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Unmasking the Truth: Public Health Experts, the Coronavirus, and the Raucous Marketplace of Ideas

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+ CONTENTS

Introduction	1
The Challenges of Communicating During a Pandemic	3
Conclusions	15
About the Authors	18
Notes	19

Introduction

A common refrain among those worried about influence operations is that the amplification of truth will triumph over disinformation.¹ Influence operations are organized activities used to affect an audience or outcome. And disinformation, or the intentional spreading of misleading or untrue information, is a common tactic in such operations.² On the surface, this truth-focused approach seems simple. If truth is preferable to lies, then educating people to easily identify the difference between accurate information and disinformation would lead them to shun untruthful alternatives. The coronavirus pandemic offers a unique opportunity to analyze this approach.

Today's digitally connected information space is an extremely challenging operating environment. Communicating the truth nowadays is a lot like hollering into a sprawling, open bazaar where some people might be straining to hear, but the vast majority are making noise and going about their own business. In this market, attention rather than valid information is the most valuable commodity. Many actors attempt to be heard in a crisis. This includes actors with both good and bad intentions, and myriad bystanders who take up and spread content not so much with a motive in mind, but as a quick response to the information they consume.³

In mapping online discourse around the coronavirus month after month, the media monitoring company Graphika found that the share of scientific and medical voices dropped as other actors joined in the discussion.⁴ Competitors for attention, like propagandists, use the opportunity to shift the narrative or win media coverage given the sensation that discovery of their activities causes. The interconnected nature of the web allows disinformation, including conspiracy theories,⁵ to spread rapidly around the world.⁶⁻

Add to this cacophony additional dangers like increased cyber threats—attacks on healthcare system computers,⁷ spoofed government websites,⁸ a “667 percent increase in malicious phishing emails . . . using the coronavirus,”⁹ and scams selling fake cures.¹⁰ This information environment is not just noisy but dangerous.

To successfully influence public behavior, public health officials must project their message above the noise to establish and maintain credibility. However, these officials often find themselves at a disadvantage when it comes to those spreading disinformation. While the messages of public health officials reflect current scientific understanding and change slowly over time, disinformation comes and goes at high speeds. If a public health official loses credibility, winning it back can be all but impossible; if disinformation is debunked, one narrative dies, only to be replaced by countless others.

This study examines how three key public health experts are communicating in this challenging environment. They include Anthony Fauci, the director of the National Institute of Allergy and

Infectious Diseases in the United States; Theresa Tam, the chief public health officer of Canada; and Chris Whitty, the chief medical officer for England, in the United Kingdom (UK), who is advising the prime minister and other leading UK officials. According to Ipsos polling data,¹¹ citizens in twenty-two countries around the world, including in the three countries studied, rated scientists (60 percent) and doctors (56 percent) to be the most trusted professions in the world, while politicians were considered to be the least trusted (9 percent). If truth can triumph over disinformation, then public health officials appear well-placed for the battle.

To understand the challenges public health officials face in such a crisis, it makes sense to analyze their official communications with the public, media coverage mentioning them, and more broadly, media coverage about the coronavirus during the first three months of the crisis.¹² While there are clearly many challenges facing public health officials as they jostle for public attention, three core issues stand out: questioning the messenger, politicizing the messenger, and mistrusting the messenger.

Questioning the messenger: The ease with which a diverse chorus of voices can now criticize the messaging put out by public health officials is a common challenge. Social media has made it easier for almost anyone to contribute their opinions. A preference for evidence-based decisionmaking opens public health officials up to criticism, as they are reluctant to stake claims concretely if insufficient evidence is available to back up a position. This challenge is exemplified by the public debate around wearing face masks.

Politicizing the messenger: The dueling necessities of political support and publicity to reach as wide an audience as possible is particularly challenging for public health officials. Politicians can both help and hinder the efforts of public health officials to be heard. Politicians who ignore the advice of public health officials make it much harder for those attempting to convey the truth as it is understood at any given moment to convince the public to adopt protective measures, such as physical distancing. Even when politicians are cooperative, there is a risk of opposition politicians using the opportunity to attack the ruling government by criticizing public health officials, particularly if the measures taken are not perceived to be successful.

Mistrusting the messenger: For public health officials communicating in a crisis, establishing and maintaining trust is crucial but also extremely difficult. Trust can be eroded through politicization or perceptions of being too closely tied to governing politicians. Trust is also challenged if the public health officials' messaging changes too widely over time, which can lead to perceptions that they are being untruthful. Public health officials must communicate clearly and authoritatively. Yet, if they are too certain of a specific fact that is later discovered to be untrue, it opens a crack that detractors can exploit.

The Challenges of Communicating During a Pandemic

The authors examined how Fauci, Tam, and Whitty each contended with this trio of challenges in the early days of the pandemic.

Questioning the Messenger

The internet has enabled almost anyone with online access to engage in public discussions—including by questioning the advice of public health officials. Pushback can come from influential figures, such as national leaders who question their countries' death statistics.¹³ Disgraced medical doctors might falsely implicate a public health official in a viral pseudo-documentary, as happened to Fauci.¹⁴ Credible voices, like a pharmacist, might critique public health officials' style of messaging, as Tam experienced on Twitter.¹⁵

So public health officials are experiencing how interactive, web-based technologies have changed mass communications from a one-to-many unidirectional flow, where a passive audience is expected to consume messaging, to a dynamic and responsive modality where people can and will respond—sometimes louder and more effectively than them. This sea change in the field of mass communications has implications for both conducting and countering influence operations, as everything said and done incurs reactions from various audiences. For public health officials, these sorts of reactions can also erode the trust that the public might have in them.

The debate around wearing face coverings in public exemplifies the challenges that public health experts face. The issue of whether to advise the public to wear face masks, or whether to even make it a requirement, has affected Canada, the UK, and the United States alike. A global shortage of personal protective equipment (PPE) colors the debate too.¹⁶ Both political and medical officials are wary of recommending public use—in part because the scientific evidence is unclear, or because they fear risking additional PPE shortages for healthcare workers—while they also do not wish to lose credibility by delaying critical decisions.¹⁷

The United States: In early March, Fauci told the U.S. news television program *60 Minutes* that “there’s no reason to be walking around with a mask.”¹⁸ The U.S. Centers for Disease Control and Prevention (CDC) later updated their guidelines and recommended that people wear cloth face masks when outside their homes. U.S. President Donald Trump, however, long emphasized the voluntary nature of the CDC recommendation and long said that he would not wear one, though he did don a mask for the first time publicly in July 2020.¹⁹ Meanwhile, some areas, such as New York, have made it compulsory to wear masks in public places.

Canada: Meanwhile, in Canada, Tam initially advised the public not to wear face masks. Then she changed her advice on April 6 and stated that nonmedical masks could help curb the spread of the virus.²⁰ Many Canadians took to social media to debate the merits of wearing a mask, sometimes publicly and directly challenging Tam in response to her directives shared via Twitter. This public back and forth has included regular Canadians weighing in but also retired public officials, such as Norman Spector, a former diplomat, deputy minister, and secretary to the Cabinet for federal-provincial relations (see screenshot 1).²¹ The media also picked up on this debate, showcasing opinions from other medical doctors who made the case for wearing masks.²² While Whitty in the UK also used Twitter to communicate, he did so far less frequently, posting only twenty-three times during the first three months of 2020 compared to Tam's 728 tweets.²³ Although he tweeted less often, Whitty had more than eight times the average engagement rate on his posts compared to Tam; some of these responses were criticism, albeit from Twitter accounts manned by less prestigious critics. Fauci has not used Twitter directly to get his message out.

SCREENSHOT 1

Public Blowback on the Canadian Government's Pandemic Response



SOURCE: Twitter

The UK: In the UK, the government delayed adopting an official position, stating that it would be guided by the scientists.²⁴ Whitty stated in March, "our advice is clear: that wearing a mask if you don't have an infection reduces the risk almost not at all. So we do not advise that."²⁵ However, the UK's scientific community was divided on whether to recommend face coverings for public use.

While the government's Scientific Advisory Group for Emergencies considers face coverings of limited value among the general population, the British Medical Association has called on the government to make wearing masks in public compulsory.²⁶ On May 11, Whitty described face coverings as “an added precaution.”²⁷ On June 15, face coverings became mandatory for those using public transport in England,²⁸ with mandatory face coverings in shops in England introduced starting on July 24.²⁹

Regardless of what public health officials were advising on face masks early in the pandemic, many celebrities were quick to wear them, often posting selfies for their large followings to see.³⁰ Celebrities expressing opinions contrary to those of public health officials can be problematic, as people tend to more readily believe those they view as influential.³¹

The debate over wearing a mask to prevent the spread of coronavirus was also taken up by researchers of influence operations and disinformation in the United States. In an opinion piece for the *New York Times*, Zeynep Tufekçi, a well-known technosociologist with more than 340,000 Twitter followers, argued that, by telling people not to wear masks, public health officials lost trust among the people.³² Writer and meta-scientist Hilda Bastian suggested in a piece she published in *Wired* that the widespread criticism over recommendations not to wear a mask showed a scientific double standard in terms of what guidelines people readily accept.³³ She argued that no one “complained about the lack of evidence for 20-second hand-washing,” and she questioned why the issue of face masks had faced much more scrutiny.

These examples illustrate how a preference for evidence-based decisionmaking can inadvertently add to confusion and damage public health officials' credibility. Crisis situations often present two key challenges that exacerbate the initial circumstances that set them off. The first is caused by the uncertainty about new scientific data and analysis. Events unfold quickly and what is accurate one day may no longer be accurate the next. The second issue is the speed at which events change and information about them spreads. There have been few studies into how effective face coverings are at slowing the spread of infectious diseases in communities.³⁴ As the evidence is scarce and inconclusive, public health officials have been wary of making firm recommendations, and decisions have been delayed.

Governments, already under public scrutiny for unprecedented restrictions on people's lives, may also feel that they can only push the public health message so far. This hesitation is not shared by many social media users who publicly question government guidelines or lack thereof. Any information vacuum left by governments is filled with the dissenting voices of anyone from medical professionals to those with no medical expertise at all. In an already febrile political environment, such as that of the United States, the polarization that these debates play into only heightens existing tensions, politicizes previously apolitical issues, and mobilizes resistance to government mandates.³⁵

The lack of conclusive proof about the effectiveness of publicly using masks to curb the spread of the virus made it difficult for public health officials to stake a claim at the “truth.” Fears over mask shortages complicated the situation further. And pushback from critics, facilitated by social networks and media narratives, opened a crack and allowed the credibility of public health officials to be eroded. The issue with the masks also highlights a key challenge with emphasizing truth as a means of countering disinformation—what do public health officials do when the scientific evidence is unclear or when what might seem true today is no longer so tomorrow?

Politicizing the Messenger

At the end of the day, public health officials are bureaucrats. In most democracies, bureaucrats are expected to serve the public interest, and they are directed by elected politicians. This means that, to communicate their message to the public effectively, they must first win the support of senior political leaders. If they fail to do this, uncooperative politicians can create substantial communication challenges for bureaucrats, including public health officials. And if they do succeed, their credibility tends to be tied to that of their governing politicians.

The United States: Of the three public health officials studied, Fauci faced the greatest challenges in terms of political support. He has had to tread a difficult path between asserting public health information and not directly contradicting Trump’s estimated more than 250 false or misleading claims related to the coronavirus in March alone.³⁶

U.S. media coverage tends to focus on the politics of the pandemic. The most shared webpage about Fauci from January to March 2020 claimed that the Trump administration had temporarily restricted Fauci’s media appearances after he warned that the spread of the virus could be impossible to contain.³⁷ According to Buzzsumo, the post was shared more than 2 million times on social media.³⁸ Speculations about the relationship between Fauci and the White House were only aggravated by Trump’s own social media activity. On April 12, Trump retweeted a call for Fauci to be fired for telling CNN that more could have been done to stop the spread of the virus (see screenshot 2).³⁹

As networks became increasingly hesitant to broadcast the official White House coronavirus briefings,⁴⁰ Fauci had to find more creative ways to get his message out. He embarked on an intensive schedule of public outreach, securing interviews with National Basketball Association (NBA) star Stephen Curry on Instagram, Facebook Chief Executive Officer Mark Zuckerberg via Facebook Live, and comedian Trevor Noah in a YouTube video that has been viewed nearly 12 million times.⁴¹ He has also been impersonated by movie star Brad Pitt on *Saturday Night Live* in a performance that was critical of Trump and praised by Fauci himself.⁴² As of early June, on Facebook, Fauci had at least twenty-two fan pages as well as at least five others calling for him to be imprisoned or fired.⁴³

SCREENSHOT 2

Trump's Anti-Fauci Retweet



SOURCE: Twitter

The United States demonstrates what can happen when there is disunity, disinformation, and inconsistency in official messaging in a crisis situation. Usually reliable ways for the government to get its message out, such as national broadcasters, have been limited because some broadcasters chose not to air the president's coronavirus briefings over concerns that they are spreading false and potentially dangerous information.⁴⁴ Fauci has tried to distance himself from some of the more confusing and misleading comments the president has made.⁴⁵ While Trump's statements attract attention by triggering controversy, the attention is not necessarily helpful in terms of amplifying public health advice.

Canada: In Canada, Tam has had, for the most part, continued cooperation from the ruling Liberal Party government, though her work with politicians has not been without challenges. There were inconsistencies in mid-March when Tam finally began announcing screening measures for those entering Canada, and the government dithered on implementation.⁴⁶ The cooperation Tam has had from the government became grounds for criticism. Opposition politicians have claimed that the government heeded Tam's advice too closely as a way to attack Prime Minister Justin Trudeau and his cabinet (see screenshot 3). These criticisms focused on Tam's claims as late as early March that Canadians' risk of contracting coronavirus was low and that travel restrictions were not necessary.⁴⁷

For some on the left, Tam is a hero, while for some on the right, she is a villain. A clothing brand in Calgary, Alberta, created T-shirts with Tam and other female leading public health officials in Canada, with proceeds going to charity.⁴⁸ Fans painted a mural of Tam in Vancouver.⁴⁹ Hashtag campaigns

like #ThankYouDrTam enjoyed modest engagement, with 1,605 tweets and more than 266,000 engagements, including 265,000 retweets from other users, in a forty-eight-hour period in April, according to the social media analytical service Social Insider (see screenshot 4).⁵⁰ Conversely, one far-right-leaning Canadian media outlet started a petition to have Tam fired, which received more than 40,000 signatures in two weeks.⁵¹

SCREENSHOT 3
Anti-Trudeau Social Media Post



SOURCE. Facebook

SCREENSHOT 4
Pro-Tam Post



SOURCE. Facebook

Canadian media usually covered Tam's press conferences. This ensured that her message reached a national audience. Tam has also attempted to reach Canadians through influencers, but with less success than Fauci. For example, on March 24, Tam solicited support from Canadian celebrities by tagging them in a tweet (see screenshot 5).⁵² The message was eventually picked up in an ad imploring Canadians to listen to the experts and stay home. The video featured Canadian astronaut Chris Hadfield and Olympic gold-medal-winning hockey player Hayley Wickenheiser.⁵³

SCREENSHOT 5

Tam's Tweet Inviting Celebrity Support



SOURCE. Twitter

The UK: UK government ministers have tried to endorse, rather than contradict the messages of public health officials, and they have made frequent references to being “informed by the science” at every stage.⁵⁴ This has not always helped to clarify their message though, and there were mass violations of physical distancing measures in the country in the early stages of the pandemic, as a result of sporadic or contradictory messaging.⁵⁵ Even senior public health experts and government ministers fell afoul of their own rules.⁵⁶

Public health experts’ very prominent roles in the crisis also transformed them into minor celebrities, with their own fan base. Whitty has at least seven Facebook fan pages and was described by the *Daily Mail*, a tabloid, as an “unlikely social media star.”⁵⁷ One-third of the analyzed media coverage that

mentioned Whitty in the first three months of the crisis was either about him as a person, rather than focused on his professional medical advice, or the fact that he was ill with COVID-19.

While protecting the capacity of the National Health Service (NHS) has been central to government messaging throughout the crisis, the government adopted the slogan “Stay Home, Protect the NHS, Save Lives” around March 21.⁵⁸ This emotive message, with healthcare workers lauded as heroes, fighting and dying on the front line, has significantly helped public health officials gain traction for their message.⁵⁹ Such is the power of this message that, every Thursday at 8:00 pm, people are encouraged to pay their own tributes to the NHS by clapping for first responders on their doorsteps.⁶⁰ Millions of people participate each week, and some even publicly shame those who do not.⁶¹

The UK has escaped much of the political polarization over the coronavirus response seen in the United States and Canada. Public health officials, the government, and even Queen Elizabeth II have rallied to unite the British public around the NHS and evoke the spirit of the British people’s solidarity during the Blitz, Nazi Germany’s bombing campaign during World War II.⁶² This messaging tactic was effective in persuading most people to voluntarily comply with lockdown restrictions. An early April survey of 2,250 people, conducted by Ipsos MORI and analyzed by King’s College London, found that people in the UK were broadly responding to the lockdown in one of three ways: 48 percent said they accepted the lockdown, 87 percent of whom said they were complying with lockdown rules; 44 percent said they were suffering as a result of the lockdown, with 93 percent of this group saying they were complying with the stipulations; and finally, only 9 percent of people surveyed were resistant to the lockdown, with 49 percent of people in this group saying they were complying with public health directives.⁶³ The UK has seen fewer protests than the United States and demonstrated the power of deploying a unifying message to influence social norms, eliciting a national response to a national crisis.

As bureaucrats, public health officials must support the government, while also remaining independent of it. As crises unfold, the more these experts are seen alongside politicians, the harder it can become to reinforce the distinction between expert counsel and government policy. Of the three medical experts studied, Tam in Canada has fallen most victim to the politicization of her message, with opposition politicians targeting her in their criticism of the government.

In the UK, some fear that, once the crisis is over and the national unity message has served its purpose, the government could deflect any criticisms of its response by deflecting it at its scientific advisers.⁶⁴ This possibility serves as a warning to experts advising in times of crisis; they must remain conscious not only of how their message is understood in the present but also how it may be interpreted with the benefit of hindsight. The message must resonate with the public sentiment of the

time, without being later exposed as erroneous or reckless and rendering the expert the scapegoat in a public inquiry.

In the United States, Fauci's biggest challenge has been to make himself heard over the loudest voice in the room. Although his inclusion in the White House coronavirus briefings may signal the administration's support for his role, in reality, he has not consistently enjoyed the administration's full support for his message.⁶⁵

Politicians can both help and hinder public health officials' efforts to be heard. Politicians who ignore the advice of public health officials make it much harder for those attempting to convey the "truth" as it is understood at any given moment to convince the public to adopt protective measures, such as physical distancing. For public health officials doing with cooperative politicians, there is a risk of opposition politicians using the opportunity to attack the ruling government, particularly if measures are not perceived to be successful. In this sort of an operating environment, the ability to maintain a position of independence is critical.

Mistrusting the Messenger

Trust is fleeting. Winning the trust of the public and maintaining it during a crisis is extremely difficult.

<C>The United States: In the United States, fact-checking organizations have worked in overdrive to try to correct the many misleading and inaccurate statements the president has made about the coronavirus.⁶⁶ Trump's misinformation has downplayed the severity of the virus, overstated the impact of his own policies, blamed others for perceived failures, rewritten the history of his response, and made unfounded claims about potential treatments.⁶⁷ Of these, perhaps the most dangerous are his claims of imminent vaccines and treatments; his public endorsement of untested treatments that has led to deaths.⁶⁸ Meanwhile, Fauci has clarified his comments when he has appeared critical of the president.⁶⁹ The high levels of conflicting information have opened the doors wide for conspiracy theorists.

Rather than providing reassurance in a time of crisis, Trump's affinity for controversy and disinformation makes him significantly less trustworthy than Fauci in the eyes of the American people. A March NPR/PBS NewsHour/Marist telephone survey found that only 37 percent of respondents "have a good deal of trust in the information Trump tells them about coronavirus."⁷⁰ By contrast, 60 percent reported little to no trust in the president.⁷¹ It also appears that elevated levels of trust in Fauci and the CDC have had tangible effects on the ground, with 72 percent of Americans polled by Gallup saying they were "avoiding . . . public places, such as stores or restaurants" by the third week of March.⁷²

Canada: In Canada, the coronavirus pandemic is playing out amid a history of racism against the country's domestic ethnically Chinese community during outbreaks of disease. In 2003, during the SARS outbreak, people of Chinese heritage similarly reported increased levels of harassment and stigmatization.⁷³ Tam was asked on January 29 whether she had considered recommending that anyone coming from China should self-isolate for two weeks. She responded saying, "you have to be very cognizant that the global effort to contain the virus requires the absolute commitment and engagement of the communities that are affected. Otherwise, they'll be stigmatized."⁷⁴ She repeated these concerns in a tweet the same day saying, "#Racism, #discrimination and stigmatizing language are unacceptable and very hurtful. These actions create a divide of #UsVsThem. #Canada is a country built on the deep-rooted values of respect, diversity and inclusion. #EndStigma #2019nCoV #coronavirus."⁷⁵ To some observers, these statements appeared to equate racism with screening people coming into Canada from China. These remarks also seemed to imply that the Canadian government's decisions not to impose border restrictions at that time were made because of concerns about racism, rather than considerations of public health and safety.

In the early stages of the outbreak, Tam repeatedly drew on World Health Organization (WHO) guidance. This led her to state that asymptomatic people were not likely to be spreading the virus and that "It is not that type of transmission that drives the force of an epidemic."⁷⁶ In January, Tam claimed that there was no cause for panic and that the risk to Canadians was very low.⁷⁷ Canadian public health officials maintained this stance up until March 10, just days before borders would begin to close.⁷⁸ Canadian military intelligence started producing detailed reports about the virus in January. Subsequent reporting has highlighted failures in the Canadian pandemic early warning system, with intelligence reports being produced but not necessarily properly distributed to relevant decisionmakers.⁷⁹ It also emerged later that the Canadian Public Health Agency had not refilled a position for a Canadian doctor to act as a direct point of contact with Chinese public health officials in Beijing, a post that had been left empty since 2015.⁸⁰

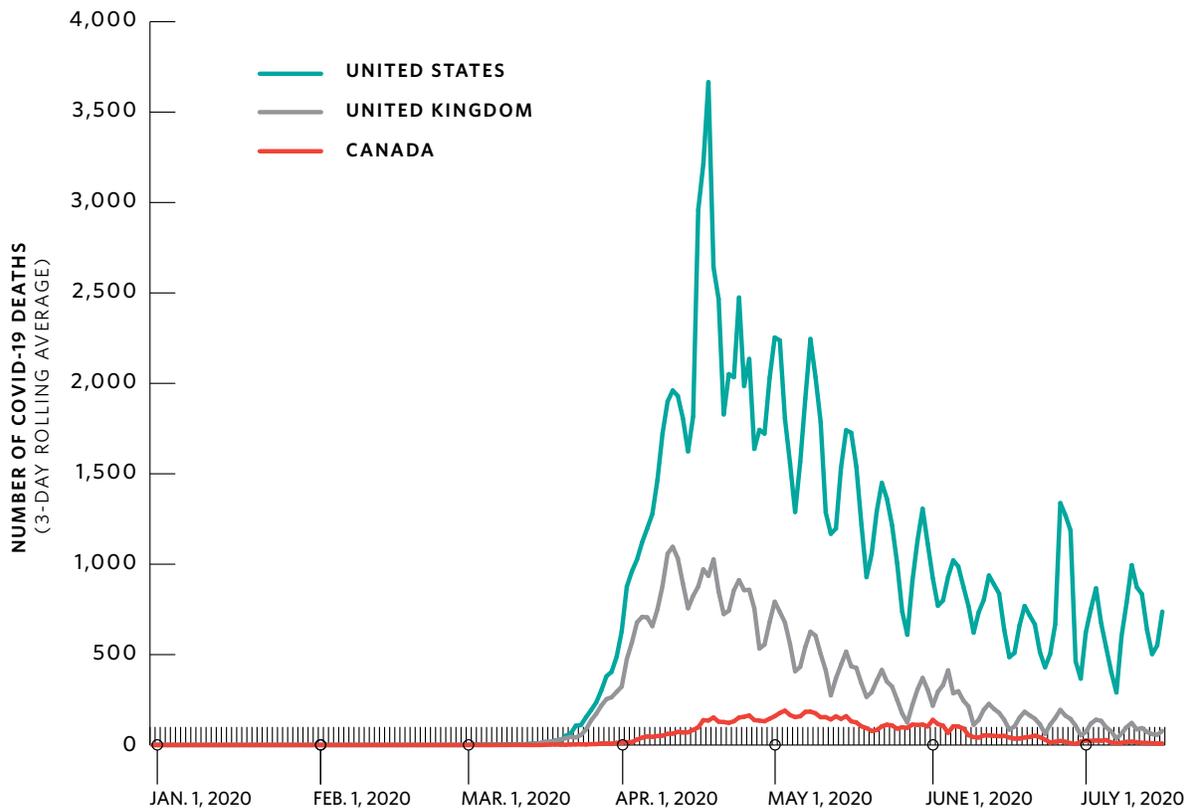
These missteps have played into the hands of those wishing to politicize the situation, as Tam can be portrayed as fickle and too reliant on the WHO, despite warnings from the Canadian intelligence community. The premier of Alberta, Jason Kenney of the Conservative Party, accused Tam of "telling us that we shouldn't close our borders to countries with high levels of infection and who in January was repeating talking points out of the [People's Republic of China] about the no evidence of human-to-human transmission."⁸¹

However, criticism of Tam might seem to be disproportionately loud as it is voiced and amplified by politicians such as Kenney,⁸² as well as a member of parliament running for a leadership position in the federal Conservative Party.⁸³ In reality, Tam's trust levels are moderate. According to one online survey, just 25 percent of respondents said they trust Tam a lot, while 48 percent said they trust her

somewhat. Those are better numbers than Trudeau's ratings, as only 12 percent trusted him a lot and 42 percent trusted him somewhat.⁸⁴ Most Canadians trusted public health professionals more broadly, with 92 percent answering that they trusted health professionals a lot or somewhat.⁸⁵

Canadians may very well be receiving Tam's message, but that does not always translate into everyone readily following government directives. In terms of compliance, according to an Ipsos April poll, while 95 percent of Canadians polled said they believe physical distancing will slow the rate of infections, 26 percent of respondents indicated that they are not following strict physical distancing measures.⁸⁶ Still, Canada has experienced lower numbers of infection and deaths than both the UK and the United States and has managed to flatten the curve more quickly (see figure 1).⁸⁷

FIGURE 1
Daily New COVID-19 Deaths in Canada, the UK, and the United States



SOURCE: Our World in Data

The UK: Across the Atlantic, UK Prime Minister Boris Johnson stands accused of not taking the virus seriously enough or acting early enough. Government messaging about the virus and media reporting in January and February focused on overseas developments concerning the virus.⁸⁸ Also around this time, the government's singular focus was on fulfilling its election promise to accomplish Brexit, culminating in Johnson signing the withdrawal agreement on January 24,⁸⁹ and marking Brexit Day on January 31 with a national address.⁹⁰ Continued uncertainty about future trade agreements with the EU and other nations meant that much of the focus on Brexit was on ensuring that the UK economy remained strong. This preoccupation with the economic consequences of Brexit undoubtedly created hostility in government circles to measures that would negatively impact the economy. On January 24, Health Secretary Matt Hancock told reporters the threat of the virus to the UK was "low," despite warnings from Chinese scientists published in the *Lancet*.⁹¹ The prime minister missed five Cabinet Office Briefing Rooms meetings on the virus, only starting to attend these briefings on March 2.

UK public health experts were careful to frame current advice with the acknowledgment that there are information gaps and that their advice may change over time as they better understand the virus.⁹² This means that they were able to update advice, rather than undermine themselves by contradicting past statements. However, this balancing act has not always been a simple process when political messaging on issues such as exercise and school closures has been at times inconsistent and confusing. By contrast, the core slogan, "Stay Home, Protect the NHS, Save Lives" was simple to understand and did not need to be regularly updated as new scientific information emerged.⁹³ In a YouGov poll conducted in April 2020, 51 percent of people said they trusted Johnson, while 39 percent said they did not.⁹⁴ Whitty fared better overall, with 42 percent saying they trusted him against only 17 percent who did not.⁹⁵

Of the three public health officials, Fauci appears to enjoy the highest trust ratings despite, or perhaps because of, low levels of trust in his president. By contrast, in the UK, where public health and government officials have presented a united front, the prime minister's trust rating is higher than Trump's, while Whitty's trust levels are lower than Fauci's. These numbers seem to suggest that the public may appreciate a streak of rebellion in their experts: people who are not afraid of sticking to their guns despite political pressure to do otherwise, rather than political lackeys.

Tam's trust levels are challenged by several factors. Some, such as the attacks from opposition politicians, are beyond her control. Others, such as her abrupt shift in messaging, her early reliance on the WHO, and her focus on racism, were not. These mistakes have played into the hands of her critics, eroding perceptions of her independence and public trust in her message.

For public health officials communicating in a crisis, establishing and maintaining trust is crucial but also extremely difficult. Trust can be eroded through politicization or perceptions that a given public health expert is too closely tied to governing politicians. Trust is also challenged if a public health official's messaging changes too greatly over time. Here again, the concept of "truth" becomes a liability, particularly as new scientific information inevitably emerges throughout the crisis. On the one hand, public health officials must communicate clearly and authoritatively. However, if they are too certain of a specific fact that is later discovered to be untrue, that breach of trust can easily open a crack that detractors can exploit.

Conclusions

The most persistent influence operations have a single narrative at their core, which can be applied to changing times and different circumstances. These narratives are often emotive and derive power from their ability to harness the collective emotions of their followers in calling for change or action. Most importantly, these messages are consistent, repetitive, and reinforced regularly by influential and respected community members.

In crises, however, things change quickly. What is true today may not be true tomorrow. This cloud of uncertainty is compounded by the conflicting agendas of the many actors who are all trying to get their own messages heard. Whether they are driven by a desire to promote public health, criticize a ruling government, promote xenophobia, or capitalize on the crisis for personal financial gain, those who wish to be heard can find or manipulate information to support their favored narratives. This increases the challenges of communicating a consistent narrative, while the rising human cost of the pandemic makes it more important than ever to keep the public's attention.

In Canada, Tam relied on several narratives in her coronavirus response. Some of these remained consistent, such as encouraging good hygiene practices, while others were less so, such as an abrupt shift on her advice about wearing masks. Her reliance on WHO information coupled with her concerns over racism made her an easy target for political attacks. Whitty in the UK acknowledged knowledge gaps and developed a narrative that has slowly adapted over time. The use of emotive messaging, focusing on NHS healthcare workers and a wartime collective spirit, enabled the government to mobilize a sense of national unity and widespread voluntary compliance with lockdown measures.

Politicians in the UK and Canada have tried to echo public health experts' messages and keep the narrative simple. Trump's well-established erratic style, lack of consistency, and Twitter rants, however, have not only continued to polarize American citizens but have also spread disinformation and

confused the public about the advice of public health experts. Indeed, the president's own White House Coronavirus Task Force daily briefings, the very initiative that was formed to promote public health messaging, has actually become the source, and high-profile promoter, of disinformation. These press briefings should be giving public health experts and their messages center stage, but they have, in fact, only distorted their advice and detracted public attention from it. During these briefings, Trump has not only advocated the use of hydroxychloroquine, but has also disagreed with Fauci's calls to significantly increase testing and even suggested injecting disinfectant into people as a cure for coronavirus infections.⁹⁶

Almost overnight, public health officials have been raised from relative obscurity to national celebrities. As individuals, they have had to cope with an intense focus on their personalities, while also trying to project credibility and get their messages heard. Fauci has adapted to the situation through creative means, such as being interviewed by celebrities, to get his message out, despite being the only public health official analyzed here who did not use Twitter to spread his message. While the use of influencers can be effective in amplifying a message, it is not a foolproof method. By contrast, Tam's appeals to national celebrities came across as more desperate and failed to gain the traction desired.

The delayed and inconsistently applied advice on the public use of face coverings exemplifies the challenge of evidence-based decisionmaking. Evolving data have made it difficult for health experts to give conclusive analyses and advice. The voids created by a lack of clear guidance have been exploited in an already tense political situation in the United States to mobilize opposition to government mandates or stoke political polarization. Renée DiResta, a technical research manager at the Stanford Internet Observatory, in an essay for the *Atlantic*, sums up the challenge posed by crises where the situation often moves faster than society's understanding of it:

Institutional medical authorities are bound by an ethical obligation to speak precisely and to hew to the facts—a constraint not shared by the Twitter and Medium commentariat. But when they finally do achieve a sufficient standard of confidence to make a statement, the pronouncement is often something that some faction on the internet has been insisting is true for weeks, so the authorities appear to be leading from behind.⁹⁷

So far, trust in public health experts has remained relatively high, even while surveys were reporting drops in public trust of political leaders. However, examples of political leaders confusing the messaging of scientific experts, and a corresponding rise in conspiracy theories and disinformation, are cause for concern. In these situations, geopolitical dynamics heavily influence domestic political rhetoric. Leaders aiming to shift blame for their own poor responses to the coronavirus all too often point fingers at other countries as the source of the virus. Political leaders are pressured to turn a

blind eye to disinformation spread by other countries for fear of losing much-needed medical resources. As Laura Rosenberger of the German Marshall Fund's Alliance for Securing Democracy has pointed out, liberal democracies lack a coherent strategy for countering foreign challengers in the information environment, and digital literacy skills are lacking. Therefore, it should not come as any surprise that the political environment has deteriorated. She warns,

Democracies face a dilemma. If they don't take an active role in the information contest, they will leave themselves vulnerable at home and lose ground abroad. But if they are more proactive and aggressive in the wrong ways, they will risk mimicking the heavy-handed behavior of autocracies and creating the kind of rigidly controlled environment autocrats seek.⁹⁸

The coronavirus pandemic has shown that, even in times of national emergency, credible experts trying to communicate public health advice can struggle to engage their audiences and get their message heard. The most successful narratives have been those that were resilient enough to adapt to changing circumstances and advances in scientific knowledge. However, abrupt changes in these messages and indecisiveness increase the chances of messages being distorted by opponents, allowing them to be used against the original messenger, to create confusion and stoke existing tensions.

At almost every turn in a crisis, public health officials are challenged as they strive to communicate to the public. First, they are seeking the attention of an unruly audience with the ability to talk back—and many among these viewers and listeners have bigger followings than most public health officials could ever dream of achieving. The criticism that can be generated, by average people and influencers alike, challenges existing concepts of “truth.” The world is seldom black and white, and staking a claim that cannot endure in truthfulness is a shortcut to lost credibility.

Second, everything in liberal democracies is political. Public health officials need the support of politicians, but that support is a double-edged sword. Too much support is easily politicized. And that truth had better be enduring, for if it is not, another crack will open, and citizens' trust of public health officials will continue to erode. Third, trust is key, but nothing can tarnish trust faster than the perception of being untruthful. For public health officials communicating in a crisis, “truths” can be fleeting and create potential liabilities in terms of maintaining credibility.

As the world continues to weather the coronavirus pandemic, reliable information from public health experts will continue to be a necessity. At the same time, these experts will still face headwinds in getting their message out to a weary or even disenchanted public. Nonetheless, as the virus continues to spread, it is imperative that experts and politicians alike redouble their efforts to find ways to deliver timely, reliable information to the public.

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Notes

- 1 Gideon Skinner and Michael Clemence, *Trust: The Truth?*, Ipsos, September 18, 2019, <https://thinks.ipsos-mori.com/trust-the-truth/>, 61.
- 2 David M. J. Lazer, Matthew A. Baum, Yochai Benkler, Adam J. Berinsky, Kelly M. Greenhill, Filippo Menczer, Miriam J. Metzger, Brendan Nyhan, Gordon Pennycook, David Rothschild, Michael Schudson, Steven A. Sloman, Cass R. Sunstein, Emily A. Thorson, Duncan J. Watts, and Jonathan L. Zittrain, “The Science of Fake News,” *Science* 359 (6380): 1094–1096, <https://pubmed.ncbi.nlm.nih.gov/29590025/>; Luciano Floridi, *The Philosophy of Information* (Oxford: Oxford University Press, 2011); and European Commission, ‘Communication From the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions Tackling Online Disinformation: a European Approach,’ accessed July 15, 2019, <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:52018DC0236>.
- 3 Alicia Wanless and Michael Berk, “The Audience is the Amplifier: Participatory Propaganda,” in the *SAGE Handbook of Propaganda* by Paul Baines, Nicholas O’Shaughnessy, and Nancy Snow, eds. (London: Sage, 2019), 85–104.
- 4 Melanie Smith, Erin McAweeney, and Léa Ronzaud, *The COVID-19 “Infodemic”: A Preliminary Analysis of the Online Conversation Surrounding the Coronavirus Pandemic*, Graphika, April 2020, https://public-assets.graphika.com/reports/Graphika_Report_Covid19_Infodemic.pdf.
- 5 Adam Satariano and Davey Alba, “Burning Cell Towers, Out of Baseless Fear They Spread the Virus,” *New York Times*, April 10, 2020, <https://www.nytimes.com/2020/04/10/technology/coronavirus-5g-uk.html>.
- 6 Tom Blackwell, “China’s COVID-19 Disinformation Push, Aided by Canadian Group, Raises Concerns About Next Pandemic,” *National Post*, March 28, 2020, <https://nationalpost.com/news/covid-19-chinese-disinformation-push-aided-by-canadian-group-raises-concerns-about-next-pandemic>.
- 7 David E. Sanger, Nicole Perlroth, and Matthew Osenberg, “Hackers Attack Health and Human Services Computer System,” *New York Times*, March 16, 2020, <https://www.nytimes.com/2020/03/16/us/politics/coronavirus-cyber.html>; and Raphael Satter, Jack Stubbs, and Christopher Bing, “Exclusive: Elite Hackers Target WHO as Coronavirus Cyberattacks Spike,” Reuters, March 23, 2020, <https://www.reuters.com/article/us-health-coronavirus-who-hack-exclusive/exclusive-elite-hackers-target-who-as-coronavirus-cyberattacks-spike-idUSKBN21A3BN>.
- 8 Sam Cooper, “Canada’s Cyber Agency Dismantling Fake Government Coronavirus Pandemic Response Websites,” *Global News*, March 13, 2020, <https://globalnews.ca/news/6673497/canada-csec-fake-coronavirus-pandemic-response-websites/>.
- 9 Maggie Miller, “Experts See Over 600 Percent Spike in Malicious Emails During Coronavirus Crisis,” *Hill*, March 26, 2020, <https://thehill.com/policy/cybersecurity/489692-experts-see-over-600-percent-spike-in-malicious-emails-during>.
- 10 Jason Vermes, “As Misinformation Spreads, ‘Snake Oil Salesmen’ Are Profiting Off Anxiety Over Coronavirus, Says Reporter,” CBC, March 13, 2020, <https://www.cbc.ca/radio/thecurrent/the-current-for-march-13-2020-1.5496578/as-misinformation-spreads-snake-oil-salesmen-are-profiting-off-anxiety-over-coronavirus-says-reporter-1.5497306>.
- 11 Skinner and Clemence, *Trust: The Truth?*, 61.

- 12 Google's search engine was used to identify media mentions of these three truth tellers in each country each week from January 6, 2020, until March 29, 2020. The articles aggregated were limited to the first two pages of the search results, given that most users do not continue past these pages. This Google method unearthed twenty mentions from Canadian sources, twenty from British sources, and thirty-nine from U.S. sources. Additionally, Buzzsumo was used to identify webpages referencing the truth tellers ranked by the most social media engagements (such as likes and shares) over the same period. The authors, in turn, manually analyzed the top fifty most-engaged-with webpages in each country. All of these articles (as identified by Google and Buzzsumo) were reviewed and coded to determine how the relevant public health official was covered, both in terms of tone and subject.
- 13 Pedro Fonseca and Marcelo Rochabrun, "Brazil's Bolsonaro Questions Coronavirus Deaths, Says 'Sorry, Some Will Die,'" Reuters, March 27, 2020, <https://www.reuters.com/article/us-health-coronavirus-brazil/brazils-bolsonaro-questions-coronavirus-deaths-says-sorry-some-will-die-idUSKBN21E3IZ>.
- 14 Sheera Frenkel, Ben Decker, and Davey Alba, "How the 'Plandemic' Movie and Its Falsehoods Spread Widely Online," *New York Times*, May 20, 2020, <https://www.nytimes.com/2020/05/20/technology/plandemic-movie-youtube-facebook-coronavirus.html>.
- 15 See the following tweet by Mina LaMinoux. "As a pharmacist, I find this message confusing to patients. Renew your medications when their due and limit yourself to a 30 day supply to avoid drug shortages for all Canadians. If you're in quarantine, your pharmacy will likely do delivery with pleasure. That's it." Mina LaMinoux, @MinaLaMinoux, Twitter post, March 31, 2020, <https://twitter.com/MinaLaMinoux/status/1245123876511768577?s=20>.
- 16 "Shortage of Personal Protective Equipment Endangering Health Workers Worldwide," World Health Organization, news release, March 3, 2020, <https://www.who.int/news-room/detail/03-03-2020-shortage-of-personal-protective-equipment-endangering-health-workers-worldwide>.
- 17 Zeynep Tufekci, "Why Telling People They Don't Need Masks Backfired," *New York Times*, March 17, 2020, <https://www.nytimes.com/2020/03/17/opinion/coronavirus-face-masks.html>.
- 18 Brit McCandless Farmer, "March 2020: Dr. Anthony Fauci Talks With Dr Jon LaPook About COVID-19," *CBS News*, March 8, 2020, <https://www.cbsnews.com/news/preventing-coronavirus-facemask-60-minutes-2020-03-08>.
- 19 Michael D. Shear and Sheila Kaplan, "A Debate Over Masks Uncovers Deep White House Divisions," *New York Times*, April 3, 2020, <https://www.nytimes.com/2020/04/03/us/politics/coronavirus-white-house-face-masks.html>.
- 20 John Paul Tasker, "Canada's Top Doctor Says Non-medical Masks Can Help Stop the Spread of COVID-19," CBC, April 6 2020, <https://www.cbc.ca/news/politics/non-medical-masks-covid-19-spread-1.5523321>.
- 21 See the following tweet by Norman Spector. "On Monday, Trudeau declined even to say he regretted not moving quicker on measures he now insists are essential. Does that make sense? No, that doesn't make sense." Norman Spector, @nspector, Twitter post, March 31, 2020, <https://twitter.com/nspector4/status/1244841962110214146?s=20>.
- 22 Melissa Couto, "Should You Wear a Face Mask? Coronavirus Prompts Debate Over Effectiveness," *Global News*, March 31, 2020, <https://globalnews.ca/news/6757571/face-mask-coronavirus-canada-effectiveness/>.
- 23 These social media statistics are based on research and calculations the authors performed using Social Insider.
- 24 "Coronavirus: UK to Be 'Guided by Scientists' on Face Masks," BBC, April 17, 2020, <https://www.bbc.co.uk/news/uk-52321378>.

- 25 Rory Sullivan, “Coronavirus: Chief Medical Officer Tells Public Not to Wear Masks,” *Independent*, March 4, 2020, <https://www.independent.co.uk/news/uk/home-news/coronavirus-uk-news-professor-chris-whitty-no-masks-advice-a9374086.html>.
- 26 Rowena Mason and Libby Brooks, “Ministers Split Over Coronavirus Advice on Wearing Face Masks,” *Guardian*, April 28, 2020, <https://www.theguardian.com/world/2020/apr/28/ministers-split-over-coronavirus-advice-on-wearing-face-masks>.
- 27 “Public Advised to Cover Faces in Enclosed Spaces,” UK Department of Health and Social Care, May 11, 2020, <https://www.gov.uk/government/news/public-advised-to-cover-faces-in-enclosed-spaces>.
- 28 “Face Coverings to Become Mandatory on Public Transport,” UK Department of Transport, June 4, 2020, <https://www.gov.uk/government/news/face-coverings-to-become-mandatory-on-public-transport>.
- 29 Chris Smyth, “Wear Mask in Shops From July 24 or Face a £100 Fine,” *Times*, July 14, 2020, <https://www.thetimes.co.uk/edition/news/wear-mask-in-shops-from-july-24-or-face-a-100-fine-xt7dxsqvz>.
- 30 Joel Golby, “Stand Down, Experts: Celebrities Have Got Coronavirus Covered,” *Guardian*, March 5, 2020, <https://www.theguardian.com/lifeandstyle/lostinshowbiz/2020/mar/05/stand-down-experts-celebrities-coronavirus-crisis>.
- 31 Jason Turcotte, Chance York, Jacob Irving, Rosanne M. Scholl, and Raymond J. Pingree, “News Recommendations From Social Media Opinion Leaders: Effects on Media Trust and Information Seeking,” *Journal of Computer-Mediated Communication* 20, no. 5 (2015): 520–535.
- 32 Tufekci, “Why Telling People They Don’t Need Masks Backfired.”
- 33 Hilda Bastian, “The Face Mask Debate Reveals a Scientific Double Standard,” *Wired*, April 8, 2020, <https://www.wired.com/story/the-face-mask-debate-reveals-a-scientific-double-standard/>.
- 34 Shuo Feng, Chen Shen, Nan Xia, Wei Song, Mengzhen Fan, and Benjamin J. Cowling, “Rational Use of Face Masks in the COVID-19 Pandemic,” *Lancet*, March 20, 2020, [https://www.thelancet.com/journals/lanres/article/PIIS2213-2600\(20\)30134-X/fulltext](https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30134-X/fulltext).
- 35 Ritu Prasad, “Coronavirus: Why Is There a US Backlash to Masks?,” BBC, May 5, 2020, <https://www.bbc.co.uk/news/world-us-canada-52540015>.
- 36 This number was reported on June 4, 2020, and was identified through a search filtered on the following *Washington Post* story using the dates of March 1–31, 2020. “The Fact Checker’s Ongoing Database of the False or Misleading Claims Made by President Trump since Assuming Office,” *Washington Post*, accessed June 4, 2020, https://www.washingtonpost.com/graphics/politics/trump-claims-database/?itid=lk_inline_manual_35&itid=lk_inline_manual_42.
- 37 Tom Porter, “The Trump Administration Briefly Barred a Top US Disease Expert From Speaking Freely to the Public After He Warned the Coronavirus Might Be Impossible to Contain,” *Business Insider*, February 28, 2020, <https://www.businessinsider.com/coronavirus-anthony-fauci-trump-admin-stops-discussion-2020-2>.
- 38 Findings were found using the proprietary tool Buzzsumo on April 7, 2020. For more information on the tool, see “Buzzsumo,” Buzzsumo, <https://buzzsumo.com/>.
- 39 Chandelis Duster, Jim Acosta, and Kevin Lipta, “Trump Retweets Call to Fire Fauci Amid Coronavirus Criticism,” CNN, April 13, 2020, <https://edition.cnn.com/2020/04/13/politics/donald-trump-anthony-fauci-tweet/index.html>.
- 40 Andrew Naughtie, “Coronavirus: US Radio Station to Stop Airing Trump Briefings Because of Disinformation,” *Independent*, March 26, 2020, <https://www.independent.co.uk/news/world/americas/coronavirus-trump-briefing-radio-station-seattle-washington-a9427881.html>; and “‘Disinformation’: See Trump Virus Briefing Get Cut Off on Live TV,” MSNBC, April 13, 2020, <https://www.msnbc.com/the-beat-with-ari/watch/trump-uses-coronavirus-briefing-to-play-propaganda-video-defending-response-time-81992773597>.

- 41 Lis Smith, “‘Go Everywhere’: How Dr. Anthony Fauci’s Media Strategy Is Revolutionizing Coronavirus Messaging,” *Vanity Fair*, April 7, 2020, <https://www.vanityfair.com/news/2020/04/how-dr-anthony-fauci-media-strategy-revolutionizing-coronavirus-messaging>; Tasneem Nashrulla, “Steph Curry Had an Instagram Live Chat with Dr. Fauci About Coronavirus That Was Super Informative,” *Buzzfeed News*, March 26, 2020, <https://www.buzzfeednews.com/article/tasneemnashrulla/steph-curry-fauci-instagram-live-coronavirus-obama>; Scott Nover, “Dr. Anthony Fauci Makes Coronavirus Plea Live on Facebook,” *AdWeek*, March 19, 2020, <https://www.adweek.com/tv-video/dr-anthony-fauci-makes-coronavirus-plea-live-on-facebook/>; and the *Daily Show with Trevor Noah*, “Dr. Fauci Answers Trevor’s Questions about Coronavirus| The Daily Social Distancing Show,” YouTube video, March 26, 2020, <https://www.youtube.com/watch?v=8A3jiM2FNR8>.
- 42 Adam Edelman, “Fauci Praises Brad Pitt’s ‘SNL’ Impersonation: ‘He Did a Great Job,’” NBC News, April 28, 2020, <https://www.nbcnews.com/politics/politics-news/fauci-praises-brad-pitt-s-snl-impersonation-he-did-great-n1194231>.
- 43 Based on a Facebook search for Anthony Fauci. “Anthony Fauci,” Facebook, accessed June 4, 2020, <https://www.facebook.com/search/groups/?q=Anthony%20fauci>.
- 44 “Coronavirus: Outcry After Trump Suggests Injecting Disinfectant as Treatment,” BBC, April 24, 2020, <https://www.bbc.co.uk/news/world-us-canada-52407177>.
- 45 Kevin Liptak, “Fissures Widen Between White House and Health Agencies Over Coronavirus,” CNN, March 9, 2020, <https://edition.cnn.com/2020/03/09/politics/cdc-policy-test-kits-coronavirus/index.html>; and Tom McCarthy, “‘It Will Disappear’: The Disinformation Trump Spread About the Coronavirus—Timeline,” *Guardian*, April 14, 2020, <https://www.theguardian.com/us-news/2020/apr/14/trump-coronavirus-alerts-disinformation-timeline>.
- 46 Aaron Wherry, “Ottawa Can’t Afford Any More Mixed Messages on COVID-19,” CBC, March 17, 2020, <https://www.cbc.ca/news/politics/covid-19-pandemic-trudeau-1.5499775>.
- 47 Canadian House of Commons, 43rd Parliament Standing Committee on Health, Number 1, 1st Session, (statement of Theresa Tam, Canada’s chief public health officer), January 29, 2020, <https://www.ourcommons.ca/DocumentViewer/en/43-1/HESA/meeting-1/evidence>.
- 48 Lauren Krugel, “Calgary Fashion Brands Celebrate Canada’s Top Female Medical Officers With T-shirts,” *Globe and Mail*, March 26, 2020, <https://www.theglobeandmail.com/life/style/article-covid-couture-calgary-fashion-brands-feature-medical-chiefs-on-t/>.
- 49 Jonathan Szekeres, “Fans Paint Murals of Dr. Bonnie Henry, Theresa Tam in Gastown,” News 1130, March 31, 2020, <https://www.citynews1130.com/2020/03/31/fans-paint-murals-dr-bonnie-henry-theresa-tam-gastown/>.
- 50 The proprietary tool Social Insider was used to identify this data on April 9, 2020. See “Social Insider,” Social Insider, <https://app.socialinsider.io/>.
- 51 “Fire Dr. Theresa Tam,” *Rebel News*, petition, April 16, 2020, accessed April 29, 2020, https://www.rebelnews.com/fire_theresa_tam.
- 52 See the following tweet by Theresa Tam. “CA, We’re all in this together- let’s protect #everybody by #SocialDistancing. #StayAtHomeSavesLives. @VancityReynolds @Drake @DanjLevy @wick_22 @WilliamShatner @ShawnMendes @AlexTrebek @BAndrescu @NatanObed @IamSandraOh Can you help us come #TogetherApart to #PlankTheCurve?” Theresa Tam, @CPHO_Canada, Twitter post, March 24, 2020, https://twitter.com/CPHO_Canada/status/1242580021585293318.

- 53 See the following tweet by Canadian public health officials. “Listen to the experts @Cmdr_Hadfield, @wick_22 and @CPHO_Canada and stay home! Learn more on how you can slow the spread of #COVID19: <http://ow.ly/6kco50znvYo> #StayHomeSaveLives” Health Canada and PHAC (@GovCanHealth), Twitter post, April 29, 2020, <https://twitter.com/GovCanHealth/status/1255482659687534593?s=20>.
- 54 Sean Murphy, “In Full: All New Coronavirus Measures Announced in Boris Johnson’s Tuesday Briefing,” *Edinburgh Evening News*, March 17, 2020, <https://www.edinburghnews.scotsman.com/health/coronavirus/full-all-new-coronavirus-measures-announced-boris-johnsons-tuesday-briefing-2482188>.
- 55 “Coronavirus: ‘Unprecedented’ Crowds in Wales Despite Warnings,” BBC, March 22, 2020, <https://www.bbc.co.uk/news/uk-wales-51994504>.
- 56 “Coronavirus: Scotland’s Chief Medical Officer Resigns Over Lockdown Trips,” BBC, April 6, 2020, <https://www.bbc.co.uk/news/uk-scotland-52177171>; Josh Halliday and Simon Murphy, “Cabinet Minister Robert Jenrick Visited His Parents During Covid-19 Lockdown,” *Guardian*, April 9, 2020, <https://www.theguardian.com/world/2020/apr/09/cabinet-minister-robert-jenrick-visited-his-parents-during-covid-19-lockdown>; and Thomas Burrows, “Locked Out: Prof Neil Ferguson Resigns as Government Coronavirus Scientist After ‘Breaking Lockdown Rules to Meet His Married Lover,’” *Sun*, May 6, 2020, <https://www.thesun.co.uk/news/11556697/professor-neil-ferguson-resigns-breaks-uk-coronavirus-lockdown-rules/>.
- 57 Based on a Facebook search for Chris Whitty. “Chris Whitty,” Facebook, accessed June 4, 2020, <https://www.facebook.com/search/groups?q=chris%20whitty>; and Vanessa Chalmers, “Put Him in Charge of Brexit, He’s the New 007: England’s Chief Medical Officer Professor Chris Whitty Who Is Leading the Fight Against Coronavirus Becomes Unlikely Social Media Star After No-nonsense Answers in Front of the Camera,” *Daily Mail*, March 6, 2020, <https://www.dailymail.co.uk/health/article-8083003/Chris-Whitty-unlikely-social-media-star-leading-fight-against-coronavirus.html>.
- 58 Luke O’Reilly, “Boris Johnson Warns ‘Accelerating;’ Coronavirus Could Overwhelm NHS as Those Most at Risk Urged to Stay Home for 12 Weeks,” *London Evening Standard*, March 21, 2020, <https://www.standard.co.uk/news/health/boris-johnson-warns-coronavirus-overwhelm-nhs-a4394091.html>; and Christopher Hope, “The Story Behind ‘Stay Home, Protect NHS, Save Lives,’” *Telegraph*, May 1, 2020, <https://www.telegraph.co.uk/politics/2020/05/01/story-behind-stay-home-protect-nhs-save-lives/>.
- 59 “Back Britain’s Brave NHS Heroes—Add Your Support Now,” *Express*, April 3, 2020, <https://www.express.co.uk/news/uk/1258033/NHS-Heroes-campaign-express-coronavirus>.
- 60 “Coronavirus: Millions Take Part in Weekly ‘Clap for Carers’ Tribute,” BBC, April 23, 2020, <https://www.bbc.co.uk/news/av/uk-52402181/coronavirus-millions-take-part-in-weekly-clap-for-carers-tribute>.
- 61 Richard Williams, “Coronavirus: Woman ‘Named and Shamed’ by Neighbours on Facebook for Not Joining Clap for Carers,” *Sun*, April 24, 2020, <https://news.sky.com/story/coronavirus-woman-named-and-shamed-by-neighbours-on-facebook-for-not-joining-clap-for-carers-11978192>.
- 62 Matt Wilkinson, “‘We’ll Get Through This’: The Queen Sparks Wartime Spirit as She Tells Brits ‘We Will Meet Again’ and Thanks NHS in Coronavirus Speech,” *Sun*, April 5, 2020, <https://www.thesun.co.uk/news/11333613/queen-wartime-spirit-thanks-nhs-coronavirus/>; and “UK Government Evokes Wartime Blitz Spirit for Fight Against Coronavirus,” Reuters, March 15, 2020, <https://fr.reuters.com/article/marketsNews/idUSL8N2B80B1>.
- 63 “The Three Groups Reacting to Life Under Lockdown,” King’s College London, April 27, 2020, <https://www.kcl.ac.uk/news/the-three-groups-reacting-to-life-under-lockdown>.

- 64 Haroon Siddique, “UK Scientists Must Not Be Blamed for Giving Advice, Says Royal Society Head,” *Guardian*, May 20, 2020, <https://www.theguardian.com/world/2020/may/20/uk-scientists-must-not-be-blamed-coronavirus-advice-says-royal-society-head>.
- 65 Nikki Carvajal, “Trump Says He Disagrees With Fauci: “I Think We Are in a Good Place. I Disagree With Him,” CNN, July 7, 2020, https://edition.cnn.com/world/live-news/coronavirus-pandemic-07-07-20-intl/h_980c3fd6931a1535a28ac5a56c4b3be2.
- 66 Christian Paz, “All the President’s Lies About the Coronavirus,” *Atlantic*, April 9, 2020, <https://www.theatlantic.com/politics/archive/2020/04/trumps-lies-about-coronavirus/608647/>.
- 67 Linda Qiu, “Analyzing the Patterns in Trump’s Falsehoods About Coronavirus,” *New York Times*, March 27, 2020, <https://www.nytimes.com/2020/03/27/us/politics/trump-coronavirus-factcheck.html>.
- 68 Tara Haelle, “Man Dead From Taking Chloroquine Product After Trump Touts Drug for Coronavirus,” *Forbes*, March 23, 2020, <https://www.forbes.com/sites/tarahaelle/2020/03/23/man-dead-from-taking-chloroquine-after-trump-touts-drug-for-coronavirus/#f7e7a6172e91>; and Heidi Przybyla, “Family of New York Woman Blames Hydroxychloroquine Combo for Fatal Heart Attack,” NBC News, April 16, 2020, <https://www.nbcnews.com/health/health-news/family-new-york-woman-blames-hydroxychloroquine-combo-fatal-heart-attack-n1185451>.
- 69 “Remarks by President Trump, Vice President Pence, and Members of the Coronavirus Task Force in Press Briefing,” White House, April 14, 2020, <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-vice-president-pence-members-coronavirus-task-force-press-briefing-25>; and Kevin Breuninger, “Fauci Walks Back Coronavirus Comments That Sparked Fears of His Firing,” CNBC, April 13, 2020, <https://www.cnn.com/2020/04/13/coronavirus-anthony-fauci-clarifies-comments-that-sparked-firing-fears.html>.
- 70 “How the Survey Was Conducted,” NPR/PBS NewsHour/Marist Poll, conducted March 13–14, 2020, http://maristpoll.marist.edu/wp-content/uploads/2020/03/NPR_PBS-NewsHour_Marist-Poll_USA-NOS-and-Tables_2003151338.pdf#page=3.
- 71 Greg Sargent, “A New Poll Shows Trump’s Magical Lying Powers Are Failing Him,” *Washington Post*, March 17, 2020, <https://www.washingtonpost.com/opinions/2020/03/17/new-poll-shows-trumps-magical-lying-powers-are-failing-him/>.
- 72 Lydia Saad, “Americans Step Up Their Social Distancing Even Further,” *Gallup Blog*, March 24, 2020, <https://news.gallup.com/opinion/gallup/298310/americans-step-social-distancing-even-further.aspx>.
- 73 Larry Heng, “Chinese Canadians Facing Hate, Racism for Coronavirus Outbreak — Much Like the SARS Outbreak in 2003,” *National Post*, January 30, 2020, <https://nationalpost.com/news/chinese-canadians-facing-hate-racism-for-coronavirus-outbreak-much-like-the-sars-outbreak-in-2003>.
- 74 Canadian House of Commons, 43rd Parliament Standing Committee on Health, Number 1, 1st Session, (Tam statement).
- 75 See the following tweet by Theresa Tam. “#Racism, #discrimination and stigmatizing language are unacceptable and very hurtful. These actions create a divide of #UsVsThem. #Canada is a country built on the deep-rooted values of respect, diversity and inclusion. #EndStigma #2019nCOV #coronavirus.” Theresa Tam, @CPHO_Canada, Twitter post, January 29, 2020, https://twitter.com/CPHO_Canada/status/1222704579172864002.
- 76 Canadian House of Commons, 43rd Parliament Standing Committee on Health, Number 1, 1st Session, (Tam statement).

- 77 Graham Slaughter, “Canadian Health Chief: ‘I Don’t Think There’s Any Reason for Us to Panic’ Over Coronavirus,” CTV News, January 20, 2020, <https://www.ctvnews.ca/health/canadian-health-chief-i-don-t-think-there-s-any-reason-for-us-to-panic-over-coronavirus-1.4775957>; and Liam Casey, “Canadian Public Health Agencies Ramping Up Preparations in Response to New Virus,” CTV News, January 22, 2020, <https://www.ctvnews.ca/health/canadian-public-health-agencies-ramping-up-preparations-in-response-to-new-virus-1.4778656>.
- 78 John Paul Tasker, “Government Documents Reveal a Slow Start to Canada’s COVID-19 Response,” *CBC*, April 10, 2020, <https://www.cbc.ca/news/politics/covid-19-government-documents-1.5528726>.
- 79 Murray Brewster, “Canadian Military Intelligence Unit Issued Warning About Wuhan Outbreak Back in January,” April 10, 2020, <https://www.cbc.ca/news/politics/coronavirus-pandemic-covid-canadian-military-intelligence-wuhan-1.5528381>.
- 80 Mark Mackinnon, Nathan Vanderklippe, and Grant Robertson, “Flattery and Foot Dragging: China’s Influence Over the WHO Under Scrutiny,” *Global and Mail*, April 25, 2020, <https://www.theglobeandmail.com/world/article-flattery-and-foot-dragging-chinas-influence-over-the-who-under/>.
- 81 Aaron Wherry, “Governments Will Make Mistakes During the Pandemic—and They Won’t Be Able to Pin Them on ‘Experts,’” *CBC*, April 15, 2020, <https://www.cbc.ca/news/politics/kenney-tam-pandemic-coronavirus-covid-1.5532290>.
- 82 *Ibid.*
- 83 Kraig Krause, “Rookie Belleville, Ont., MP Gets Blowback for ‘Racist’ Comments Against Canada’s Top Doctor,” *Global News*, April 24, 2020, <https://globalnews.ca/news/6860468/canadian-mp-demands-theresa-tam-fired/>.
- 84 Leggier and Association for Canadian Studies, “COVID-19 Tracking Survey Results, April 20, 2020,” https://leger360.com/wp-content/uploads/2020/04/tracking_covid19_13386-124_EN_week5_VF_Final-1.pdf
- 85 *Ibid.*
- 86 “One Quarter (26%) of Canadians Admit They’re Not Practicing Physical Distancing as Recommended,” Ipsos Canada, April 8, 2020, <https://www.ipsos.com/en-ca/news-and-polls/One-Quarter-Of-Canadians-Admit-They-Are-Not-Practicing-Physical-Distancing-As-Recommended>; and Amanda Connolly, “Coronavirus: One Quarter of Canadians Still Not Fully Social Distancing, Poll Suggests,” *Global News*, April 8, 2020, <https://globalnews.ca/news/6792961/coronavirus-social-distancing-canada/>.
- 87 Max Rose, Hannah Ritchie, Esteban Ortiz-Ospina, and Joe Hasell, “Coronavirus Pandemic (COVID-19),” *Our World in Data*, accessed July 14, 2020, <https://ourworldindata.org/coronavirus>.
- 88 “British Nationals on the Diamond Princess: Foreign Office Statement,” UK Foreign Office, February 18, 2020, <https://www.gov.uk/government/news/fco-statement-on-british-nationals-on-the-diamond-princess>.
- 89 “Brexit: Boris Johnson Signs Withdrawal Agreement in Downing Street,” *BBC*, January 24, 2020, <https://www.bbc.co.uk/news/uk-politics-51244126>.
- 90 “Boris Johnson Promises Brexit Will Lead to National Revival,” *Guardian*, January 31, 2020, <https://www.theguardian.com/politics/2020/jan/31/boris-johnson-promises-brexit-will-lead-to-national-revival>.
- 91 “Coronavirus: 38 Days When Britain Sleepwalked Into Disaster,” *Times*, April 19, 2020, <https://www.thetimes.co.uk/article/coronavirus-38-days-when-britain-sleepwalked-into-disaster-hq3b9tlgh>.
- 92 Éanna Kelly, “UK’s Chief Science Advisers Say Response to COVID-19 Will Evolve as Data Comes in,” *Science Business*, March 19, 2020, <https://sciencebusiness.net/covid-19/news/uks-chief-science-advisers-say-response-covid-19-will-evolve-data-comes>.
- 93 Hope, “The Story Behind ‘Stay Home, Protect NHS, Save Lives.’”

- 94 Sam Coates, “Coronavirus: Britons Still Support Lockdown Despite Being Sadder and More Anxious—Poll,” *Sky*, April 24, 2020, <https://news.sky.com/story/coronavirus-britons-still-support-lockdown-despite-being-sadder-and-more-anxious-poll-11977655>.
- 95 *Ibid.*
- 96 John T. Bennett, “Coronavirus: Trump Suggests Injecting Disinfectant and Touts Power of Sunlight to Beat Disease,” *Independent*, April 24, 2020, <https://www.independent.co.uk/news/world/americas/us-politics/trump-coronavirus-inject-disinfectant-bleach-treatment-sunlight-a9481291.html>.
- 97 Renée DiResta, “Virus Experts Aren’t Getting the Message Out,” *Atlantic*, May 6, 2020, <https://www.theatlantic.com/ideas/archive/2020/05/health-experts-dont-understand-how-information-moves/611218/>.
- 98 Laura Rosenberger, “Making Cyberspace Safe for Democracy,” *Foreign Affairs*, May/June 2020, <https://www.foreignaffairs.com/articles/china/2020-04-13/making-cyberspace-safe-democracy>.



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