

# Rapid COVID-19 State of Vaccine Confidence Insights Report

August 17 – 19, 2021 | Announcement of Booster Dose Program of mRNA COVID-19 Vaccines for U.S. Adults

Vaccine Confidence and Demand Team, Insights Unit



Following the [White House press briefing](#) on August 18, 2021, announcing an mRNA COVID-19 vaccine booster dose program for adults 18 years and older, a rapid insights report was conducted using the same methods and [inputs](#) from [the COVID-19 State of Vaccine Confidence Insights Reports](#).

This report seeks to better understand consumers' perceptions and sentiments around booster doses. The report details threats to COVID-19 vaccine confidence, content gaps and information voids, circulating mis- and disinformation, and action steps to take.

The information in this report is a snapshot from August 17, 2021 through August 19, 2021.



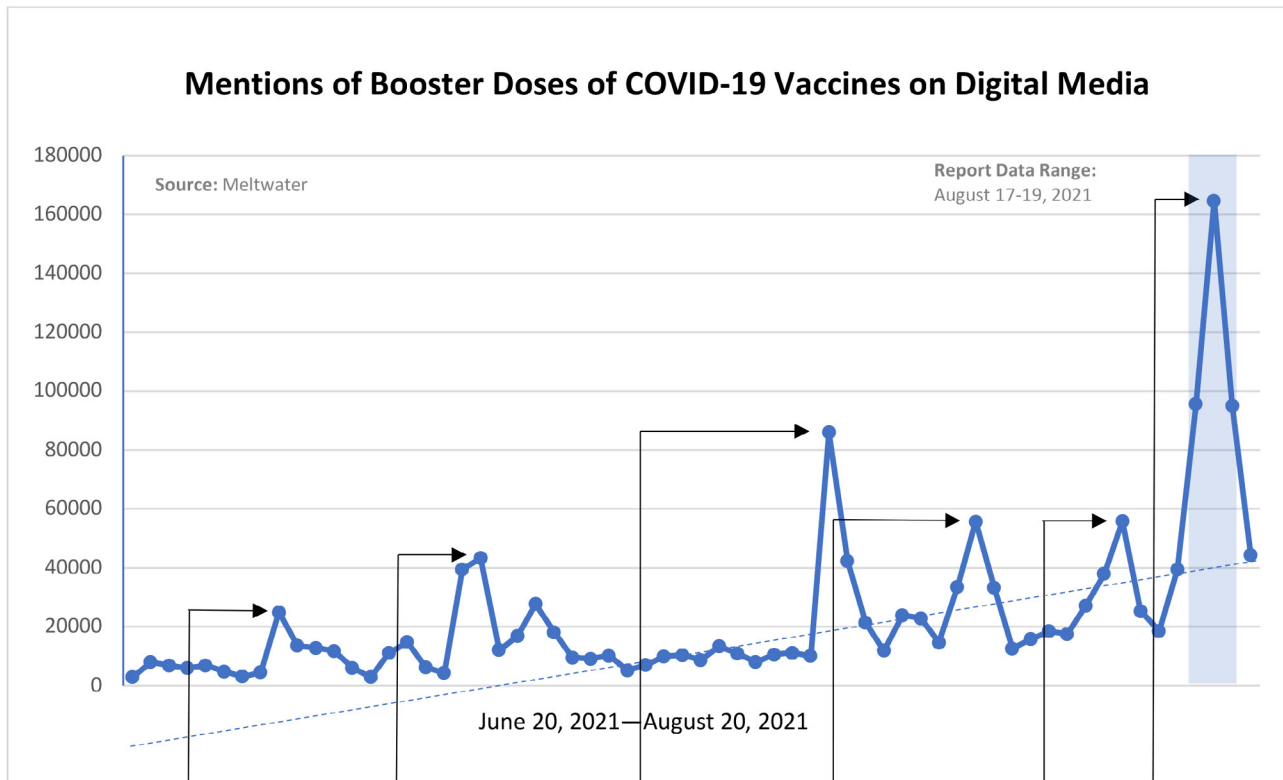
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## Background

Coverage on news media and social media conversations about additional or booster doses of mRNA COVID-19 vaccines have been steadily increasing since June 2021. However, the conversation around booster doses began as early as January 25, 2021, when Moderna announced they would be researching ways to adapt their vaccine for potential booster doses to better address emerging variants of the virus that causes COVID-19.<sup>1,2</sup> Announcements by vaccine manufacturers in 2021, not public health authorities, drove most of the conversation on digital media about potential additional or booster doses of COVID-19 vaccines.<sup>3,4,5,6</sup> However, with breaking news coverage on August 17, 2021 of a pending announcement about booster doses from the White House Coronavirus Task Force, mentions about booster doses<sup>7,8,9</sup> spiked on August 18, 2021, with reactions from both news outlets and consumers<sup>10,11,12</sup>



**June 28:** New study shows that Pfizer-BioNTech and Moderna vaccines offer long-term protection from severe illness by COVID-19, however, emerging variants may require booster doses.

**July 9:** Pfizer announces that booster dose of vaccine will likely be needed. Data shows waning immunity 6 months after 2<sup>nd</sup> dose administered.

**July 28:** Pfizer announces data suggesting booster dose provides strong protection against circulating variants of the virus that causes COVID-19.

**August 5:** Moderna announces booster dose will likely be needed this fall, despite data showing strong protection at 6 months after 2<sup>nd</sup> dose administered.

**August 13:** FDA authorizes additional dose of mRNA vaccines for people with compromised immune systems.

**August 18:** Announcement of booster dose program of mRNA COVID-19 vaccines for U.S. adults at White House COVID-19 press briefing.

## Perceptions, Concerns, and Threats to Vaccine Confidence

News coverage and social media conversations following the announcement were mixed with some being for and others against booster doses. While some, especially healthcare professionals on the front lines, expressed relief due to concern over surging cases of COVID-19 caused by the Delta variant,<sup>13,14,15</sup> many felt that this decision was made prematurely. Several news outlets covered how this announcement conflicted with standing guidance by the World Health Organization (WHO) that countries should pause booster doses, and that governments should focus on increasing vaccine coverage globally first<sup>16,17</sup> as it is the best way to prevent the emergence of additional variants.<sup>18</sup> Several consumers and public health experts echoed these concerns.<sup>19,20,21,22,23,24,25</sup> Many consumers also felt that vaccinating children should be prioritized over administering booster doses to adults since pediatric cases are also rising.<sup>26,27,28</sup> Some also felt that officials should not have announced this decision before a COVID-19 vaccine was fully approved and licensed by FDA.<sup>39,40,41,42</sup>

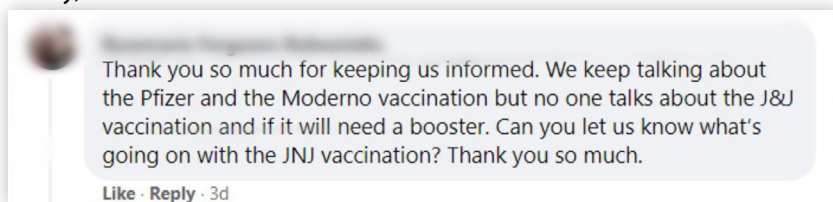
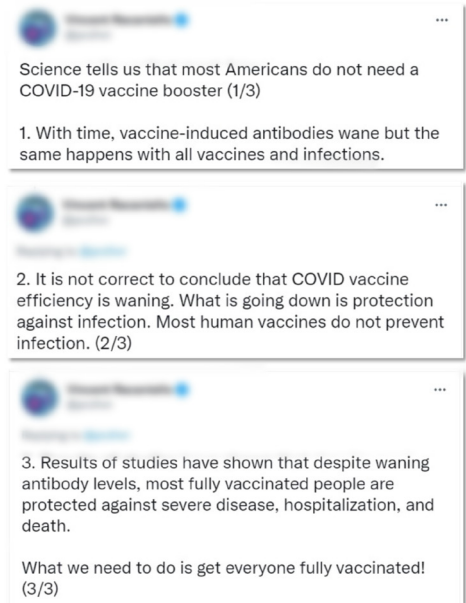
At the same time, several public health experts undercut the announcement saying that available data did not necessarily indicate the need for booster doses.<sup>29,30,31,32,33,34,35</sup> Some consumers felt that the announcement should have come from the Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC), not through the White House.<sup>36,37,38</sup> Some consumers also claimed that the pharmaceutical companies were responsible for the announcement, and the decision was motivated by profits for pharmaceutical companies, not science.<sup>43,44,45</sup>

The booster dose announcement left some consumers feeling that the pandemic “would never end,” that COVID-19 would inevitably become endemic,<sup>46,47</sup> and that booster doses and vaccines are not the best path to return to normal.<sup>48,49</sup> Some consumers drew parallels between COVID-19 vaccine booster doses and the annual influenza vaccine, citing that booster doses are something to expect given the virus that causes COVID-19 mutates like how the influenza virus does each season.<sup>50,51</sup> Other consumers expressed frustration with people who are unvaccinated, blaming the need for booster doses and emerging variants on their refusal to get vaccinated.<sup>52,53,54</sup> Some consumers felt that the guidance should consider previous infection and antibody testing before administering booster doses and that the approach to booster doses should not be one-size-fits-all.<sup>55,56,57</sup> Many consumers online said that while they had received the primary series, they did not intend on getting the booster dose when they were eligible. Reasons ranged from the disease becoming endemic and that we should “learn to live with it” rather than get vaccinated to perceptions that the benefits to a booster dose were not clear.<sup>58,59,60,61</sup>

Overall, the announcement confused consumers about the benefits and effectiveness of the primary series of COVID-19 vaccines and booster vaccines. Many news outlets sought to answer consumer questions about why receiving the primary series was still important, as well as dispelling the inaccurate assumption that booster doses or additional doses of vaccines generally are abnormal.<sup>62,63</sup> However, many consumers still questioned how effective the vaccines are if they will require a booster dose so soon after the primary series.<sup>64,65,66</sup> Consumers also questioned how often they would need a booster dose and the role booster doses would play in whether or not one would be considered fully vaccinated.<sup>67,68,69</sup>

Additionally, reports have emerged about other countries assigning an expiration date to when one’s fully vaccinated status would end based on their vaccination date.<sup>70</sup> Many consumers also expressed concern about the safety and potential side effects of a booster dose. Many consumers highlighted their severe reactions following the second dose of a mRNA vaccine previously or concerns about myocarditis and pericarditis following vaccination.<sup>71,72,73,74,75</sup>

Lastly, the announcement left consumers who received Johnson & Johnson’s Janssen COVID-19 Vaccine feeling “left in the dark” and seeking guidance about whether they could get a booster dose and, if so, could it be with one of the mRNA vaccines, despite assurance from federal health authorities that an announcement about the J&J/Janssen vaccine would be coming soon.<sup>76,77,78,79</sup>



## Content Gaps and Information Voids

Content gaps and information voids emerged following the White House press briefing on August 18, 2021, that COVID-19 booster doses would be offered to adults 18 years and older in the United States beginning the week of September 20, 2021, if they received their last vaccine dose at least eight months prior. Questions from consumers emerged organically on social media channels, websites, news articles, and internet forums, as well as through inquiries to CDC-INFO in response to news coverage about the booster dose. The following lists the most frequently asked questions by theme:

### *Questions about who can receive a booster dose*

- Can people who received the J&J/Janssen vaccine get a booster dose made by another manufacturer?
- Can people receive the J&J/Janssen vaccine as a booster dose?
- What conditions make a person eligible to receive an additional or a booster dose?
- Will people with compromised immune systems need a booster dose eight months after their third dose?
- Should antibody testing be used to determine if a person should get a booster dose?
- Do people who previously had COVID-19 need a booster dose?

### *Questions about the safety of booster doses*

- What are the side effects of the booster dose?
- How do we know booster doses are safe?

### *Question about why a booster dose is needed*

- If a person has enough antibodies to COVID-19, do they still need a booster dose?
- Other vaccines don't require a booster dose; why will COVID-19 vaccines require booster doses?
- What evidence supports the decision to wait eight months after the previous dose before getting a booster dose?
- Will administering booster doses help us reach herd immunity?

### *Other Questions*

- Should a person receive the same brand of COVID-19 vaccine for their booster dose as the primary series they received?
- When can people start getting the booster doses?
- Will people who receive a booster dose need to continue to wear masks?
- Would not having the booster dose mean you are not fully vaccinated in instances where you need to prove your vaccination status?
- What is the difference between the primary series, the additional dose, and the booster dose?
- Are the booster doses going to be free, and if not, what is the cost?
- How many booster doses will people need to get?
- Will a booster dose decrease the chance of someone getting or becoming sick with COVID-19?

## Misinformation and Disinformation Themes

With the existence of several information gaps regarding booster doses and COVID-19 vaccines, mis- and disinformation spread online broadly. Some vocal vaccine deniers felt their beliefs that COVID-19 vaccines are ineffective and unsafe were validated and strengthened by the booster dose announcement. Below are the most common mis- and disinformation themes related to booster doses of COVID-19 vaccines:

*The need for a booster dose proves COVID-19 vaccines do not work.* Vocal vaccine deniers highlighted the booster dose announcement as evidence that vaccines do not work at preventing the spread of the virus that causes COVID-19 or becoming seriously ill with COVID-19.<sup>80,81,82</sup> Additionally, some social media consumers continued to promote the belief that COVID-19 vaccines damage a person's immune system, and that booster doses will cause further damage.<sup>83,84</sup>

*People do not need the booster dose because there are other treatments and prevention methods available.* Vaccine deniers continued to promote the use of unproven treatments such as hydroxychloroquine, zinc, Zithromax, and Ivermectin.<sup>4</sup> Vaccine deniers promoted these unproven treatments by comparing their supposed efficacy to vaccination. Additionally, vaccine deniers continued to promote the idea that natural immunity is superior to vaccine-mediated immunity,<sup>85,86</sup> with some claiming that a combination of better nutrition, diet, or exercise was a more effective prevention method than the vaccine or the booster dose.<sup>87</sup>

*The decision to recommend booster doses was made for financial gain, not to address COVID-19.* Vocal vaccine deniers spread the belief that booster doses exist only for the financial benefit of pharmaceutical companies.<sup>88,89,90</sup> This idea was further spread by a notable public figure who echoed these beliefs on a national news media outlet.<sup>91</sup> Some vocal vaccine deniers also continued to promote the belief that the vaccine and booster dose ingredients are not safe<sup>92</sup> and that the pharmaceutical companies are lying to the government and the population about the ingredients in the vaccines and booster doses.<sup>93</sup>

*Multiple booster doses will be recommended.* Some consumers on social media believe that this is the first of many booster doses that will be required,<sup>94,95</sup> with some believing booster doses were premeditated.<sup>96,97</sup> While opinions varied about the number of booster doses that will be needed, some believed that people would need booster doses for the rest of their lives.<sup>98</sup>

*Variants of the virus that causes COVID-19 are not as deadly as the original COVID-19 strain, so booster doses are unnecessary.* Some vocal vaccine deniers claimed on social media that the variants of the virus that causes COVID-19 are not as dangerous as the original COVID-19 strain.<sup>99</sup> For this reason, they claimed that booster doses are unnecessary as the risk for severe illness and death are low due to low prevalence of the original COVID-19 strain.

*The booster doses are the next step in the government's plan to control or harm the population.* Mis- and disinformation outlets and some social media users promoted the idea that the recommendation for mRNA booster doses is part of a stepwise process to get the population acclimated to authoritarian government control.<sup>100</sup> Some consumers also continued to say that the vaccine, and now booster dose, contain a microchip.<sup>101</sup> Some consumers had concerns about the next steps the government will take after the booster dose. Some people believed the next step is that the government knows the booster dose is dangerous, and they are purposefully giving it to people with compromised immune systems to kill them.<sup>102,103</sup> A related circulating conspiracy theory is that the government is putting a "kill switch" in the booster to cause neurological damage<sup>104</sup> and sterility,<sup>105</sup> or to kill anyone at any time.<sup>106</sup>

## Ways to Take Action

### Fill content gaps and information voids.

- Create clear, consistent messaging about the recommendation for booster doses of COVID-19 vaccines, including J&J/Janssen vaccine once data become available, including information about when and how to get a booster dose, who should get a booster dose, and why it is important. Until data are available, create messaging letting people know that more information about booster doses for people who received the J&J/Janssen vaccine is coming once data become available.
- Expand web content about vaccination to include information on who should receive a COVID-19 booster dose, when, and the benefits of receiving a booster dose.
- Expand guidance for people who are fully vaccinated to include the role that booster doses will play in one's vaccination status and what preventative measures they will and will not need to follow after receiving a booster dose.
- Leverage available safety data to expand frequently asked questions about booster doses, especially addressing concerns:
  - From those who had serious side effects following their second dose of mRNA vaccine
  - About the risk of myocarditis following vaccination
  - About receiving a different brand of vaccination for a booster dose than was administered for one's primary series.
- Develop content in a variety of styles, including easy-to-use graphics, videos, and social media content, to answer questions and fill information gaps.

### Disseminate messages focused on the role of booster doses in managing the COVID-19 pandemic and how the U.S. vaccination program uses safety and effectiveness data to make recommendations.

- Disseminate messages about the benefits and importance of booster doses in reducing the spread and severity of COVID-19, especially concerning the Delta variant, and provide illustrative examples.
- Disseminate messages that the U.S. vaccination program will continue to offer safe and effective vaccines to all consumers and will continue to actively monitor vaccine safety and effectiveness.
- Disseminate messages about how CDC's Advisory Committee on Immunization Practices (ACIP) makes decisions, and the role safety and effectiveness studies and data play in their recommendations.

### Partner with healthcare professionals.

- Disseminate messages about the benefits and importance of booster doses for healthcare personnel, especially in the context of the Delta variant.
- Provide guidance about how to communicate with patients about booster doses, with special attention to providers who work closely with patients who received vaccination between December 2020 through February 2021, so they can begin having conversations with patients now.
- Develop materials and tools for healthcare providers to share with their patients about the benefits of receiving a booster dose. Include information addressing concerns about the risks of serious side effects and information on when and how to get a booster dose.
- Strengthen the capacity of healthcare providers to have proactive vaccine conversations about booster doses with their patients, equipping them with answers to frequently asked questions and facts related to circulating mis- and disinformation.

### Address mis- and disinformation.

- Continue to disseminate messages on the spread and severity of the Delta variant of COVID-19 and how vaccines reduce the severity of illness and help to prevent the development of additional variants.
- Develop and disseminate plain language talking points and suggested social media messages and unbranded assets for social media influencers and the [COVID-19 Community Corps](#).
- Partner with technology companies and notify them of key misinformation to flag or remove. Ensure technology companies promote resources with credible, evidence-based information about COVID-19 vaccines beyond resources from federal agencies and health departments.
- Expand [Myths and Facts](#) web content to address new mis- and disinformation themes.
- Empower consumers to have effective, empathetic conversations about vaccines with family and friends online and offline.

## Ways to Take Action (cont.)

### **Support research efforts to better understand the impact of any future booster dose recommendation on vaccination intent and motivation.**

- Expand current polling mechanisms to include questions about the impact of any future booster dose recommendation on unvaccinated people and how it impacts their motivation and intent to receive the primary series of a COVID-19 vaccine and whether fully vaccinated people are motivated and intend to receive a booster dose.
- Use qualitative research methodologies to better understand perceptions of any future booster dose recommendations and intention, motivation, barriers, and facilitators for those unvaccinated to get the primary series, especially among those who are concerned about booster doses.
- Use participatory research methodologies with people concerned about booster doses to create, test, and disseminate messaging that addresses their concerns.
- For all research efforts, ensure sampling strategy has ample data for data disaggregation to understand perceptions by various subgroups including by racial/ethnic groups and socially disadvantaged groups

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## Appendix: Inputs and Sources

Type	Input	Cadence	Sources	Tactics for Utilization
<b><u>Social Media Listening &amp; Media Monitoring</u></b>	<u>Communication Surveillance Report</u>	<u>Mondays, Thursdays</u>	<ul style="list-style-type: none"> <li>▪ <u>Google news</u></li> <li>▪ <u>Meltwater</u></li> <li>▪ <u>CrowdTangle</u></li> <li>▪ <u>Native platform searches</u></li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Share of voice topic analysis to identify themes</u></li> <li>▪ <u>Emerging topics</u></li> </ul>
	<u>Meltwater</u>	<u>Daily</u>	<ul style="list-style-type: none"> <li>▪ <u>Facebook, Twitter, Instagram</u></li> <li>▪ <u>Blogs</u></li> <li>▪ <u>News media</u></li> <li>▪ <u>Online forums</u></li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Share of voice topic analysis</u></li> <li>▪ <u>Emerging theme topics</u></li> <li>▪ <u>Identify high reach/velocity topics</u></li> </ul>
	<u>CrowdTangle</u>	<u>Daily</u>	<ul style="list-style-type: none"> <li>▪ <u>Facebook</u></li> <li>▪ <u>Instagram</u></li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Share of voice topic analysis</u></li> <li>▪ <u>Emerging theme topics</u></li> <li>▪ <u>Identify high reach/velocity topics</u></li> </ul>
	<u>OADC Channel Comment Analysis</u>	<u>Daily on weekdays</u>	<ul style="list-style-type: none"> <li>▪ <u>Native platform searches</u></li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Sentiment analysis</u></li> <li>▪ <u>Identify message gaps/voids</u></li> </ul>
<b><u>Direct Reports</u></b>	<u>CDC-INFO Metrics</u>	<u>Weekly</u>	<ul style="list-style-type: none"> <li>▪ <u>CDC-INFO inquiry line list</u></li> <li>▪ <u>Prepared response (PR) usage report</u></li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Cross-compare PR usage with inquiry theme analysis</u></li> <li>▪ <u>Sentiment analysis</u></li> <li>▪ <u>Identify information gaps/voids</u></li> </ul>
	<u>Web Metrics</u>	<u>Weekly</u>	<ul style="list-style-type: none"> <li>▪ <u>Google trends data</u></li> <li>▪ <u>SEMRush</u></li> <li>▪ <u>Top pages</u></li> <li>▪ <u>Top FAQs</u></li> <li>▪ <u>Referring domains</u></li> </ul>	<ul style="list-style-type: none"> <li>▪ <u>Identify information gaps/voids</u></li> <li>▪ <u>Identify keywords/search terms, changes in web traffic</u></li> </ul>