

COVID-19 State of Vaccine Confidence Insights Report

Report 2 | March 1, 2021 | Date Range: January 31, 2021 – February 13, 2021



Summary

There continue to be widespread challenges and confusion with COVID-19 vaccine rollout in the U.S., which undermines vaccine confidence and threatens vaccine acceptance. Consumers are confused about how COVID-19 vaccines work and their relative effectiveness, while people with high-risk underlying and acute medical conditions are concerned about vaccine safety and their eligibility to receive a vaccine. Although vaccine supply has expanded to retail pharmacy settings, consumers continue to face structural barriers to access. The Centers for Disease Control and Prevention (CDC) should continue to coordinate with states and jurisdictions to increase transparency, respond to gaps in information, and confront misinformation with evidence-based messaging to increase vaccine confidence more broadly.



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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

How do you classify this theme/information?		
High risk	Moderate risk	Low risk
<ul style="list-style-type: none"> May lead to vaccine refusals and decreased uptake Wide reach, pervasive 	<ul style="list-style-type: none"> Potential to trigger hesitancy to vaccinate Moderate reach, modest dissemination 	<ul style="list-style-type: none"> Concerning, but low risk to vaccine confidence Limited reach, limited dissemination

How has this theme/idea changed over time (since last report or over the course of multiple reports)?		
 <p>increasing Information spreading rapidly</p>	 <p>stable Information remaining constant at prior level</p>	 <p>decreasing Information is not gaining further traction and there has been no indication of additional activity</p>

Major Themes



Consumers are confused about how COVID-19 vaccines work and their benefits.

Consumers are confused about how COVID-19 vaccines work,¹ the impact of vaccination on asymptomatic spread,² how many doses they need if they previously had COVID-19 illness,³ and whether they will need to get vaccinated each year.⁴ Social media discussion and media coverage of vaccine effectiveness and efficacy are second only to conversations about accessing vaccination appointments, with 14% of the total conversations on COVID-19 vaccines online focused on vaccine effectiveness. Media coverage consistently includes statistics describing effectiveness of the available vaccines, with no information about how the public should interpret the statistics. Consumers need additional information to better manage their expectations for how COVID-19 vaccines work.⁵



Additionally, media coverage of new studies looking at VE of a single dose of mRNA vaccines is increasing.^{6,7} As social media conversation about unpleasant common side effects after the second dose of mRNA vaccines also increases, this type of coverage may persuade consumers that they either do not need a second dose or that the benefits do not outweigh the risk of experiencing side effects.⁸

Short-term recommendations

- Clarify messaging about vaccine effectiveness and efficacy, including how it is determined, what it means, and how consumers should interpret the vaccine effectiveness statistics in media headlines.
- Partner with healthcare providers to better understand which questions patients have regarding vaccine effectiveness and expand tools to assist providers in ongoing patient education.

Long-term recommendation

- Conduct research to better understand why consumers did not complete COVID-19 vaccine series and describe the wide array of barriers to completing COVID-19 vaccination.



People with underlying medical conditions, acute medical conditions, or allergies are unsure if current vaccines are safe for them.

Consumers are confused about whether people with underlying or high-risk medical conditions, such as cancer, or heart disease, or Down syndrome should or should not get a COVID-19 vaccine. Many believe that vaccination will cause illness and is unsafe, given their underlying condition. Compounding this misinformation, states and jurisdictions define “high-risk medical condition” differently, and generally lack clarity on where to find the lists of accepted underlying conditions for vaccination.⁹ This could affect the ability of those with underlying conditions to access the vaccine. High rates of media requests to CDC seeking to understand the underlying conditions eligible for vaccine prioritization and increased web queries on vaccination for those with a variety of conditions, underscore the public’s desire for credible information.

Caller has lupus, and wants to know how the vaccine will affect her immune system? She also has other high-risk medical conditions.

- CDC-info caller, 2/8

Consumers are also concerned that known allergies and factors such as acute illness, recent surgery, or taking antibiotics or other medications might prevent them from getting vaccinated, with 1,200 inquiries per week on the topic to CDC-INFO. Many with autoimmune disorders or suppressed immune systems, including HIV, are concerned that their bodies will not develop a significant immune response to the vaccine and that they will not be protected against COVID-19, or that the vaccine will make them increasingly ill.¹⁰

Short-term recommendation

- Address the information gap around underlying conditions, acute medical conditions, allergies, medications, and vaccine safety. Populate evidence-based, trusted websites with comprehensive and transparent information on what is known about health conditions and vaccine safety. Consider launching screeners or chat-bots to further fill these information gaps.

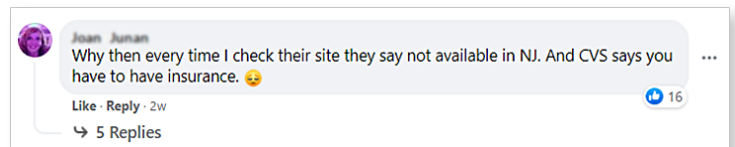
Long-term recommendations

- Collaborate with states to ensure “high-risk medical conditions” are defined clearly and consistently and that the conditions included in the high-risk category are listed and easy to locate on state websites and other state-level communication materials about vaccination eligibility.
- Partner with advocacy organizations and specialty healthcare organizations to reach out to people with disabilities and high-risk groups directly to ensure they are aware that they are eligible for vaccination and develop messaging to promote vaccination as appropriate.



Barriers to vaccine access remain, despite national expansion to retail pharmacy administration sites.

Although the Federal Retail Pharmacy Program sought to expand access to COVID-19 vaccines,¹¹ consumers report that scheduling or appointment systems are difficult to navigate; many consumers cannot secure appointments or find nearby vaccination locations.¹² Social media mentions and media interest in the pharmacy program increased over the reporting period, with reporters seeking to understand how pharmacies were selected and how vaccine doses were allocated. Questions are consistently raised about why large-scale vaccination sites are closed due to vaccine supply problems, but pharmacies continue to receive vaccine doses. Some news outlets are reporting that vaccine supply initially earmarked for hospitals is now being rerouted to mass vaccination clinics and pharmacies to increase vaccination coverage, which has led to appointment cancellations.¹³



Additionally, consumers’ concerns about eligibility and vaccine allocation are increasing as the media highlights reports of a doctor losing his job after giving away excess doses prior to expiration¹⁴ and vaccines being seized after doses were mistakenly administered to non-eligible teachers.¹⁵ Pharmacies also report different plans for how to use excess doses before they expire, with some pharmacies allocating them to their staff and others developing wait lists of prioritized individuals.¹⁶

Short-term recommendations

- Develop clear, transparent messaging about how the Federal Retail Pharmacy Program operates; outline the process by which vaccines are allocated to pharmacies and other administration sites.
- Work with states and jurisdictions to develop systems to assist consumers with limited internet access with scheduling appointments and identifying the locations of vaccine administration sites.
- Collaborate with retail pharmacy partners and states/jurisdictions to develop clear communication plans for scheduling appointments through the Federal Retail Pharmacy Program

Long-term recommendation

- Use geospatial mapping to identify where to increase vaccine supply allocations to ensure equitable access to high-burden populations.

Emerging Topics



People are confused about their risk for COVID-19 before vaccine series completion.

- An uptick in media inquiries, web traffic, and social media listening platforms indicates uncertainty among consumers about what they should do if they are exposed to COVID-19 after the first dose of vaccine and whether they should proceed with getting their second vaccine dose.

Short-term recommendation

- Create clear communication materials regarding what to do if you are exposed to COVID-19 during the vaccination series

Recruitment of children for vaccine trials met with concern and fear

Consumers are expressing deep concern about clinical trials for COVID-19 vaccines involving children. Social media posts have compared the trials in children to child abuse,¹⁷ noted that vaccination should be unnecessary for this group as their transmission of the virus is low,¹⁸ and expressed that even if a COVID-19 vaccine were approved, parents would not allow their children to be vaccinated.¹⁹

Short-term recommendation

- Coordinate with FDA, state and local health departments, and professional organizations to develop messaging about how clinical trials in children work and why they are necessary.

Long-term recommendation

- Conduct research to better understand parents' fears and hesitations, specifically related to COVID-19 vaccines for children.

Scams are emerging across the U.S., targeting consumers trying to be vaccinated.

- Reports of fake vaccine being sold,²⁰ people receiving calls to schedule them for fake vaccination appointments,²¹ and individuals targeting seniors on Craigslist and Facebook seeking to pose as "caregivers" for them in order to get vaccinated before they are eligible.²²

Short-term recommendation

- Encourage states and jurisdictions to develop messaging informing consumers how to verify that their vaccination appointment is legitimate and what scheduling appointments should look like, including what information the consumer will need to show the vaccine provider to receive the vaccine.

Closed-network social media platforms gaining traction with anti-vaccine supporters.

- Vocal vaccine deniers and conspiracy theorists who previously used mainstream social media have been switching to closed-network social media apps.²³ Misinformation about COVID-19 vaccines has begun to circulate on this platform before moving to mainstream social media platforms with posts receiving tens of thousands of user views before they can be removed.²⁴

Short-term recommendations

- Partner with trusted messengers to communicate accurate, evidence-based information on closed messaging platforms and boost messages related to vaccine benefits and safety.
- Continue to monitor activity in these closed messaging groups, and partner with companies in fact-checking efforts to support rebuttal or removal of harmful mis/disinformation.

Continuing Themes

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

- **Vaccine Adverse Event Reporting System (VAERS) and adverse events.** Misinformation about VAERS continues, along with fear about adverse vaccine effects. Although recently published VAERS data showed very low levels of severe adverse events,²⁵ media and the public continue to amplify deaths following vaccination and other potential reactions.
- **Nonsteroidal anti-inflammatory drugs (NSAIDs).** A recent study found that NSAIDs “reduced both the antibody and pro-inflammatory cytokine response to SARS-CoV-2 infection,” which may indicate NSAIDs impact the body’s response to vaccination.²⁶ Confusion about the effect of NSAIDs on vaccine effectiveness is expanding to other over-the-counter medications, like acetaminophen, pseudoephedrine, and naproxen. *New recommendations:*
 - Clarify what is known about the impact of NSAIDs and other medications on vaccine effectiveness.
 - Expand messaging about what types of medications can be taken after vaccination.
 - Provide healthcare providers and other trusted messengers with additional information on helping patients to manage common side effects.
- **Pregnancy and vaccination.** Anti-vaccine supporters continue to target pregnant women with dis- and misinformation, distorting information around miscarriage risks. Many women are turning to pregnancy forums for discussion. *Additional recommendation:*
 - Partner with websites and organizations that host pregnancy discussion boards to identify information gaps and address them.
- **Prioritization.** Sentiment has grown that willingness to reopen schools is in contradiction with teachers’ general lack of vaccine eligibility. Social media discussions and media coverage related to teacher eligibility accounted for 17% of all eligibility or prioritization conversations with 111,000 mentions. Only 24 states currently list teachers as eligible for vaccination.
- **Side effects.** Consumers are expressing concern about general side effects, long-term side effects, severe allergic reactions, and feeling ill after receiving the vaccine.
- **Lack of equity.** There is a lack of perceived equity in the vaccine prioritization process, and consumers continue to be frustrated about varied eligibility criteria and shifting guidelines.
- **Post-vaccination care.** Confusion about post-vaccination mitigation measures is continuing, including CDC’s new quarantine guidance for those who are fully vaccinated. *New recommendations:*
 - Clarify consumer-facing messages about post-vaccination quarantine guidelines.
 - Integrate post-vaccination mitigation messaging into vaccine-related communication products and messaging.

Appendix

Type	Input	Cadence	Sources	Tactics for Utilization
Mixed Methods	Communication Surveillance Report	Daily, weekdays	<ul style="list-style-type: none"> Google news Meltwater CrowdTangle Native platform searches 	<ul style="list-style-type: none"> Share of voice topic analysis to identify themes Emerging topics
	Tanaq Social Listening +Media Monitoring Report	Weekly, Mondays	<ul style="list-style-type: none"> Hootsuite Muck Rack Sprout Social First Draft Stronger Native platform searches 	<ul style="list-style-type: none"> Trending topics Demographic and geographic conversation monitoring
	Meltwater	Daily	<ul style="list-style-type: none"> Facebook, Twitter, Instagram Blogs News media Online Forums 	<ul style="list-style-type: none"> Share of voice topic analysis Emerging theme topics Identify high reach/velocity topics
Social Media Listening	OADC Channel COVID-19 Post metrics	Weekly, Wednesdays	<ul style="list-style-type: none"> Sprout Social Native OADC account analytics 	<ul style="list-style-type: none"> Analyze # of posts, topics Success of messages, # of impressions, reach, # engagements
	OADC Channel Comment Analysis	Daily, weekdays	<ul style="list-style-type: none"> Native platform searches 	<ul style="list-style-type: none"> Sentiment analysis Identify message gaps/voids
	CrowdTangle content insights report	Biweekly, Mondays	<ul style="list-style-type: none"> Facebook 	<ul style="list-style-type: none"> Top pages (voices), groups General trends/sentiment analysis News analysis through posts
	FEMA Social Listening Report	Weekdays, daily	<ul style="list-style-type: none"> Various 	<ul style="list-style-type: none"> Trends/sentiment analysis National and global news analysis
Direct Reports	CDC-Info Metrics	Weekly, Mondays	<ul style="list-style-type: none"> CDC-Info inquiry line list Prepared response (PR) usage report 	<ul style="list-style-type: none"> Cross-compare PR usage with inquiry theme analysis Sentiment analysis Identify information gaps/voids
	VTF Media Requests	Weekly, Mondays	<ul style="list-style-type: none"> Media request line list 	<ul style="list-style-type: none"> Leading indicator for news coverage Identify information gaps/voids
	Web Metrics	Weekly, Wednesdays	<ul style="list-style-type: none"> Top pages Google search queries Top FAQs Referring domains 	<ul style="list-style-type: none"> Identify information gaps/voids, identify keywords/search terms, changes in web traffic
Research	Poll Review	Weekly, Mondays	<ul style="list-style-type: none"> Harris Poll, PEW research, Gallup Poll, KFF New data related to vaccine hesitancy 	<ul style="list-style-type: none"> Identify socio-behavior indicators related to motivation and intention to vaccinate
	Literature Review	Weekly, Mondays	<ul style="list-style-type: none"> PubMed, LitCovid, ProQuest Central New data related to vaccine hesitancy 	<ul style="list-style-type: none"> Identify current vaccination intention Identify barriers to vaccination