Summary

**Findings.** Even as the number of unvaccinated people with intent to get a COVID-19 vaccine has shrunk, efforts to promote vaccination have remained the same or even increased. This is causing some who might not intend to get vaccinated to report feeling unfairly pressured to get vaccinated. At the same time, the removal of mask mandates for vaccinated individuals and other mitigation measures across the United States has reduced motivation for some unvaccinated people to get vaccinated. The United States’ decision to investigate the possibility that the virus that causes COVID-19 might have been created in a laboratory has caused some consumers to express distrust in domestic and foreign governments, the COVID-19 response, and COVID-19 vaccines.

**Ways to take action.** Federal, state, and local partners should work together to disseminate messages about the effectiveness of COVID-19 vaccines, respond to gaps in information, and confront misinformation with science-based messaging. The goal of these efforts is to increase confidence in COVID-19 vaccines and expand vaccine uptake more broadly. Communication and outreach efforts should be evaluated and recalibrated to provide a more tailored, localized approach to reach the shrinking number of people with some intent to get a COVID-19 vaccine. Additional research and evaluation should be done to better understand the perceptions and opinions regarding COVID-19 vaccines and motivating factors for vaccination among those who want to be vaccinated but have not yet for various reasons.

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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 that influence COVID-19 vaccine hesitancy and uptake. These are characterized by 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 improve vaccine confidence across the United States.

The information in this report is a snapshot in time based on the date range of the report and certain populations might be underrepresented. Images and quotes are illustrative examples and are not meant to be comprehensive of all content related to the highlighted themes. Included polls and literature reflect polls that were released or conducted data collection during the date range of this report.

Theme Classification

Moderate risk
- May lead to vaccine refusals and decreased uptake
- Wide reach, pervasive
- Potential to trigger hesitancy to vaccination
- Moderate reach, modest dissemination
- Concerning, but low risk to vaccine confidence
- Limited reach, limited dissemination

Low risk
- Could increase vaccine confidence, intent, or motivation
- Variable reach and dissemination

How has this theme/idea changed over time (since last report or over the course of multiple reports)?

Increasing
Information spreading rapidly

Stable
Information remaining constant at prior level

Decreasing
Information is not gaining further traction and there has been no indication of additional activity
Major Themes

Pressure created by abundant marketing campaigns, unprecedented incentives, and vaccine requirements might alienate consumers who are unsure about getting vaccinated.

In an effort to reach the President’s goal to administer at least one dose of vaccine to 70% of adults by July 4, 2021, vaccination coverage and efforts by states and jurisdictions to increase vaccine confidence and uptake was widely covered by the news media. While some consumers expressed optimism of getting closer to the goal, others expressed skepticism and felt that the strategies being used are ineffective, intrusive, and discriminatory. One poll found that 4 in 10 unvaccinated people felt ‘unfairly pressured,’ indicating that the government, news media, society, and loved ones all contributed to this feeling. The poll also found that the likelihood a person perceived ‘unfair pressure’ increased the more reluctant or hesitant they were to get vaccinated.

As the number of unvaccinated people with an intent to get a COVID-19 vaccine shrinks, the volume and scale of communication and marketing campaigns have remained the same or even grown. Also, localized efforts to increase uptake through incentives, such as lotteries and free beer, and other innovative outreach methods, like offering free rides to vaccination sites and badges on dating apps, have also grown. Some consumers felt that these efforts should be seen as ‘red flags,’ and people who are unvaccinated should ignore the ‘bribes’ and decide to get vaccinated on their own when they are ready. These perceived attempts at ‘coercion’ have resulted in some consumers losing further trust in the U.S. vaccination system, which could decrease their motivation and intent to get vaccinated.

Another source of perceived pressure is announcements from several entities on requirements to prove vaccination status for travel, school attendance, employment, and when receiving services. News media outlets covered the legality of employers requiring vaccination and companies announcing such requirements, as well as employees suing their employers over the requirements. Some vocal vaccine deniers attempted to sow further distrust in the U.S. vaccination system by equating proof-of-vaccination systems and mandates to ‘medical segregation.’ Their efforts especially focused on education-based mandates in light of colleges and universities announcing reopening plans and the recent recommendation that adolescents 12–15 years old be vaccinated.

Proof-of-vaccination systems remain a polarizing topic for consumers and politicians. One survey found that just over half (56%) of people surveyed would support policies that would prevent those without proof of vaccination from traveling, while 1 in 10 (14%) would be upset if they were asked for proof of vaccination. Some political leaders introduced executive orders and legislation to prevent proof-of-vaccination systems and mandates, claiming that vaccination should be a personal choice.

Ways to act:
- Further evaluate the perceptions and opinions of unvaccinated adults to better understand the reasons they might be delaying or refusing COVID-19 vaccination, what messengers and platforms they most trust, and what would motivate them to get vaccinated. Leverage such evaluation to develop tailored communication and social mobilization campaigns around vaccination.
Ways to act (cont.)

- Evaluate and recalibrate current communication, marketing, and outreach efforts for COVID-19 vaccines and vaccination to identify new strategies for organic and paid media. This could include message testing, content frequency adjustments, new audience segmentations, and different channel selection and messengers that better reach remaining unvaccinated consumers.
- Develop and disseminate messages by leveraging data that show how widely accepted and safe vaccines have proven to be, with over 65% of U.S. adults getting at least one dose and safety monitoring continuing to confirm that the vaccines are safe and effective.
- Partner with local influencers, trusted messengers, and public health experts to encourage dialogue around vaccination through hosting town halls or forums, digitally and in-person, as able. Use these events to foster a safe space for questions, concerns, and information gathering.

While the ‘return to normal’ appears to be motivating some consumers to get vaccinated, it seems to be decreasing urgency for others.

Many states and jurisdictions have announced plans to remove mask mandates and other mitigation measures after reaching a vaccination coverage target, while some have already rolled back mitigation measures regardless of vaccination rates. News coverage abounded with examples of the country returning to pre-pandemic life, such as the lifting of mask mandates for schools, countries announcing that they would once again be welcoming Americans for international travel, and even crowded festivals and movie theaters returning to full capacity. While some consumers expressed excitement to see vaccinations helping this return to normal, others expressed concern that without proof-of-vaccination systems and higher rates of vaccination coverage these decisions were premature. This was especially concerning for families with children who are not eligible to be vaccinated and people with compromised immune systems who commented that they felt as though public health guidance did not adequately protect them. These concerns could contribute to broader distrust in the U.S. vaccination system and public health response to COVID-19.

Many businesses and organizations are relying on an ‘honor system’ regarding vaccination status with mask and physical distancing requirements lifted for fully vaccinated people without requiring proof of vaccination, which vaccine advocates claim is being ignored by those reluctant or refusing to be vaccinated. A recent poll supported these claims finding that the percentage of people wearing masks is declining, with less than 50% of people who do not plan to get vaccinated reporting wearing masks compared with 90% of people who are fully vaccinated. Another poll found that updated guidance for fully vaccinated individuals regarding mask wearing has little to no effect on the intent for those who have yet to get vaccinated to get a COVID-19 vaccine. This indicates that the further loosening of mitigation measures might not increase vaccine confidence or uptake for those wanting to ‘wait and see’ and those who would only get vaccinated if it is required.

Ways to act:

- Amplify true vaccination stories from community members, particularly of those who delayed vaccination, to highlight how they decided to get vaccinated, their experience, and what they are looking forward to once they are fully vaccinated.
- Continue to disseminate messages through health authorities, healthcare providers, and other trusted messengers about the importance of vaccination, how to find a vaccine near, and the importance of mitigation measures for those who are not fully vaccinated. Messages should include information about the role of vaccination in protecting themselves and their loved ones, especially those who are not able to be vaccinated.
Emerging Theme

The origin story of the virus that causes COVID-19 is reducing confidence in COVID-19 vaccines for some.

In late May 2021, President Biden ordered intelligence agencies to further investigate the origins of the virus that causes COVID-19. Early in the pandemic, claims that the virus might have been in a laboratory were widely fact-checked and labeled to be false, but this new investigation is re-examining early theories that the virus likely originated from animals. One poll indicated that most consumers (58%) believe that the virus that causes COVID-19 was made in a laboratory and some consumers (25%) believe it was released on purpose. Additionally, online searches for the origin of COVID-19 have almost doubled since the beginning of 2021, with only one of the top ten results being a health authority.

News coverage on the re-investigation of the origins of the virus that causes COVID-19 quickly escalated from major news outlets and outlets known for their involvement in instigating and spreading mis- and disinformation. This coverage appeared to validate skepticism and distrust for vocal vaccine deniers and some consumers. This perceived validation led some social media companies to stop flagging and removing content related to the origins of the virus. This also led some consumers to call for other content flagged or removed on the basis of misinformation to be reinstated. Reinstating content might undermine the progress and efforts made to reduce the spread of COVID-19 and vaccine mis- and disinformation on social media platforms. At the same time, a widely-circulated story claimed that a scientist from the laboratory that some believe the virus emerged from filed a patent for a COVID-19 vaccine before the pandemic was declared. Some consumers indicated this story furthered their distrust in COVID-19 vaccines and the motivations of the federal government in promoting vaccination.

Ways to Act:

- Evaluate perceptions and opinions of consumers who have not yet been vaccinated to better understand how the origin of the virus that causes COVID-19 might affect their motivation and intent to get vaccinated.
- Amplify messages through trusted messengers about the benefits of COVID-19 vaccines, regardless of the origin of the virus, and available facts and statistics on vaccine impact.
Continuing and Evolving Themes

Themes below have been noted in previous reports and continue to undermine vaccine confidence for people who remain unvaccinated. The information highlighted below focuses on what is new or different from previous reports. For additional context and previous recommendations on these themes see previous Insights Reports.

- **Vaccine effectiveness.** Studies looking at the effectiveness of currently available COVID-19 vaccines against the most common variants of the virus that causes COVID-19 caught news attention. One highlighted the importance of completing a vaccination series, if a vaccination requires two doses, while another noted how the Delta variant in particular led to an increase in hospitalizations in the United Kingdom. Based on social media comments and inquiries to CDC-INFO, consumers are expressing confusion about the effectiveness of their vaccination, when they would require a booster dose, and whether they should mix two brands of vaccine to enhance their protection.

  New ways to act:
  - Enhance message dissemination about the role COVID-19 vaccines play in reducing the spread and development of virus variants.
  - Continue to amplify messages about the effectiveness of COVID-19 vaccines against common variants and the benefits of vaccination, particularly reducing the length and severity of illness if people get sick.

- **Adverse events.** Adolescents experiencing myocarditis following vaccination was a focus in the news cycle and in social media conversation about COVID-19 vaccines. Vocal vaccine deniers intensified concerns about the potential of adverse events by spreading misinterpreted VAERS data, claiming that in addition to the myocarditis cases there are large numbers of adverse events occurring following COVID-19 vaccination.

- **Misinformation.** Concerns about foreign actors influencing vaccine confidence arose with reports of a foreign advertising agency targeting influencers to sow distrust in the Pfizer-BioNTech COVID-19 Vaccine. Minor misinformation topics during this reporting period included claims that:
  - Vaccination is leading to the development of virus variants.
  - The Moderna COVID-19 Vaccine contains a cancer-causing ingredient that could also damage fertility or a fetus.
  - Vaccination will cause mass deaths circulated based on comments by a former pharmaceutical executive and a Nobel prize winner who was misquoted.

- **Natural immunity.** Experts from two major health authorities in the United States spoke out advising consumers that previously infected people should ignore CDC’s guidance to get vaccinated, as there is little to no benefit for them. Social media misinformation that vaccination ‘destroys’ the superior antibodies of people who were previously infected also circulated, causing some to say that is why convalescent plasma is not being accepted by blood banks. CDC-INFO received several inquiries asking for clarity on antibody testing and what levels of infection-induced antibodies are needed for one to be protected.

- **Medical Bills.** Consumers continue to report to CDC-INFO that they are receiving medical bills for their COVID-19 vaccination, causing confusion as vaccination is supposed to be free. As reports of people receiving medical bills continue, it has discouraged some unvaccinated consumers from getting vaccinated. At the same time, some consumers expressed concern about medical bills if they were to experience an adverse event that required medical care or hospitalization and some consumers have already contacted CDC-INFO to inquire about how to be reimbursed.
## Appendix: Inputs and Sources

<table>
<thead>
<tr>
<th>Type</th>
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<th>Tactics for Utilization</th>
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| **Social Media Listening & Media Monitoring** | Communication Surveillance Report                                    | Daily on weekdays      | • Google news  
• Meltwater  
• CrowdTangle  
• Native platform searches                                                                                                     | • Share of voice topic analysis to identify themes  
• Emerging topics                                                                  |
|                          | Meltwater                                                            | Daily                  | • Facebook, Twitter, Instagram  
• Blogs  
• News media  
• Online forums                                                                                                                  | • Share of voice topic analysis  
• Emerging theme topics  
• Identify high reach/velocity topics                                                  |
|                          | OADC Channel COVID-19 Post metrics                                   | Weekly                 | • Sprout Social  
• Native OADC account analytics                                                                                                   | • Analyze # of posts, topics  
• Success of messages, # of impressions, reach, # engagements                       |
|                          | OADC Channel Comment Analysis                                        | Daily on weekdays      | • Native platform searches                                                                                                       | • Sentiment analysis  
• Identify message gaps/voids                                                              |
| **Direct Reports**       | CDC-INFO Metrics                                                     | Weekly                 | • 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                 | • Media request line list                                                                                                       | • Leading indicator for news coverage  
• Identify information gaps/voids                                                       |
|                          | Web Metrics                                                          | Weekly                 | • 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                 | • 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                 | • PubMed, LitCovid, ProQuest Central  
• New data related to vaccine hesitancy                                                                                              | • Identify current vaccination intention  
• Identify barriers to vaccination                                                      |
| **Third Party Reports**  | Tanaq Social Listening +Media Monitoring Report                      | Weekly                 | • Meltwater  
• Sprout Social  
• First Draft  
• Native platform searches                                                                                                         | • Trending topics  
• Demographic and geographic conversation monitoring                                      |
|                          | CrowdTangle content insights report                                  | Biweekly               | • Facebook                                                                                                                       | • Top pages (voices), groups  
• General trends/sentiment analysis  
• News analysis through posts                                                          |
|                          | FEMA Social Listening Report                                         | Daily                  | • Hootsuite  
• Brandwatch  
• CrowdTangle  
• Meltwater                                                                                                                        | • Trends/sentiment analysis  
• National and global news analysis                                                     |
|                          | First Draft News Vaccine Misinformation Insights Report               | Monthly                | • Proprietary methods                                                                                                            | • Media trends analysis  
• Emerging threats and data deficits  
• Online vaccine narratives                                                               |
|                          | Project VCTR                                                         | Weekly                 | • Proprietary methods                                                                                                            | • National and regional trends in negative attitudes toward vaccination  
• Conversations around Legislation                                                       |
|                          | Virality Project                                                     | Weekly                 | • Proprietary methods                                                                                                            | • Mis- and disinformation trends related to COVID-19 vaccine                            |