janssen COVID-19 vaccine as it is “morally compromised as it uses the abortion-derived cell line in development and production of the vaccine as well as the testing.” Online conversations increased following this report by 78% with over 19,000 mentions online during the report period.

**Short-term recommendations:**
- Collaborate with trusted messengers—such as faith-based leaders and faith organizations—to tailor and share culturally relevant messages and materials to build vaccine confidence as accurate and transparent communication about the use of fetal cells is critical.

Reports of vaccine refusals among military are driving misinformation about mandatory vaccination.

There are reports of first responders and military members refusing vaccination opportunities because they do not trust the vaccines, and current messaging about vaccination from direct supervisors is insufficient. Additionally, misinformation is beginning to circulate about vaccination being forced on members of the military.

**Short-term recommendation:**
- Identify and build partnerships with trusted messengers and advocacy organizations to deploy targeted messaging.

Consumers are frustrated over wasted doses of vaccine.

Media interest in vaccine wastage and consumer confusion about how vaccine doses could be wasted are growing as vaccine demand continues to outpace supply. Concerns around wasting vaccine have led pharmacists to suggest pooling vaccine as a means to maximize current supplies.

**Short-term recommendation:**
- Partner with states and jurisdictions to develop clear, consistent messaging about how excess doses of vaccine will be allocated and plans to reduce vaccine wastage that align with CDC’s recommendations. If possible, include transparent communication about how many doses have expired or gone unused and reasoning behind wastage.
Continuing Themes

Themes below have been noted in Reports 1 and 2 and continue to undermine vaccine confidence. For additional context and previous recommendations on these themes, see Insights Report 1 (February 12, 2021)ii and Insights Report 2 (March, 1, 2021).iii

- **Pregnancy and vaccination.** Expectant parents and parents of newborns continue to be concerned about vaccination during pregnancy and while breastfeeding. Amplified by vocal vaccine deniers, misinformation is circulating that vaccines can harm women who are pregnant by damaging the placenta or causing other effects that may lead to infertility.28 At the same time, new studies indicate increased vulnerability of pregnant women to COVID-1929 and suggest protection for infants when breastfeeding mothers are vaccinated.30 Such mixed and complex information means that pregnant women and new mothers are urgently seeking reliable medical advice and evidence-based information about the effects of COVID-19 vaccines.

- **Vaccine logistics and administration.** Consumers continue to report issues with scheduling appointments due to limited supply and inadequate systems.31 Concerns that vaccine appointment systems are not up to standards for people with disabilities, such as people who are blind or visually impaired, are being discussed in media.32 New recommendation:
  - Review appointment systems and work with advocacy groups to ensure that systems are meeting minimum guidelines and standards for accessibility for people with disabilities.

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## Appendix: Inputs and Sources

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<thead>
<tr>
<th>Type</th>
<th>Input</th>
<th>Cadence</th>
<th>Sources</th>
<th>Tactics for Utilization</th>
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</thead>
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| **Mixed Methods** | Communication Surveillance Report | Daily, weekdays | • Google news  
• Meltwater  
• CrowdTangle  
• Native platform searches | • Share of voice topic analysis to identify themes  
• Emerging topics |
|  | Tanaq Social Listening + Media Monitoring Report | Weekly, Mondays | • Meltwater  
• Muck Rack  
• Sprout Social  
• First Draft  
• Stronger  
• Native platform searches | • Trending topics  
• Demographic and geographic conversation monitoring |
|  | Meltwater | Daily | • Facebook, Twitter, Instagram  
• Blogs  
• News media  
• Online forums | • Share of voice topic analysis  
• Emerging theme topics  
• Identify high reach/velocity topics |
| **Social Media Listening** | OADC Channel COVID-19 Post metrics | Weekly, Wednesdays | • Sprout Social  
• Native OADC account analytics | • Analyze # of posts, topics  
• Success of messages, # of impressions, reach, # engagements |
|  | OADC Channel Comment Analysis | Daily, weekdays | • Native platform searches | • Sentiment analysis  
• Identify message gaps/voids |
|  | CrowdTangle content insights report | Biweekly, Mondays | • Facebook | • Top pages (voices), groups  
• General trends/sentiment analysis  
• News analysis through posts |
|  | FEMA Social Listening Report | Weekdays, daily | • Hootsuite  
• Brandwatch  
• CrowdTangle  
• Meltwater | • Trends/sentiment analysis  
• National and global news analysis |
| **Direct Reports** | CDC-INFO Metrics | Weekly, Mondays | • CDC-INFO inquiry line list  
• Prepared response (PR) usage report | • Cross-compare PR usage with inquiry theme analysis  
• Sentiment analysis  
• Identify information gaps/voids |
|  | VTF Media Requests | Weekly, Mondays | • Media request line list | • Leading indicator for news coverage  
• Identify information gaps/voids |
|  | Web Metrics | Weekly, Wednesdays | • Top pages  
• Google search queries  
• Top FAQs  
• Referring domains | • Identify information gaps/voids,  
• Identify keywords/search terms, changes in web traffic |
| **Research** | Poll Review | Weekly, Mondays | • Harris Poll, PEW research, Gallup Poll, KFF  
• New data related to vaccine hesitancy | • Identify socio-behavior indicators related to motivation and intention to vaccinate |
|  | Literature Review | Weekly, Mondays | • PubMed, LitCovid, ProQuest Central  
• New data related to vaccine hesitancy | • Identify current vaccination intention  
• Identify barriers to vaccination |