



Addressing COVID-19 Vaccine Misinformation and Disinformation

Note: While this section was written with COVID-19 vaccines in mind, many of the general principles apply to other vaccines as well. Individual vaccines may vary in their antigenic components or dosage forms, but the principles of human behavior and good communication skills transcend most differences between vaccines.

The Issue

The spread of false, inaccurate, or misleading information—on social media and through other channels—can affect COVID-19 vaccine confidence. Health misinformation and disinformation have spread at unprecedented speed and scale in recent years, especially online. It is possible to limit the reach and impact of COVID-19 vaccine misinformation and disinformation by identifying trending content and effectively sharing clear, accurate, evidence-based information.



Sound Bites

- > Help patients understand the difference between misinformation (not intentionally focused on misleading others) and disinformation (created and spread with malicious intent).
- > The U.S. Surgeon General considers health misinformation and disinformation urgent threats to public health.
- > Monitor social media and other resources in your community to be ahead of emerging misinformation and disinformation trends.

What We Know

Americans are exposed to a wide range of false, inaccurate, and misleading information about the COVID-19 pandemic, targeting everything from masks and social distancing to treatments and vaccines.¹ False information falls into two main categories²:

- > **Misinformation** is false information shared by people who do not intend to mislead others. Misinformation often arises when there are information gaps or unsettled science, as human nature seeks to reason, better understand, and fill in the gaps.
- > **Disinformation** is false information deliberately created and disseminated with malicious intent.

Most misinformation and disinformation targeting COVID-19 vaccines has focused on vaccine development, safety, and effectiveness, as well as denying that COVID-19 is a dangerous virus.

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The Centers for Disease Control and Prevention (CDC) warns that both misinformation and disinformation can affect vaccine confidence and vaccination rates. U.S. Surgeon General Vivek Murthy, MD, considered health misinformation and disinformation to be such urgent threats to public health that he issued an [Advisory](#) on the topic.¹ Surgeon General's Advisories are reserved for significant public health challenges that demand the American people's immediate attention.

CDC outlines [several steps for addressing misinformation and disinformation](#) about COVID-19 vaccines.² The first step is to learn more about the misinformation and disinformation circulating among people in your community, including where it starts and when, why, and how it is spreading and evolving. This can include monitoring local social media channels and traditional media outlets as well as creating and maintaining a rumor log to identify trends in your area.

One helpful approach is to develop a list of key social media influencers and monitor their platforms for perceptions, content gaps, and misinformation. The Center for Countering Digital Hate (CCDH) analyzed anti-vaccine content that was posted or shared on social media more than 812,000 times between February 1 and March 16, 2021.³ They found that just 12 individuals—dubbed the “Disinformation Dozen”—were responsible for 65% of the anti-vaccine content circulating on Facebook and Twitter.³ This shows that while many people might spread anti-vaccine content on social media platforms, the content they share often comes from a much more limited range of sources.

The people who help to share anti-vaccine content may not be aware of the lucrative industry they are supporting. According to CCDH, the anti-vaccine industry boasts annual revenues of at least \$36 million; its audience of 62 million followers is worth up to \$1.1 billion in annual revenues for major technology companies.⁴

Creating and maintaining a rumor log is helpful for tracking circulating misinformation and disinformation and assessing its volume, how it is spreading, and how it evolves over time. Catching emerging rumors early makes it easier to develop and share accurate information to address concerns and questions ahead of time and close information gaps before they are filled with inaccurate information.

CDC periodically issues State of Vaccine Confidence reports about the status of COVID-19 vaccine confidence in the United States, emphasizing major themes that influence vaccine confidence and uptake. The reports include analyses of multiple quantitative and qualitative data sources, ranging from social listening and web metrics to vaccination survey data and CDC-INFO inquiries. The reports seek to identify emerging issues of misinformation, disinformation, and places where intervention efforts can positively increase vaccine confidence across the United States. The reports can be accessed from the [CDC Building Confidence in COVID-19 Vaccines](#) webpage.⁵

Engaging with and listening to your community to identify and analyze perceptions, content gaps, information voids, and misinformation is also important. This can be achieved by considering things such as:

- > *What questions are people asking about COVID-19 vaccination?*
- > *What are people's attitudes and emotions that may be linked to vaccination behavior?*
- > *What rumors or misinformation are circulating?*
- > *What overarching themes and narratives—beyond individual pieces of content—emerge from widely circulated rumors and misinformation?*
- > *How are people responding to and interpreting vaccine-related communication from public health authorities?*





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CDC offers specific guidance for addressing misinformation and disinformation effectively, using a **Fact–Warning–Fallacy–Fact** framework (Figure 1).² To combat the misperception that the vaccines can make people sick with COVID-19, the message might look like this:

- > **Fact:** The COVID-19 vaccine will **not** make you sick with COVID-19.
- > **Warning:** Misinformation alert!
- > **Fallacy:** Some people say the COVID-19 vaccine will give you COVID-19. That is **not true**. While you may feel sick after getting the COVID-19 vaccine, it is a sign that your body is building protection against the virus that causes COVID-19.
- > **Fact:** The COVID-19 vaccine **cannot** make you sick with COVID-19. COVID-19 vaccines teach your immune system to recognize and fight the virus that causes COVID-19. Sometimes this process can cause symptoms such as fever and chills. These symptoms are normal and are signs that the body is building protection against the virus that causes COVID-19. After vaccination, it typically takes a few weeks for the body to build immunity (protection against the virus). That means it's possible you could be infected with the virus that causes COVID-19 just before or just after you get the vaccine and still get sick. This is because the vaccine has not had enough time to provide protection.

When sharing accurate information, consider methods—such as radio or community events—for reaching people with limited or no internet access. **Using trusted messengers** can boost credibility and the likelihood of being seen and believed. Some people may not trust public health professionals or visit the health department website, so reaching them through the channels and sources they look to and trust—such as religious leaders or community organizations—may be more effective.

Figure 1. Framework for Addressing Inaccurate Information²

 FACT	 WARNING	 FALLACY		 FACT
Lead with the fact Make it clear, relevant, memorable	Misinformation alert! Misleading tactics alert!	Unintentional Explain reasons why facts could have been misinterpreted	Intentional Flag tactics being used to deceive Undermine trust in disinformation authors Highlight misleading tactics Reveal hidden agenda	Provide alternative correct information Must replace misinformation Make correct information more memorable than misinformation

Graphic modified from UNICEF Field Guide on Addressing Misinformation

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Keep in mind that just because someone asks questions does not mean the person is anti-vaccine. Listen to people's questions and concerns and provide evidence and supporting data to consider in their own analysis process.

References

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