Introduction and Overview

This document is the final report for the AIM Q&A 2.0: COVID Misinformation Project (AIM Q&A 2.0). The objectives of this project are:

- Conduct an environmental scan to assess the current landscape of publicly circulating COVID-19 vaccine misinformation, including myths and claims.
- Report the findings of this scan.
- Develop a Q&A document, along with talking points, which corrects the misinformation and provides a resource that AIM members, partners and other stakeholders can use to respond to misinformation.

The initial Statement of Work for the AIM Q&A 2.0 project called for one report followed by one set of Q&As and talking points; however, the acceleration of vaccine delivery by the federal government has increased the urgency to produce a Q&A document that AIM can provide to members, partners and other stakeholders. As a result, the delivery schedule for AIM Q&A 2.0 was altered to provide these resources as soon as possible. This new schedule was as follows:

### Phase 1

Review, compile and report easier-to-access information, including mainstream news, information from AIM members and partners, information from the CDC and other reliable sources, relevant articles, blogs and studies, and misinformation spread by leading anti-vaccine (anti-vax) sources.

- Common questions and claims were identified from these sources, and factual answers provided. They formed the basis for an initial set of Q&As and talking points.

### Phase 2

Review, compile and report more difficult-to-monitor sources, including those that cater more specifically to the anti-vax subculture, such as social media sources and communities, conservative news outlets like Newsmax and One America News (OAN), blogs, and social media pages and related subreddits and Facebook groups.

- Three sets of additional Q&As and talking points were delivered in April and May 2021 to supplement the initial set of Q&As and talking points provided in Phase 1.

### Phase 3

Update the initial report with additional findings, and compile all Q&As through May 28, 2021. This report includes all findings, Q&As and talking points.

The Phase 1 and final report include:

1. The framework for conducting the environmental scan.
2. Findings that identify the key trends driving the current COVID-19 vaccine misinformation.
3. Recommendations for AIM members, partners and other stakeholders to use the Q&A and talking points most effectively.
4. Common COVID-19 vaccine misinformation questions and claims, organized by theme, and the research-based facts/corrections that address them.
All Q&A documents have been integrated into one final COVID-19 Vaccine Misinformation Q&A Resource Guide, which is provided as an attached to this report.

**Background**

In 2020, AIM conducted an Environmental Scan and Vaccine Misinformation Q&A Project, which scanned general vaccine misinformation and identified:
- The main vaccine misinformation categories and themes.
- The recurring misinformation in each theme.
- What information and resources existed to address misinformation.

The project then created a Q&A/Resource Catalog based on its findings, with the goal of creating more targeted messaging and identifying key resources to combat misinformation.

The current AIM Q&A 2.0 project seeks to build on these findings by conducting a new environmental scan of COVID-specific vaccine misinformation and then creating a COVID-19 vaccine Q&A/Resource Guide.

**Methodology and Framework**

The 2021 Environmental Scan seeks to answer these questions:
- What are the primary myths and claims in COVID vaccine misinformation and disinformation?
- What are the major themes under which these myths and claims fall?
- How is this misinformation and disinformation similar and different than general vaccine misinformation and disinformation?
- What trends have emerged during COVID-19 that have created new vaccine misinformation issues.

This scan does not consider logistical issues, such as delivery delays, or practical information related to storage and delivery.

**FRAMEWORK FOR PHASE ONE**

Phase One of our search strategy sought to study **easier to access** information, including mainstream news coverage, information from AIM members and partners, relevant articles and studies, and misinformation spread by leading anti-vax sources.

Searches were conducted into news and information sources from March 1, 2020 through February 28, 2021, with particular attention paid to time frames around the May 15, 2020 White House announcement of Operation Warp Speed, and the December 2, 2020 announcement of the first COVID vaccine. These sources were:
- Information supplied by AIM members and its partners, including Vaccinate Your Family, IAC, American Academy of Pediatrics (AAP) and Voices for Vaccines.
- Information from the primary public health agencies, including CDC, WHO and the Public Health Communications Collaborative.
A resource guide on the mRNA vaccines developed by AIM and a resource guide on the J&J vaccine developed by Y.B. Consultants, L.L.C.

A series of slide decks/presentations provided by AIM.


Local television news in the top 10 American media markets (DMAs)

Three cable news networks with different political leanings: CNN, MSNBC and Fox News.

Resource guides developed to counter anti-vax voices, such as the Anti-Vax Handbook (Center for Countering Digital Hate).

Review of recent blogs and posts from some of the 12 leading anti-vax voices, including leaders of anti-vax organizations, alternative medicine entrepreneurs, current and former physicians, and others producing the majority of the anti-vax messages.

FRAMEWORK FOR PHASE TWO

Phase Two of our search strategy sought to study more difficult-to-monitor sources, including those that cater more specifically to the anti-vax subculture, such as social media sources and communities, conservative news outlets, blogs, and social media pages and related subreddits and Facebook groups. These sources were:

- Recent blogs and posts from any of the 12 leading anti-vax voices not reviewed in Phase One.
- Two leading conversative media outlets: Newsmax and One America News (OAN).
- A private Facebook group dedicated to anti-vax messaging.
- Subreddits that either pushed anti-vax conspiracies or those that address and attack claims from anti-vax sources.
- Newer social media platforms, including Parler and Telegram.

In addition to these sources, ongoing monitoring continued to scan leading anti-vax voices and mainstream media sources for updated claims and myths, as well as new studies analyzing the pro- and anti-vax messages.

The anti-vax claims identified in this environmental scan and Resource Guide were organized into the three categories developed in the 2020 Environmental Scan and Vaccine Misinformation Q&A Project—Safety, Pseudo-Science, and Politics & Conspiracies. In addition, the wording of facts/corrections took into account the conclusions of this earlier project.

Finally, in conducting the environmental scan, several findings were reported that are relevant to the COVID-19 claims and questions below and, moreover, to the subsequent Q&A and talking points that were developed. These findings include two recommendations on how AIM members, partners and other stakeholders can use the Q&A and talking points most effectively, and how AIM can provide future resources to meet the needs of its members.
Findings
Findings from Phase One Report

Finding 1:

The unique circumstance around COVID-19 and accelerated vaccine development has led to vaccine hesitancy and made it fertile ground for anti-vax voices.

The speed, urgency and resulting publicity surrounding development of the COVID-19 vaccine has led to vaccine hesitancy. Safety questions arose immediately during the very public discussions of "how fast" a vaccine could be developed, and continued when the White House named the vaccine program *Operation Warp Speed* with a development timeline that was much shorter than normal for vaccines.

Exacerbating these issues were the many unknowns about the coronavirus in general, and then the announcement that the first vaccine was a new type using an mRNA platform. All of these circumstances made it easy for anti-vax voices to feed anxiety about vaccines and cast doubt about the COVID-19 vaccine's efficacy and safety, as well as the motivations behind its development. This is consistent with the anti-vax approach identified in the 2020 scan.

In short, anti-vax voices recognized the opportunity offered by COVID-19 and seized it to further erode confidence in the COVID-19 vaccine and vaccines in general.

Finding 2:

COVID-19 has drawn more attention to the anti-vax movement, producing greater media coverage of vaccine myths and facts and putting pressure on social media platforms to remove offending posts. This has driven some anti-vax voices underground to find new platforms for their voices.

The extraordinary impact of COVID-19 has brought the urgency of vaccine development to the forefront of the news cycle though much of 2020 and into 2021. Traditional news media have covered vaccine development thoroughly, advocated for the vaccines and made public the many myths and false claims espoused by the anti-vax movement.

These same forces, along with the greater attention brought to misinformation and disinformation in the political realm from 2017 to 2021, have put tremendous pressure on established social media platforms to take down posts with anti-vax claims. This trend, and other political developments, drove some prominent anti-vax voices off these platforms to find new "alt-tech" platforms, such as Parler and Telegram. As a result, some social media content relevant to this environmental scan is no longer available, and new social media platforms are currently under review.
Finding 3:

From its onset, COVID-19 has been a highly politicized public health issue. Messages to resist the COVID-19 vaccine are often grouped with messages to resist face masks and lockdowns.

As found in the 2020 environmental scan, anti-vax organizations and personalities are aligning with the ultra-right and alt-right movements. This trend continued with the emergence of COVID-19, which quickly became a highly politicized issue, particularly with some of the political right equating mandated mask-wearing and lockdowns to an attack on personal liberties.

Finding 4:

To counter vaccine-hesitancy and misinformation, it is important to consider who is sharing pro-vaccine messages and how they are doing it.

Along with the material gathered to create a Q&A and talking points document, the scan revealed several studies and “handbooks” that point to strategies on how to use information to combat anti-vax messages and promote the safety of COVID-19 vaccines. These include:

- Preliminary results from a study, conducted by faculty at Boston University’s College of Communications, which points out the need to consider who is sharing facts about COVID-19 vaccines and how they are sharing it. “When it comes to the COVID-19 vaccine,” said one of the researchers, “it means local doctors are better placed than the Centers for Disease Control and Prevention (CDC) to correct misinformation and stop its spread.”

- The Anti-Vax Handbook, developed by the Center for Countering Digital Hate, cautions against engaging anti-vax voices online even to rebut or criticize their messages because doing so only spreads misinformation to new audiences. This handbook includes tactics for individuals, such as correcting misinformation from family and friends, spreading pro-vaccine messages, and getting vaccinated “and getting loud about it.” Similar to the Boston University study, it also emphasized telling personal stories of those who have fallen ill from the virus, of scientists developing the vaccines and those who received the vaccine.

- The March 3 REACH webinar, “Effectively Communicating About Vaccines and Increasing Vaccine Acceptance,” includes valuable information on the value of personalizing pro-vaccine messages to improve effectiveness.

These communication strategies are consistent with those found in the 2020 Environmental Scan and Vaccine Misinformation Q&A Project and also communication best practices.

ADDITIONAL FINDINGS

Finding 5:

A study published in May 2021 found two notable trends: an increase in pro-vaccine conversations on Twitter and a shift among U.S. Hispanics from vaccine hesitant to pro-vaccine.

The Vaccine Conversation Trends Study, conducted by the consulting group LLYC, examined Twitter posts about COVID-19 vaccines in the U.S., including a focused look at the Hispanic community,
between November 2020 and April 2021. It found conversations fell into "two well-distinguished macro-communities, broken down into several sub-communities based on common interest." These included the pro-vax community, which it said include both neutral communities providing general information and more active communities defending vaccination, and the anti-vax community, which it said was a large, diverse community with some radical components.

Key findings were:

- The volume of pro-vax conversation grew 8 percent on Twitter in March and April, while the neutral-vax community’s volume fell 16.2 percent as its members made decisions and took a side.
- Up until March 2021, most U.S. Hispanics showed fear and doubt about the vaccine, generally because they received misleading information. But in April, this trend reversed: "Now, most U.S. Hispanics are pro-vaccination." The study attributed this shift, in part, to education efforts made by scientists, journalists and the government.

Other notable findings from the study include:

- The number one myth spread about the COVID-19 vaccines is that they alter DNA.
- Though some journalists are vocal on vaccines, mass media was not relevant to the conversation.
- Just 40,000 Twitter profiles led 33 percent of the Twitter vaccine conversation, reaching hundreds of millions of users.
- Vaccine labs and other pharmaceutical companies or authorities do not participate in or lead any of the vaccine communities.

Finding 6:

Vaccine misinformation has not changed significantly since authorization of the first COVID-19 vaccine, with most new questions and claims focused on trending news of potential side effects.

The second phase of this environmental scan into more difficult-to-monitor sources, including those that cater more specifically to the anti-vax subculture, did not reveal a significant change in the misinformation voiced by the anti-vax community.

Misinformation continued to focus on the ability of the vaccines to alter one's DNA, fertility issues and overall questions of whether the vaccines could cause death or serious disease. The most important, trending issue that needed to be addressed occurred was the halt of the J&J vaccine due to reports that it may cause blood clots.

This finding was supported by a Harris Poll survey conducted from April 23-May 9, which found vaccine-hesitant Americans believe in a number of inaccurate or rare vaccine side effects, led by blood clots.

- The top five side effects cited by respondents were blood clots (60%), short-term, flu-like symptoms (57%), death (45%), migraines and high blood pressure. Following these were DNA alteration (26%), birth defects (24%), infertility (24%) and cancer (22%).
- The survey suggested that misinformation, or what it called "skewed understanding of risk," may be behind much vaccine hesitancy.
This finding is also consistent with past findings (2020 Environmental Scan and Vaccine Misinformation Q&A Project) that highlighted the anti-vax community’s ability to take a kernel of truth and build myths and false claims that effectively spread through the anti-vax ecosystem.

Finally, it should be noted that many of the claims found during this part of the scan moved so far beyond truth and believability that they did not reach a significant part of the population. For that reason, these claims were not included in the COVID-19 Vaccine Misinformation Q&A Resource Guide.

**Recommendations**

**Recommendation 1:**

The ultimate objective of the AIM Q&A 2.0 project is to produce a Q&A and Talking Points document for use by AIM members, partners and other stakeholders. However, based on Finding 4 above, it is also recommended that this document include a short (one-page) introduction with tips to better communicate pro-vaccine messages.

These tips will include:

- How to communicate on social media, with emphasis on handling anti-vax messages.
- The most effective ways to counter anti-vax messages and promote pro-vax messages, with an emphasis on who should communicate.
- How people can help correct misinformation with friends and families.
- The importance of spreading pro-vaccine messages through personal stories.

It’s recommended that this one-page summary be in the form of an introduction to help put the Q&A and talking points in perspective and improve their effectiveness.

**Recommendation 2:**

The dynamic nature of COVID-19 vaccine news and trends revealed an urgent need by community organizations, educators, healthcare providers and others to have updated, relevant materials, such as Q&As and talking points, to share with their audiences as soon as possible after vaccine news was reported in the media and on social media. This need was not only revealed during the course of this AIM Q&A 2.0 project, but also when AIM conducted focus groups with CDC’s REACH (Racial and Ethnic Approaches to Community Health) program recipients in May 2021.

It’s recommended that future efforts to supply vaccine resources, such as the Q&A materials developed for the AIM Q&A 2.0 project, be created within a more agile framework that enables AIM to provide relevant material to key groups in a timelier manner.
COVID-19 Vaccine Misinformation Q&A Resource Guide

A final document with all Questions & Answers and Talking Points compiled during each phase of the AIM Q&A 2.0 project is attached as a separate document.