

THE ANTI-VAXX PLAYBOOK



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The Center for Countering Digital Hate is a not-for-profit NGO that seeks to disrupt the architecture of online hate and misinformation.

Digital technology has changed forever the way we communicate, build relationships, share knowledge, set social standards, and negotiate and assert our society's values.

Digital spaces have been colonised and their unique dynamics exploited by fringe movements that instrumentalise hate and misinformation. These movements are opportunistic, agile and confident in exerting influence and persuading people.

Over time these actors, advocating diverse causes - from anti-feminism to ethnic nationalism to denial of scientific consensus - have formed a Digital Counter Enlightenment. Their trolling, disinformation and skilled advocacy of their causes has resocialised the offline world for the worse.

The Center's work combines both analysis and active disruption of these networks. CCDH's solutions seek to increase the economic, political and social costs of all parts of the infrastructure - the actors, systems and culture - that support, and often profit from hate and misinformation.

Introduction

The Anti-Vaxx Industry, CCDH's July 2020 report, exposed how the global scientific consensus on vaccines is being undermined by a small but determined and sophisticated network of individuals and groups spreading misinformation online.¹ They have improved their reach and sustainability through skilful exploitation of social media to proselytize and normalize their fringe beliefs.

Big Tech companies such as Facebook and Instagram, Twitter, Google and YouTube have done little to stop the flow of lies. Another CCDH report, *Failure to Act*, released in September 2020, showed that even when users report misinformation to the platforms, fewer than 1 in 20 misinformation posts were removed.² Why? In part, because the audience for anti-vaccine misinformation is worth up to \$1 billion a year.³

Global health advocates need to understand the battle we are in. There is an identifiable counterforce trying to persuade people Covid isn't dangerous, vaccines are dangerous, and that doctors and scientists cannot be trusted. Pretending the threat doesn't exist isn't good enough. Assuming compliance with vaccine programmes is negligent. We need to adapt or risk losing.

Digital platforms have rapidly become the dominant means by which people transmit knowledge, maintain relationships and establish norms and values. The Covid pandemic has further consolidated this situation. Social media became a vital part of our wellbeing as physical interactions were curtailed. The digital realm of our existence, however, is governed by algorithms that don't care about truth, our wellbeing or even morality, and are instead designed to maximize time spent on platforms. The organisation of content by algorithms in such a way, without regard to any harm it may cause, is fundamentally changing our society. We are not just less able to agree on what were once considered "facts". It is making it more fissiparous, more brittle, more polarised and less tolerant.

This report, *The Anti-Vaxx Playbook*, is based on in-depth analysis of speeches and presentations by leading digital anti-vaccine advocates at a meeting they recently held in private over three days; investigation of private anti-vaccine digital spaces; and other intelligence gathered by our researchers. It reveals how anti-vaccine networks are systematically planning to suppress uptake of the Coronavirus vaccine by exploiting digital platforms.

These malignant actors have developed their strategic understanding over years of advocacy and practice. Their strategy is simple. Exploit social media algorithms' predilection for controversial and engaging content to hammer

home three key messages - Covid isn't dangerous; vaccines are dangerous; and mistrust of doctors, scientists and public health authorities. Despite the variety of styles, tones and themes employed by the anti-vaccine movement, every meme they share is in service to one of these three messages.

Our response must be equally simple: to inoculate against misinformation by ignoring the individual memes generated by the anti-vaxx industry and instead focus on communicating our core message - one that has the benefit of being true:

1. Covid is deadly;
2. Vaccines are among the safest, most effective, most consequential human inventions in the past two centuries, saving countless lives from disease, disability and even death; and
3. Doctors, scientists and public health professionals chose those professions because they want to help people and better understand the world.

Big Tech needs to make a decision, now that we expose the intent, the tactics and the deadly impact of the anti-vaxx industry, and the ways in which social media platforms have become integral to their success. Facebook, Instagram, Twitter and Google can stop this now. They could stop providing services to people whose business is in enabling the spread of disease and death. The tech giants keep telling us that they will remove anti-vaxx content from their websites and yet the key players exposed in *The Anti-Vaxx Industry* are still meeting months later, gleefully plotting how the Coronavirus vaccine presents them with an opportunity to sell their false cures and false hope on social media platforms. Anything less than the dismantling of these individuals' profiles, pages and groups and permanent denial of service, now they know what is happening, is willing acquiescence.

The time for spin is over. For years, we assessed that the social media companies did not understand the problem because if they did, surely, they would do something about it because it was harming people. Lots of government, political and civil society leaders and public figures personally met with tech sector representatives to discuss the threat and received assurances that they would actively remove material that violates their terms of service. And yet, a decade later, there is even more misinformation on the platforms.

It is time for quantifiable, verifiable action, or governments need to step in to perform their ultimate duty - to protect the lives of the people who put them in place.

Imran Ahmed
CEO, CCDH

INTRODUCTION

Executive Summary

1. Drawing on access to a private conference attended by the world's leading anti-vaxxers, CCDH has been able to reveal their plan to use social media to spread distrust about the Covid vaccine and recruit new supporters to their cause.
2. Leading anti-vaxxers view Covid as an historic opportunity for them to reach larger numbers of the public than ever before, and to create long-lasting distrust in the effectiveness, safety and necessity for vaccination.
3. Online anti-vaxxers continue to grow, with 147 of the leading accounts gaining 10.1 million followers since 2019, an increase of 25%. The additional growth took place primarily on Instagram and YouTube, with anti-vaxxers adding an extra 4.3 million followers on each platform.
4. Anti-vaxxers have developed a sophisticated playbook for spreading uncertainty about a Covid vaccine, converting vaccine-hesitant people into committed anti-vaxxers, and resisting attempts to remove their misinformation.
5. Online anti-vaxxers have organised themselves around a "master narrative" comprised of three key messages: Covid is not dangerous, the vaccine is dangerous and vaccine advocates cannot be trusted.
6. Alternative health entrepreneurs, conspiracy theorists and accounts aimed at parents or ethnic communities vastly expand the reach of this master narrative and tailor it to cause uncertainty in their audiences.
7. Anti-vaxxers have created accessible online "answering spaces" such as Facebook Groups, Instagram accounts and purpose-built websites that are designed to answer legitimate questions about a Covid vaccine with anti-vaccine misinformation.
8. The most established anti-vaccine "answering spaces" identify vaccine hesitant individuals, convert them into committed anti-vaxxers and offer training to make them more effective activists.
9. Anti-vaxxers are attempting to mitigate the removal of their misinformation by adopting a "Lifeboat Strategy" of migrating their followers to "alt-tech" platforms such as Telegram and Parler, but with little success.
10. The public are urged not to engage with anti-vaxx misinformation online, even to rebut it or criticise it, because doing so only spreads the misinformation to new audiences. The example is given of anti-vaxxer narratives "trending" on social media on the first day of the vaccine rollout, primarily due to pro-vaccine accounts amplifying them. Instead, users are urged to share pro-vaccine messages.
11. Platforms are urged to remove the accounts of anti-vaxx "superspreaders", those accounts with the largest followings and using the most cynical tactics. The report provides evidence that some are guilty of promoting false cures for Covid and training their social media followers to spread harmful misinformation.
12. Pro-vaccine practitioners are advised to focus on inoculating the public by ignoring individual memes and focusing on the master narrative, with a series of suggestions for how "inoculation" can make individuals more resilient to anti-vaxxer messaging.

INTRODUCTION

The online anti-vaxxers featured in this report

This report sets out how leading online anti-vaxxers plan to attack a forthcoming Covid vaccine, drawing on their remarks in private online conferences and forums.

Fifth International Public Conference on Vaccination

A private online conference was organised by the National Vaccine Information Center (NVIC) and held from 16-18 October. The NVIC sits at the core of the established anti-vaccine movement. The conference featured a number of influential online anti-vaxxers as speakers.

- **Barbara Loe Fisher** is the co-founder and president of the NVIC, which itself maintains a Facebook page with 209,000 followers.⁴
- **Joseph Mercola** is an “alternative medicine entrepreneur” and a funder of the NVIC.⁵ Social media accounts operated by Mercola and his wife have 3.6 million followers.
- **Del Bigtree** is the founder of Informed Consent Action Network (ICAN) and produces an online anti-vaccine news show called The HighWire with 343,000 followers.⁶
- **Robert F. Kennedy Jr.** is the founder of Children’s Health Defence, another leading anti-vaccine charity.⁷ Kennedy commands a social media following of 1.3 million.
- **Sherri Tenpenny** operates a number of “alternative health” and anti-vaccine business ventures, supported by a network of social media accounts with 414,000 followers.⁸
- **Andrew Wakefield** is the disgraced physician who “stood to profit” from claims linking the MMR jab to autism.⁹ Wakefield has since been struck off the UK General Medical Council’s medical register on charges of serious professional misconduct and produces anti-vaccine films that have proved to be influential on social media.¹⁰¹¹

Other speakers at the conference also provided useful intelligence, and their identities are outlined where appropriate elsewhere in this report.

Anti-vaxxers and vaccine hesitancy

Throughout this report we use the term “anti-vaxxer” to refer to individuals who have made a conscious decision to use their online platforms to campaign against vaccines and spread misinformation about them. This makes them distinct from “vaccine-hesitant” people, which includes those who are unsure whether they will get a vaccine, and from those who simply have questions or concerns about new Covid vaccines.

Private Facebook Groups

Our researchers also gained access to some of the largest and most influential private Facebook Groups that spread anti-vaccine misinformation on the platform, all of which provide their members with training.

- **Vaccination Re-education Discussion Forum** is the largest, private anti-vaccine group on Facebook with 226,000 members and has been operating since 2014.
- **Stop Mandatory Vaccination** was operated by Larry Cook, a QAnon conspiracy theorist, and was the second largest such group until its removal over calls for violence. Our researchers extracted copies of its training resources prior to removal.
- **Vaccine Choices** is a private group operated by the influential anti-vaxxer Sherri Tenpenny. It has 42,000 members and contains training courses for anti-vaxxers.
- **Restore Liability for the Vaccine Makers** is a smaller, public group with 11,000 members, but maintains a wide range of training resources for its members.

Anti-vaxxers see Covid as an historic opportunity

A number of speakers at the NVIC conference presented the Covid pandemic as an historic opportunity to popularise anti-vaccine sentiment. Robert F. Kennedy Jr. told activists listening to the conference “All of the truths that we've been trying to broadcast for many, many years. There are people hearing it and the impact and those seeds are landing on very fertile ground.”¹²

The disgraced physician Andrew Wakefield echoed these sentiments, saying “The population who are aware of these issues has grown dramatically in the face of coronavirus, Covid-19. It is now an issue for discussion by everyone.”¹³

Other anti-vaxxers such as Sherri Tenpenny highlighted the Covid pandemic as an opportunity to build a wider movement with campaigners against masks and lockdowns: “We need everyone to get politically active, get behind this cause, get behind Hugs Over Masks, get behind MAD, Mothers Against Distancing, get behind the NVIC, the National Vaccine Information Center, get behind the things that we're doing over at vaxxter.com, and Courses for Mastery, and our boot camp course that open enrolment is coming up again, the end of September. All the things that we're doing, we need all hands on deck. We need everybody to release their fear from their brains, get rid of their masks, go hug people and absolutely say no. Wake up your community.”¹⁴

INTRODUCTION

Online anti-vaxxers continue to grow

Since the publication of our report, *The Anti-Vaxx Industry*, CCDH has continued to monitor hundreds of the most popular anti-vaxxer accounts on mainstream social media platforms.

Tracking of 425 accounts on Facebook, Instagram, YouTube and Twitter show that they now stand at 59.2 million followers, nearly 877,000 more than they had in June.

This means that anti-vaxxers grew fast enough to outpace the removal of accounts belonging to influential figures such as Del Bigtree, Larry Cook and David Icke in that period. Those removals led to a loss of 3.2 million followers from the total, while other anti-vaxxers in our sample gained over 4.1 million.

The picture across the year is even more stark. Tracking of 147 accounts for which we have been able to obtain historical figures shows that they now stand at 51.6 million followers, growth of 10.1 million followers since 2019. This growth took place primarily on Instagram and YouTube, with anti-vaxxers adding an extra 4.3 million followers on each platform.

Analysis of this year-long growth also shows the substantial contributions that alternative health entrepreneurs and conspiracy theorists make to the reach of the anti-vaccine movement. Entrepreneurs now have 22.6 million followers, supplying two-fifths of the anti-vaccine movement's online following. Anti-vaccine conspiracy accounts grew by nearly 50 percent over the year, starting at 15.5 million followers in 2019 and rising to 23.1 million by December 2020.

Recent analysis of the Twitter followers of leading anti-vaxxers performed by CCDH suggests that up to 5.4 million followers of anti-vaccine accounts are based in the UK.¹⁵ However, the US remains a global centre of innovation for the anti-vaccine movement: in particular, the US anti-vaxxer Robert F. Kennedy Jr. addressed anti-lockdown protests in Berlin and his videos are regularly translated by activists based in other countries.¹⁶

ANTI-VAXX AUDIENCE GROWTH BY PLATFORM SINCE 2019

TWITTER

 +405,774

FACEBOOK

 +1.03MM

YOUTUBE

 +4.30MM

INSTAGRAM

 +4.32MM

INTRODUCTION

The Anti-Vaxx Playbook

The online debate between vaccine advocates and anti-vaxxers is not symmetrical. The medical and scientific professionals attempting to turn the tide of the Covid pandemic must ask others to take action: to use a Covid vaccine. To do so, they must convince the public that Covid is dangerous and give them confidence that a vaccine is safe and effective.

The same is not true for anti-vaxxers: they win the debate by default if a sceptical public fails to take action and use the vaccine. This is why the term “vaccine hesitant” applies to people who are uncertain whether they will use a vaccine, as well as those who are sure they won’t. It is also why generating uncertainty and confusion is a powerful strategy for anti-vaxxers.

Anti-vaxxers have developed a sophisticated playbook for spreading uncertainty about a Covid vaccine and answering the concerns of vaccine hesitant people with anti-vaccine misinformation.

1 Establishing the anti-vaxx “master narrative” on Covid vaccines

Online anti-vaxxers have organised themselves around a “master narrative” comprised of three key messages: Covid is not dangerous, the vaccine is dangerous and vaccine advocates cannot be trusted.

2 Adapting the master narrative for online subcultures

Different elements of the online anti-vaccine movement adapt the master narrative to expand its reach. Alternative health entrepreneurs, conspiracy theorists, and accounts directed at parents or ethnic communities add their reach to the master narrative and tailor it for their audiences. In doing so, they add to the sum of uncertainty around Covid and the vaccine.

3 Offering spaces for vaccine-hesitant people

Anti-vaxxers harness the uncertainty that they create by offering online “answering spaces” where people with doubts about Covid or the vaccine can direct their questions. These spaces are often more easily accessible or more tailored to their audience’s interests than their pro-vaccine equivalents. People entering these spaces are met with answers that harden their doubts into vaccine hesitancy.

4 Converting the vaccine-hesitant into anti-vaxxers

The most established “answering spaces” identify vaccine hesitant individuals, convert them into committed anti-vaxxers and offer training to make them more effective activists.

5 Mitigating attacks on their online infrastructure

Leading online anti-vaxxers have adopted a “Lifeboat Strategy” to migrate their followers to “alt-tech” platforms such as Telegram and Parler in anticipation that their mainstream accounts will be removed. They have also developed techniques for undermining fact-checking and attempts to remove their misinformation.

THE MASTER NARRATIVE

The anti-vaxxer “master narrative” on Covid vaccines

The anti-vaccine movement is varied, and its elements promote a variety of messages about the Covid vaccine on social media, some of which flatly contradict each other.

But despite this disorganised appearance, the vast majority of online anti-vaxxers are promoting the same “master narrative” composed of three key messages:

- **Covid is not dangerous**
- **Covid vaccines are dangerous**
- **Vaccine advocates cannot be trusted**

This master narrative has largely been set by the example of leading anti-vaxxers such as Del Bigtree and Robert F. Kennedy Jr. who have used similar messaging in their online campaigns against other vaccines, and it carries two major advantages.

First, this master narrative directs the anti-vaccine movement to address two pillars of vaccine hesitancy: complacency about a disease and confidence in a vaccine. These factors are widely recognised as two of the “3Cs” of vaccine hesitancy, along with the convenience of accessing a vaccine.¹⁷

Second, it provides a loose framework that all elements of the anti-vaccine movement can contribute to. This report explores how each part of the movement, from concerned parents to conspiracists, has found ways of expressing these key messages.

The rest of this section demonstrates how many popular attacks on the Covid vaccine relate to this master narrative. In our recommendations at the end of this report, we suggest some ways in which vaccine advocates can counter it.

Example: Del Bigtree addresses the 3Cs of vaccine hesitancy

Del Bigtree concluded his presentation to the NVIC conference with a summary of his key lines on a Covid vaccine that neatly addressed each of the 3Cs of vaccine hesitancy, saying “It’s dangerous. You don’t need it. And herd immunity is your friend.”¹⁸

This example of the anti-vaxxer master narrative attacks confidence in the vaccine, encourages complacency about Covid and even suggests that herd immunity is a more convenient solution.

THE MASTER NARRATIVE

Covid is not dangerous

Leading anti-vaxxers were amongst the first to spread misinformation about Covid and downplay the threat of a pandemic. Their principal messages are that the deadliness of Covid has been exaggerated or that Covid can be treated without vaccines.

Covid deaths are exaggerated

Anti-vaxxers regularly claim that the number of deaths from Covid has been exaggerated, with some quoting a Covid “death rate” of 0.26 percent based on CDC figures from May.¹⁹

- **Deaths are falsely attributed to Covid** without a positive test result, or where Covid was not the sole cause of death. This is based on CDC guidelines that do not demand a positive Covid test where the symptoms of the disease are evident.²⁰
- **The Covid death rate is comparable to seasonal flu** based on a supposed death rate of 0.13 percent.²¹ This figure is a crude average of CDC estimates of flu deaths for the last ten years, directing attention away from the number of excess deaths caused by Covid and the role of vaccines managing influenza.
- **Covid is going away on its own.** Anti-vaxxers have claimed that falling cases and deaths are evidence of herd immunity, ignoring the impact of public health measures.²²



They desperately want you to believe that an invisible viral particle (e.g. COVID-19), so infinitesimal that it can only be seen via a subatomic scale “electron microscope,” and which is indistinguishable from your body’s own extracellular vesicles (exosomes), can kill and victimize a person simply through exposure to it, even though the cell membranes of healthy tissue have been measured to have up to the tensile strength of steel. This archaic, superstitious and quasi-scientific concept of viral pathogenicity is the ultimate dark magician’s trick, intended to transfer human agency into the hands of a medical cult erected simply to subjugate and eviscerate the spirit and sovereignty of mankind.



- Sayer Ji
@sayergmi

A meme posted to the Telegram channel of Sayer Ji, an anti-vaxx entrepreneur, that implies Covid-19 cannot kill anyone

Covid can be addressed without vaccines

Anti-vaxxers also encourage complacency about Covid by claiming it can be addressed by means other than a vaccine.

- **Exaggerating natural immunity.** Some anti-vaxxers use misleadingly low estimates of the Covid death rate to claim that most people are naturally capable of surviving the disease.²³ This directs attention away from the other health problems that Covid can cause, and obscures the risk it poses to the elderly and immunocompromised.

- **Covid can be treated with therapeutics.** Some anti-vaxxers have endorsed therapeutics like remdesivir and convalescent plasma as solutions to the Covid pandemic.²⁴ Most experts do not consider such treatments effective enough to prevent most deaths from Covid, and unlike vaccines they cannot prevent infection.

Example: Del Bigtree on natural immunity

“Your immune system has a 99.74 percent effectiveness rate at beating Covid-19... I can tell you right now there is not a single vaccine on the market that can claim a 99.74 percent effectiveness rate.”²⁵

THE MASTER NARRATIVE

Covid vaccines are dangerous

As well as creating misinformation about the safety and contents of vaccines, anti-vaxxers are claiming that new mRNA vaccines could actually worsen Covid infections.

It is too soon to tell if the vaccine is safe

Anti-vaxxers take advantage of existing media and political narratives around the speed of vaccine development to claim trials have been rushed, and that it is too soon to know if Covid vaccines are safe. One strength of this narrative is that it asks people to delay a Covid vaccination, rather than rule it out completely. Variations of this narrative highlight perceived shortcomings in clinical trials, and draw on past examples of vaccines with adverse effects.

- **It is too soon to assess the vaccine's long-term safety.** Anti-vaxxers have cited legal cases and compensation claims as evidence that other vaccines have caused long-term illnesses, suggesting that the Covid vaccine could have long-term consequences too.²⁶
- **Trial participants have been seriously injured or died.** Anti-vaxxers have singled out adverse events from Covid vaccine trials, often exaggerating them and ignoring the short-lived nature of any reaction.²⁷ Some have even used the deaths of participants in large-scale trials to claim that a vaccine is deadly, even where those who died were in the placebo group.²⁸
- **Widespread adverse reactions are expected.** Health authorities have established systems for recording adverse reactions to assess safety as vaccines are deployed. Anti-vaxxers claim this is evidence that adverse reactions will be common.²⁹
- **Covid vaccines are not placebo tested.** Anti-vaxxers have levelled this claim against all Covid vaccines, despite the fact that many have been tested against saline placebos. The Oxford-AstraZeneca vaccine has faced attacks for its use of a meningitis vaccine comparator for some participants.³⁰
- **Mistakes will affect millions of people.** Trading on the anticipated scale of the Covid vaccine deployment, anti-vaxxers argue that even extremely rare adverse reactions could affect thousands of people. Speaking at the NVIC conference, the anti-vaccine nurse Vicky Pebsworth claimed that rare adverse events not detectable by Covid vaccine trials could affect over 30,000 people in the US alone.³¹



A video posted by the US anti-vaccine film producer Del Bigtree that claims UK authorities expect a "high volume" of adverse reactions to a Covid vaccine

The vaccine is toxic or unethical

It is common for anti-vaxxers to claim that particular components present in vaccines or used in their development are toxic or unethical, with mercury compounds and cell cultures derived from aborted fetuses being two common examples. In addition to concerns about the safety or ethics of particular vaccines, these attacks also aim to promote a general sense that vaccines are unnatural or dirty, with some anti-vaxxers such as Sherri Tenpenny repeatedly describing vaccines as “filthy”.³²

- **Covid vaccines contain toxic chemicals.** Anti-vaxxers have identified chemicals present in Covid vaccines that they claim are dangerous, singling out the polyethylene glycol (PEG) present in mRNA vaccines in particular.³³
- **Covid vaccines contain cells from abortions.** Research from the anti-abortion Charlotte Lozier institute has identified a number of vaccines that used human cell lines originally derived from aborted human fetuses over three decades ago in their development, including vaccine candidates from Oxford-AstraZeneca, Moderna and Pfizer-Biontech.³⁴ Anti-vaxxers claim that this makes these vaccines incompatible with opposition to abortion, although the Vatican has declared that Catholics can use them in good conscience.³⁵
- **Covid vaccines are bad for the environment.** Anti-vaxxers have claimed that the production of Covid vaccines will involve the unethical exploitation of wild animals such as sharks and horseshoe crabs.³⁶
- **Covid vaccines will change your DNA.** Anti-vaxxers have traded on the novelty of mRNA vaccines and ignorance of how they work to promote the false claim that they will permanently alter the DNA of recipients.³⁷ In reality, mRNA vaccines never enter the nucleus of a cell, and scientists believe that its integration into the human genome is not a practical or theoretical concern.³⁸



A post on the “VaccinesUncovered” Instagram account with 148,000 followers suggests Covid vaccines could contain “cancer causing chemicals”

The vaccine will cause disease enhancement and kill people

A number of anti-vaxxers examined by this report have homed in on the real issue of vaccine-associated disease enhancement as the best basis upon which to claim that Covid vaccines will not just be ineffective, but dangerous and even deadly.

Vaccine-associated disease enhancement (VADE) occurs where a vaccine successfully stimulates an immune response against a disease, but something about the nature of that immune response actually enhances the disease instead of countering it. Two forms of VADE have been identified in previous vaccine trials: antibody-dependent and TH2 cell-dependent disease exacerbation.³⁹

One trial of a vaccine for respiratory syncytial virus (RSV) in 1965 resulted in the hospitalisation of 16 out of 20 infants who received the vaccine, two of whom subsequently died, compared to just one hospitalisation out of 21 participants in the control group. It was only three decades after this trial that it was discovered that the vaccine caused TH2 cell-dependent disease exacerbation.⁴⁰

More recently, vaccination programmes for dengue fever were halted amid concerns about VADE. In 2016, health authorities in the Philippines approved the use of Dengvaxia, an attenuated virus vaccine developed by Sanofi Pasteur. A year later, warnings from some scientists proved well founded when it was announced that the vaccine could worsen cases of dengue in children never previously infected. Health officials in the country found that 130 out of 830,000 vaccinated children had died, and that 19 of those had dengue, and vaccination was halted amid anger from parents.⁴¹ The number of deaths that can be attributed to Dengvaxia is disputed.⁴²

Crucially, VADE was also identified in animal trials of previous coronavirus vaccine candidates targeting SARS-CoV and Middle East Respiratory Syndrome (MERS). However, better knowledge of the mechanisms underpinning VADE have allowed for the development of three MERS vaccines that entered phase I clinical trials.⁴³

How COVID-19 Vaccine Can Destroy Your Immune System

Analysis by Dr. Joseph Mercola [Fact Checked](#)

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STORY AT-A-GLANCE

- > According to a study that examined how informed consent is given to COVID-19 vaccine trial participants, disclosure forms fail to inform volunteers that the vaccine might make them susceptible to more severe disease if they're exposed to the virus
- > Previous coronavirus vaccine efforts — including those for SARS, MERS and RSV — have revealed a serious concern: The vaccines have a tendency to trigger antibody-dependent enhancement (ADE)
- > ADE means that rather than enhance your immunity against the infection, the vaccine actually enhances the virus' ability to enter and infect your cells, resulting in more severe disease than had you not been vaccinated



An article by Joseph Mercola with over 9,000 Facebook interactions claims a Covid vaccine could “destroy your immune system” as a result of disease enhancement

Anti-vaxxers have quoted all of these cases in support of the accusation that Covid vaccines are liable to cause VADE. Del Bigtree made this the centrepiece of his speech to the NVIC conference, saying “there's a possibility to have a vaccine that makes you more sick or even kills you. This is the history of the coronavirus vaccine.”⁴⁴ Robert F. Kennedy Jr. also led with this accusation, saying “instead of protecting you, the vaccine was actually creating a kind of antibody... [that] actually increased your susceptibility to the disease. Every coronavirus vaccine that has been tested to date, we've seen that effect.”⁴⁵

In its simplest form, this narrative is an extension of questions over the long-term safety of Covid vaccine candidates, but its power comes from past cases that appear to demand a definitive answer from Covid vaccine advocates today.

However, there is a key weakness in this argument in that a number of Covid vaccine candidates have now reached phase III trials where participants have proven to display a robust immune response without displaying any evidence of VADE.⁴⁶

As such, the simplest way of “pre-bunking” this argument from anti-vaxxers is simply to emphasise that vaccine candidates have already been used by thousands of trial participants, many of whom are frontline health workers, and that they have proven to safely protect them from Covid.

Example: Robert F. Kennedy Jr. on vaccine-associated disease enhancement

“So instead of protecting you, the vaccine was actually creating a kind of antibody called a binding antibody as opposed to the good antibody, which is neutralizing antibody, the binding antibody actually increased your susceptibility to the disease. Every coronavirus vaccine that has been tested to date, we've seen that effect. The question is, with this new class now, there is almost two hundred vaccines being tested. We already know that it can produce an antibody response. The big question is what happens when those people get exposed to the wild virus? And those are the questions we haven't answered and in many cases, including Moderna, the vaccine companies have been given permission to skip the animal stage, which seems to me reckless, almost criminally irresponsible, because you want to answer that question before you touch the human being, not afterwards.”⁴⁷

THE MASTER NARRATIVE

Vaccine advocates cannot be trusted

Attacks on the integrity and motivation of vaccine advocates have always been a key feature of the anti-vaccination movement, and they are now applying this technique to advocates of a Covid vaccine.

Analysis of leading anti-vaxxers shows there are three main strands to these attacks: that politics is being put first, that profit is being put first, and that leading vaccine advocates are in any case unaccountable to the public they wish to vaccinate.

Politics is being put ahead of safety

Under pressure from the health, economic and social crises caused by Covid, many politicians have emphasised the speed with which they are seeking to develop and deploy vaccines. In the US, this is symbolised by Donald Trump's choice of the title "Warp Speed" for the country's vaccine programme.

Example: Del Bigtree on "Warp Speed"

"Rushing the science is the most dangerous thing you can do. Yet that is the headline in every newspaper around the world referencing the Covid-19 vaccine. In fact, Donald Trump has discussed a warp speed approach that will attempt to get hundreds of millions of vaccines available to the public before they even get through the safety trials. This should be alarming to everybody."⁴⁸

Profit is being put ahead of safety

This is the accusation that pharmaceutical companies and their investors are putting profiteering ahead of safety in their decisions around the development and deployment of vaccines.

- **"Big Pharma" is putting profit ahead of safety.** Many anti-vaxxers use the phrase "Big Pharma" to link vaccine producers to the conspiracy theory that mainstream medicine deliberately keeps people ill in order to profit from them.
- **Health authorities profit from vaccines.** Anti-vaxxers have long attacked independent agencies such as the CDC by claiming that they profit from vaccine patents and sales.⁴⁹ They now say that decisions on Covid vaccines are profit-driven, for example claiming that Anthony Fauci allowed the Moderna vaccine to skip key tests because the National Institute of Health shares ownership of a patent for the technology it uses.⁵⁰
- **Politicians are compromised by pharma investments.** Robert F. Kennedy Jr.'s Children's Health Defense has highlighted research on campaign donations and encouraged readers to "find out if your state lawmakers take cash from Big Pharma".⁵¹
- **Governments have made vaccines "too big to fail".** Some anti-vaxxers have accused governments of investing so much in vaccines that they will approve them despite safety concerns. Robert F. Kennedy Jr. has claimed that UK

government investment in the Oxford-AstraZeneca vaccine has made it “too big to fail”.⁵²



David Avocado Wolfe



Funding Sources

Bill and Melinda Gates Foundation	Pfizer
Health Canada	PepsiCo
Walt Disney Parks and Resorts	PayPal
Government of Canada	Novartis Corp
Siemens USA	Facebook
Catholic University of Maule	Merck
Kaiser Permanente	Mailchimp
Johnson & Johnson	Exxon Mobile
Diazyme Laboratories	P&G
Quest Diagnostics	Cargill
Roche Diagnostics	Coca-Cola
National Association of Chain Drug Stores Foundation	Dell Inc.
	Earthley

A Telegram post from the anti-vaxx entrepreneur David Wolfe who claims the CDC “is a for-profit corporation”

The US Center for Disease Control (CDC) is a for-profit corporation.

Example: Robert F. Kennedy Jr. on “Big Pharma” profits

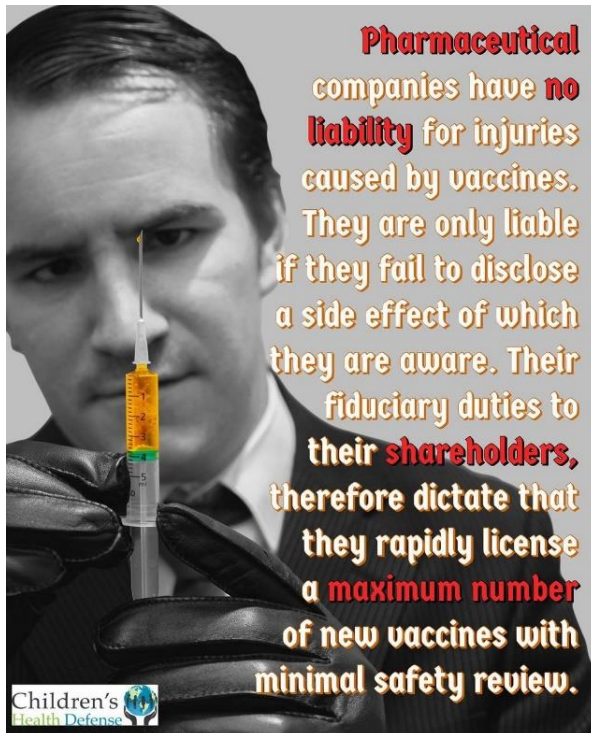
“Remember, these companies have nothing to lose. They're playing with house money. The government is giving the money to do these experiments. In the Moderna case, they gave them the patent for the vaccine. And then they guarantee that they're going to buy two billion doses even if the vaccine doesn't work. The Company is going to make money no matter what. And if they injured people, they're protected completely against liability. No matter how grievous your injury you cannot sue them. That company has zero incentive, number one, to make it safe, and number two, to do anything to make it safe. Because if it works, they're going to get rich, if it doesn't work, they're going to get rich, either way.”⁵³

Vaccine advocates are unaccountable

Anti-vaxxers frequently claim that vaccine advocates are not accountable to the people who will use their vaccines, and therefore have no real motivation to put their safety first. There are two main versions of this sub-narrative, the first of which targets global entities that promote vaccines, such as Gavi, the Bill and Melinda Gates Foundation, the World Bank and the World Economic Forum. The second attacks trust in pharmaceutical companies directly by claiming that they are insulated from liability for injuries caused by their products.

- **Global vaccine advocates are not accountable to the public.** Anti-vaxxers insinuate that pro-vaccine organisations are funded by billionaires, businesses or other unidentified actors with ulterior motives. These attacks often run into conspiracy theory, but at bottom the accusation is that global vaccine advocates are too remote from the public to act in their interests.

- **Vaccine manufacturers are not liable for injuries.** Anti-vaxxers argue that exemptions from legal liability for Covid vaccines mean pharmaceutical companies could profit from sales of a harmful vaccine without fear of future financial penalties. In the UK where some Covid vaccines have already been authorised with legal indemnity for manufacturers, those vaccines have been added to the government's Vaccine Damage Payments Scheme.⁵⁴



An Instagram post by Robert F. Kennedy Jr. with over 24,000 likes that claims vaccine manufacturers have no motivation to ensure their vaccines are safe

Example: Barbara Loe Fisher on accountability

“The World Health Organization, governments and politically powerful non-governmental organizations partnering with industry and governments like the Gates Foundation have given the pharmaceutical industry tens of billions of dollars to develop and fast track experimental coronavirus vaccines to licensure and promote their universal use. At the same time, governments have given pharmaceutical companies a liability shield from lawsuits whenever messenger RNA and DNA Covid-19 vaccines, which are being produced using technology never before licensed for humans, cause harm.”⁵⁵

⚠️ Anti-vaxxers’ symbolic use of Bill Gates

Anti-vaccine campaigners have collaborated with alternative health entrepreneurs and conspiracists to ensure that global health philanthropist Bill Gates has become a symbolic figure that represents all of their attacks on the trustworthiness of vaccine advocates.

These attacks are not aimed at influencing the ongoing debate over a Covid vaccine, in which the role of Bill Gates takes a back seat to more practical issues. The real utility of

this campaign of vilification is to create a symbol and associated memes that aid the communication of interrelated beliefs about Covid, vaccines and conspiracies.

One factor in the rapid spread of the QAnon conspiracy theory was its ability to accommodate emerging conspiracy theories and symbolise them, as it proved to do with conspiracies around Covid-19.⁵⁶ It was aided by a name, “QAnon”, and a set of symbols that were easily communicable and discoverable on social media. This allowed curious individuals to easily discover more QAnon content and provided a gateway through which existing conspiracy theorists could access a new audience.

Similarly, Bill Gates has come to represent a complex of anti-vaxxer talking points and conspiracy theories. Virtually every element of the online anti-vaxx movement has found ways of featuring him in their narratives, in a variety of contexts and tones. As a result, content featuring him is widespread, and the #billgates hashtag on Instagram allows users access to nearly 800,000 posts featuring anti-vaccine misinformation.⁵⁷ Analysis performed by First Draft found that Bill Gates featured in 6 percent of social media posts about vaccines in their sample of 1,200.⁵⁸

Instagram



A selection of Instagram posts from a hashtag search for #billgates performed on 16 December 2020

ADAPTATION

Adapting the master narrative for online subcultures

So far, we have described the “master narrative” that is used in some form or other by all elements of the online anti-vaccine movement, and binds them together:

- **Covid is not dangerous**
- **Covid vaccines are dangerous**
- **Vaccine advocates cannot be trusted**

Elements of this master narrative, broadly set by the institutional anti-vaxxers we identified as “campaigners” in our first report, then undergoes a process of “adaptation” across the wider anti-vaccine movement where it is split into a series of sub-narratives with radically different content and themes that improve its ability to spread in a wide range of online environments.⁵⁹ This is analogous to the way that a disease evolves to adapt to new environments, improving its ability to spread and infect new individuals.

This process of “adaptation” has substantial advantages for online anti-vaxxers. First, it allows all elements of the anti-vaccine movement to contribute to promotion of the master narrative, for example by enabling “alternative health” entrepreneurs to claim that their products render Covid harmless.

Second, this approach takes advantage of the fragmented social media landscape to reach more people, more effectively. It means that different online anti-vaxxers are free to tailor the master narrative to the interests and demography of their own followers, using the very data that social platforms extract from us, their users. Research by a team led by George Washington University social physicist Professor Neil Johnson suggests that the variety of anti-vaxxer narratives makes them more effective at attracting undecided users.⁶⁰

Third, the primary disadvantage of such an approach - that it creates a confusion of different and even contradictory narratives - is actually an advantage in the hands of anti-vaxxers whose primary aim is to spread uncertainty rather than win new converts.

In order to counter the anti-vaxxer master narrative, it is therefore important to understand how it is adapted by different elements of the online anti-vaccine movement. CCDH's previous report, *The Anti-Vaxx Industry*, identified four key components of this movement:

Campaigners are full-time activists working to popularise anti-vaxx ideas. They are the wider movement's experts on vaccination and contribute primarily by developing and deploying the master narrative, although many also give credence to narratives promoted by other parts of the movement.

Entrepreneurs use their involvement in the anti-vaxx movement to promote alternative health businesses. They adapt the master narrative primarily by

promoting the idea that Covid can be treated with alternative remedies or that healthy people can easily fight the disease.

Conspiracists approach the issue of vaccines from an interest in conspiracy theories more generally. They adapt the master narrative to suggest that the Covid pandemic is fake or planned, promote baseless theories about the content of the vaccine, and suggest that vaccine advocates are conspiring against the public.

Communities are people with an interest in anti-vaxx ideas who have formed groups in which to share and discuss those ideas. The most prevalent narratives in these groups reflect the makeup of their administrators and members, but the following section explains how they play a particularly important role in turning vaccine hesitant people into committed anti-vaxxers.

In addition to these elements of the online anti-vaccine ecosystem identified in our previous report, this report also recognises unique narratives pushed by the following elements:

Parent anti-vaxxers have a particular focus on advising parents against childhood vaccinations, and have developed a number of unique narratives relating to the new Covid vaccine and children.

Minority anti-vaxxers have a particular focus on promoting distrust of vaccines and the medical profession amongst racial and ethnic minorities, trading on real health inequalities and historical cases of medical malpractice against ethnic minorities.

Together these are the most common ways in which the anti-vaxxer master narrative on a Covid vaccine is adapted to particular online subcultures, and they are examined in more detail below. Leading anti-vaxxers have less frequently adapted their key messages for a number of other online subcultures, such as religious groups, but an examination of these is outside the scope of this report.

ADAPTATION

Alternative health

Alternative health entrepreneurs often claim to be focused on promoting good health in opposition to a medical establishment that they say is too focused on treating diseases. This extends into alternative health narratives around the Covid vaccine.

Covid is not dangerous

Alternative health products can prevent or treat Covid

Alternative health entrepreneurs have exploited the Covid pandemic by selling advice and treatments that they claim can prevent or treat the disease. In this way, they are constantly promoting the narrative that Covid is not dangerous because it can be easily managed with alternative health techniques.

CCDH's previous report, *The Anti-Vaxx Industry*, exposed how these entrepreneurs offer free advice about Covid on mainstream social media platforms in order to direct users to email "marketing funnels" where they are offered paid-for products and services.⁶¹ Influential entrepreneurs such as Joseph Mercola and the Bollingers have continued to promote unproven remedies for Covid including "H2O2 nebulization" and "homeopathic immunizations".⁶²



An Instagram post from the "Truth About Vaccines" account with over 2,400 likes promoting "homeopathic immunizations"

Example: Joseph Mercola on H2O2 nebulization

The anti-vaxx entrepreneur Joseph Mercola used his speech to the NVIC conference to recommend that people ill with Covid inhale hydrogen peroxide, a bleaching agent, to cure themselves. Mercola made a series of baseless claims about what he called "H2O2 nebulization" to suggest that it has a "100 percent success rate" in treating people who had Covid-19, and that even those who were seriously ill "implement this and literally within hours their whole life has changed and they up and around and feeling much better".⁶³ Mercola's website hosts a similar guide that has received over 14,000 Facebook interactions according the analytics tool CrowdTangle.⁶⁴ Mercola claimed to be inspired by Andrew Brownstein, an alternative health entrepreneur who also lectured the NVIC conference on the merits of H2O2 nebulization and injections.⁶⁵

The Covid vaccine is dangerous

Alternative health “experts” say the vaccine is dangerous

Anti-vaxx entrepreneurs help adapt the master narrative on the dangers of a Covid vaccine by posing as alternative health “experts” in opposition to real experts from mainstream science and medicine. This provides a direct route for the master narrative to enter alternative health spaces on social platforms, but it also has the effect of spreading uncertainty about who is really an expert on Covid or vaccines, and what the scientific consensus is.

Alternative health entrepreneurs create the image of expertise and the authority that comes with it by imitating the structures and culture of the scientific community. This is most visible on social media in the form of global conferences that portray entrepreneurs as “world leaders” in health, or in videos that present doctors and scientists in the anti-vaccine movement as an alternative community of professional peers.⁶⁶ A parallel set of studies, research papers and journals add to this impression and are cited as evidence elsewhere in the anti-vaccine movement, thus acquiring ‘social proof’.⁶⁷ The authors of one such recent study had both worked as paid consultants to anti-vaccine organisations.⁶⁸



childrenshealthdefense • Following ...

childrenshealthdefense This study adds to a growing list of published peer-reviewed papers that compare the health of vaccinated children to the health of unvaccinated children. These studies suggest we have long underestimated the scope of vaccine harms, and that the epidemic of chronic illness in children is hardly a mystery.

Unvaccinated children are healthier than vaccinated children, according to a new study published in the International Journal of Environmental Research and Public Health. The study — “Relative Incidence of Office Visits and Cumulative Rates of Billed Diagnoses Along the Axis of Vaccination” — by James Lyons-

10,167 likes

DECEMBER 8

An Instagram post from Children's Health Defense with over 10,000 likes promotes a study that [fact-checkers](#) say is unsupported

Example: “Ask the Experts” video

This recent video, removed from YouTube but now being shared to Facebook from other platforms, features a number of anti-vaxxers from around the world, all of whom are doctors, scientists or otherwise presented as authorities on Covid and vaccines.⁶⁹ The video presents all of these individuals as “experts” who have reached their own consensus on the dangers of a vaccine and the relative harmlessness of Covid. It is the latest in a series of similar videos produced by Oracle Films for a group called “The World Freedom Alliance”.⁷⁰ It features a number of anti-vaxx entrepreneurs such as Rashid Buttar, Andrew Kaufman and Sherri Tenpenny who sell nutritional supplements. Other speakers include suspended nurse and UK activist Kate Shemirani, homeopaths, an acupuncturist and a “metaphysicist”.

Vaccine advocates cannot be trusted

Vaccine advocates suppress alternative health

Anti-vaxx entrepreneurs also offer a unique angle on this master narrative, essentially arguing that vaccine advocates are ignoring or even suppressing alternative health remedies that could easily manage the Covid pandemic. For example, in an advice video on the “Stop Covid Cold” website, Joseph Mercola claims “the narrative of the mainstream media and most physicians on approaching Covid-19 seems to focus on the fact that there’s nothing you can do to improve and enhance your immune system, which is just not true, and the reliance is instead on these expensive antiviral strategies like remdesivir which costs \$4,000 for a course of treatment, and more concerningly the vaccine programme.”⁷¹

ADAPTATION

Conspiracy theory

Research has shown that conspiratorial thinking is positively and significantly associated with vaccine hesitancy.⁷² By adapting their master narrative for online communities concerned with conspiracies, anti-vaxxers access a large and receptive audience.

Even leading anti-vaxxers have felt comfortable alluding to grand conspiracies about Bill Gates, a “Plandemic” or “The Great Reset”. This “conspiracy signalling” allows prominent anti-vaxxers to insert themselves into online conspiracy narratives, with little risk of their content being removed by social media platforms.

In return, this makes it easier for dedicated conspiracy theorists to integrate the anti-vaxx master narrative into theirs, and they gain credibility from association with established anti-vaxxers with their own organisations, businesses or medical qualifications. For example, the conspiracy misinformation site Waking Times has previously featured Joseph Mercola as a guest writer on health issues.⁷³

Covid is not dangerous

Covid is a “scamdemic”

This adaptation of the narrative that Covid is not dangerous maintains that the disease does not even exist. One of the underpinnings of this conspiracy theory is that the virus has never been isolated.⁷⁴ Variations of this conspiracy theory blame the real symptoms associated with Covid on some other cause such as 5G mobile network signals.⁷⁵



An Instagram post from Joseph Mercola with nearly 6,000 likes repeats claims that Covid is a “hoax”

The Covid vaccine is dangerous

The vaccine is designed to control or kill you

The first variation of this conspiracy theory claims that the Covid vaccine is designed to impose a totalitarian society on the world. The vaccine’s role in bringing this about varies, with some conspiracy theorists claiming that it will contain microchips to aid tracking or mind control, while others simply claim that civil rights will be severely curtailed for those who refuse to receive the vaccine.

The other adaptation of this narrative claims that the vaccine is positively designed to kill people. This fits into a range of long-running conspiracy theories that claim organisations like the UN or wealthy businessmen like Bill Gates are using vaccines to depopulate the world.



David Avocado Wolfe



Wanted: Dead or Alive. For Crimes Against Humanity. Ba'al "Ruthless Schemer" and Manlinda Gates.

5.2K 5:09:08 PM

A Telegram post from the anti-vaxx entrepreneur David Wolfe that suggests Bill Gates wishes to control the world, with the caption "Wanted: Dead or Alive"

Vaccine advocates cannot be trusted

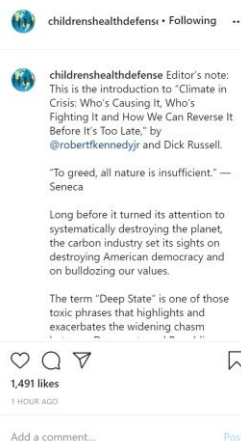
Covid is a "plandemic"

This is the claim that governments or international bodies deliberately released or created Covid in order to necessitate lockdowns, social distancing and other limits on civil liberties. Increasingly, this conspiracy theory has converged with another called "The Great Reset" which alleges that the World Economic Forum and other elites planned the Covid pandemic to "reset" or destroy the global economy.⁷⁶

Proponents of this conspiracy differ on whether Covid poses a serious threat to human health, but many believe that the pandemic's final purpose is to necessitate a vaccine designed to kill or control recipients, as outlined above.



An Instagram post from Children's Health Defense with over 3,000 likes promotes the "Great Reset" conspiracy theory



Borrowing the language of the QAnon movement, another recent Instagram post from Children's Health Defense identifies "Big Pharma" as part of "the real Deep State"

Example: Leading anti-vaxxers use "conspiracy signalling"

In their speeches to the NVIC conference, both Sherri Tenpenny and Joseph Mercola made throwaway references to a "plandemic" and "scamdemic".⁷⁷ Along with Robert F. Kennedy Jr. and Del Bigtree, they have also posted about the "Great Reset" conspiracy theory.⁷⁸ These examples of "conspiracy signalling" form just a small part of the content produced by leading anti-vaxxers, but it helps ensure that their master narrative is integrated into existing conspiracy narratives.

ADAPTATION

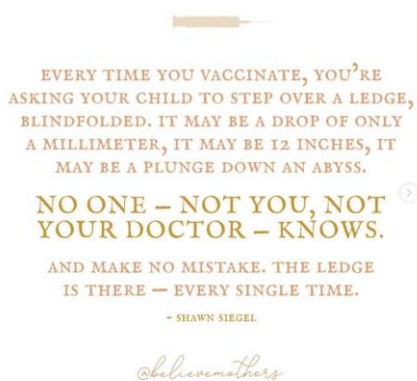
Driving up vaccine hesitancy amongst parents

Parents are an important demographic for anti-vaxxers, since the majority of vaccinations take place in childhood. As such, anti-vaxxers have developed ways of adapting their messaging and methods to more effectively drive vaccine hesitancy amongst parents.

This messaging recasts the anti-vaxxer master narrative in even stronger emotional and moral terms. Emotive images of distressed children, alongside moving accounts of children who have suffered vaccine injuries, appeal to parents' protective instincts.⁷⁹ This is accompanied by a moral appeal that links vaccine hesitancy to good parenting: vaccine hesitant parents are characterised as taking action to protect their children from unknown risks, and as rejecting the advice of experts in favour of their own parental intuition.⁸⁰

Parents are naturally the most effective message carriers for these appeals, so anti-vaxxers have ensured that parent-campaigners feature heavily in their communications and encouraged the creation of parent-focused campaigns and social media accounts. This also allows anti-vaxxers to contrast the personal experiences of anti-vaccine parents with the expertise of scientists and medical professionals.⁸¹

However, anti-vaxxers must now adapt these messages and methods to Covid, a disease that poses relatively little threat to children, making them less of a priority for a vaccine. As such, anti-vaxxers have further adapted their master narrative to play up the risks and urgency of a Covid vaccine for young children.



An Instagram post from the Believe Mothers account that associates good parenting with resisting vaccination

Covid is not dangerous

Children are not at risk from Covid

While it is true that children who are infected with Covid are much less likely to suffer a severe illness or die, speakers at the NVIC conference exaggerated this: Del Bigtree stated that “children are virtually unaffected by Covid-19” while Robert F. Kennedy Jr. claimed that “the risk of dying from Covid if you are under 20 is zero.”⁸² Joseph Mercola

told the conference that the only children to suffer severe Covid were “obese... or [had] some other complication”.⁸³

The Covid vaccine is dangerous

Children could suffer lifelong illnesses

Anti-vaccine material directed at parents also warns that children are likely to suffer most from any unknown long-term illnesses caused by a vaccine. This is used to contrast with the low likelihood that children would suffer a severe illness from Covid itself. Del Bigtree used his speech to the NVIC conference to make a number of unsubstantiated claims about possible long-term consequences of a Covid vaccine including diabetes, lupus and other autoimmune diseases.⁸⁴

Vaccine advocates cannot be trusted

Vaccine advocates are targeting children

Children are not currently a priority for Covid vaccines, but anti-vaxxers have sought to raise uncertainty amongst parents by claiming that Covid vaccine advocates are targeting children. An article hosted on the website of Robert F. Kennedy Jr.’s Children’s Health Defense campaign has claimed that children are being targeted as part of a push for “vaccines for everyone at all costs”.⁸⁵ In addition, Children’s Health Defense has used its Instagram account to condemn parents who have chosen to protect their children with Covid vaccines undergoing trials.⁸⁶



An Instagram post from Children's Health Defense criticises parents who have enrolled their children in Covid vaccine trials

ADAPTATION

Driving up vaccine hesitancy amongst ethnic communities

Compared to the overall US population, a higher proportion of African Americans are either uncertain about whether they will get a Covid vaccine, or plan not to, and this is particularly acute for those who rely on social media more than traditional media for their news.⁸⁷

Anti-vaxxers have adapted their master narrative to maximise vaccine hesitancy amongst African Americans and other ethnic communities, primarily by highlighting past cases of medical abuse such as the Tuskegee experiment. Despite these attempts to stoke distrust, recent polling shows that 74 percent of African Americans trust information from scientists, a similar proportion to the general US population at 76 percent.⁸⁸

Covid is not dangerous

Covid does not affect minorities

Early in the pandemic, some anti-vaxxers such as Rizza Islam tried to claim that African Americans are less likely to be infected by Covid.⁸⁹ This narrative has become less common as evidence has mounted that Covid of the disproportionate impact that Covid has had on low-income communities and communities of color.⁹⁰

The Covid vaccine is dangerous

Vaccines are unsafe for minorities

Some anti-vaxxers have exploited poor representation of ethnic minorities in vaccine trials to promote the narrative that the vaccine is unsafe for them to use. Children's Health Defense, the charity founded by Robert F. Kennedy Jr., has gone further by publishing an article that suggests plans to prioritise the vaccination of minorities have "ulterior motives" and that US vaccine deployment plans are "racist".⁹¹

The Nation of Islam, a religious movement led by the antisemite Louis Farrakhan, has been active in promoting the conspiracy theory that the Covid vaccine is not just unsafe for African Americans, but a deliberate attempt to kill people, calling it "America's Wicked Plan".⁹²

Vaccine advocates cannot be trusted

Vaccine advocates are linked to historical and structural racism

Anti-vaxxers have often stoked distrust of vaccine advocates by highlighting cases of historic racism perpetrated against minorities by the medical profession, most notably the Tuskegee syphilis experiments performed on African Americans. Robert F. Kennedy Jr. recently joined the Nation of Islam Minister Tony Muhammad at an event pitched as a discussion of "smallpox infested blankets, Tuskegee experiment, forced vaccinations and hidden agendas".⁹³

Our research discovered one document listed as a resource for activists on the now defunct “Stop Mandatory Vaccination” Facebook Group that contained a list of talking points aimed at persuading African Americans that health authorities such as the CDC had suppressed evidence that vaccine injuries were more common amongst African Americans.⁹⁴

Another emerging version of this narrative suggests that vaccine advocates are planning to target ethnic minorities, using “economic coercion” to encourage them to use a Covid vaccine not for the benefit of those communities, but as a large-scale experimental sample.⁹⁵



An Instagram post from Robert F. Kennedy Jr. with 22,000 likes advertises an event linking vaccines to the Tuskegee experiment, with a caption suggesting the MMR vaccine is linked to higher rates of autism in African-American children

CAPTURING UNCERTAINTY

Offering spaces for vaccine-hesitant people

So far, this report has examined how anti-vaxxers have created a flexible master narrative that can be adapted to a wide range of online environments, spreading uncertainty about a Covid vaccine and driving vaccine hesitancy.

But rising vaccine hesitancy also presents anti-vaxxers with a further opportunity to convert the vaccine hesitant, many of whom are simply undecided on a vaccine, into committed anti-vaxxers. Online anti-vaxxers accomplish this in three steps: providing better “answering spaces” for addressing vaccine hesitancy, identifying hesitant individuals in those spaces, and training them to become effective anti-vaccine activists.

Creating effective “answering spaces” for the vaccine-hesitant

Undecided individuals are often thought of as being passive observers in the online debate over vaccines, but analysis performed by the social physicist Professor Neil Johnson and his team has found that undecided individuals are highly active, and highly engaged with anti-vaccination clusters.⁹⁶ In the coming months, undecided individuals are likely to become even more active as they seek answers about a Covid vaccine.

Our research suggests that the flexibility of the anti-vaxxer “master narrative”, and its adaptation to different online environments, has made it more effective at offering online “answering spaces” where undecided individuals can address their questions.

This process of “adaptation” has created a varied ecosystem of anti-vaccine spaces that are more accessible to undecided individuals and more relevant to their interests. There are anti-vaccine social media accounts for different interests and demographics, they range from very large to very small, they are local and international, public and private, and they are present on traditional websites as well as social media platforms old and new.

Facebook Groups are the most obvious example of how anti-vaxxers provide spaces for answering the uncertainty their narratives create, but they are skilled in creating effective “answering spaces” on a range of platforms.



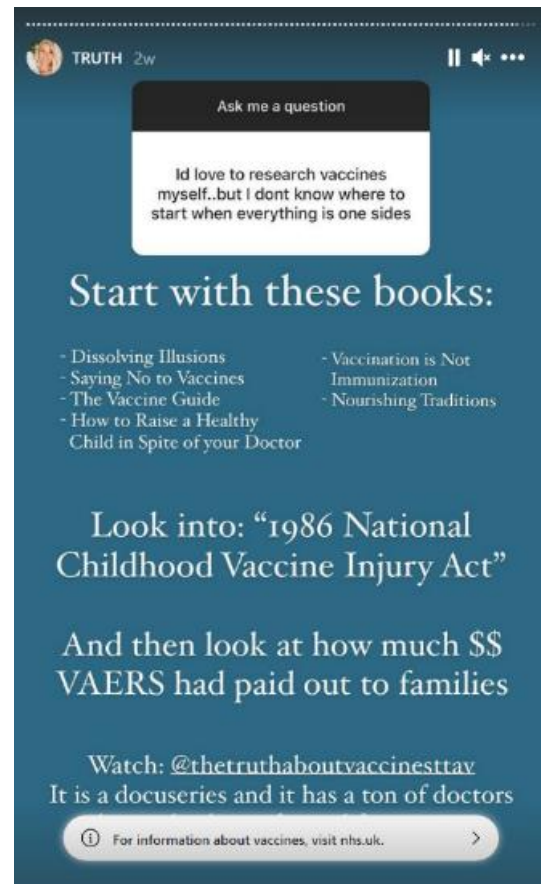
Example of a post in the Vaccination Re-education Discussion Forum with 227,000 members where questions about a Covid vaccine are answered with misinformation

They have created dedicated websites for Q&As on Covid, comprehensive guides on vaccine ingredients, and online polls designed to show that hesitancy about a Covid vaccine is widespread.⁹⁷ At the same time, a new generation of anti-vaxxers are applying their skills as Instagram wellness influencers to create anti-vaccine content, conduct vaccine Q&As with followers and create resources using the platform's Story Highlights feature.⁹⁸

This also makes sense of another common element of anti-vaxxer messaging, which is the call to “do your own research”, a message also common in QAnon communities. This call encourages undecided individuals to resolve their uncertainty, and in combination with the greater availability of anti-vaxxer spaces, is likely to result in them finding anti-vaccine answers. One member of the “Restore Liability for the Vaccine Makers” Facebook Group, advised other activists:

“Once we have established some doubt about vaccines, we can move on to directing people where to find honest science, such as lack of true placebo-based safety studies and truly not-so rare injuries that are coming from our overuse of vaccines.”⁹⁹

Over 117,000 Instagram posts use the hashtag #doyourresearch, many of which contain misinformation about Covid and vaccines, demonstrating the enduring popularity of this framing even after many QAnon accounts have been removed from the platform.¹⁰⁰



An example of an Instagram wellness influencer using the platform's Q&A feature to spread vaccine misinformation

Example: Joseph Mercola's “Stop Covid Cold” website

Joseph Mercola, whose alternative health website ranks as the most popular in the world, recently announced a new website called “Stop Covid Cold” designed to offer apparently independent advice on preventing or treating Covid with alternative remedies.¹⁰¹ The advice focuses almost exclusively on the use of vitamin D, and links on the website lead to articles on Mercola.com promoting a variety of supplements.¹⁰² The website is professionally designed and includes a short “Check My Covid Risk” quiz that generates recommended lifestyle changes and vitamin D supplements.¹⁰³

RECRUITING ANTI-VAXXERS

Converting the vaccine-hesitant into anti-vaxxers

The previous section identified the “answering spaces” that anti-vaxxers have established to answer the questions of vaccine-hesitant people with misinformation. The most established of these spaces have developed techniques to identify vaccine hesitant individuals, convert them into committed anti-vaxxers and train them to become more effective activists.

Identifying hesitant individuals

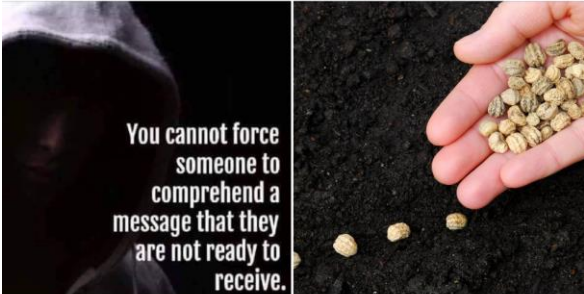
A number of influential anti-vaxxer Facebook Groups have revealed that they employ sophisticated techniques for identifying vaccine-hesitant individuals and testing their receptiveness to further anti-vaccine content.

One post in the “Vaccination Re-Education Discussion Forum”, the largest private anti-vaxxer group on Facebook, advised activists that “the entire point of this is to plant seeds”.¹⁰⁴ Other advice posted to anti-vaxxer Facebook groups included methods “to find out who is wasting your time and who you might be able to make a difference with.”¹⁰⁵

Tom Says: Plant Seeds

Almost 8 years ago my Granddaughter was born. Prior to her birth I sent my daughter messages outlining the dangers of vaccination. I never once told her Not to vaccinate, I only suggested that prior to the birth of her daughter she might want to look into them.

NO Response to any of them but I knew she was at least reading them and by doing so, I had accomplished what I was seeking all along, A Seed Had been planted. By the time of my granddaughters arrival she had decided t... [See more](#)



Done

425 36 comments

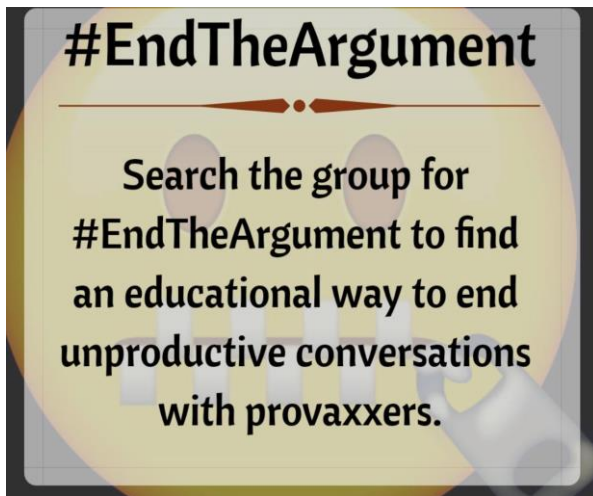
HOW TO WEED OUT THE TIME-WASTERS>>>

You only need to use two photos or the information these photos present to find out who is wasting your time and who you might be able to make a difference with.

You present the greatly expanded CDC childhood vaccine schedule and how children today are given multiple injections of combination vaccines at one time. If this information is ignored or you get some uncaring or mean answer, then the person you are trying to communicate with is eth... [See more](#)

2019 CHILDHOOD VACCINE SCHEDULE

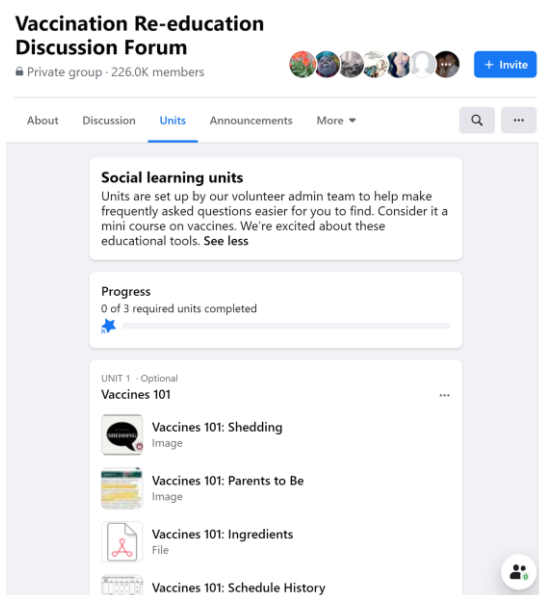
1962	1983	2019
OPV (1 dose)	DTaP (3 months)	Influenza (3 months)
MMR (1 dose)	MMR (1 year)	Hep B (1 month)
DTaP (3 doses)	DTaP (3 months)	Influenza (12 months)
MMR (2 doses)	MMR (2 years)	Hep B (1 year)
DTaP (4 doses)	DTaP (4 months)	Influenza (2 years)
MMR (3 doses)	MMR (3 years)	Influenza (3 years)
DTaP (5 doses)	DTaP (5 months)	Influenza (4 years)
MMR (4 doses)	MMR (4 years)	Influenza (5 years)
DTaP (6 doses)	DTaP (6 months)	Influenza (6 years)
MMR (5 doses)	MMR (5 years)	Influenza (7 years)
DTaP (7 doses)	DTaP (7 months)	Influenza (8 years)
MMR (6 doses)	MMR (6 years)	Influenza (9 years)
DTaP (8 doses)	DTaP (8 months)	Influenza (10 years)
MMR (7 doses)	MMR (7 years)	Influenza (11 years)
DTaP (9 doses)	DTaP (9 months)	Influenza (12 years)
MMR (8 doses)	MMR (8 years)	Influenza (13 years)
DTaP (10 doses)	DTaP (10 months)	Influenza (14 years)
MMR (9 doses)	MMR (9 years)	Influenza (15 years)
DTaP (11 doses)	DTaP (11 months)	Influenza (16 years)
MMR (10 doses)	MMR (10 years)	Influenza (17 years)
DTaP (12 doses)	DTaP (12 months)	Influenza (18 years)
MMR (11 doses)	MMR (11 years)	Influenza (19 years)
DTaP (13 doses)	DTaP (13 months)	Influenza (20 years)
MMR (12 doses)	MMR (12 years)	Influenza (21 years)
DTaP (14 doses)	DTaP (14 months)	Influenza (22 years)
MMR (13 doses)	MMR (13 years)	Influenza (23 years)
DTaP (15 doses)	DTaP (15 months)	Influenza (24 years)
MMR (14 doses)	MMR (14 years)	Influenza (25 years)
DTaP (16 doses)	DTaP (16 months)	Influenza (26 years)
MMR (15 doses)	MMR (15 years)	Influenza (27 years)
DTaP (17 doses)	DTaP (17 months)	Influenza (28 years)
MMR (16 doses)	MMR (16 years)	Influenza (29 years)
DTaP (18 doses)	DTaP (18 months)	Influenza (30 years)
MMR (17 doses)	MMR (17 years)	Influenza (31 years)
DTaP (19 doses)	DTaP (19 months)	Influenza (32 years)
MMR (18 doses)	MMR (18 years)	Influenza (33 years)
DTaP (20 doses)	DTaP (20 months)	Influenza (34 years)
MMR (19 doses)	MMR (19 years)	Influenza (35 years)
DTaP (21 doses)	DTaP (21 months)	Influenza (36 years)
MMR (20 doses)	MMR (20 years)	Influenza (37 years)
DTaP (22 doses)	DTaP (22 months)	Influenza (38 years)
MMR (21 doses)	MMR (21 years)	Influenza (39 years)
DTaP (23 doses)	DTaP (23 months)	Influenza (40 years)
MMR (22 doses)	MMR (22 years)	Influenza (41 years)
DTaP (24 doses)	DTaP (24 months)	Influenza (42 years)
MMR (23 doses)	MMR (23 years)	Influenza (43 years)
DTaP (25 doses)	DTaP (25 months)	Influenza (44 years)
MMR (24 doses)	MMR (24 years)	Influenza (45 years)
DTaP (26 doses)	DTaP (26 months)	Influenza (46 years)
MMR (25 doses)	MMR (25 years)	Influenza (47 years)
DTaP (27 doses)	DTaP (27 months)	Influenza (48 years)
MMR (26 doses)	MMR (26 years)	Influenza (49 years)
DTaP (28 doses)	DTaP (28 months)	Influenza (50 years)
MMR (27 doses)	MMR (27 years)	Influenza (51 years)
DTaP (29 doses)	DTaP (29 months)	Influenza (52 years)
MMR (28 doses)	MMR (28 years)	Influenza (53 years)
DTaP (30 doses)	DTaP (30 months)	Influenza (54 years)
MMR (29 doses)	MMR (29 years)	Influenza (55 years)
DTaP (31 doses)	DTaP (31 months)	Influenza (56 years)
MMR (30 doses)	MMR (30 years)	Influenza (57 years)
DTaP (32 doses)	DTaP (32 months)	Influenza (58 years)
MMR (31 doses)	MMR (31 years)	Influenza (59 years)
DTaP (33 doses)	DTaP (33 months)	Influenza (60 years)
MMR (32 doses)	MMR (32 years)	Influenza (61 years)
DTaP (34 doses)	DTaP (34 months)	Influenza (62 years)
MMR (33 doses)	MMR (33 years)	Influenza (63 years)
DTaP (35 doses)	DTaP (35 months)	Influenza (64 years)
MMR (34 doses)	MMR (34 years)	Influenza (65 years)
DTaP (36 doses)	DTaP (36 months)	Influenza (66 years)
MMR (35 doses)	MMR (35 years)	Influenza (67 years)
DTaP (37 doses)	DTaP (37 months)	Influenza (68 years)
MMR (36 doses)	MMR (36 years)	Influenza (69 years)
DTaP (38 doses)	DTaP (38 months)	Influenza (70 years)
MMR (37 doses)	MMR (37 years)	Influenza (71 years)
DTaP (39 doses)	DTaP (39 months)	Influenza (72 years)
MMR (38 doses)	MMR (38 years)	Influenza (73 years)
DTaP (40 doses)	DTaP (40 months)	Influenza (74 years)
MMR (39 doses)	MMR (39 years)	Influenza (75 years)
DTaP (41 doses)	DTaP (41 months)	Influenza (76 years)
MMR (40 doses)	MMR (40 years)	Influenza (77 years)
DTaP (42 doses)	DTaP (42 months)	Influenza (78 years)
MMR (41 doses)	MMR (41 years)	Influenza (79 years)
DTaP (43 doses)	DTaP (43 months)	Influenza (80 years)
MMR (42 doses)	MMR (42 years)	Influenza (81 years)
DTaP (44 doses)	DTaP (44 months)	Influenza (82 years)
MMR (43 doses)	MMR (43 years)	Influenza (83 years)
DTaP (45 doses)	DTaP (45 months)	Influenza (84 years)
MMR (44 doses)	MMR (44 years)	Influenza (85 years)
DTaP (46 doses)	DTaP (46 months)	Influenza (86 years)
MMR (45 doses)	MMR (45 years)	Influenza (87 years)
DTaP (47 doses)	DTaP (47 months)	Influenza (88 years)
MMR (46 doses)	MMR (46 years)	Influenza (89 years)
DTaP (48 doses)	DTaP (48 months)	Influenza (90 years)
MMR (47 doses)	MMR (47 years)	Influenza (91 years)
DTaP (49 doses)	DTaP (49 months)	Influenza (92 years)
MMR (48 doses)	MMR (48 years)	Influenza (93 years)
DTaP (50 doses)	DTaP (50 months)	Influenza (94 years)
MMR (49 doses)	MMR (49 years)	Influenza (95 years)
DTaP (51 doses)	DTaP (51 months)	Influenza (96 years)
MMR (50 doses)	MMR (50 years)	Influenza (97 years)
DTaP (52 doses)	DTaP (52 months)	Influenza (98 years)
MMR (51 doses)	MMR (51 years)	Influenza (99 years)
DTaP (53 doses)	DTaP (53 months)	Influenza (100 years)
MMR (52 doses)	MMR (52 years)	Influenza (101 years)
DTaP (54 doses)	DTaP (54 months)	Influenza (102 years)
MMR (53 doses)	MMR (53 years)	Influenza (103 years)
DTaP (55 doses)	DTaP (55 months)	Influenza (104 years)
MMR (54 doses)	MMR (54 years)	Influenza (105 years)
DTaP (56 doses)	DTaP (56 months)	Influenza (106 years)
MMR (55 doses)	MMR (55 years)	Influenza (107 years)
DTaP (57 doses)	DTaP (57 months)	Influenza (108 years)
MMR (56 doses)	MMR (56 years)	Influenza (109 years)
DTaP (58 doses)	DTaP (58 months)	Influenza (110 years)
MMR (57 doses)	MMR (57 years)	Influenza (111 years)
DTaP (59 doses)	DTaP (59 months)	Influenza (112 years)
MMR (58 doses)	MMR (58 years)	Influenza (113 years)
DTaP (60 doses)	DTaP (60 months)	Influenza (114 years)
MMR (59 doses)	MMR (59 years)	Influenza (115 years)
DTaP (61 doses)	DTaP (61 months)	Influenza (116 years)
MMR (60 doses)	MMR (60 years)	Influenza (117 years)
DTaP (62 doses)	DTaP (62 months)	Influenza (118 years)
MMR (61 doses)	MMR (61 years)	Influenza (119 years)
DTaP (63 doses)	DTaP (63 months)	Influenza (120 years)
MMR (62 doses)	MMR (62 years)	Influenza (121 years)
DTaP (64 doses)	DTaP (64 months)	Influenza (122 years)
MMR (63 doses)	MMR (63 years)	Influenza (123 years)
DTaP (65 doses)	DTaP (65 months)	Influenza (124 years)
MMR (64 doses)	MMR (64 years)	Influenza (125 years)
DTaP (66 doses)	DTaP (66 months)	Influenza (126 years)
MMR (65 doses)	MMR (65 years)	Influenza (127 years)
DTaP (67 doses)	DTaP (67 months)	Influenza (128 years)
MMR (66 doses)	MMR (66 years)	Influenza (129 years)
DTaP (68 doses)	DTaP (68 months)	Influenza (130 years)
MMR (67 doses)	MMR (67 years)	Influenza (131 years)
DTaP (69 doses)	DTaP (69 months)	Influenza (132 years)
MMR (68 doses)	MMR (68 years)	Influenza (133 years)
DTaP (70 doses)	DTaP (70 months)	Influenza (134 years)
MMR (69 doses)	MMR (69 years)	Influenza (135 years)
DTaP (71 doses)	DTaP (71 months)	Influenza (136 years)
MMR (70 doses)	MMR (70 years)	Influenza (137 years)
DTaP (72 doses)	DTaP (72 months)	Influenza (138 years)
MMR (71 doses)	MMR (71 years)	Influenza (139 years)
DTaP (73 doses)	DTaP (73 months)	Influenza (140 years)
MMR (72 doses)	MMR (72 years)	Influenza (141 years)
DTaP (74 doses)	DTaP (74 months)	Influenza (142 years)
MMR (73 doses)	MMR (73 years)	Influenza (143 years)
DTaP (75 doses)	DTaP (75 months)	Influenza (144 years)
MMR (74 doses)	MMR (74 years)	Influenza (145 years)
DTaP (76 doses)	DTaP (76 months)	Influenza (146 years)
MMR (75 doses)	MMR (75 years)	Influenza (147 years)
DTaP (77 doses)	DTaP (77 months)	Influenza (148 years)
MMR (76 doses)	MMR (76 years)	Influenza (149 years)
DTaP (78 doses)	DTaP (78 months)	Influenza (150 years)
MMR (77 doses)	MMR (77 years)	Influenza (151 years)
DTaP (79 doses)	DTaP (79 months)	Influenza (152 years)
MMR (78 doses)	MMR (78 years)	Influenza (153 years)
DTaP (80 doses)	DTaP (80 months)	Influenza (154 years)
MMR (79 doses)	MMR (79 years)	Influenza (155 years)
DTaP (81 doses)	DTaP (81 months)	Influenza (156 years)
MMR (80 doses)	MMR (80 years)	Influenza (157 years)
DTaP (82 doses)	DTaP (82 months)	Influenza (158 years)
MMR (81 doses)	MMR (81 years)	Influenza (159 years)
DTaP (83 doses)	DTaP (83 months)	Influenza (160 years)
MMR (82 doses)	MMR (82 years)	Influenza (161 years)
DTaP (84 doses)	DTaP (84 months)	Influenza (162 years)
MMR (83 doses)	MMR (83 years)	Influenza (163 years)
DTaP (85 doses)	DTaP (85 months)	Influenza (164 years)
MMR (84 doses)	MMR (84 years)	Influenza (165 years)
DTaP (86 doses)	DTaP (86 months)	Influenza (166 years)
MMR (85 doses)	MMR (85 years)	Influenza (167 years)
DTaP (87 doses)	DTaP (87 months)	Influenza (168 years)
MMR (86 doses)	MMR (86 years)	Influenza (169 years)
DTaP (88 doses)	DTaP (88 months)	Influenza (170 years)
MMR (87 doses)	MMR (87 years)	Influenza (171 years)
DTaP (89 doses)	DTaP (89 months)	Influenza (172 years)
MMR (88 doses)	MMR (88 years)	Influenza (173 years)
DTaP (90 doses)	DTaP (90 months)	Influenza (174 years)
MMR (89 doses)	MMR (89 years)	Influenza (175 years)
DTaP (91 doses)	DTaP (91 months)	Influenza (176 years)
MMR (90 doses)	MMR (90 years)	Influenza (177 years)
DTaP (92 doses)	DTaP (92 months)	Influenza (178 years)
MMR (91 doses)	MMR (91 years)	Influenza (179 years)
DTaP (93 doses)	DTaP (93 months)	Influenza (180 years)
MMR (92 doses)	MMR (92 years)	Influenza (181 years)
DTaP (94 doses)	DTaP (94 months)	Influenza (182 years)
MMR (93 doses)	MMR (93 years)	Influenza (183 years)
DTaP (95 doses)	DTaP (95 months)	Influenza (184 years)
MMR (94 doses)	MMR (94 years)	Influenza (185 years)
DTaP (96 doses)	DTaP (96 months)	Influenza (186 years)
MMR (95 doses)	MMR (95 years)	Influenza (187 years)
DTaP (97 doses)	DTaP (97 months)	Influenza (188 years)
MMR (96 doses)	MMR (96 years)	Influenza (189 years)
DTaP (98 doses)	DTaP (98 months)	Influenza (190 years)
MMR (97 doses)	MMR (97 years)	Influenza (191 years)
DTaP (99 doses)	DTaP (99 months)	Influenza (192 years)
MMR (98 doses)	MMR (98 years)	Influenza (193 years)
DTaP (100 doses)	DTaP (100 months)	Influenza (194 years)
MMR (99 doses)	MMR (99 years)	Influenza (195 years)
DTaP (101 doses)	DTaP (101 months)	Influenza (196 years)
MMR (100 doses)	MMR (100 years)	Influenza (197 years)
DTaP (102 doses)	DTaP (102 months)	Influenza (198 years)
MMR (101 doses)	MMR (101 years)	Influenza (199 years)
DTaP (103 doses)	DTaP (103 months)	Influenza (200 years)
MMR (102 doses)	MMR (102 years)	Influenza (201 years)
DTaP (104 doses)	DTaP (104 months)	Influenza (202 years)
MMR (103 doses)	MMR (103 years)	Influenza (203 years)
DTaP (105 doses)	DTaP (105 months)	Influenza (204 years)
MMR (104 doses)	MMR (104 years)	Influenza (205 years)
DTaP (106 doses)	DTaP (106 months)	Influenza (206 years)
MMR (105 doses)	MMR (105 years)	Influenza (207 years)
DTaP (107 doses)	DTaP (107 months)	Influenza (208 years)
MMR (106 doses)	MMR (106 years)	Influenza (209 years)
DTaP (108 doses)	DTaP (108 months)	Influenza (210 years)
MMR (107 doses)	MMR (107 years)	Influenza (211 years)
DTaP (109 doses)	DTaP (109 months)	Influenza (212 years)
MMR (108 doses)	MMR (108 years)	Influenza (213 years)
DTaP (110 doses)	DTaP (110 months)	Influenza (214 years)
MMR (109 doses)	MMR (109 years)	Influenza (215 years)
DTaP (111 doses)	DTaP (111 months)	Influenza (216 years)
MMR (110 doses)	MMR (110 years)	Influenza (217 years)
DTaP (112 doses)	DTaP (112 months)	Influenza (218 years)
MMR (111 doses)	MMR (111 years)	Influenza (219 years)
DTaP (113 doses)	DTaP (113 months)	Influenza (220 years)
MMR (112 doses)	MMR (112 years)	Influenza (221 years)
DTaP (114 doses)	DTaP (114 months)	Influenza (222 years)
MMR (113 doses)	MMR (113 years)	Influenza (223 years)
DTaP (115 doses)	DTaP (115 months)	Influenza (224 years)
MMR (114 doses)	MMR (114 years)	Influenza (225 years)
DTaP (116 doses)	DTaP (116 months)	Influenza (226 years)
MMR (115 doses)	MMR (115 years)	Influenza (227 years)
DTaP (117 doses)	DTaP (117 months)	Influenza (228 years)
MMR (116 doses)	MMR (116 years)	Influenza (229 years)
DTaP (118 doses)	DTaP (118 months)	Influenza (230 years)
MMR (117 doses)	MMR (117 years)	Influenza (231 years)
DTaP (119 doses)	DTaP (119 months)	Influenza (232 years)
MMR (118 doses)	MMR (118 years)	Influenza (233 years)
DTaP (120 doses)	DTaP (120 months)	Influenza (234 years)
MMR (119 doses)	MMR (119 years)	Influenza (235 years)
DTaP (121 doses)	DTaP (121 months)	Influenza (236 years)
MMR (120 doses)	MMR (120 years)	Influenza (237 years)
DTaP (122 doses)	DTaP (122 months)	Influenza (238 years)
MMR (121 doses)	MMR (121 years)	Influenza (239 years)
DTaP (123 doses)	DTaP (123 months)	Influenza (240 years)
MMR (122 doses)	MMR (122 years)	Influenza (241 years)
DTaP (124 doses)	DTaP (124 months)	Influenza (242 years)
MMR (123 doses)	MMR (123 years)	Influenza (243 years)
DTaP (125 doses)	DTaP (125 months)	Influenza (244 years)
MMR (124 doses)	MMR (124 years)	Influenza (245 years)
DTaP (126 doses)	DTaP (126 months)	Influenza



Example of a graphic posted to the Vaccination Re-education Discussion Forum private Facebook Group instructing members on how to “end unproductive conversations with provaxxers”

Training anti-vaccine activists

Anti-vaxxers take the issue of training grassroots activists seriously, offering a range of online training courses for which there is no parallel amongst vaccine advocates. This is particularly clear in anti-vaxxer Facebook Groups, a number of which have taken advantage of Facebook’s “Units” feature for offering training courses that members can sign up to and mark their progress.



Example of a training unit offered by the Vaccination Re-education Discussion Forum private Facebook Group

Established anti-vaxxers also offer training and webinars for activists. Activists who join the mailing list of the “alternative health” entrepreneur Sherri Tenpenny receive invitations to Zoom webinars on vaccines and a paid-for “boot camp” course on anti-vaccine activism.¹⁰⁷

In addition to these online training resources, anti-vaxxers regularly host free and paid-for conferences, many of which are open to rank-and-file activists or the owners of small “alternative health” businesses. The NVIC conference examined by this report is just one example.

RESISTING MODERATION

Resisting moderation of anti-vaxxer accounts

CCDH's *Failure to Act* report shows that social media platforms fail to act on 95 percent of anti-vaccine misinformation reported to them, but anti-vaxxers are already working to mitigate potential interventions such as fact-checking, attempts to restrict the distribution of their posts, and the removal of their accounts or content.¹⁰⁸

Seeking mainstream exposure on social and traditional media

Leading anti-vaxxers have claimed that they welcome mainstream media scrutiny and fact-checks as a way of exposing new audiences to their ideas. In an interview with Ty and Charlene Bollinger, the operators of The Truth About Vaccines network of social media accounts, the anti-vaccine film producer Del Bigtree claimed:

"I read the headlines: 'Del Bigtree anti-vaxxer putting everybody at risk', and I know that that attack on me, and that article, that I just had a hundred people said 'who is Del Bigtree? What is the HighWire? What's this show about?' And we just gained a hundred people, and they just lost a hundred. And think about being on their side: if they attack, we win, if they leave us alone, we win. They cannot figure out what to do, because every day, Charlene, we win and they lose."¹⁰⁹

Similarly, Robert F. Kennedy appeared to welcome scrutiny of his role in spreading conspiracy theories about Bill Gates from the New York Times, deliberately referring to the newspaper's reporting in a post on the subject that reiterated the same conspiracies.¹¹⁰ This suggests that anti-vaxxers may deliberately indulge in provocative conspiracy theories in order to attract media attention.

In addition, Kennedy used this post and another to direct his followers to "contact Bill Gates on his social media", thereby further spreading the conspiracy theory in comments and trolling directed at posts from Bill Gates and organisations connected to him.¹¹¹

Pushing followers to "lifeboat" accounts

With a few exceptions, mainstream social media platforms have been slow to remove the leading anti-vaxxers and anti-vaxx discussion groups, but many have already begun to act in anticipation of further restrictions by encouraging followers on mainstream platforms to follow them on "lifeboat" accounts.

In some cases, these lifeboat accounts are simply backup accounts on mainstream platforms. David Icke was removed from YouTube in May 2020 but maintains a small backup account called "Ickonic" on the platform.¹¹² The anti-vaccine influencer Alec Zeck recently created two backup accounts on Instagram in addition to his active main account.¹¹³

Other anti-vaxxers are experimenting with lifeboat accounts on "alt-tech" platforms such as Parler, Gab and BitChute. It is particularly common for anti-vaxxers to use their biography statements on Instagram to embed a "Linktree" URL that takes users to a list of their accounts on each platform, including less common platforms.¹¹⁴ They are then

free to direct viewers of their posts to this link and urge them to join them on other platforms.

Anti-vaxxers have also encouraged social media followers to become email subscribers. Robert F. Kennedy Jr. recently rebranded articles on the website of his Children's Health Defense organisation as "The Defender", encouraging followers to sign up to its email newsletter in order to "fight the censorship".¹¹⁵

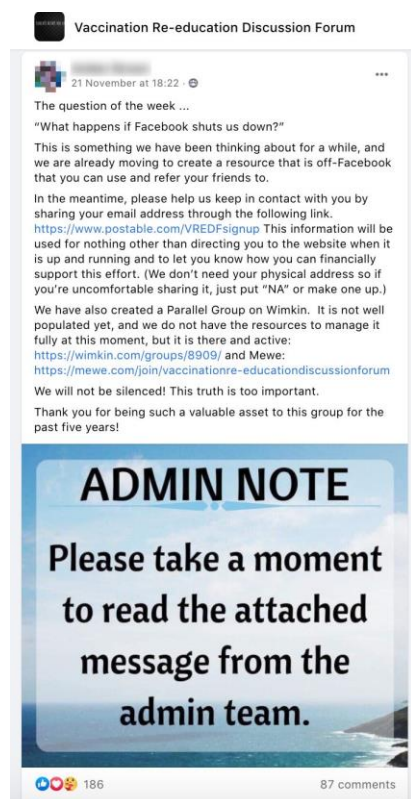
Example: Anti-vaxxers moving to "censorship-free platforms"

The "alternative health" entrepreneur David Wolfe has established a new Telegram channel that he promotes on both Facebook and Instagram, but has so far managed to translate just 25,000 of his 12.7 million mainstream followers to the platform.¹¹⁶

Erin Elizabeth Finn, an anti-vaccine entrepreneur who is the wife of Joseph Mercola, regularly embeds Linktree URL in her posts, asking followers to "check out our other censorship-free platforms" including a Telegram channel.¹¹⁷

Sayer Ji, another entrepreneur and the owner of the website GreenMedInfo, posted that "in anticipation of an imminent, massive, Covid-19 related censorship event predicted to occur this fall... we are asking our 1 million+ followers to move to Telegram as a backup".¹¹⁸ So far 30,000 have migrated to his Telegram channel.

The Vaccination Re-education Discussion Forum, the largest, private anti-vaccine group on Facebook recently asked their 226,000 members to share their email addresses in case Facebook shut the group down.¹¹⁹



A member of the "admin team" for the Vaccination Re-education Discussion Forum private Facebook Group urges members to sign up to an email newsletter in case their group is removed by Facebook for the misinformation it spreads

This push to convert mainstream followings in followings on “alt-tech” platforms has been triggered by existing soft measures taken by platforms, for example removing individual posts and reducing their distribution. The anti-vaxxer and “alternative health” entrepreneur David Wolfe has seen his Facebook following of over 12 million decline very gradually in the last year, presumably as a result of restrictions on the distribution of his posts on the platform.

Forcing debates on public pages to spread hesitancy

A number of posts in anti-vaxxer Facebook Groups give detailed advice on how to spread awareness through public social media pages to reach vaccine unaware users.

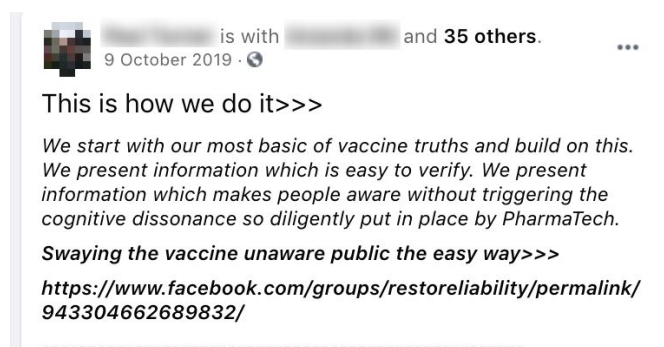
One post in the “Restore Liability For The Vaccine Makers”, a public group with about 11,000 members, identified politicians' social media pages as places where activists can “force debates”. The post claimed that politicians are “NOT supposed to censor public input” which it identified as a key issue to “make our best use of”.¹²⁰



A post in the Restore Liability For the Vaccine Makers Facebook Group instructs members to “force debates” on politicians’ social media accounts

A similar post in the “Restore Liability For The Vaccine Makers” Group advised activists on where to post to reach more of the vaccine unaware population. The author provided a list with possible public Facebook groups to target and claimed “we need to be spreading awareness through our politician's pages, public health departments, parenting sites, health related groups, gardening, GMOs, 5G, etc.”¹²¹

Another post in the “Restore Liability For The Vaccine Makers” Group offered advice on how to sway the vaccine unaware public “the easy way” without triggering “the cognitive dissonance so diligently put in place by PharmaTech”. The post suggested that activists should start with the “most basic of vaccine truth and build on this”.¹²²



Another post in the Restore Liability For The Vaccine Makers Facebook Group explains how to spread vaccine hesitancy

Co-opting the language of fact-checking

Recent research suggests that “fact-checking” is not a complete solution to the problem of misinformation, but anti-vaxxers have nonetheless developed new strategies to mitigate any potential damage it inflicts on their credibility.¹²³

There is some evidence that anti-vaxxers have begun to co-opt the language of fact-checking in order to undermine its effectiveness and make their own content appear more credible. Robert F. Kennedy Jr. and his Children’s Health Defense organisation have themselves as “fact-checking the fact-checkers”, while Kennedy has directly attacked the independence of established fact-checkers on the basis of their funding.¹²⁴

Articles on Mercola.com, ranked the most popular alternative health website in the world, have begun to display a small “Fact Checked” symbol with a check mark, clicking on which displays a message assuring readers that “All Mercola articles are fact-checked, vetted and verified using Associated Press and Society of Professional Journalists journalism standards.”¹²⁵



Asymptomatic People Do Not Spread COVID-19

Analysis by [Dr. Joseph Mercola](#)

✓ Fact Checked

Inoculating followers against attacks on their credibility

Another increasingly common tactic is for anti-vaxxers to ‘inoculate’ their followers against forthcoming attacks on their credibility. For example, many anti-vaxxers warn that social media platforms are poised to remove them precisely because they are speaking the truth, thereby conditioning their followers to see such a move as confirmation of their credibility rather than as an attack on it.

For example, responding to the removal of the anti-vaccine film producer Del Bigtree from YouTube, Robert F. Kennedy Jr. branded Google “a vaccine company” that “steers users toward deceptive and fraudulent pharma propaganda”. Kennedy also claimed that “Google’s definition of “misinformation” is “any information, even if accurate and true, which criticizes vaccination products.”¹²⁶

It is important to note that such a strategy can only mitigate the reputational damage of being removed, and primarily only amongst an anti-vaxxer’s existing followers. It does nothing to mitigate the lost reach caused by being ‘deplatformed’.

RECOMMENDATIONS

For the public: Don't Spread The Virus

In traditional communications, we are taught that rapid rebuttal is vital for preventing the spread of harmful narratives. This is based on assumptions which are not true in digital spaces. Most notably, broadcasting platforms intermediate information, with journalists and editors assessing, organising and presenting information to allow for a public debate that is anchored in shared facts.

The structure of social media is of course fundamentally different. There is no editorial deliberation in Big Tech HQs before an anti-vaxxer's content is published; the algorithms take over there, driven by a desire to maximise engagement and time spent on site rather than the public good. Our information ecosystem has become more fragmented than ever before and runs to new rules. This means we need new methods for dealing with online misinformation.

In a digital setting, we can do far more harm by engaging with misinformation than it can do alone. Extremists know this, and they attempt to trigger responses from the rest of society, in order to reach a larger audience. On the day the Covid vaccine was approved in the UK, anti-vaxxers were able to trigger pro-vaccine voices into posting about thalidomide, getting the term trending and exposing new audiences to a reason to distrust the medical establishment.¹²⁷ Engaging with anti-vaccine misinformation can also help spread emotive anti-vaccine images: for example, anti-vaxxers frequently use images of syringe needles in the knowledge that needle sensitivity is a significant driver of vaccine hesitancy.¹²⁸

Even well-meaning attempts to fact-check or myth-bust anti-vaccine misinformation can actually help spread it further. Leading anti-vaxxers examined by this report such as Del Bigtree have said they welcome the extra exposure that fact-checks and mainstream media criticism bring, while research has shown that showing corrective information to people already concerned about vaccines can actually significantly reduce their intent to vaccinate.¹²⁹

In 2019, the CCDH published [Don't Feed The Trolls](#), a report on why people troll and a guide on what victims should do. In March, we adapted the understandings and recommendations for [Covid misinformation](#), and the resulting guidance was endorsed by the UK Government's Secretary of State for Digital, Culture, Media and Sport, Rt Hon Oliver Dowden MP, among others. All of society can more effectively counter anti-vaccine misinformation online:

- **Don't engage with anti-vaccine misinformation online.** Doing so only amplifies the content and shares it with your own followers, who may not otherwise ever be exposed to these falsehoods.
- **Remember that most people trust vaccines.** The @ key has changed the world. People's view of the world can be shaped by a small group's decision to target them online. Similarly, social media algorithms promote divisive content in our newsfeeds rather than give a truthful view of what the public or even our own friendship groups are talking about. What you see online is not a true

representation of reality, but posting that the vaccine is unpopular will make people think there must be a good reason why.

- **If you see someone you know posting misinformation about the vaccine, contact them privately.** We listen to our friends and family more than we do strangers on social media, so it is always worth reaching out. Doing so privately doesn't risk spreading the misinformation further, and it may be more likely to lead to a better outcome.
- **Spread pro-vaccine messages instead.** Vaccine advocates should be louder about our support for vaccines. It is much more useful to share pro-vaccine content than to rebut anti-vaccine content.
- **Shout about getting vaccinated.** Recipients of the vaccine should post about getting it – such a campaign could create authentic social proof and work against the anti-vaxxers' aim of creating doubt around the safety of vaccines. "I've had the vaccine" Twibbons and Instagram filters could also help achieve this.

RECOMMENDATIONS

For practitioners: Inoculate against misinformation

Groups working on communicating the vaccine rollout need to study, monitor and learn from the methods and narratives of anti-vaxxers online, as set out in this report, in order to develop their own distinct playbook for promoting their cause in the online world.

This playbook must reflect the differing physics of social media, the risks of amplification in engagement, as well as all of the traditional communications techniques at their disposal, in order to make sure their side is effectively and persuasively heard by as large a number of the public as possible.

How can practitioners counter misinformation messages online, if engagement spreads them further? The more effective method is to “inoculate” against these narratives, making the public less likely to believe them when they later encounter them, either online or in their offline lives. Research by Jon Roozenbeek & Sander van der Linden shows that effective inoculation against misinformation confers resistance to it.¹³⁰

Pro-vaccine forces should focus on inoculating against the three components of the anti-vaxxers’ master narrative, which are at the heart of every other anti-vaccine message. This could include:

- **Tell the stories of those who have fallen ill through Covid or from diseases which existing vaccines protect against**, including parents of children who have been affected, a group who are relentlessly targeted by anti-vaccine propaganda.
- **Telling the human stories of scientists involved in developing the vaccine**, the effort they put into this project, their relief at its success. This would effectively counter the numerous conspiracy theories and attacks on the motives of those who developed this vaccine.
- **Promote clips and posts from recipients of the vaccine**. As well as generating social proof, as mentioned above, this will help pre-bunk the sense that anti-vaxxers will seek to create, that the vaccine is something to be wary about. Those who took part in the clinical trials should also feature.

Research on inoculation also suggests that explaining the methods of those who spread misinformation is a powerful way of conferring resistance. This opens the possibility of raising public awareness of how and why anti-vaxxers spread their message:

- **Expose the methods of anti-vaxxers**. Our analysis shows that two-fifths of the online anti-vaxxer ecosystem is composed of “alternative health” entrepreneurs who often combine their attacks on vaccines with promotion of their products. Another two-fifths are conspiracists many of whom profit from advertising revenues and sales of merchandise. Exposing these impure motives along with examples of the misinformation they spread in a weakened form could encourage members of the public to be more vigilant towards anti-vaccine messages they see online.

Pro-vaccine groups must also learn from the varied types and widely-distributed messengers used by anti-vaxxers in order to give pro-vaccine messages more reach and impact.

- **Recruit a large and diverse group of authentic and representative message carriers**, who have their own existing social media audiences, to spread pro-vaccine messages. This should range from Instagram influencers, YouTubers and TikTok stars, to harnessing the large social media followings of more mainstream celebrities on Twitter and Facebook. This process should start with a detailed survey of the most influential pro-vaccine accounts on each social media platform, much like the regular surveys of influential anti-vaxxer accounts regularly performed by CCDH. They should then be encouraged to produce their own material and given guidance on effective communication on vaccines, rather than on the substance of the content.

As the vaccine rollout gathers pace, and the public are more engaged in the subject and searching for answers to their queries, it is vital that they find true, pro-vaccine information before anti-vaccine messages. As argued above, the anti-vaccine information ecosystem is better adapted for the varied user experience of social media, which includes more than search engines. Pro-vaccine forces need to meet members of the public where they are online and develop better “answering spaces”.

- **Create easily accessible “answering spaces” that offer information to people with questions and concerns about a vaccine.** Anti-vaxxers are extremely effective at creating these spaces, whether it’s in Facebook Groups, on Instagram or attractive websites full of “alternative health” solutions. Vaccine advocates must do the same, both by making sure existing social media accounts are able to provide answers to these questions, by creating new spaces and by encouraging trustworthy message carriers such as doctors to engage with social media.
- **Doctors and scientists should offer their expertise for questions.** They should do as the anti-vaxxers do and join their local community Facebook groups where they will be most trusted. Those with larger social media audiences should run Q&As, and influencers could be persuaded to offer their accounts for a “takeover” Q&A.

RECOMMENDATIONS

For platforms: Deplatforming works

Social media has given anti-vaxxers access to a much larger audience than they have ever had before. Whereas they have mostly been denied a platform to voice their conspiracy theories and falsehoods by traditional media, social media gave them access to hundreds of millions of potential new converts.

The problem lies with a very small number of accounts. The 59 million followers of anti-vaxxer social media accounts identified in this report are following just 425 accounts, pages, groups and channels across Twitter, YouTube, Facebook and Instagram. The ten anti-vaxxers we track with the largest cross-platform followings make up the majority of the total audience for anti-vaxxers online. These are the “superspreaders” of anti-vaxx misinformation.

As this report has demonstrated, anti-vaxxers are concerned by the prospect of losing their privileged position on social media platforms. The results of our campaign to persuade platforms to remove the accounts of conspiracy theorist, David Icke, demonstrate that the reach his propaganda enjoys was greatly reduced by his deplatforming. While there is much debate among academics of the best way to counter a conspiracy theory, the evidence is clear that the best way of preventing someone falling for a conspiracy theory is to prevent them from seeing it in the first place.

Social media companies should:

- **Remove prominent anti-vaxxers from their platforms.** Freedom of speech does not mean freedom of reach and there is no justification for Facebook or others to continue undermining the attempts to roll out the Covid vaccine by broadcasting the lies of propagandists to millions.
- **Hire more human moderators.** Two studies run by CCDH and Restless Development this year found that 90% of reported Covid misinformation, and 95% of reported anti-vaxx misinformation, was not acted on by the main platforms. During a pandemic, user reports of posts which brief platforms’ policies for harmful misinformation ought to be dealt with in 24 hours.
- **Stop monetising anti-vaxx misinformation.** YouTube channels which spread anti-vaccine messages in their videos should have their advertising removed from all of their videos. Websites which publish medical misinformation should not enjoy the privilege of Google, or other advertising providers, placing adverts across their sites. The piecemeal action taken to date, of removing advertising from individual videos and articles, often weeks or months after publication, offers no deterrent to an outlet not to continue posting harmful misinformation.
- **Promote good information.** Platforms should go out of their way to verify (attach blue ticks to) accounts of professional medical providers, including individual doctors, nurses, health scientists, and other sources of expertise. Currently, there are anti-vaxxers and other conspiracy theorists who enjoy this privilege, meaning the platforms are signalling that these accounts are more worthy of users attention than medical experts.

- **Don't promote harmful trends.** As we note above, hashtags and platforms 'trending' sections have been used by anti-vaxxers recently to help their propaganda reach new audiences. Anti-vaxx hashtags continue to be promoted on Instagram as suggested searches. Platforms must monitor these more closely and stop promoting anti-vaxx narratives.

RECOMMENDATIONS

For legislators: Hold platforms accountable

In a global pandemic, which has taken millions of lives and wreaked havoc on many more, social media companies still refuse to properly police their own platforms, permitting them to be used to propagate falsehoods which put all of society at risk. They were asked by governments and global health organisations to act against Covid and anti-vaccine misinformation and yet huge quantities remain online for all to access. This should be enough evidence to persuade any legislator that the status quo of self-regulation is not a viable option for the online world.

In the US, both Presidential candidates supported replacing Section 230 of the Communications Decency Act, which gives impunity to platforms for third party content on their services. Even the leaders of some of the largest tech companies - Mark Zuckerberg and Jack Dorsey - agreed with this position in a recent Senate Judiciary hearing. In Britain and the EU, legislation is being prepared that attempts to regulate the online world. This report will not delve into the wide and varied debate on how best to do this. Below are suggestions for the principles and policies in this area which would help limit the reach of anti-vaccine misinformation:

- **Fines and criminal sanctions for platforms which host harmful medical misinformation.** Knowingly hosting false information which leads people to risk their own health and the health of those around them ought to be unacceptable in civilised society. It would be unacceptable for any other form of media to publish or broadcast this to an audience of millions. Any regulatory solution must include measures to deter this practice.
- **Legal liability for online forum administrators.** The most potent space for radicalisation online is in forums. Group dynamics combine to weed out non-believers, and reward new converts with the dopamine hits of likes and positive comments. As this report reveals, Facebook groups, the platform's forums feature, are training members to recruit more widely. These are privately administered spaces, run by administrators who take on responsibility for policing them. Giving these administrators of large forums legal liability for the content of the spaces they set up and run would force them to do so properly. There is a ready-made bill in the UK Parliament to do exactly this, introduced by Lucy Powell MP in 2018.
- **Transparency for the online advertising world.** There are a number of websites publishing anti-vaccine conspiracy theories and misinformation which profit from online advertising networks, predominantly Google's. These sites provide the evidence points misinformation actors require to give them the veneer of credibility. Simply requiring advertising networks, like Google, to provide its clients with a published list of websites their adverts appear on would allow greater transparency and apply pressure to be more responsible with where adverts, and therefore advertising expenditure, are placed.

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