



The Anti-Vaxx Industry

**How Big Tech powers and profits from
vaccine misinformation**

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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

Vaccines are one of the most consequential, safe, efficient and effective medical discoveries in history. Few other inventions have saved so many lives. And yet today, amidst the Coronavirus pandemic, vaccination finds itself undermined as never before.

It is another of mankind's inventions - social media - that has subverted public confidence in vaccines, by empowering ideologues, hucksters and the perhaps well-meaning but misinformed - people trying to make sense of the severity and complexity of the scientific issues being discussed - to identify and communicate with potential converts at zero cost.

Conspiracy theories proliferate where there is deep epistemic anxiety, that is, when people feel uncertain about what is true or false.¹ Covid-19 is new and unfamiliar. The scale of its impact is immense and yet when it comes to our best hope for vanquishing the disease, many have little understanding of how vaccines actually work or of the role they have played historically in eliminating diseases that once crippled and killed.

Our health authorities have, understandably, focused on acute management of the Coronavirus threat and its spread. Out of sheer necessity, as they try to comprehend the disease, the message has been 'trust our best guess'.

This has given anti-vaxxers an opportunity to exploit subtle shifts in recommendations as scientific knowledge grows and position themselves in opposition to an aloof, fallible medical establishment in the same way that political 'populists' define themselves in part by contrasting their authenticity to a real or imagined political 'establishment's' failures.

Big Tech may sell itself on its granular knowledge of users, but it took a series of measles outbreaks in the developed world in 2019 for them to even acknowledge or begin to address the role their services played in creating what has been called a "Golden Age" for the anti-vaxx movement.² Even then, tech giants responded by doing the absolute minimum. Facebook announced it would downrank or hide anti-vaxx content, while Twitter and YouTube would label it. No platform announced its intention to remove anti-vaxx content despite accepting the scientific consensus that vaccines are safe.³

Now these feeble measures are being tested by a pandemic that will only be overcome by the most ambitious vaccination programme in human history. The decision to continue hosting known misinformation content and actors left online anti-vaxxers ready to pounce on the opportunity presented by

¹ Douglas KM, Sutton RM, Cichocka A. The Psychology of Conspiracy Theories. *Curr Dir Psychol Sci.* 2017;26(6):538-542.
[doi:10.1177/0963721417718261](https://doi.org/10.1177/0963721417718261)

² Richard Stein, GERMS, 5 December 2017, <http://www.germs.ro/en/Articles/The-golden-age-of-anti-vaccine-conspiracies-671#text>

³ "Zuckerberg, who told Congressman[sic] that his "understanding of the scientific consensus" is that

people should get their vaccines, said Facebook won't stop its users from posting information that's wrong."

<https://www.forbes.com/sites/mnunez/2019/10/23/mark-zuckerbergs-answer-to-an-anti-vaxxer-question-highlights-facebooks-problematic-response-to-misinformation/#5ccb846370b7>

Coronavirus. As a result, they have gained almost eight million followers since 2019 and continue to grow. Our research shows anti-vaxxers now enjoy a following of 58 million, based primarily in the US with significant numbers in the UK, Canada and Australia too. This is enough to compromise a future vaccine's ability to contain the disease.

This sophisticated ecosystem has grown by exploiting weaknesses in each social media company's policies on anti-vaxx and health misinformation. Each platform plays a role in feeding and growing the whole. Full-time anti-vaxx campaigners doubled their reach by broadcasting their message on YouTube channels that peddle conspiracy theories and false cures. In turn, these campaigners lend their brand and audience of activists to a thriving industry of anti-vaxx entrepreneurs using Facebook as a shopfront. Both groups have benefited from the reach of professional conspiracists on YouTube and from a network of Facebook Groups that turns vaccine sceptics into true believers using psychological hacks like the dopamine hit for 'likes' and the fear of abuse for nonconformity.

This failure was not an accident but was the result of deliberate decisions. Social platforms chose not to alienate an anti-vaxx user base that we estimate is worth up to \$1 billion a year to them. Some platforms have even broken their own promises by still profiting directly from anti-vaxx content: we found Facebook accepting paid anti-vaxx adverts and YouTube displaying adverts on anti-vaxx videos. The price for the social media companies' gain is paid by tax-funded health systems, to which Big Tech, of

course, notoriously makes little contribution.

It is time for change. Social media companies can start by enforcing their own policies on Covid-related and health misinformation. Fundamentally, someone can't believe propaganda they've never been exposed to. Given the findings in this report and the lavish profits social media companies have made tolerating this activity, anything less would be gross negligence. They can also contribute to the global effort to contain Coronavirus by paying back the billions in profits they have made from the anti-vaxx movement to our healthcare systems; if they don't, this report gives legislators the moral and factual arguments to create a levy to do so. In the meantime, other businesses can play their part too, by listening to campaigns like the Center for Countering Digital Hate's Stop Funding Fake News and Stop Hate for Profit, and make sure that Big Tech pays an economic cost for spreading misinformation.

This report also makes it clear that platforms have acted negligently. They have failed in their duty of care; a statutory duty of care model such as that underpinning the UK Online Harms Bill could mean that in future executives face criminal charges if serious harm resulted.⁴

Lies cost lives. Just as people around the world have hunkered down and taken steps to protect our communities, it's beyond time for the social media companies to finally do their bit.

Imran Ahmed
CEO, CCDH

⁴ NBC News, 7 February 2020, [https://www.nbcnews.com/tech/social-](https://www.nbcnews.com/tech/social-media/facebook-anti-vaxxers-pushed-mom-not-give-her-son-tamiflu-n1131936)

[media/facebook-anti-vaxxers-pushed-mom-not-give-her-son-tamiflu-n1131936](https://www.nbcnews.com/tech/social-media/facebook-anti-vaxxers-pushed-mom-not-give-her-son-tamiflu-n1131936)

Anti-vaxxers are a growing threat to a Coronavirus vaccine

Covid has been a growth opportunity for anti-vaxxers. Our investigation of 409 English language anti-vaxx social media accounts shows that they now have 58 million followers.

For 147 of the largest accounts, with 49 million followers, we have calculated that they have gained at least 7.8 million followers since 2019, an increase of 19%. This figure reflects only the 147 accounts where it was possible to use SocialBlade, the Internet Archive or a survey of Facebook groups we first conducted in March 2019 to establish the number of followers they had at a point as close as possible to 1 January 2020.

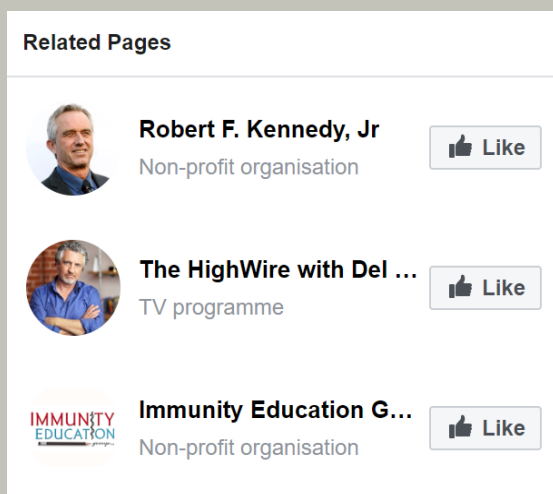
Most of these accounts were selected because they have shared popular anti-vaccine misinformation this year or because our research showed that they belong to influential figures in the anti-vaxx movement. While Facebook now prevents many anti-vaxx pages and groups from appearing in search results, we discovered many such pages by browsing the “Pages liked by this Page” and “Related Pages” sections on many

anti-vaxx pages that were already known to us.

Our investigation of these accounts shows that the majority are run from the US, but a significant number have connections to other English-speaking countries too. Analysis of transparency data for the 215 Facebook pages in our sample shows that 90 percent have administrators based in the US, while 20 percent have at least one administrator based in Canada, Australia, New Zealand or the UK.

It is also clear that the anti-vaxx movement is most popular on Facebook, but has a significant following on every mainstream social media platform. In our sample, anti-vaxx Facebook groups and pages command over 31 million followers, well over half of the combined following of all the accounts we studied. Anti-vaxx accounts have nearly 17 million subscribers on YouTube and 7 million on Instagram, but appear to be weakest on Twitter where they have 2 million followers.

The anti-vaxx movement’s failure to capture a larger following on Twitter may be down to hesitancy to express anti-vaxx views on what is a relatively open platform. This is supported by the fact that 89 percent of the Facebook pages in our sample have more followers than likes, with the key difference that



likes are visible to other users.⁵ In contrast, just 44 percent of the top 50 Facebook pages have more followers than likes.⁶

The scale and growth of the anti-vaxx movement revealed by our research is particularly concerning given that scientists estimate that 82 percent of the population would need to become immune to Covid, either through getting the disease or through a vaccine, in order to safely manage outbreaks.⁷

New polling of 2,861 US and UK adults commissioned from YouGov for this

report indicates that vaccine refusal and use of social media are linked, and that too few people currently plan to get a Coronavirus vaccine.

Amongst those who use social media more than traditional media to access news and updates about Covid, 63 percent in the UK and 56 percent in the US say they will definitely or probably get a vaccine. This compares to 72 percent in the UK and 66 percent in the US amongst those who get more information from traditional rather than social media.⁸

⁵ Facebook, retrieved 30 June 2020, <https://www.facebook.com/help/171378103323792>

⁶ SocialBlade, retrieved 30 June 2020, <https://socialblade.com/facebook/top/50/likes>

⁷ Sanche S, Lin Y, Xu C, et al. High Contagiousness and Rapid Spread of Severe Acute Respiratory Syndrome Coronavirus 2. *Emerging Infectious Diseases*. 2020;26(7):1470-1477. doi:10.3201/eid2607.200282. https://wwwnc.cdc.gov/eid/article/26/7/20-0282_article?deliveryName=USCDC_333-DM25287

⁸ YouGov poll, fieldwork 24-25 June 2020

Big Tech powers an anti-vaxx ecosystem

In March 2019, Facebook announced new policies to tackle anti-vaccine misinformation on its platform following a series of measles outbreaks in the US.⁹

However, Facebook stopped far short of removing known spreaders of anti-vaccine misinformation from its website. Instead it decided to “reduce the ranking of groups and Pages that spread misinformation about vaccinations in News Feed and Search.”¹⁰ Both YouTube and Twitter followed suit, again stopping short of removing anti-vaxx misinformation from their platforms.¹¹

This report reveals that these measures were ineffective because they underestimated the sophistication of the anti-vaxx ecosystem and its ability to circumvent these basic measures intended to limit its reach, growth and profitability.

By encompassing a wide range of actors present on every platform, this ecosystem has defied interventions that were not only weak but which only targeted an extremely narrow band of anti-vaxx accounts and misinformation.

It means that anti-vaxx campaigners rendered virtually invisible by Facebook have continued to grow their pages on

the platform by advertising themselves on the YouTube and Instagram channels of anti-vaxx entrepreneurs who couch their misinformation in the language of the fast growing wellness industry. Searches for the anti-vaxx phrase “natural immunity” reached an all-time high in March this year.¹²

In return, those anti-vaxx campaigners have allowed actors who profit from the sale of dubious supplements and treatments to reach into a deep pool of potential customers left intact by Facebook’s decision not to remove groups and pages known to spread anti-vaxx misinformation.

Research into the structure of the anti-vaxx movement by a team led by George Washington University social physicist Professor Neil Johnson suggests that the heterogeneous ecosystem and varied approaches to messaging allows anti-vaxxers to more easily form connections with other online communities than pro-vaxx groups. This helps anti-vaxx Facebook pages enmesh themselves more deeply into other networks containing undecided users who might be susceptible to persuasion and conversion. The researchers predicted that these features will allow anti-vaxx

⁹ Wired, 7 March 2019, <https://www.wired.com/story/facebook-anti-vaccine-crack-down/>

¹⁰ Facebook, 7 March 2019, <https://about.fb.com/news/2019/03/combating-vaccine-misinformation/>

¹¹ TechCrunch, 23 February 2019, <https://techcrunch.com/2019/02/22/youtube-demonetizes-anti-vaccination-videos/>

The Verge, 14 May 2019, <https://www.theverge.com/2019/5/14/18623494/twitter-vaccine-misinformation-anti-vax-search-tool-instagram-facebook>

¹² Google Trends, retrieved 30 June 2020, <https://trends.google.com/trends/explore?date=to%20day%20-y&q=natural%20immunity>

views to dominate the network of views on vaccines within ten years.¹³

In order to combat this trend, it is therefore important to identify the unique components and architecture of the anti-vaccine movement and propose bespoke counter-strategies. This report separates the movement into four broad sub-communities which we study in depth.

Campaigners are full-time activists working to popularise anti-vaxx ideas. This includes professional anti-vaxxers who earn a living from their activism, grassroots activists who use Facebook pages to share anti-vaxx misinformation and non-profit organisations that push anti-vaxx narratives.

Entrepreneurs use their involvement in the anti-vaxx movement to promote a business. Typically entrepreneurs will

employ a 'marketing funnel' leading users from freely accessible anti-vaxx content to paid-for products and services, from books to alternative medical treatments.

Conspiracists approach the issue of vaccines from an interest in conspiracy theories more generally. Unlike campaigners, they do not focus on the issue of vaccines or health full-time, but like entrepreneurs they sometimes use their involvement in the issue to promote a business.

Communities are people with an interest in anti-vaxx ideas who have formed groups in which to share and discuss those ideas. Communities are almost always Facebook groups or smaller Facebook pages, some of which are private. A minority of communities are run by entrepreneurs.

¹³ Nature, 13 May 2020, <https://www.nature.com/articles/d41586-020-01423-4>

Anti-vaxxers exploit weak restrictions to grow their audiences in the pandemic

Total following: 7.3 million
Covid growth: +1 million
Platform focus: Instagram

The core of the anti-vaxx movement is made up of dedicated campaigners who have been making the same arguments for more than a decade. With the dawn of the Coronavirus pandemic and the global drive to find a vaccine, their arguments have found new audiences.

These campaigners form the foundations of the anti-vaxx movement, not only producing new attacks on vaccines or new theories about why they might be dangerous, but presenting those arguments in a polished and authoritative way that lends the entire movement credibility.

However, despite significant growth, full-time anti-vaxx campaigners only reach a small part of the wider movement's audience. Whereas entrepreneurs reach half of the movement's potential audience, and conspiracists just over a third, campaigners reach just 12 percent.

Instagram was the biggest growth area for anti-vaxx campaigners

Instagram accounts for more than half of anti-vaxx campaigners' follower growth during the Covid pandemic, attracting an extra 571,000 people. Robert F. Kennedy Jr. led this trend by leveraging his reputation as an environmental activist in conjunction with graphic memes that work well in Instagram's format to promote conspiracy theories about Bill Gates and 5G mobile phone signals, adding over 336,000 people to his following in a matter of months.

Anti-vaxx filmmaker Del Bigtree and Nation of Islam influencer Rizza Islam have also mastered Instagram as a medium, adding another 187,000 followers between them.

This rapid growth contrasts with more sluggish growth on Facebook where new policies on anti-vaccine misinformation appear to have had a limiting effect on many groups and pages, suggesting that Facebook would be wise to ensure that similar techniques are being applied to its management of Instagram, which it wholly owns.

Some of the most influential anti-vaxx nonprofits are funded by just two men

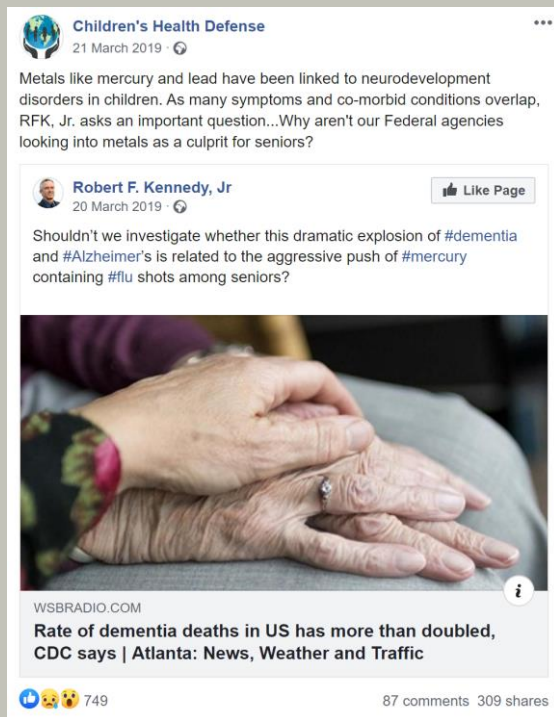
Some of the movement's largest campaigners are also funded in large part by just two men. The anti-vaxx entrepreneur Joseph Mercola helps fund both the National Vaccine Information Center and the Organic Consumers Association, which between them reach 1.7 million people.

The Informed Action Consent Network, which in turn supplies the resources for Del Bigtree's anti-vaxx show The HighWire and the Physicians for Informed Consent campaign, is largely funded by the financier Bernard Selz, who himself has significant investments in pharmaceutical companies and some of the tech giants that make the modern anti-vaxx movement possible.

Key Campaigners

Children's Health Defense was founded in 2016 by Robert F. Kennedy Jr., a son of Robert F. Kennedy and nephew of former president John F. Kennedy who

built a reputation over decades of campaigning on environmental issues.



At the time of its founding the organisation was called the World Mercury Project, reflecting a theory that the mercury compound thimerosal made vaccines unsafe, despite the fact that thimerosal use was largely phased out in 2001.¹⁴ This focus on mercury creates a continuity with environmental activism against methylmercury, a more dangerous mercury compound that can poison waterways and food chains that Kennedy himself has linked to the very

different compound that was once widespread in vaccines.¹⁵

In recent months Kennedy has leveraged his celebrity to become a leading advocate of popular Covid-related conspiracy theories about Bill Gates and 5G mobile phone signals.¹⁶ This has seen Kennedy's following on Instagram rise from 121,000 at the start of the outbreak to 454,000 today. In contrast, the official social media channels of Children's Health Defense have grown only fractionally during the outbreak.

Kennedy's most important role in the anti-vaccination movement is lending his credibility as an environmental campaigner and son of the Kennedy political dynasty to other key figures by appearing alongside them at events or taking part in interviews. Kennedy has played this role with other campaigners like Del Bigtree, alternative health entrepreneurs like Rashid Buttar, and even widely discredited figures like Andrew Wakefield.¹⁷



¹⁴ Mercury, Vaccines, and Autism, Jeffrey P. Baker MD PhD, Am J Public Health, February 2008, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2376879/>

¹⁵ *ibid.*

Robert F. Kennedy Jr., International Center for Nutritional Research, 2005, <https://www.icnr.com/articles/thimerosalcoverup.html>

¹⁶ Robert F. Kennedy Jr., Instagram, 6 May 2020, https://www.instagram.com/p/B_3IQYFXgJ/

Robert F. Kennedy Jr., Instagram, 12 June 2020, <https://www.instagram.com/p/CBWE8-OnYFE/>

¹⁷ The Truth About Vaccines, YouTube, 4 May 2020, <https://www.youtube.com/watch?v=VzsZhsvety0>

Washington Post, 5 May 2020, [https://www.washingtonpost.com/dc-md-](https://www.washingtonpost.com/dc-md-va/)

Kennedy has appeared on another eight anti-vaccine channels with over 3.2 million subscribers during the Covid pandemic, and this publicity is likely to have contributed to the growth of his own social media accounts.

Informed Consent Action Network (ICAN) is run by Del Bigtree, the producer of the popular anti-vaccination film *Vaxxed*, who earns \$182,000 a year as the group's CEO.¹⁸ A talented on-screen performer, ICAN produces Bigtree's magazine-style anti-vaccine YouTube show *The Highwire*. Bigtree broadcast his first video on Covid in late February, linking the disease to a "push for vaccine mandates".¹⁹ He has since ramped up production of videos on Covid to meet demand, more than doubling the channel's following from 70,000 to over 174,000.

Bigtree begins his videos by telling viewers "I don't want corporate sponsors telling us what to investigate or what to say, instead, you're our sponsors."²⁰ However, filings for ICAN's largest donor, the Selz Foundation, show that its \$1.8 million grant in 2018 accounted for over two-thirds of its revenue.²¹

This funding is directed by Bernard Selz, the multi-millionaire owner of Selz

Capital, registered in the tax haven of Delaware.²² Selz Capital owns multi-million dollar holdings in the drug companies Flexion Therapeutics and Constellation Pharmaceuticals, as well as \$26 million in Amazon shares, \$15 million in Microsoft, \$10 million in Google and \$1.6 million in Paypal.²³



The **National Vaccine Information Center (NVIC)** is one of the oldest and most influential anti-vaccination campaign organisations, but has experienced only moderate growth

[va/2020/05/05/anti-vaxxers-wakefield-Coronavirus-vaccine/](https://www.youtube.com/watch?v=qVizW1OgQZQ)

¹⁸ Informed Consent Action Network, Form 990, ProPublica, December 2018, <https://projects.propublica.org/nonprofits/organizations/814540235>

¹⁹ The Highwire with Del Bigtree, YouTube, 27 February 2020, <https://www.youtube.com/watch?v=qVizW1OgQZQ>

²⁰ Ibid.

²¹ The Selz Foundation, Form 990, ProPublica, December 2018, https://projects.propublica.org/nonprofits/display_

[990/133180806/11_2019_prefixes_11-20%2F133180806_201812_990PF_2019112916899773](https://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&CIK=0001288125&type=&dateb=&owner=include&start=0&count=100&output=xml)

²² Selz Capital LLC, US Securities and Exchange Commission, retrieved 21 June 2020, <https://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&CIK=0001288125&type=&dateb=&owner=include&start=0&count=100&output=xml>

²³ Selz Capital LLC, Fintel, retrieved 21 June 2020, <https://fintel.io/i/selz-capital-llc>

during the Covid pandemic despite pivoting to misinformation about the disease. This may be because the NVIC is primarily active on Facebook where many larger anti-vaccination pages and groups have seen their growth curtailed by a series of policies introduced after measles outbreaks in 2019.²⁴



anti-vaccine organisations the National Health Freedom Coalition and US Right to Know in 2018.²⁵

Both the NVIC and the OCA have received millions of dollars in funding from Joseph Mercola, an anti-vaccine entrepreneur, and are members of his Health Liberty coalition.²⁶ Websites for both organisations advertised products sold by Mercola.²⁷



The **Organic Consumers Association (OCA)** was founded as the Pure Food Campaign in 1998 in order to campaign against genetically modified crops, and has come to adopt anti-vaccination views through its alliances with leading figures in the alternative medicine movement. The OCA's annual accounts reveal it gave a total of \$161,000 to the

Figures connected with the **Nation of Islam** are responsible for popular anti-vaccine content targeting the Black community. The most popular of these is Rizza Islam who has over 462,000 followers on Instagram and has told his followers that vaccines give Black children autism.²⁸ Rizza Islam collaborates with other parts of the anti-

²⁴ Combatting Vaccine Misinformation, Facebook, 7 March 2019, <https://about.fb.com/news/2019/03/combating-vaccine-misinformation/>

²⁵ Organic Consumers Association, Form 990, ProPublica, December 2018, <https://projects.propublica.org/nonprofits/display-990/411908341/01-2020-prefixes-39-42%2F411908341-201812-990-20200128170756-49>

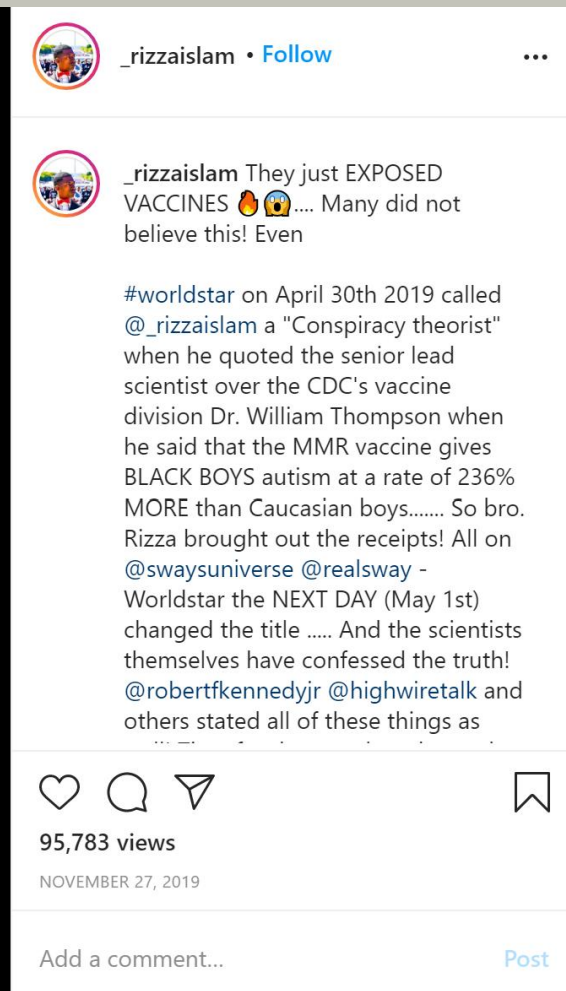
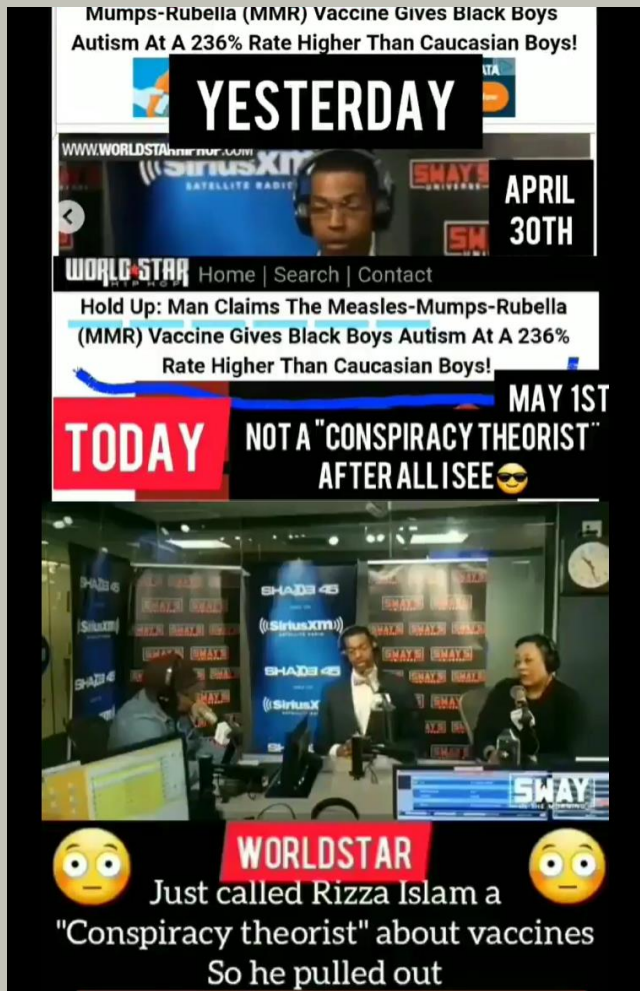
²⁶ Health Liberty, retrieved 22 June 2020, <http://www.health-liberty.org/sites/healthliberty/about-healthliberty.aspx>

²⁷ Washington Post, 20 December 2019, https://www.washingtonpost.com/investigations/2019/10/15/fdc01078-c29c-11e9-b5e4-54aa56d5b7ce_story.html

²⁸ Rizza Islam, Instagram, 27 November 2019, <https://www.instagram.com/p/B5W-OC5FuHV>

vaxx movement, taking part in a recent discussion about Black Lives Matter on

Del Bigtree's HighWire YouTube channel.²⁹



²⁹ The HighWire with Del Bigtree, YouTube, 4 June 2020,

<https://www.youtube.com/watch?v=mTHiFmAmlJl&bpctr=1592822887>

Platforms provide anti-vaxx entrepreneurs with a shopfront

Total following: 28 million
Covid growth: +854,000
Platform focus: Facebook

Anti-vaxx entrepreneurs reach the largest audience of any part of the anti-vaxx movement, but they have only seen moderate growth throughout the Covid pandemic. This appears to be a consequence of their investment in Facebook, which imposed new controls on groups and pages promoting anti-vaccine misinformation after a series of measles outbreaks in 2019.

Despite these restrictions, anti-vaxx entrepreneurs act as conduits through which the wider movement can access its largest possible audience. This enormous reach is a consequence of the huge variety of businesses connected with the anti-vaxx movement, offering everything from spiritual advice, to diet plans, to supplements that promise to help overcome cancer.

Facebook is a shopfront for anti-vaxx products

The most influential anti-vaxx entrepreneurs use Facebook as the mouth of a “marketing funnel” that directs potential customers from social media content to newsletter signup pages, and from there to free video content and finally paid content or products.

This is a well-established digital marketing technique, but it also serves a second purpose for anti-vaxx

entrepreneurs, in that it allows them to make claims about their products and services in the relative privacy of a newsletter that they might not be willing to make in a more public setting.

In one case outlined below, the influential anti-vaxx entrepreneurs Rashid Buttar and Ty Bollinger invite potential customers to “exit the public domain” and purchase access to a private website in order to view their products because “there are certain things that you cannot say if you are in the health world today.”

Facebook’s role as the mouth of this marketing funnel means it has a special responsibility to ensure that its platform is not being used to make unauthorised health claims about products.

Anti-vaxx entrepreneurs have paid Facebook for advertising

Eleven of the anti-vaxx entrepreneurs identified by this report with a combined following of 13.6 million have paid Facebook for advertising. They include a number of adverts from David Wolfe, an anti-vaccine wellness guru, for colloidal silver, a product that the National Institute of Health in the US has stated “isn’t safe or effective for treating any disease or condition.”³⁰ In a separate post about the product on his Facebook page with 12.3 million followers, Wolfe called the product “my #1 recommendation under the current crisis”.³¹

³⁰ NIH, retrieved 23 March 2020, <https://nccih.nih.gov/health/colloidalsilver>

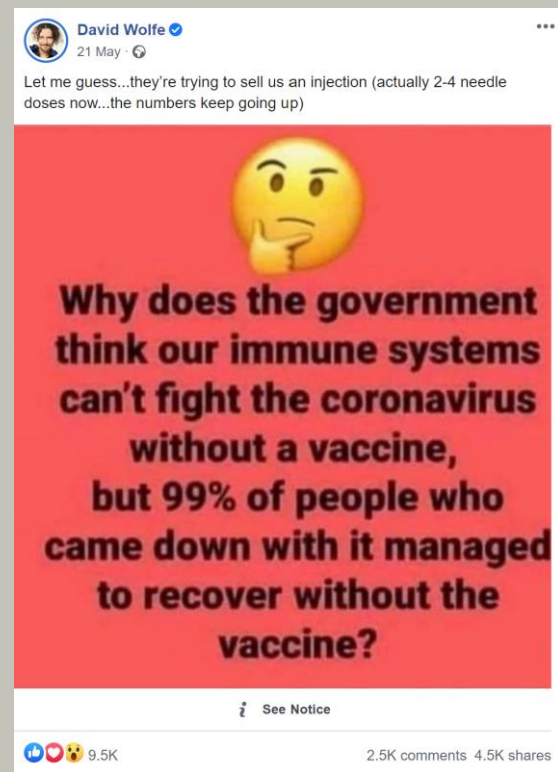
³¹ \

Other adverts accepted by Facebook include one for “The Truth About Vaccine Docu-Series” offered by Ty and Charlene Bollinger, a package of videos promoting anti-vaccine misinformation.³²

Key Entrepreneurs

David Wolfe has the largest social media following of any anti-vaccine advocate covered in this report, with 12.3 million followers on Facebook alone. He has shared a number of posts linking Covid to attempts to impose vaccinations.³³

Wolfe has adapted his marketing funnel for Covid, directing new signups from Facebook posts and Google ads to a video hosted on the Vimeo platform.³⁴ There, he promises to help customers “to become immune, I mean really immune, so you never get coughs, colds, flus, fevers, anything.”³⁵ The video and its accompanying “immunity protocol” for Coronavirus direct readers to purchase Wolfe’s \$137 brand of colloidal silver, a potentially dangerous fake cure.³⁶ Facebook has allowed Wolfe to recommend his brand of colloidal silver both in posts on his page and in an advert on the platform.³⁷



In the marketing funnel for paid access to Wolfe’s “inner circle”, he complains about “extreme levels of censorship” and “shadow-banning” on social media that he claims have resulted in a “50-90% drop in traffic” for websites like his, listing “anti-vaxxers” amongst those

³² Facebook Ads Library, retrieved 22 June 2020, [https://www.facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&impression_search_field=has_impressions_lifetime&view_all_page_id=411516962540551&sort_data\[direction\]=desc&sort_data\[mode\]=relevancy_monthly_grouped](https://www.facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&impression_search_field=has_impressions_lifetime&view_all_page_id=411516962540551&sort_data[direction]=desc&sort_data[mode]=relevancy_monthly_grouped)

³³ David Wolfe, Facebook, 21 May 2020, <https://www.facebook.com/DavidAvocadoWolfe/photos/a.10151816699691512/10157200876401512/>

³⁴ David Wolfe, Facebook, 24 March 2020, <https://www.facebook.com/DavidAvocadoWolfe/photos/a.10150364951666512/10157021827341512/>

³⁵ David Wolfe, retrieved 22 June 2020, <https://www.thebestdayever.com/immunity-summit-david-avocado-wolfe-welcome37224427>

³⁶ Immunity Protocol, David Wolfe, retrieved 22 June 2020, <https://www.davidwolfe.com/wp-content/uploads/2019/01/Nourish-Your-Immunity.pdf>

³⁷ David Wolfe, Facebook, 29 March 2020, <https://www.facebook.com/DavidAvocadoWolfe/videos/1002006253528456/>

Facebook Ads Library, retrieved 22 June 2020, https://www.facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&impression_search_field=has_impressions_lifetime&view_all_page_id=102515706511&sort_data%5bdirection%5d=desc&sort_data%5bmode%5d=relevancy_monthly_grouped

who he believes have been unfairly affected.³⁸

In this case, Facebook’s new policies on anti-vaccine misinformation appear to have been somewhat effective: Wolfe’s following has fallen from 12.4 million to 12.3 million since the start of the Coronavirus pandemic, a drop of just over 120,000. In response, Wolfe has used his platform on Facebook to advertise his channel on the messaging app Telegram, but has so far attracted just 11,000 subscribers.³⁹



Ty and Charlene Bollinger operate two sets of social media accounts called The Truth About Vaccines and The Truth About Cancer with 3.5 million followers in total. Both accounts promote Covid and vaccine misinformation, including claims that Bill Gates is using the

pandemic to pursue “total medical tyranny”.⁴⁰



Users that join the Bollingers’ mailing list receive a “Coronavirus field guide” that claims “federal agencies are working vigorously on a propaganda campaign designed for one purpose: to increase vaccine administration at any cost.”⁴¹ Links in the email direct potential customers to a page selling access to anti-vaccine videos featuring activists including Robert F. Kennedy Jr. and Andrew Wakefield.⁴²

The Bollingers are supporters of Donald Trump, using the his #MAGA hashtag

³⁸ David Wolfe, retrieved 22 June 2020, <https://www.thebestdayever.com/inner-circle-membership37376571>

³⁹ David Wolfe, Facebook, 15 June 2020, <https://www.facebook.com/DavidAvocadoWolfe/photos/a.10150364951666512/10157268046736512/>

⁴⁰ The Truth About Cancer, Facebook, 14 June 2020, <https://www.facebook.com/thetruthaboutcancer/posts/3092371507522804>

⁴¹ Coronavirus Field Guide, The Truth About Vaccines, retrieved 22 June 2020, https://go.thetruthaboutvaccines.com/downloads/TTAV-Coronavirus_Field_Guide-Ty-and-Charlene-Bollinger.pdf

⁴² The Truth About Vaccines, retrieved 22 June 2020, <https://go2.thetruthaboutvaccines.com/docuseries/order/>

and the #WWG1WGA hashtag associated with the pro-Trump QAnon conspiracy in their Twitter bio, and the couple have claimed “Trump is for medical freedom”.⁴³ The couple have announced their intention to establish a “United Medical Freedom Super PAC” to help fund anti-vaccine candidates in the forthcoming US elections.⁴⁴ The couple announced the launch of the Super PAC on 4th July, but its websites and social media accounts have been active since June.⁴⁵



Judy Mikovits is a former researcher who has campaigned against vaccinations and the scientific establishment since her research into chronic fatigue syndrome was

discredited.⁴⁶ Mikovits enjoyed a recent surge in popularity after fronting a conspiracy theory video titled Plandemic which claimed the Coronavirus pandemic was planned in order for Bill Gates and others to profit from a vaccine.⁴⁷ Multiple versions of the video received over a million views before being removed.⁴⁸

One result of this notoriety was to propel Mikovits’ books to the top of the New York Times and Amazon bestsellers charts.⁴⁹ Mikovits continues to appear in videos with other anti-vaccine campaigners, entrepreneurs and conspiracists, and has featured in a number of Facebook adverts from anti-vaccine organisations.⁵⁰



Despite not operating an active YouTube channel of her own, videos of Mikovits have been viewed millions of times

⁴³ Ty & Charlene Bollinger, Twitter, retrieved 22 June 2020, <https://twitter.com/CancerTruthNews>

⁴⁴ Charlene Bollinger, Facebook, 11 June 2020, <https://www.facebook.com/thetruthaboutcancer/videos/284829179374494/?t=687>

⁴⁵ United Medical Freedom Super PAC, retrieved 22 June 2020, <https://medicalfreedompac.com/>

⁴⁶ Washington Post, 8 May 2020, <https://www.washingtonpost.com/nation/2020/05/08/plandemic-judy-mikovits-Coronavirus/>

⁴⁷ TechCrunch, 8 May 2020, <https://techcrunch.com/2020/05/07/plandemic-video-judy-mikovits/>

⁴⁸ CNBC, 7 May 2020, <https://www.cnbc.com/2020/05/07/facebook->

[youtube-struggling-to-remove-plandemic-conspiracy-video.html](https://www.youtube.com/watch?v=...)

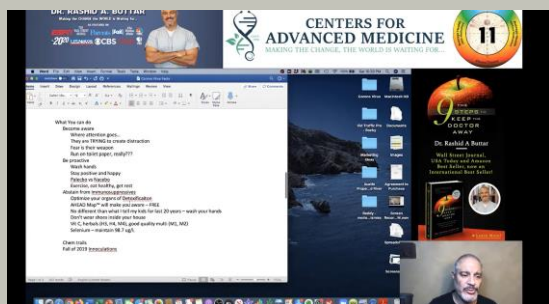
⁴⁹ Washington Post, 8 May 2020, <https://www.washingtonpost.com/nation/2020/05/08/plandemic-judy-mikovits-Coronavirus/>

Judy Mikovits, Twitter, 4 June 2020, <https://twitter.com/DrJudyAMikovits/status/1268600635567468545>

⁵⁰ Facebook Ads Library, retrieved 22 June 2020, [https://www.facebook.com/ads/library/?active_status=all&ad_type=political_and_issue_ads&country=ALL&impression_search_field=has_impressions_lifetime&q=mikovits&sort_data\[direction\]=desc&ort_data\[mode\]=relevancy_monthly_grouped](https://www.facebook.com/ads/library/?active_status=all&ad_type=political_and_issue_ads&country=ALL&impression_search_field=has_impressions_lifetime&q=mikovits&sort_data[direction]=desc&ort_data[mode]=relevancy_monthly_grouped)

despite thanks to appearances on other channels including those belonging to the professional conspiracist Patrick Bet-David, fellow anti-vaxx entrepreneur Rashid Buttar and Robert F. Kennedy Jr.'s Children's Health Defense campaign group.

Rashid Buttar is an osteopath who has previously been cited by the US Food and Drug Administration for his marketing of supplements and by the North Carolina Medical Board for his controversial use of chelation therapy for autism.⁵¹ He is opposed to vaccines and promotes a range of conspiracy theories about everything from 5G mobile phone signals to so-called "chemtrails".



While Buttar has been active on social media for many years, his conspiracy theories about Covid have become immensely popular, propelling him from 4,200 YouTube subscribers in March to nearly 400,000 today.⁵² Buttar uses his own social media channels to direct users to a marketing funnel where users must sign up to Buttar's International Association for a Disease Free World (IADFW) website to access videos on Covid that include conspiracy theories about a potential vaccine.⁵³



⁵¹ USA Today, 2 July 2013, <https://eu.usatoday.com/story/news/nation/2013/06/18/book-raises-alarms-about-alternative-medicine/2429385/>

⁵² MIT Technology Review, 7 May 2020, <https://www.technologyreview.com/2020/05/07/1001252/youtube-covid-conspiracy-theories/>

⁵³ Rashid Buttar, Advanced Medicine, 31 March 2020, <https://www.advancedmedicine.com/dashboard/video.php?id=37>

WARNING

I swear under oath that I am NOT an investigator or agent for any governmental (federal or state) agency or any self-appointed or quasi-governmental agency (including, but not limited to the FDA, FTC, state medical boards, state dental boards, state pharmacy board, DOJ, IOM) or any other state or federal agency. If in fact, I am a member of any such organization and I have NOT disclosed that association with that governmental agency including but not limited to all the afore mentioned agencies with my intentions fully revealed, I have committed perjury and will be held fully accountable under the maximum allowable extent of the law.

I further understand if I am attempting to subversively gain access or information to the contents of this private members association site or investigation of any of its members, products, services, information or materials, that I have broken the law and am in direct violation of the Privacy Act of 1974, 5 USC 552a which provides protection to individuals by ensuring that personal information collected by Federal agencies is limited to that which is legally authorized and necessary and is maintained in a manner which precludes unwarranted intrusions upon individual privacy.

I further understand that failure to fully disclose my association in any capacity with any of the following listed agencies, including but not limited to the FDA, FTC, state medical boards, state dental boards, state pharmacy board, DOJ, IOM or any other state or federal agency attempting to investigate for any reason, is an intentional and willful misstatement or omission of material facts which constitute a federal criminal violation punishable under 18 U.S.C. 1001 by imprisonment up to 5 years and fines up to \$10,000 for each offense.

By signing my electronic signature below, I swear under oath that I agree with all the above and under penalty of perjury, attest that all the above is true and applicable.

Electronic Signature (Type your Full Name): /s/

By checking this box, I understand all of the above and wish to continue.

WARNING: If you are a state or federal governmental official acting in your official capacity, you have been warned that you are about to break the law and commit perjury if you continue beyond this point.

Accessing paid content or viewing products for sale on Buttar’s website requires users to pay \$99 to join the IADFW and digitally sign the above declaration.⁵⁴

A video on the signup page features Ty Bollinger, who explains that membership of the IADFW is necessary in order to avoid breaking the law on marketing medical products:

“Under the pretence of public safety, right? ‘Protecting the public’. That’s what they use to get power over us, that’s what they use to limit our access to information. So in order to get access to this potentially life-saving information, this vital information, you’ve got to exit the public domain. [...] There are certain things that you cannot say if you are in the health world today. There are certain things that you can’t say if you have certain nutritional supplements. There are certain things that you can’t say if you are potentially selling devices that could be good

for someone’s health. [...] And the bottom line is in order to be a valid private association there has to be some kind of exchange, so the IADFW cannot give away membership because there’s not exchange.”⁵⁵

Users who pay to join the IADFW are presented with a private online shop selling a product called “The Drops of Life”. The first three variations of the product, none of which list their ingredients, start at \$90 and claim to have the following health benefits:

- *“Optimizes hormones for a greater sense of wellbeing”*
- *“Alleviates the symptoms of arthritic joint pain”*
- *“Increase the range of motion and flexibility in various joints”*
- *“Alleviates the symptoms of urinary retention and incomplete bladder emptying... may be utilized in acute or chronic conditions of the prostate including acute urinary retention due to benign prostate*

⁵⁴ International Association for a Disease Free World, retrieved 22 June 2020, <https://www.advancedmedicine.com/dashboard/access.php?location=dol>

⁵⁵ Ty Bollinger, International Association for a Disease Free World, retrieved 22 June 2020, <https://www.advancedmedicine.com/welcome/whujoin.html>

*hypertrophy (BPH) as well as prostate carcinoma.*⁵⁶



A fourth variation of Buttar’s current product line-up is called “ND-04 Feminine-Sol” and is described as “a one ounce (28.4 ml) bottle of Progesterone3/.3”.⁵⁷ This fourth product appears to be identical to one referred to in a letter to Buttar from the US Food and Drug Administration that criticized his health claims about products “not generally recognized as safe and effective for use under the conditions prescribed, recommended or suggested in their labelling.”⁵⁸

Buttar has also benefited from a series of Facebook adverts placed by other organisations that feature videos of his conspiracy theories.⁵⁹

Joseph Mercola owns a network of alternative health companies that have helped him amass a reported net worth “in excess of \$100 million”.⁶⁰ Mercola has used this wealth to fund anti-vaccine organisations including the National Vaccine Information Center.

Users that sign up to Mercola’s news and shopping website are presented with a “Coronavirus resource page”⁶¹ that links to articles suggesting that Covid may be “an escaped bioweapon” that can be combated with supplements including “Elderberry extract”.⁶² As noted above, similar articles hosted on Mercola’s website are promoted by the National Vaccine Information Center and Organic Consumers Association, both of which he funds.

⁵⁶ International Association for a Disease Free World, retrieved 25 June 2020, <https://www.advancedmedicine.com/dashboard/cart/product-category/drops-of-life/>

⁵⁷ International Association for a Disease Free World, retrieved 25 June 2020, <https://www.advancedmedicine.com/dashboard/cart/product/drops-of-life-nd-04-feminine-sol/>

⁵⁸ QuackWatch, 25 November 2013, <https://quackwatch.org/cases/fdawarning/prod/fda-warning-letters-about-products-2013/buttar/>

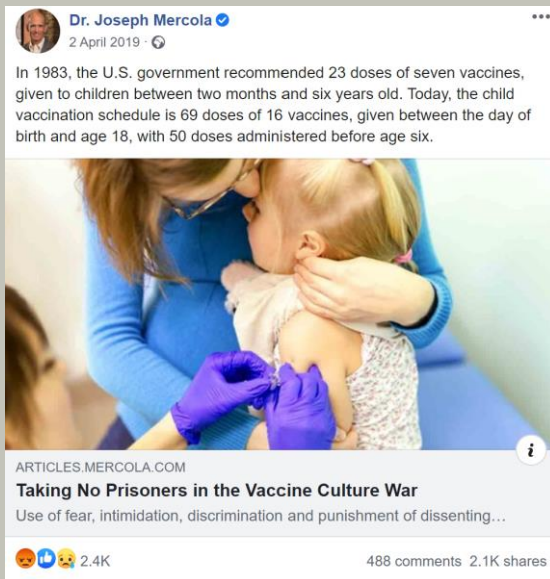
⁵⁹ Facebook Ads Library, retrieved 22 June 2020, [https://www.facebook.com/ads/library/?active_status=all&ad_type=political_and_issue_ads&country=ALL&impression_search_field=has_impressions_](https://www.facebook.com/ads/library/?active_status=all&ad_type=political_and_issue_ads&country=ALL&impression_search_field=has_impressions_lifetime&q=rashid%20buttar&sort_data[direction]=desc&sort_data[mode]=relevancy_monthly_grouped)

[lifetime&q=rashid%20buttar&sort_data\[direction\]=desc&sort_data\[mode\]=relevancy_monthly_grouped](https://www.facebook.com/ads/library/?active_status=all&ad_type=political_and_issue_ads&country=ALL&impression_search_field=has_impressions_lifetime&q=rashid%20buttar&sort_data[direction]=desc&sort_data[mode]=relevancy_monthly_grouped)

⁶⁰ Washington Post, 20 December 2019, https://www.washingtonpost.com/investigations/2019/10/15/fdc01078-c29c-11e9-b5e4-54aa56d5b7ce_story.html

⁶¹ Mercola, retrieved 22 June 2020, <https://www.mercola.com/Coronavirus-resources.htm>

⁶² Mercola, 9 March 2020, <https://articles.mercola.com/sites/articles/archive/2020/03/09/Coronavirus-prevention.aspx>



Mercola is a vocal critic of Facebook who he accuses of privacy breaches.⁶³ This may reflect the fact that Mercola has lost followers on Facebook this year, possibly as a result of its policies on vaccine misinformation. However, this has been offset by significant growth on Instagram for accounts run by him and his wife Erin. Mercola’s website still attracts 7.2 million visits every month, more than it was receiving at the end of last year.⁶⁴

Real Farmacy operates two Facebook pages each with over a million followers that promote anti-vaccine and Covid misinformation. Both pages push users to ad-supported articles on Real Farmacy’s website and on Prntly.com, a

pro-Trump website operated by the entrepreneur Alexander Portelli.⁶⁵ Portelli has ‘liked’ The Farmacy on Facebook, and his Prntly website was recently reported to have spread fake news about Black Lives Matter protests in Seattle.⁶⁶



⁶³ Mercola, retrieved 22 June 2020, <https://www.mercola.com/forget-facebook.htm>

⁶⁴ SimilarWeb, retrieved 22 June 2020, <https://www.similarweb.com/website/mercola.com/#overview>

⁶⁵ Alexander Portelli, LinkedIn, retrieved 22 June 2020, <https://www.linkedin.com/in/alexander-portelli-578229a2/>

⁶⁶ Alexander M. Portelli, Facebook, retrieved 22 June 2020, <https://www.facebook.com/profile.php?id=100007301565501>

Washington Post, 16 June 2020, <https://www.washingtonpost.com/politics/2020/06/16/fake-news-purveyor-apparently-invented-seattle-counterprotest-that-could-become-real/>

Professional conspiracists proselytise misinformation to a wider audience

Total following: 21.3 million
Covid growth: +5.8 million
Key platform: YouTube

Like anti-vaxx entrepreneurs, professional conspiracists help bring anti-vaxx misinformation to a wider audience, but with the difference that rather than using their audience to sell a product or service, their primary enterprise is in producing conspiracy content for social media.

In one particularly notable example, Patrick Bet-David who runs the business and conspiracy channel Valuetainment featured Robert F. Kennedy Jr. in a video that attracted nearly one million views. That is almost triple the most viewed video on Kennedy Jr.'s own Children's Health Defence Channel.⁶⁷ When Bet-David asked Kennedy Jr. "Why'd you agree to do a long-form interview?" he replied, "I'd love to talk to your audience."⁶⁸

Brian Rose is the founder of London Real, a series of social media channels featuring videos about business, alternative health and conspiracy theories.

London Real was the foremost promoter of David Icke's conspiracy theories about Covid and vaccines before they were removed by YouTube and Facebook, and

the channel has also had to remove content featuring vaccine misinformation from Judy Mikovits and Rashid Buttar. Content featuring anti-vaxx figures remains on London Real's social media channels, including clips from interviews with disgraced doctor Andrew Wakefield and graphics advertising an interview with wellness entrepreneur Zach Bush.⁶⁹ Rose has been a major beneficiary of interest in Covid conspiracy theories, nearly doubling his following from 1.5 million in January to 2.8 million now.



⁶⁷ Children's Health Defense, retrieved 26 June 2020, <https://www.youtube.com/c/ChildrensHealthDefense/videos?view=0&sort=p&flow=grid>

⁶⁸ MIT Technology Review, 7 May 2020, <https://www.technologyreview.com/2020/05/07/1001252/youtube-covid-conspiracy-theories/>

⁶⁹ London Real, Twitter, 26 June 2020, <https://twitter.com/LondonRealTV/status/1276458281049956353>

London Real, Twitter, 25 June 2020, <https://twitter.com/LondonRealTV/status/1276188417949413377>

David Icke is a conspiracy theorist who had long promoted misinformation about vaccines before applying them to the Covid pandemic, becoming the leading producer of Covid misinformation.

Following the publication of the CCDH report #DeplatformIcke highlighting the influence of his misinformation and its antisemitic content, YouTube followed Facebook in removing his accounts.⁷⁰ Icke remains active on Twitter where he regularly posts conspiracy theories including the allegation that Bill Gates plans to use the Covid pandemic to control the world.



Patrick Bet-David runs Valuetainment, a series of social media channels featuring

videos about business and interviews with various conspiracy theorists. Valuetainment's YouTube videos regularly accumulate over a million views, and has featured a series of anti-vaccine campaigners and entrepreneurs including Robert F. Kennedy Jr.⁷¹ Bet-David's interviews with discredited researcher Judy Mikovits and antisemitic conspiracy theorist David Icke were removed from YouTube, and his videos are no longer monetised. Despite these obstacles, Bet-David's channels have grown by 58 percent during the Covid pandemic, putting him at a total following of 6.9 million.



A series of other YouTube channels that repackage conspiracy theories as business motivational videos have continued to post anti-vaccine misinformation supported by advertising. The accounts include Be Inspired, Video Advice, Success Archive, Inspire Discipline, Be Inspired and Just Motivation with a combined following of over 10 million.

⁷⁰ BBC News, 2 May 2020, <https://www.bbc.co.uk/news/technology-52517797>

⁷¹ Valuetainment, YouTube, 2 May 2020, <https://www.youtube.com/watch?v=QLi6ZrFp6vQ>

Facebook Groups radicalise sceptics into determined anti-vaxxers

Total following: 1 million
Covid growth: +89,000
Key platform: Facebook

Facebook claims that one billion people are active in a group every day, the majority of its 1.73 billion daily active users.⁷² While the membership of anti-vaccine groups is small compared to the number of followers that popular anti-vaccine campaigners and entrepreneurs have, they do possess particular features that make them a powerful tool for the anti-vaccine movement to recruit new members and disseminate its ideas. The true scale of this network of anti-vaxx Facebook Groups is unclear, as many hidden groups exist which can only be reached by invitation.

The 64 groups identified in our research provide spaces for anti-vaccine misinformation to be shared with large audiences with little or no opportunity for scrutiny, challenge or oversight. This makes them ripe for the process of radicalisation as posts in line with each group's prevailing values receive approval in the form of likes, while posters expressing contrary views are swiftly removed.⁷³

Group members are encouraged to share photos of their children with an explanation of why they have not been

vaccinated, which can then be shared across members' personal timelines. Others share testimonies about their children falling ill after having been vaccinated, often accompanied by images of a visibly sick child. These posts are powerful stories which engage parents emotionally, in ways that facts or statistics from official organisations do not.

Members will often post questions in the group about how best to treat their child's illness. In one case, a parent wrote that her two-year-old daughter had a fever and a cough, which made her concerned that her daughter may have contracted the Coronavirus. Members discouraged her from any medicine and instead advised rubbing lemon oil on her spine and placing slices of onion on her feet.

Groups help radicalise their members

The format of groups makes their members ripe for the process of radicalisation. People will receive far more 'likes' - described by its creator as "bright dings of pseudo-pleasure" - for a post to a group, which will be seen by a far wider audience, than posting something about their personal life on their own page.⁷⁴ But while likes are received for a post which matches the

⁷² Wired, 20 January 2017, <https://www.wired.com/2017/01/secret-facebook-groups-trump-eras-worst-best-echo-chamber/>

Facebook Q1 2020 Results, https://s21.g4cdn.com/399680738/files/doc_fina ncials/2020/q1/Q1-2020-FB-Earnings-Presentation.pdf

⁷³ www.nbcnews.com/tech/social-media/who-s-policing-facebook-s-secret-groups-n729856

⁷⁴ <https://www.theguardian.com/technology/2017/oct/05/smartphone-addiction-silicon-valley-dystopia>

views of groups' members, any posts which go against the grain will result in harsh criticism and potential exclusion from the group.

Members of groups appear to be extremely reluctant to report any material posted within. Professor Golbeck, from the University of Maryland's College of Information Studies, says there's a real risk of becoming a social pariah if members tip off Facebook to objectionable posts, and so they are discouraged from doing so: "*There is this risk that even if what is going on in the group is bad, you're going to tick off a bunch of people in this exclusive club you are a part of.*"⁷⁵ Similarly, the moderators and administrators supposedly responsible for removing content and accounts in breach of Facebook's guidelines rarely act.

These dynamics mean the content in anti-vaccine groups is largely uniform. There is little challenge or dissent to falsehoods. Fringe and extremist views are quickly normalised to group members. People regularly seeing evidence posted that suggests Bill Gates uses vaccines to control the Earth's population, or that gargling warm salt water can cure measles, with no comments contradicting these falsehoods, will eventually rationally conclude it to be true.

While Facebook did take action to downgrade some vaccine misinformation content last year

following the measles outbreak in the US, for example making it harder to find through searching, groups present a way around this. Unlike news pages, groups are classed as "meaningful interactions" (the same category as friends), so content posted within is prioritised and will form a greater share of the content seen by users.⁷⁶

Groups help anti-vaxx entrepreneurs profit

Groups also represent an opportunity for advertising products or services, and indeed a number of them set up by anti-vaccine entrepreneurs. Renee DiResta, a security researcher at Stanford Internet Observatory who studied anti-vaccine groups on Facebook said of them: "Propagandists and spammers need to amass an audience, and [Facebook] groups serve that up on a platter. There's no need to run an ad campaign to find people receptive to your message if you can simply join relevant groups and start posting."⁷⁷

The largest group, named Stop Mandatory Vaccination, has 196,000 members, and has grown by almost 35,000 members since we first investigated it last year. Its administrator Larry Cook regularly asks for money from group members and shares links to his own website where he fundraises thousands of dollars for "top secret projects," and directs group members to buy his books and DVDs.⁷⁸

⁷⁵ NBC News, 7 March 2017, www.nbcnews.com/tech/social-media/who-s-policing-facebook-s-secret-groups-n729856

⁷⁶ CNBC, 16 February 2020, <https://www.cnbc.com/2020/02/16/zuckerbergs-focus-on-facebook-groups-increases-facebook-engagement.html>

⁷⁷ BuzzFeed, 19 March 2018, www.buzzfeed.com/craigsilverman/how-facebook-groups-are-being-exploited-to-spread

⁷⁸ Stop Mandatory Vaccination, 25 March 2019, <https://www.stopmandatoryvaccination.com/campaigns/larrys-secret-project-3000-goal/>

The groups we found were only those which exist in the open: Facebook’s privacy settings allow for the existence of some “hidden” groups, which are only discoverable by invitation . The only people who can see what is happening in hidden groups are the members and Facebook, and Facebook does not take a proactive role in moderating them. Not only are police locked out, there are examples of Facebook removing them from groups they have successfully infiltrated, even after illegal activity was found to be taking place. This allows them to be exploited as safe spaces for criminal activity and the sharing of extremist and potentially dangerous content.

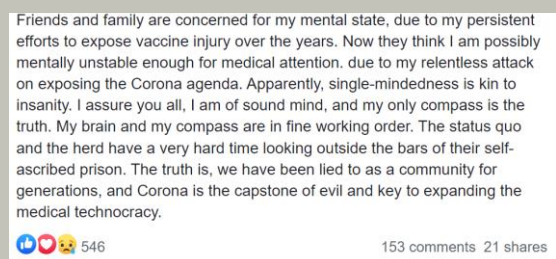
These secret spaces allow for deeper radicalisation, as members spend more time online within the group. DiResta says of her research into the different types of groups within the anti-vaccine network: “People would go into a group and say, ‘Hey, I need to get a medical exemption [for vaccines] for my kid’ and someone would say, ‘Hang on, I’ll DM you.’ Then gradually they recruit you into a [hidden] group. There was a whole underground network of information sharing around which doctors to go to in order to get fraudulent medical exemptions.”⁷⁹

Because non-members are locked out of these spaces, the size of this hidden network is unknown. Charities are locked out, so they have no opportunity to directly challenge the content within. One example of how dangerous these secret spaces can be is a group for parents of children with autism, which had 8,500 members. The group

promoted the theory that bleach enemas can cure children of autism, encouraging parents to conduct them on their own children. The parents then share images of ‘parasites’ (in fact, the children’s bowel lining) leaving their children after the process. The group was exposed by an autism campaigner who infiltrated the group and then reported the mothers to the police.⁸⁰

Examples of Group Dynamics

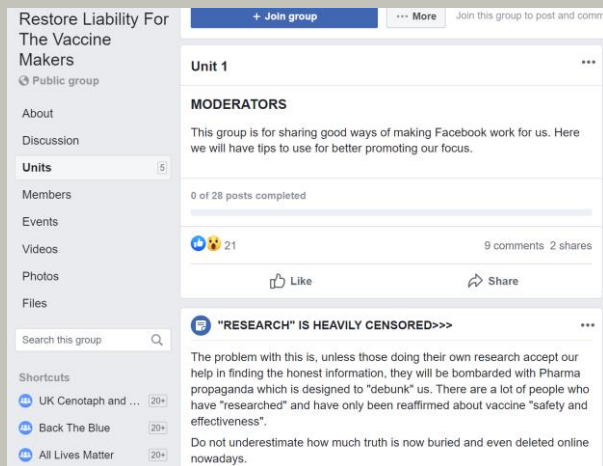
This post shows how powerful the peer relationships formed in groups can become, with the administrator of this group stating that their friends and family have become concerned over their single-mindedness on the issue of vaccines.



A number of anti-vaccine groups have created educational “units” for their members with information on how to be more effective anti-vaccine advocates.

⁷⁹ BuzzFeed, 19 March 2018, www.buzzfeed.com/craigsilverman/how-facebook-groups-are-being-exploited-to-spread

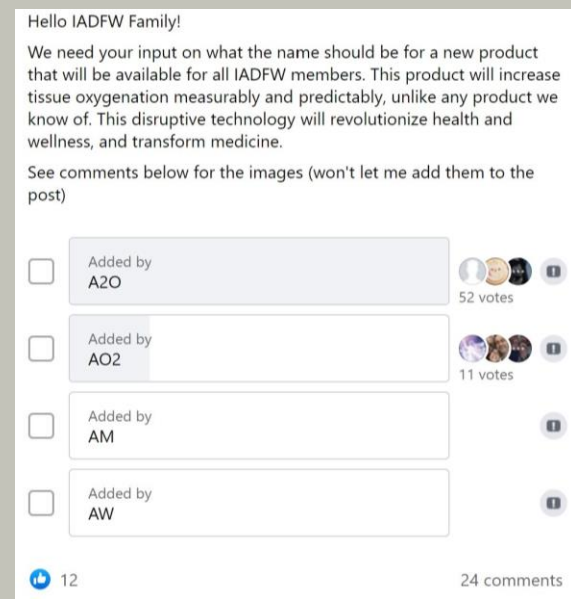
⁸⁰ The Mirror, 7 August 2017, <https://www.mirror.co.uk/news/uk-news/secret-facebook-group-reveals-how-10944477>



Many anti-vaccine groups have explicit rules forbidding the advertisement of products or services. The example below implies that this is partly to protect the business interests of the group’s administrators, telling other would-be entrepreneurs, “Do all of your marketing in groups you work to create, build and manage yourself.”



Rashid Buttar operates a private Facebook group for people who have purchased access to his website. In this screenshot, one of the administrators of the group asks members to participate in the marketing of a new product that promises to “increase tissue oxygenation measurably and predictably”.



An influential minority of anti-vaxxers support Donald Trump

New research from Dr Sander van der Linden at the University of Cambridge builds on Richard Hofstadter’s work on “The Paranoid Style in American Politics” to show that conservatives in the United States are more likely than liberals to endorse specific conspiracy theories and to espouse conspiratorial worldviews.⁸¹ This exposes the risk that anti-vaxx conspiracy theories have the potential to become a political issue and reach a much wider audience.

While most anti-vaxxers are ambivalent about Donald Trump, an influential minority feel he shares their views on vaccines, Covid and online misinformation. As a result, they are voicing support for Trump and in one case are preparing to offer anti-vaxxers financial support in the upcoming US elections, risking increased polarisation of the debate over a future Coronavirus vaccine.

President Trump has previously expressed his sympathy for the anti-vaxx conspiracy theory that vaccines cause autism, and reportedly met with anti-vaxxers including Andrew

Wakefield ahead of his election in 2016.⁸²

But this changed once Trump reached office. Last year Trump publicly backed vaccines when it became clear that measles outbreaks in the US were the result of poor vaccination coverage.⁸³ Now he has backed the rapid development of a Coronavirus vaccine as a way out of the dilemma posed by the pandemic and its effect on the economy.⁸⁴

Despite this ambiguity over Trump’s position on vaccines and Covid, the anti-vaxx entrepreneur David Wolfe has used his Telegram channel to express support for Donald Trump’s attacks on social media platforms that have labelled his posts as false or dangerous. Wolfe, who has the largest total following of any actor in our sample, has also shared posts featuring the QAnon conspiracy theory that pits Donald Trump against an imagined “deep state”.⁸⁵ Wolfe has also shared QAnon conspiracy material with his 12 million Facebook followers, including a meme about “The Great Awakening”, a QAnon term referring to a final confrontation with the Satanist

⁸¹ van der Linden, Sander, *Political Psychology*, Vol. 0, No. 0, 2020, <https://onlinelibrary.wiley.com/doi/epdf/10.1111/pps.12681>

⁸² Science Magazine, 18 November 2020, <https://www.sciencemag.org/news/2016/11/trump-met-prominent-anti-vaccine-activists-during-campaign>

⁸³ Stat News, 26 April 2019, <https://www.statnews.com/2019/04/26/trump-vaccinations-measles/>

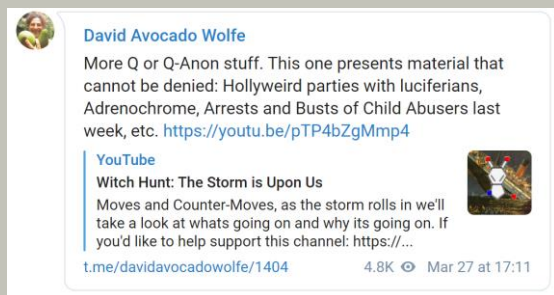
⁸⁴ New York Times, 9 March 2020, <https://www.nytimes.com/2020/03/09/health/trump-vaccines.html>

⁸⁵ David Wolfe, Telegram, 28 May 2020, <https://t.me/davidavocadowolfe/2824>

David Wolfe, Telegram, 27 March 2020, <https://t.me/davidavocadowolfe/1404>

David Wolfe, Telegram, 18 March 2020, <https://t.me/davidavocadowolfe/1224>

cabal that adherents claim runs the world.⁸⁶



Larry Cook, who runs the second-largest anti-vaxx Facebook group in our sample called Stop Mandatory Vaccination and a connected Facebook page, shares videos that fuse the QAnon conspiracy theory with anti-vaxx misinformation.⁸⁷ Cook has now established a group called Medical Freedom Patriots whose explicit aim is to politicise the anti-vaxx narrative and support Donald Trump.⁸⁸

Our research also identified a pair of Facebook pages called The Pharmacy and REALpharmacy.com that post anti-vaccine and wellness stories have recently pivoted to promote pro-Trump stories on Prntly.com. The Prntly website was recently reported to have spread fake news about Black Lives Matter protests in Seattle.⁸⁹



Ty and Charlene Bollinger, a couple behind a network of websites promoting anti-vaccine misinformation and purported therapies to aid people with cancer, have also expressed support for Trump but for the far-right QAnon conspiracy that pits Trump against an imagined 'deep state'.

The Bollingers have now announced that they intend to launch an anti-vaccine United Medical Freedom Super PAC on 4th July to support candidates in the forthcoming US elections. While other anti-vaccine campaigners have previously formed PACs to support chosen candidates, this would be the first time that a Super PAC has been formed allowing donations of any value. Charlene Bollinger was clear that this new campaign was linked to her support for Donald Trump:

"I have inside intel that this agenda [mandatory vaccination] is partly to

⁸⁶ David Wolfe, Facebook, 18 May 2020, <https://www.facebook.com/DavidAvocadoWolfe/posts/10157192778261512>

⁸⁷ Larry Cook, Facebook, 30 June 2020, <https://www.facebook.com/groups/StopMandatoryVaccination/permalink/1761053340719659/>

⁸⁸ Mother Jones, 18 June 2020, <https://www.motherjones.com/politics/2020/06/t>

[he-anti-vax-movements-radical-shift-from-crunchy-granola-purists-to-far-right-crusaders/](https://www.washingtonpost.com/politics/2020/06/16/fake-news-purveyor-apparently-invented-seattle-counterprotest-that-could-become-real/)

⁸⁹ Washington Post, 16 June 2020, <https://www.washingtonpost.com/politics/2020/06/16/fake-news-purveyor-apparently-invented-seattle-counterprotest-that-could-become-real/>

obliterate the Trump campaign and Donald Trump from being re-elected. Now I know from the inside that Trump is with us for medical freedom. He will not allow us to be force vaccinated, I know that you hear him talking about vaccines, but remember, it's all strategy and you'll never hear him say he's going to

force vaccinate anyone. I know this from the inside, he will never do that. His administration will stand with us, in fact, I've got really good news: we're starting the first United Medical Freedom Super PAC. We're going to launch that big league on July 4th so look for it, it's coming."⁹⁰



⁹⁰ Charlene Bollinger, Facebook, 11 June 2020, <https://www.facebook.com/thetruthaboutcancer/videos/284829179374494/?t=687>

Big Tech profits from anti-vaxxers

The anti-vaxx movement's following of over 58 million people could be worth up to \$1 billion in annual revenue for social media giants. This income is primarily generated by advertisers seeking to reach users with an interest in anti-vaxx misinformation, but also includes that the anti-vaxx movement spends on ads to reach a wider audience.

This estimate is derived from publicly available figures for the amount of revenue social media platforms make per impression, or per user where that information is not available. It represents the best possible estimate of the anti-vaxx movement's value to social networks in terms of engaging users and generating ad impressions.

Facebook and Instagram

They get: Up to \$989m in revenue from anti-vaxxers

Anti-vaxxers: 38.7m followers to sell products to

Anti-vaxxers' audience of 38.7m followers on Facebook and Instagram could be earning Facebook up to \$23.2 million in revenue. This figure is based on Facebook's own key metric of Average Revenue Per Person (ARPP),

which stood at \$25.57 in 2019 according to the company's last annual report.⁹¹

Anti-vaxxers' primary value to Facebook is in engaging users who are subsequently served adverts. In the absence of publicly available data on the precise number of ad impressions that anti-vaxxers generate, this ARPU figure gives the best possible estimate of the value of their audience to Facebook.

It is clear that Facebook also earns revenue from adverts placed directly by anti-vaxxers. The platform's Ad Library shows that 28 anti-vaxx accounts have placed ads on the platform. These include adverts featuring Judy Mikovits' anti-vaxx conspiracy theories and adverts placed by Robert F. Kennedy Jr.'s Children's Health Defense campaign that promote health misinformation about both vaccines and 5G mobile phone signals.⁹²

Many of these adverts contravene Facebook's promise in March 2019 that "when we find ads that include misinformation about vaccinations, we will reject them."⁹³

⁹¹ Facebook Annual Report 2019, https://s21.q4cdn.com/399680738/files/doc_financials/2019/q4/Q4-2019-Earnings-Presentation-final.pdf


⁹² UI Media Network, Facebook Ads Library, retrieved 25 June 2020, [https://www.facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&impression_search_field=has_impressions_lifetime&view_all_page_id=156258384498324&sort_data\[direction\]=desc&sort_data\[mode\]=relevancy_monthly_grouped](https://www.facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&impression_search_field=has_impressions_lifetime&view_all_page_id=156258384498324&sort_data[direction]=desc&sort_data[mode]=relevancy_monthly_grouped)

Children's Health Defense, Facebook Ads Library, retrieved 25 June 2020, [https://www.facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&impression_search_field=has_impressions_lifetime&view_all_page_id=1797590283821718&sort_data\[direction\]=desc&sort_data\[mode\]=relevancy_monthly_grouped](https://www.facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&impression_search_field=has_impressions_lifetime&view_all_page_id=1797590283821718&sort_data[direction]=desc&sort_data[mode]=relevancy_monthly_grouped)

⁹³ Facebook, 7 March 2019, <https://about.fb.com/news/2019/03/combating-vaccine-misinformation/>

UI Media Network
Sponsored

Hear directly from Dr. Judy Mikovits LIVE and UNCENSORED on our show Wednesday, May 13th at 11 am at www.uimedinetwork.org



UIMEDIANETWORK.ORG
Dr. Judy Mikovits

Learn ...

Amount spent (USD): <\$100

Potential reach: >1M people

Children's Health Defense
Sponsored • Paid for by World Mercury Project

5G, The Global Human Experiment without Consent: Soon 5G will significantly increase our wireless RF radiation exposure 24/7/365. Senior telecom executives admit there is no safety testing on 5G, but related research shows cause for alarm. 1000's of independent studies indicate adverse health impacts from wireless radiation, ranging from cancer & sterility to DNA damage. Children are generally most vulnerable to any...



Kennedy News & Views

CHILDRENSHEALTHDEFENSE.ORG
5G – The Global Human Experiment without Consent • Children's Health Defense
Soon 5G will significantly increase our wireless RF radiation (radio frequency microwave) exposure 24/7/365. Senior...

Learn ...

Facebook is known to help advertisers target its users by categorising them according to their interests as revealed by the pages and posts that they engage with. Analysis of Facebook's

advertising platform shows that it allows advertisers to target users with interests that could be linked to anti-vaxx misinformation, such as “Immunity (medical)” and “Vaccine-preventable diseases”. It also allows for targeting of users who follow anti-vaxx pages like Bruce Lipton, Alliance for Natural Health USA, Organic Consumers Association and pages connected with the March Against Monsanto.

The existence of these categories runs counter to Facebook's claim to have removed ad targeting options related to the anti-vaxx movement in March 2019.⁹⁴

Detailed targeting Include people who match

Interests > Additional interests

- 5G
- Alliance for Natural Health USA
- Bruce H. Lipton, Ph.D
- Immunity (medical)
- march against monsanto
- Organic Consumers Association
- Vaccine-preventable diseases

Add demographics, interests or behaviours | Suggestions | Browse

Advertising categories like “Natural Cures Not Medicine” and “Health and beauty Page admins” support Facebook's thriving alternative medicine industry, while the category “Talk About Curing Autism” could allow advertisers to target vulnerable families when the UK's National Autism Society insists “there is no known ‘cure’ for autism.”⁹⁵

Detailed targeting Include people who match

Behaviours > Digital activities > Facebook page admins

- Health and beauty Page admins

Interests > Additional interests

- Alternative medicine
- Natural Cures Not Medicine
- Talk About Curing Autism
- Wellness (alternative medicine)

Add demographics, interests or behaviours | Suggestions | Browse

⁹⁴ Facebook, 7 March 2019, <https://about.fb.com/news/2019/03/combating-vaccine-misinformation/>

⁹⁵ National Autistic Society, retrieved 25 June 2020, <https://www.autism.org.uk/about/what-is/causes.aspx>

YouTube

They get: Up to \$797,000 in ad revenue

Anti-vaxxers: Up to \$974,000 in ad revenue

Anti-vaxxers' YouTube videos could be generating up to \$1.8 million in annual ad revenue, according to the average number of views that they have received on their videos in the last 30 days and available information on the typical rates paid by YouTube advertisers.⁹⁶ This includes only the fourteen anti-vaxx YouTube channels identified as carrying adverts, although the other 28 will also make a contribution to YouTube's revenue by generating traffic.

YouTube is known to split this ad revenue between itself and content creators, giving them a 55 percent share while keeping the remaining 45 percent.⁹⁷ This model means that anti-vaxxers could earn up to \$974,000 a year from adverts on YouTube videos, while YouTube earns \$797,000.

The fact that popular anti-vaxx channels are still displaying adverts runs counter to YouTube's claim to have demonetised channels promoting anti-vaccine misinformation in February 2019.⁹⁸ In the course of our research, we discovered that YouTube was even displaying pro-vaccine adverts from the Gates Foundation on videos from an

anti-vaxx account, thereby funding them.



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Twitter

They get: \$5.6m in revenue from anti-vaxxers

Anti-vaxxers: 2.1m followers to sell products to

Anti-vaxxers' Twitter audience of 2.1 million followers could be earning Twitter up to \$5.6 million in revenue. This figure is based on Twitter's own key metric of "monetizable Daily Active Users" (mDAUs) who are served adverts on the platform.

Twitter had 152 million mDAUs according to the company's last annual report for 2019, compared to a reported 1.3 billion accounts in total.¹⁰⁰ Using these figures, it is possible to estimate that 248,528 accounts following anti-vaxx accounts are mDAUs who generate revenue for

⁹⁶ Social Blade, retrieved 23 April 2020, <https://socialblade.com/youtube/youtube-money-calculator>

⁹⁷ New York Times, 1 February 2014, <https://www.nytimes.com/2014/02/02/business/chasing-their-star-on-youtube.html>

⁹⁸ TechCrunch, 23 February 2019, <https://techcrunch.com/2019/02/22/youtube-demonetizes-anti-vaccination-videos/>

⁹⁹ Andy Kaufman, YouTube, 16 June 2020, <https://www.youtube.com/watch?v=kdY1IMzyQlc>

¹⁰⁰ Twitter Annual Report 2019, [https://s22.q4cdn.com/826641620/files/doc_financials/2019/FiscalYR2019_Twitter_Annual_Report-\(3\).pdf](https://s22.q4cdn.com/826641620/files/doc_financials/2019/FiscalYR2019_Twitter_Annual_Report-(3).pdf)

Business Insider, 3 August 2015, <https://www.businessinsider.com/twitter-monthly-active-users-2015-7>

the platform. Anti-vaxxers' share of Twitter's mDAUs would be equivalent to a \$5.6 million share of Twitter's \$3.5 billion revenues in 2019.

As with Facebook, anti-vaxxers' primary value to Twitter is in engaging users who are subsequently served adverts. In the absence of publicly available data on the precise number of ad impressions that anti-vaxxers generate, this is the best

possible estimate of the value of anti-vaxxers' audience to Twitter.

Analysis of Twitter's advertising platform shows that it is possible to target a range of keywords related to vaccines and the anti-vaxx movement, as well as targeting followers of popular anti-vaxx accounts and other users that resemble them.

The screenshot displays two sections of a targeting interface. The first section, titled "Keywords", contains six green buttons with the following text: "vaccination", "natural immunity", "vaxxed", "antivaxx", "antivaccine", and "antivaccination". The second section, titled "Follower look-alikes", contains ten green buttons with the following text: "@OrganicConsumer", "@RobertKennedyJr", "@IslamRizza", "@ChildrensHD", "@davidicke", "@DrJudyAMikovits", "@LondonRealTV", "@DavidWolfe", "@DrButtar", "@truthaboutbigc", "@vaxxedthemovie", and "@vaxxed2". Each button has a small 'x' icon to its right, indicating it can be removed. There are also information icons (i) and close icons (x) for each section.