Democratic Health Communications during Covid-19: A RAPID Response

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Table of Contents

| Acknowledgements | 4 |
|---|-----|
| Biographies | 5 |
| Executive Summary | 7 |
| Introduction | 10 |
| What Are <i>Democratic</i> Health Communications? | 13 |
| Overview of Case Study Countries | 16 |
| The RAPID Principles of Democratic Public Health Communications | 23 |
| Rely on Autonomy, Not Orders | 25 |
| Attend to Values, Emotions, and Stories | 31 |
| Pull in Citizens and Civil Society | 37 |
| Institutionalize Communications | 41 |
| Describe It Democratically | 46 |
| Conclusion | 52 |
| Appendix of Case Studies | 54 |
| Canada | 55 |
| British Columbia | 59 |
| Ontario | 63 |
| Denmark | 68 |
| Germany | 72 |
| New Zealand | 77 |
| Norway | 82 |
| Senegal | 86 |
| South Korea | 90 |
| Sweden | 94 |
| Taiwan | 99 |
| Endnotes | 104 |

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Executive Summary

This report recommends how to put health communications at the heart of democracies' response to Covid-19. Communications are an effective non-pharmaceutical intervention (NPI) for Covid-19; other NPIs include travel restrictions, physical distancing, or personal protective equipment—each of which, in turn, requires clear, rapid communications. More effective communications could save lives.

Effective communications are essential in the short-term for uptake of public health measures like face coverings. But they matter more over a longer time horizon, whether to forestall compliance fatigue, lay the groundwork for vaccine uptake, or encourage the public to engage proactively with the healthcare system for concerns unrelated to Covid. They also matter for cultivating trust among citizens and their governments—trust that is critical for the future stability of democratic institutions.

If communications are a health intervention, democratic communications can be a civic intervention. Many democracies were already struggling with distrust before the pandemic: anti-vaccination activism, conspiracy theories, sinking faith in institutions, populism, rising inequality, the erosion of local journalism, and so on. This rolling democratic crisis is now interacting with the pandemic. Our report lays out a framework for how to communicate—even or especially

during a public health emergency—in ways that strengthen democratic norms and processes rather than undermining them.

We draw our recommendations from in-depth studies of nine jurisdictions and two provinces on five continents: Senegal, South Korea, Taiwan, Germany, Norway, Sweden, Denmark, New Zealand, and Canada (for which we also studied two provinces, British Columbia and Ontario). Each of these cases managed relatively effective responses on their own terms; each of them also took democratic communications seriously. Where appropriate, we compare with democracies that struggled to communicate around Covid-19, particularly the United Kingdom and the United States.

This report proposes five broad principles that can underpin any democratic public health communications strategy. Our principles draw upon research from a range of disciplines, including political science, social epidemiology and public health, behavioural science, sociology, media and communications studies, history, and political theory. We call them the RAPID principles, because rapidity is an essential element of an effective response:

Rely on Autonomy, Not Orders

Pandemic responses should emphasize autonomy where possible, in alignment with national

traditions and local political cultures, supported by thoughtful and clear communications. We identify two particularly salient forms of autonomy: personal and institutional. This means developing and repeatedly communicating a set of universal principles for making responsible and safe decisions during a pandemic. Autonomy is not anarchy, but rather a policy that includes stakeholders, assumes good faith, and reinforces democratic self-understanding.

Attend to Values, Emotions, and Stories

To complement autonomy, the most effective democratic health communications sustain and build community by incorporating societal values, emotions, and stories. Facts alone are insufficient. Emotions, shared values, and narratives build trust and make health information reliable. There is no single best practice for how to do the work of values-framing, or who should be responsible. What is important, however, is that someone repeatedly and carefully communicates how pandemic measures relate to existing social and political values. Effective communicators considered the diversity of the population and found strategies that avoided stigmatization; they relied on pro-social hygiene and behavioural messaging; they articulated positive emotions like gratitude and acknowledged mental health struggles; they sought to build rapport with citizens.

Pull in Citizens and Civil Society

While officials play an essential role, citizen participation and civil society are also essential. Too often, public health engagement occurs based on what officials think the public looks like, rather than trying to understand citizens as many overlapping groups of individuals with different ideas, beliefs, or capacities. It is essential to establish feedback loops through techniques like surveys or text mining to understand a population's diverse experiences, their feelings about the response,

and their needs from government. Officials should also consider finding trusted local validators to share health information with friends, families, and followers (e.g. young people, social media influencers, celebrities, religious leaders). Encouraging participation and collaboration, especially on issues like public health, also reduces burdens on public-sector actors. Collaborating with citizens and civil society may create a more robust response; in turn, listening and responding to citizens' concerns strengthens democratic values such as solidarity and collective responsibility.

Institutionalize Communications

A rapid response, paradoxically, requires structures built far in advance. Countries without communications units have sometimes struggled to deliver consistent information over time or to update citizens swiftly on how pandemic guidelines are changing. On the other hand, jurisdictions with institutional strategies for pandemic communications had the capacity to produce differentiated government messaging that embraced openness and transparency. An institution enables a swift response. A pandemic communications unit could also lay the groundwork for communicating quickly during future epidemics, follow the latest research on effective communications, and establish liaisons with large social media companies to combat misinformation. Finally, a specific unit indicates that communications are seen as an integral part of public health rather than ancillary.

Describe It Democratically

The most obvious way to keep democracies healthy during an emergency is to maintain the business of institutions like parliaments. But if democracy is not reducible to formal institutions, neither are effective democratic health communications. Communicators should describe the pandemic response democratically.

This means avoiding militaristic metaphors that are hierarchical and limit space for agency. Instead, pandemic messaging should rely on more democratically-aligned metaphors. Just as citizens need repeated messaging on handwashing or physical distancing, they need repeated messaging on compassion or their democratic duties during times of emergency. Framing the Covid-19 response as a democratic challenge matters not only for the present; it could shape how citizens will remember it in the future. Like institutionalization, democratic framing better prepares us for the next pandemic even as it gives citizens new tools for addressing this one.

The five principles for effective democratic health communications in this report are a toolbox for sustaining democratic trust, practice, and self-understanding in an age of great uncertainty. They enable policymakers to recognize and frame this crisis not only as a threat to democracy—but as an opportunity for citizens to feel more trust than they did before, more resilient than they did before, and more sovereign than they did before Covid-19 emerged. It is important that policymakers, elected officials, and citizens alike recognize the importance of clear, consistent, compassionate, and contextual communications during a time of crisis. Public health depends on it. The health of democracy does, too.

Introduction

n April 23, 2020, Bill Gates published a lengthy blog post about addressing Covid-19. Gates focused on technological and medical innovations: vaccines, antiviral drugs, and digital contact-tracing apps. He devoted just a single sentence to communications: "It will take a lot of good communication so that people understand what the risks are and feel comfortable going back to work or school." But what are "good communications" and how are they implemented? What happened in countries where communications were integral during the pandemic, rather than an afterthought during the recovery?

Gates also neglected the issue of democracy; it has been overlooked in many public discussions about Covid-19, too. Many democracies were struggling with communication and distrust before the pandemic: anti-vaccination activism, conspiracy theories, sinking faith in institutions, populism, rising inequality, the erosion of local journalism, and so on.2 This rolling democratic crisis is now interacting with the pandemic. The challenge is how to communicate—even or especially during a public health emergency-in ways that strengthen democratic norms and processes rather than undermining them. Moreover, the effectiveness of Covid response measures in democratic countries may hinge on how policies are communicated and how far they are seen to be democratically legitimate.3 These are not entirely scientific problems; they require interdisciplinary insights from history, political science, social epidemiology, communications studies, and democratic theory to resolve.4

Policy discussions around communications have so far focused on fighting what World Health Organization (WHO) Director-General Dr. Tedros Adhanom Ghebreyesus has called an "infodemic," an alarming surge of Covid-related health misinformation.⁵ Reports have documented extensive misinformation that seems to receive more engagement than content from reliable sources like the WHO.6 While such findings are concerning, solutions have focused too often on addressing unreliable information, rather than considering how officials and publics can create more appealing, digestible, and reliable content.

Studies have suggested that risk-communication strategies are an effective non-pharmaceutical intervention (NPI) for Covid-19;7 other NPIs could include travel restrictions, physical distancing, or personal protective equipment-each of which, in turn, requires clear communications. Yet a recent study of fifteen countries' official public health websites found that "nine of the 10 states with the highest illiteracy rates had information written above a grade 10 level."8 Many countries, therefore, are not communicating about Covid-19 as effectively as they might. This can hinder the uptake of vaccines or mask-wearing habits (uptake is the term used by public health experts to describe people's autonomous adoption of measures). More effective communications could save lives.

This report is constructive in its intent: we have identified best practices for communicating public health information democratically. We have drawn our principles and recommendations from in-depth studies of nine countries and two provinces on five continents. The jurisdictions are Senegal, South Korea, Taiwan, Germany, New Zealand, Norway, Sweden, Denmark, and Canada (for which we also studied two provinces, British Columbia and Ontario). Each of these cases managed relatively effective Covid responses on their own terms; each of them also took the work of democratic communication seriously. Where appropriate, we draw comparisons with democracies that struggled to communicate around Covid-19, particularly the United Kingdom and the United States.

We analyzed original-language sources for all cases, including official communications, news sources, policy reports, internal pandemic planning documents, social media websites, and polling data. To ensure comparability, we created a standard set of questions investigating communications around the pandemic in each jurisdiction from roughly late January to June 30, 2020. The primary researcher for each case study distilled their work into a short report, with details on sources and further reading, found in the Appendix. Where necessary, we incorporate developments from July and August 2020.

We deliberately chose a range of countries to identify a range of concrete examples and best practices. We chose places with different health systems (e.g. federal vs. centralized), varied pandemic experiences, and extremely different populations. Some territories adopted technologically-savvy strategies, like Taiwan, while others used conventional press conferences to great effect, like British Columbia. Some have received extensive praise from English-language media, like New Zealand; others, like Senegal, have barely featured due to "the assumed inevitable failure of African nations to effectively respond to the pandemic."9 These different approaches and experiences have allowed us to draw insights from a wide spectrum of democratic health communi-

cations strategies. There was no one-size-fits-all communications plan. In some of our cases, successes were achieved by implementing existing plans effectively. In others, officials developed a swift and agile response from scratch.

Our report proposes five broad RAPID principles that can underpin any democratic public health communications strategy. We describe them in the report below and provide specific ideas for how policymakers, public health experts, and elected officials may wish to implement these principles. These principles are mutually-constitutive and occasionally overlapping; like the beams and rafters of a building, they reinforce one another. This report is designed to be read from start to finish, but it is also possible to delve into individual principles of particular interest and encounter a rich cross-section of our case studies and a range of comparative examples. Our principles draw upon research from a range of disciplines, including political science, social epidemiology and public health, behavioural science, sociology, media and communications studies, history, and political theory.

At this interim stage of the pandemic, judgments about success or failure against Covid-19 are necessarily preliminary. Australia, a nation that seemed to have practically eliminated the virus by July, was forced to lock down Melbourne in August. Similar spikes are now happening in jurisdictions that appeared to have reopened economies and societies in a safe and balanced way. During August alone, South Korea was reporting hundreds of new cases daily; British Columbia's active caseload topped a thousand, higher than ever before; New Zealand was forced to put Auckland back into lockdown. That said, public health officials in each of these jurisdictions had anticipated the return of Covid-19, and rising caseloads still paled in comparison with many European countries, Brazil, India, or the U.S.

What's more, truly useful definitions of success and failure depend on the local context. New Zealand's elimination strategy, for instance, meant that authorities measured success by the number of days with zero active Covid cases. In Sweden, health officials have defined success as a sustainable response that does not overwhelm hospitals and intensive-care units. In the neighbouring countries of Norway and Denmark, politicians instituted more stringent measures because they defined success as minimizing deaths while corralling the virus enough to safely open schools. American policymakers and citizens, by contrast, have struggled to agree upon the terms of a successful response at all. Given the contextual nature of Covid-19 response, this report showcases messaging strategies that have been effective (following nation-specific roadmaps) as well as aligned with democratic principles, rather than proposing flawed universal measures of success or failure.

If communications are a health intervention, democratic communications can be a civic intervention.

Effective communications are essential in the short-term for uptake of public health measures like face coverings. But they matter more over a longer time horizon, whether to forestall compliance fatigue, lay the groundwork for vaccine uptake, 10 or encourage the public to engage proactively with the healthcare system for concerns unrelated to Covid.11 They also matter for cultivating trust among citizens and their governments—trust that is critical for the future stability of democratic institutions.

Most generally, then, we recommend communications strategies that function democratically.

Historically, epidemics have often led to troubling extended restrictions on individual freedoms, often disproportionately affecting marginalized communities.12 In authoritarian states, Covid-19 is proving to be no exception. Some critics fear this is occurring in democracies, too.¹³ We see an alternate path. If communications are a health intervention, democratic communications can be a civic intervention. This report recommends combining these tools, that is, communicating thoughtfully in ways that may improve health outcomes and democratic outcomes at once, supporting more effective, sustainable, and just responses to public health emergencies.

Communications are no pandemic panacea. Jurisdictions need to test, track, and trace cases. They also need bold policies to address the economic fallout. Though health is too often portrayed as an individual concern, Covid-19 has revealed once again the social determinants of health. "Good" communications cannot by themselves resolve problems of trust, democratic weakness, or insufficient leadership. But our principles for democratic health communications offer one prong of a solution. It has become easily forgotten that clear, consistent, compassionate communications are a public health intervention, too. At relatively minimal cost, a range of public actors can incorporate our principles to improve their democracies as well as their Covid responses.

We begin by defining democratic health communications and providing a short overview of our eleven case studies. We then delve into our five RAPID principles with concrete examples and simple recommendations for how to implement these principles. The Appendix provides summaries of our eleven case studies, including discussions of source material and suggestions for further reading.

What Are Democratic **Health Communications?**

ong before policymakers and citizens began grappling with Covid-19, democratic institutions globally were showing signs of strain. After an unprecedented period of worldwide expansion during the second half of the twentieth century, liberal democracy began retreating or backsliding in the twenty-first century—a process some political scientists have called "democratic deconsolidation."14 This has involved growing political violence, challenges to the rule of law, deepening inequality, and the rise of new populist and xenophobic political movements. It has also been characterized by declining faith in democracy as an effective way of solving complex problems and improving people's lives.

The Covid-19 pandemic has accelerated this crisis of global democracy. But we believe that citizens and policymakers may yet use this moment to act more rather than less democratically. After all, the idea of crisis (from the Greek word krisis), signifies not a catastrophe but rather a turning point, or a moment of decision.¹⁵ Our proposals are designed to help government decision-makers communicate and act during public health emergencies in ways that reinforce democratic self-government instead of further weakening it. This problem is an urgent one: illiberal forces worldwide are waiting to seize on democratic failures. Rather than succumb to defeatism, we suggest that democracies can use particular communications strategies to emerge from the Covid-19 pandemic with healthier, more trusting, and more resilient cultures of democratic self-government than before.

Democracy is famously difficult to define. As journalist and critic Astra Taylor has observed, "The significance of the democratic ideal, as well as its practical substance, is surprisingly elusive."16 Is democracy a set of institutions or procedures? Should we define it by the existence of elections or parliaments? Or should we rather be looking to constitutionally-enshrined rights and a culture of legal protections? Is democracy a political category, or a social and economic one? Is it a cluster of guiding ideas and aspirations, or a matter of lived experience and conditions? Is democracy a tool for building consensus via rational deliberation, or is it defined by protests? Or empathy? Is it about how we choose our leaders, or how we see each other?

For the purposes of this comparative global report, we have drawn on insights from political science and democratic theory to define democracy by three fundamental features on the next page.

Three Fundamental Features of Democracies

1. Democratic citizens are free as well as equal.

While freedom has become virtually synonymous with democratic government, it must be accompanied by the condition of equality before the law (isonomia). As Harvard classicist and democratic theorist Danielle Allen writes, "it is out of an egalitarian commitment that a people grows—a people that is capable of protecting us all collectively, and each of us individually, from domination." We thus treat both freedom and equality as necessarily democratic, whether enshrined in law or operating partially in practice.

2. Democracy is popular sovereignty.

The people rule. Power is not jealously guarded by a narrow elite (economic, political, cultural, or social), but is rather broadly distributed. Popular sovereignty is difficult because it involves sacrifices. Although democratic citizens are taught that they govern, none of us feels especially sovereign when our rights are limited or our policy preferences are unrepresented in government.¹⁸ Popular sovereignty is an abstraction, but it is not entirely intellectual or rational. It requires a sense of solidarity and collective experience, a feeling that "the people" exists and that we are shaping our future together and with purpose.19

3. Democracy is an everyday practice.

Citizens often link democracy with voting and parliaments, but, as the French theorist Pierre Rosanvallon has observed, "the life of democracy has never been reducible to the electoral moment alone."20 Democracy is better understood as a set of habits or practices that structure our daily lives. We treat democracy as a way for human beings to encounter one another, deliberate together, and rule themselves. Here, we follow American philosopher John Dewey, who observed that "democracy is more than a form of government; it is... a mode of associated living, of conjoint communicated experience."21 Communications, in other words, can (and should) be understood as a democratic practice.

Communicating public health information democratically means communicating in ways that directly reinforce (or are conceptually aligned with) these three defining features of modern democratic life. These could be styles of messaging or forms of communicating that strengthen democratic self-understanding: language that frames the pandemic response as a basically democratic project, explicitly describing Covid-19 measures as the work of free and equal citizens exerting control over their own future. This might even include the temporary restriction of democratic rights for the common good.

Health communications can also be democratic if they encourage forms of democratic practice. These strategies empower citizens to learn or exercise habits that align with self-government, even if they are not directly named as democratic ones. For example, we consider messaging on themes such as autonomy, empathy, transparency, and solidarity to be democratic health communications because they foster the everyday behaviours necessary for sustained democratic rule. We also include strategies that directly involve citizens in the work of public health communication.

Health communications can also be democratic if they encourage forms of democratic practice.

Our eleven cases have all managed relatively effective-and democratic-responses to Covid-19 using a range of public health communications strategies. But we do also call attention to misaligned messaging or missed opportunities. In the jurisdictions under consideration here, these errors are not directly undemocratic or baldly authoritarian. But some officials have failed to

consider the democratic implications of their messaging strategies, or have framed Covid-19 in ways that inadvertently bolster alternate political values (e.g. obedience, authority, selfishness). We have as much to learn from false starts as we do from best practices.

This project is structured by two assumptions. First, health communications aligned with democratic norms and principles can improve compliance in democracies. Public health messaging ought to work with the political grain in a particular society, not against it. This also means that the RAPID principles explained below may be applied differently in specific political contexts, attuned to local democratic traditions and populations. Our second assumption is that a democratic response to Covid-19 can help populations feel more sovereign, bolstering rather than weakening democratic trust during a period of uncertainty and crisis. Recent mass demonstrations against mask-wearing in Europe and North America show that Covid compliance problems will continue to plague many democracies. Feelings of disenfranchisement and a lack of control or sovereignty are not far from the surface. Our RAPID principles are designed to address politicized public health challenges like these ones.

Overview of Case Study Countries

ur case studies varied widely, from geography and total population (from New Zealand's 5 million to Germany's 83 million) to responses and communications strategies. We analyzed countries with economies ranging from the G7 (Canada and Germany) to mid-sized markets like Denmark and New Zealand, as well as one country with a smaller GDP: Senegal. Some places, like Germany and Canada, have federal health systems where states and provinces led much of the response. Others, like Taiwan and South Korea, were more centralized. Some possessed enormous resources for their response while others, like Senegal, have shown that public cohesion and targeted communications can matter more than overflowing coffers. Each of our countries was rated either Most Prepared or More Prepared according to the 2019 Global Health Security Index, although there was a range from Canada (rated the 5th most-prepared country in the world) to Senegal (the 95th most-prepared). Still, this Index has not proven a prescient tool: the United States and United Kingdom were ranked as the first and second most-prepared countries.22

Many of the issues confronting the cases in this report, however, have been similar: rapidity of response; debates about the appropriate level of restrictions; balancing massive economic fallout with a potential Covid-19 resurgence; outbreaks

in bars; stigmatization of marginalized groups; growing numbers of cases involving young people in more recent months. Sweden, Canada, Ontario, and British Columbia (B.C.) all reckoned with the real vulnerability of care homes for seniors. (After recording its first death in a long-term care facility, B.C. swiftly regulated the sector to prevent further deaths, prohibiting staff from working at more than one facility.) Covid-19 also highlighted and exacerbated existing racial, gender, and class inequalities in many democratic societies, disproportionately affecting certain groups. Yet in each of our case studies, decision-makers took public health communications seriously and understood them as an important pillar of the response.

We also considered cases with poor communications but reasonable outcomes, and vice-versa. Although Sweden communicated its response clearly, the measures themselves produced comparably worse results relative to the country's Nordic neighbors. We attempt to explain this paradox. Ontario, on the other hand, flattened its Covid-19 curve with fewer deaths than neighbouring Quebec, and avoided the overburdening of hospitals or intensive-care units. Yet provincial communications were frequently chaotic and confusing, the subject of fierce criticism among public health experts and journalists.

Canada's federal structure and the decentralized configuration of its health system meant that the response was necessarily distributed among several jurisdictions and multiple public officials-not unlike the United States. Covid-19 was also experienced differently in each province or territory. After the province's spring break in March, Quebec grappled with a rise in cases that threatened to overload hospitals and intensive-care units. The northern territory of Yukon, however, reported only fifteen cases throughout the pandemic. An island province like Prince Edward Island pursued an elimination strategy, while the western province of Alberta focused on containment and mitigation like many other jurisdictions. Federal politicians and public health authorities played an important role in establishing guidelines, managing the nation's border and travel restrictions, and narratively framing the Canadian response in political and civic language. Federal figures like Chief Public Health Officer Dr. Theresa Tam and Prime Minister Justin Trudeau played an outsized role in territories and provinces with less robust health communications strategies, and vice-versa in jurisdictions where local officials became household names. Canada is an excellent site for analyzing the challenge of coordinating and managing health communications (as well as funding) in federal systems with competing realms of jurisdiction—a coordination dilemma that also exists at the international level.

Accordingly, we focused further on two provincial approaches: British Columbia and Ontario. The response in **British Columbia** relied primarily on persuasion over coercion. B.C.'s response was not flashy from a communications perspective, as it used very few high-tech or social media measures. Its strategy instead focused on being gentle and compassionate, building trust, expecting good faith, and offering clear scientific information in a consistent, understandable, reassuring way. The strategy was pro-social, encouraging citizens to act to protect the health of others.²³ It

also framed many early measures as precautions familiar from influenza season (e.g. hygiene, staying home when sick) before the adoption of extraordinary requests (e.g. physical distancing). British Columbians were trusted to make their own judgments and risk assessments using information and health guidance. In late summer, the province rolled out targeted enforcement measures (e.g. fines) to deal with rising transmission rates among young people, but the overall focus remained on autonomy.

Ontario's pandemic communications response, on the other hand, was confusing and unclear, earning the government much public criticismalthough outcomes in Ontario were not as devastating as in Quebec. Like British Columbia, Ontario released detailed epidemiological modelling. Ontario also spent \$10-million (CAD) on an awareness campaign and used an emergency SMS alert system. An extended lockdown and slowly-phased reopening have been generally effective, but communications from public health officials were often vague, unclear, and technical. There were also multiple communicators in Ontario; politicians and public health experts rarely appeared together and sometimes offered contradictory advice. In the early phase of the pandemic, messaging was mostly pro-self (emphasizing the need to protect yourself and your loved ones), although in recent months the focus has shifted more to solidarity and community care.

In Germany, too, the pandemic was a stress test for federalism. During the initial phase of the pandemic, Chancellor Angela Merkel corralled the minister-presidents of the sixteen German states into harmonizing their lockdowns. Federal coordination ensured consistency across a small geographical area rather than allowing states to pursue their own policies. The rapid scaling-up of testing and the large number of available hospital beds meant that Germany was comparatively well-prepared. Like in Canada, however, states

designed their own paths for reopening based on infection rates. Epidemiological information was provided primarily by the Robert Koch Institute, a public institution belonging to the Ministry of Health tasked with disease surveillance and prevention. The Institute published daily reports on case numbers and initially held daily press conferences. The two chief political communicators were Chancellor Angela Merkel and Health Minister Jens Spahn, often joined by virologists. Merkel gave press conferences and national addresses, but she also broadcast a video podcast via the government's YouTube channel. Communications were calm and personal but decisive, thanks to cooperation among health officials. Still, Germany has been convulsed by repeated (and recently growing) mass protests against Covid-19 regulations, demonstrations that have united anti-vaxxers with the illiberal far-right. Indeed, the most dangerous phase of Covid-19 may be yet to come for democratic countries, as states of emergency go on and short-term lockdowns give way to fatigue and frustration with uncomfortable new habits.

Turning to Scandinavia, we can see how countries with similar political cultures responded in different ways. With lockdowns and restrictions, Denmark and Norway followed other European countries; Sweden chose less stringent measures. Cases in Denmark peaked in early March, but have been falling since due to rapid lockdowns and vigorous testing. Denmark drew international attention for opening schools as early as possible. Communications were aggressive, warning about the penalties for violating pandemic measures. Uncertainty was communicated without extended debate, and policy changes made when new evidence came to light. In Norway, the government provided accessible, convenient, and informative resources for the general public. Nearly 1.5 million of Norway's 5.5 million citizens downloaded its new coronavirus-tracking smartphone app Smittestopp (Infection Stop) during its first week in April, but the app was rapidly plagued by concerns about security, privacy and the procurement process.24 Despite this backlash, the government communicated policies clearly and consistently. Press conferences for children were an innovative tool for allaying anxieties, a strategy which generated international attention.²⁵

The most dangerous phase of Covid-19 may be yet to come for democratic countries.

Sweden, meanwhile, opted for a "common sense" approach that promised to keep the nation operating while restricting large gatherings and protecting its most vulnerable. The strategy relied on a national culture of personal responsibility, the cornerstone justification for this approach. Prime Minister Stefan Löfven explained that "measures have to be sustainable over time."26 Despite growing international and domestic criticism of its approach, Swedish officials communicated guidelines clearly. Important information was frequently updated, available on various platforms in a variety of languages with clear messaging and an emphasis on evidence.

Senegal has garnered praise for its prevention and testing strategies as well as for its humane approach. Using lessons from AIDS and Ebola, a laboratory in Senegal developed a \$1 (USD) Covid-19 testing kit. Senegal's communications were pro-self and pro-social, encouraging everyone to protect themselves as well as those around them. The government invited religious leaders to act as examples and encourage others to comply with public health guidelines. Although Islam is the dominant religion in Senegal, government messaging targeted both Muslims and Christians. The government committed to transparency, providing regular updates as well as proactively publishing donations and aid received.

In contrast to Senegal's effective, humble approach, Taiwan and South Korea offer examples of high-tech responses on all fronts, including communications. Technology played an essential role in South Korea. Public-private partnerships, new mobile apps, and websites all stemmed the spread of Covid-19. Scientists from the Ministry of Health explained best practices during twice-daily press conferences. The government also used daily emergency SMS alerts to share details on the movements of new patients. General advice was distributed via television, newspapers, and internet advertisements, reminding people to avoid crowded places and use appropriate preventive measures. The transparency and competency of health officials encouraged awareness, public trust, national solidarity, and civic cooperation, though the government struggled with outbreaks spreading from several secretive churches.

Taiwan has been effective in containing Covid-19 thus far due to its rapid response as well as its extensive communication and transparency efforts. On January 20, Taiwan established the Central Epidemic Command Control (CECC), which coordinated internal and public-facing communication. Taiwan's Centers for Disease Control (CDC) addressed individual concerns through Facebook, Line (another social network), or the "1922 Communicable Disease Reporting and Consultation hotline," while the CECC provided health education on myriad platforms including You-Tube, informational advertisements, and memes. Alongside daily briefings streamed on multiple platforms, groups worked to prevent misinformation, and provided support to those without the know-how to access the various platforms. The Taiwanese government's transparency and openness to having difficult conversations (e.g. around initial mask shortages) helped its citizens accept conditions imposed during the pandemic.

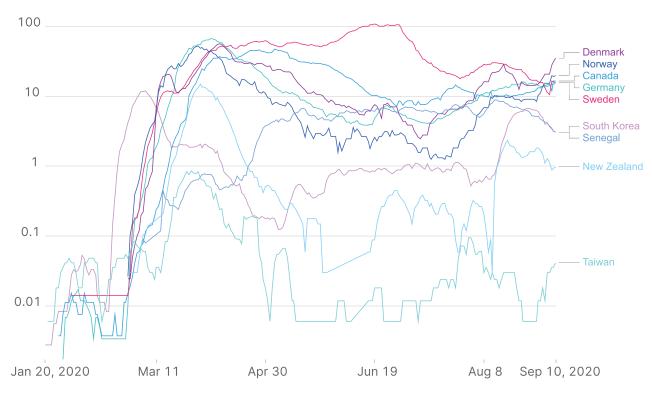
New Zealand has been praised for the speed and decisiveness of its initial measures. It is also one of the few countries to have adopted an elimination strategy (instead of containment or mitigation) and to have effectively executed it. Central to the government's response as well as its communications strategy was a four-level emergency alert system, revealed and explained to the public before it was implemented. Expectations for implementation and lifting of lockdown measures were set as early as possible. New Zealand also used memorable slogans and an empathetic approach from Prime Minister Jacinda Ardern, who was available to sympathize with citizens, acknowledge uncertainties, and answer their questions over Facebook Live videostreaming.

Despite the differences, many of our case studies offered similar best practices: clear, evidence-based messaging; materials translated into multiple languages to reach as many residents as possible; attempts to empower different groups of citizens to communicate their own versions of messages and validate recommendations; messaging adapted to a wide variety of platforms, both offline and online; and compassionate, empathetic acknowledgment of the difficulties of Covid-19 response. Most of the case studies primarily emphasized the importance of adhering to public health measures for the good of the community (pro-social messaging), not just for the good of the individual (pro-self messaging).

Many of the case studies confirmed that conventional best practices in health communications work when implemented effectively. Indeed, many strategies would look familiar to any expert in crisis communications. Well beyond that, however, these cases reveal how democratic practices may guide, reinforce, and overlap with public health communications. Overall, the case studies suggest five main principles, adjusted for local context, that can underpin effective democratic health communications.

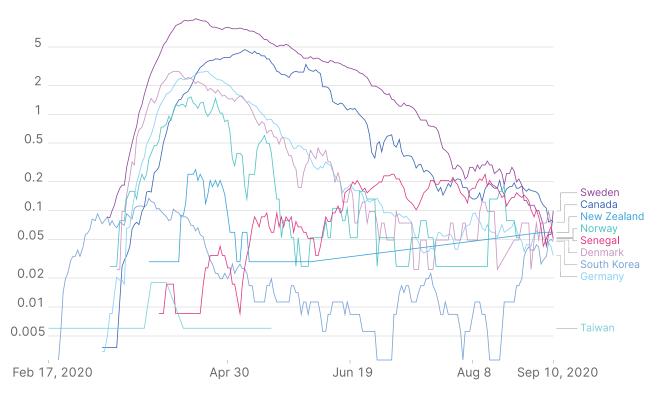
Daily Confirmed Covid-19 Cases per Million People

Rolling 7-day average, logarithmic scale



Source: Our World in Data based at Oxford University.

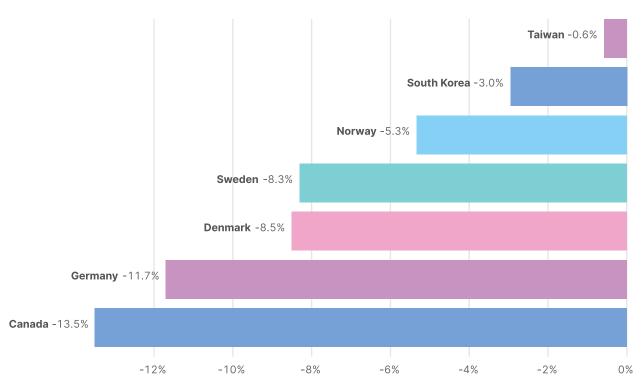
Daily Confirmed Covid-19 Deaths per Million People Rolling 7-day average, logarithmic scale



Source: Our World in Data based at Oxford University.

Economic Decline in the Second Quarter of 2020

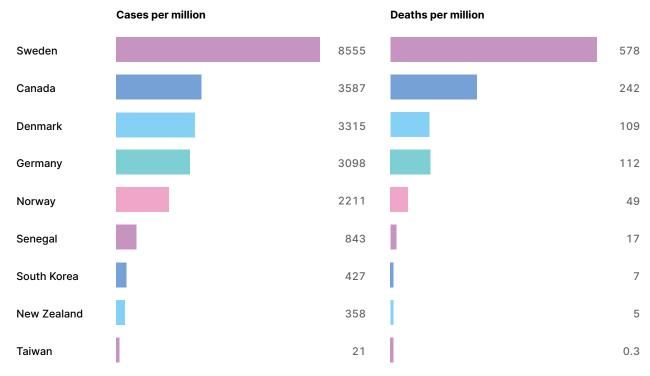
Relative GDP decline in percent compared to 2019 Q2 figures. Adjusted for inflation.



Source: Our World in Data based at Oxford University. Q2 figures for New Zealand and Senegal not yet released.

Confirmed Covid-19 Cases and Deaths per Million

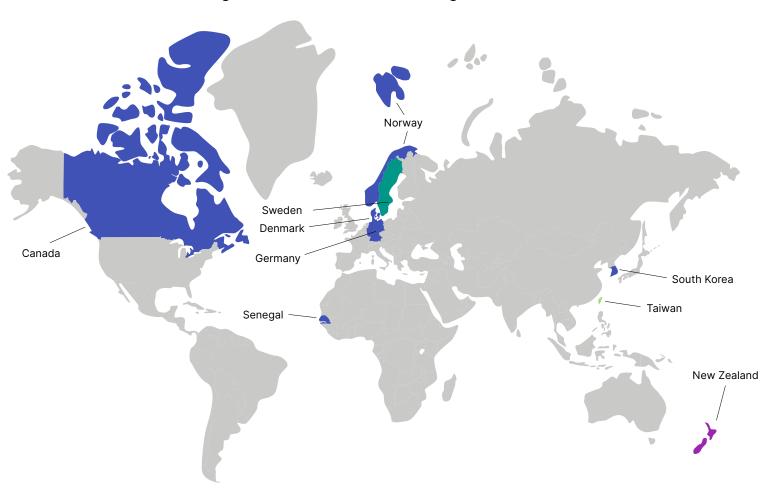
Figures as of September 10, 2020



Source: Worldometer Coronavirus Live Update.

Case Study Countries by Pandemic Response Stringency (Oxford University)

Higher scores denote more stringent measures



| | | April 1 | | June 1 | | August 1 |
|--|-----------|-------------|---------|---------------|---------|----------|
| New Zealand | • | 96.30 | • | 33.33 | • | 22.22 |
| Norway | | 79.63 | | 54.63 | | 34.26 |
| Senegal | | 77.78 | | 72.22 | | 32.41 |
| Germany | | 76.85 | | 59.72 | | 57.87 |
| South Korea | • | 75.93 | | 56.94 | • | 48.61 |
| Canada | • | 74.54 | | 70.83 | • | 67.13 |
| Denmark | | 72.22 | | 62.96 | • | 56.48 |
| Sweden | • | 40.74 | | 46.30 | | 37.04 |
| Taiwan | | 27.78 | | 22.22 | | 19.44 |
| | | | | | | |
| Source: Blavatnik School of Governmen Map from Freepik. | t, Oxford | University. | 10% 209 | % 30% 40% 50% | 60% 70% | 80% 90%+ |

The RAPID Principles of **Democratic Public Health Communications**

There is no panacea for Covid-19. Countries with low or negligible community transmission have adopted policies ranging from mask use and testing regimes to physical distancing requirements. Norway and Denmark decided that mask-wearing (except on public transportation) made little sense because scientists calculated that 100,000 people in Denmark (200,000 in Norway) would need to wear a mask correctly to prevent a single new case of Covid-19 per week.27 Nor is geography destiny: some islands like New Zealand or Taiwan have fared well, while others, like Great Britain, have faced major difficulties. As The Atlantic's Ed Yong observed, governments coped with Covid-19 when they basically "did enough things right."28 So with communications: there is not a one-size-fits-all solution and no perfect execution. But there are basic principles that enable governments to do enough things right-and, in the best-case scenarios, much more than that.

In every case, rapidity was essential. A big-data study of online behaviour in twelve countries during the early months of Covid-19 found that when governments released official guidelines swiftly, citizens bought fewer unproven remedies.²⁹ Rapid response, then, reduced rumours. But the questions remain: How did officials actually do that work? And was it possible for them to do so in just, equitable, and democratic ways? Below, we elaborate on five general RAPID principles used by states to achieve those goals. We offer concrete examples of how each of our case studies implemented these principles.

The RAPID Principles of **Democratic Public Health Communications**



Rely on Autonomy, Not Orders



Attend to Values, Emotions, and Stories



Pull in Citizens and Civil Society



Institutionalize Communications



Describe It Democratically

Rely on Autonomy, **Not Orders**

ver the past 50 years, citizens in liberal democratic states worldwide have grown accustomed to an extremely high degree of individual autonomy and personal freedom. Yet any effective public health response to a highly-contagious virus like Covid-19 will incorporate some restrictions on public life, including freedoms of assembly and movement. Around the world and across a range of political cultures, from the more individualist United States to more collectively-oriented societies like Canada and Germany, personal autonomy has been the site of fiercest resistance to public health measures during Covid-19. In the name of individual liberty, citizens have objected to mask-wearing mandates, limits on social gatherings, and shelter-in-place orders. Conversely (and often simultaneously), anxious citizens have criticized governments for not limiting freedoms stringently enough. Policymakers have faced pressure to shame bad actors and rely heavily on enforcement. Privacy concerns have also been a flashpoint in many democratic states, shaped by national histories and political traditions.

On the matter of autonomy and individual rights, as elsewhere, Covid-19 has heightened and intensified prior political arguments more than it has introduced new democratic problems altogether. Public health policies in particular, from compulsory immunizations to smoking bans, have long

been enveloped in legal, medical, ethical, and political debates about civil liberties and the common good.30 Here, as elsewhere, we learned that the nimblest and most effective Covid-19 communications strategies were contextual, working with the grain of local political cultures rather than against them.

To improve compliance, forestall fatigue, and support democratic health, governments should rely sparingly on explicit or enforced health directives. Instead, pandemic responses should emphasize autonomy where possible, in alignment with national traditions and local political cultures, supported by thoughtful and clear communications. Among the most effective Covid-19 responses analyzed here, two forms of autonomy were most salient:

- 1. Personal autonomy: Allowing individuals and families to make their own choices and moral decisions about relative risk, the social impact of their actions. Acknowledging that individuals are the best judges of the appropriateness of their own conduct.
- 2. Institutional autonomy: Inviting stakeholders (e.g. businesses, unions, trade associations and professional bodies, parents, teachers, etc.) to build their own reopening and

risk-management strategies in concert with government, involving themselves in shaping Covid-19 regulations.

It is important to be crystal clear: a pandemic communications effort that prioritizes autonomy does not mean abandoning public health responsibilities to share guidance or information with citizens. Autonomy is not anarchy. Rather, jurisdictions that have integrated autonomy into their Covid-19 responses have combined the freedom to make individual and institutional decisions with a set of understandable and applicable principles: guidelines that citizens, businesses, and organizations can use to manage their behaviour and help them evaluate risks. These principles are communicated clearly and frequently. Rather than dedicating resources to developing orders for every possible circumstance (and establishing an expectation among citizens that authorities will do so), regions and countries that rely on autonomy expect individuals and organizations to make responsible judgments themselves. As Canada's public health ethics framework observes, for instance, autonomy during Covid-19 "entails recognizing the unique capacity of individuals and communities to make decisions about their own aims and actions... and providing individuals with the needed personal supports and the opportunity to exercise as much choice as possible when this is consistent with the common good."31

Autonomy is not anarchy.

The best example of autonomy guiding a pandemic communications strategy is found in British Columbia. The province's Covid-19 Ethical Decision-Making Framework highlights the need to respect "individual autonomy, individual liberties, and cultural safety" as much as safely possible.32 Gatherings of more than 50 people were banned on March 16, but the province has refrained from

issuing specific orders for ever-smaller groups. Instead, in daily press conferences, Provincial Health Officer Dr. Bonnie Henry and Health Minister Adrian Dix have stressed a set of "principles for safe socializing" for all British Columbians when making daily decisions. On May 14, Henry reiterated the principles: "fewer faces, smaller groups, shorter time together, and bigger spaces. Always thinking about location, duration, and our relations will help to keep all of us safe."33

More recently, as infections have surged among young people, B.C. has tried to pivot its principles-based approach by introducing a colourful, illustrated website ("Dr. Bonnie Henry's Good Times Guide") accompanied by ads on social media, aimed at a younger population.³⁴ Provincial authorities regularly emphasize that individuals are in the best position to make their own reasonable and responsible judgments about risk, given their particular circumstances, by applying these principles. Henry responds to anecdotal cases of dangerous behaviour with compassion and humility, pointing out that "we don't know everyone's story" and that all British Columbians are doing their best.35 It is a deeply-held conviction for Henry that autonomy, backed by effective communication, is a better public health approach than coercion. As she told the New York Times in June, "if you tell people what they need to do and why, and give them the means to do it, most people will do what you need."36 Although the province moved in August 2020 to impose stricter fines and enforcement measures in response to surging case counts among young people, this remains a secondary component of B.C's strategy-and it has been communicated largely by political figures (e.g. Mike Farnworth, Minister of Public Safety), not Henry or other public health officials.

The province also granted autonomy to industry groups and private-sector stakeholders when planning British Columbia's economic reopening strategy. For instance, in-restaurant dining began under new Covid-19 safety protocols in early June, developed in concert with the B.C. Restaurant and Foodservices Association.³⁷ Individual businesses submitted Covid-19 Safety Plans to WorkSafeBC (the province's workplace safety agency), indicating how they would apply pandemic guidelines to their particular business models and unique physical spaces. B.C. used a similar strategy for reopening schools in August 2020: in light of provincial principles and guidelines, individual school districts and independent school associations were invited to submit their own Restart Plans for provincial approval by the start of the school year.³⁸ Indigenous communities, supported by the provincial First Nations Health Authority, have also exercised considerable autonomy to limit access and protect themselves.

Principles for autonomy in B.C. function as a conceptual bridge between abstract overarching values (compassion, responsibility, etc.) and specific decisions made in particular daily circumstances (e.g. should you travel to your vacation property, should one visit grandparents, etc.) Principles for autonomy link values with actions, a middle-distance of communications that conveys critical public health information while maintaining space for individual decision-making.

The Canadian province of **Ontario** offers a useful comparison. Instead of providing citizens with general principles, provincial authorities issued a confusing set of increasingly-granular rules and overlapping categories for managing social interactions. On March 28, the province banned groups of five people or more. In June, it expanded the social gathering limit to ten people, physically-distanced. Several days later, the province introduced a new category: Ontarians were told they could form social circles or social bubbles of ten close friends or family without physical distancing. Officials were forced to clarify that social circles or bubbles (without distancing) differed

from social gatherings (where physical distancing should still be maintained). The province could not provide a scientific justification for its ten-person limits. Epidemiologists have speculated that the confusion may have led to a rise in Covid-19 cases, as citizens misinterpreted the guidance and gathered in multiple small groups without physical distancing.39 In late July, different protocols also obtained for indoor gatherings (expanded to 50 people) than for outdoor gatherings (expanded to 100 people).

Principles for autonomy link values with actions.

Autonomy has not been a principal feature of Ontario's Covid-19 communications response. The province relied more forcefully in its messaging on guarantees of strict enforcement. (Preliminary evidence suggests that enforcement is disproportionately affecting marginalized groups in Ontario and across Canada, deepening the inequalities that undermine democratic life, but Ontario's reticence to collect Covid-19 data related to race makes it difficult to be conclusive. 40) Premier Doug Ford stressed heroic actions taken by his government to protect citizens and frequently shamed bad actors: youth gathering in parks, hoarders and price-gougers, etc. Although this communication style called attention to the social consequences of individual acts, it did so by appealing to authority, not autonomy, and by elevating moments of specific outrage rather than by nurturing habits. The case of Ontario suggests that the more determined governments are to regulate behaviour at a local level, the more opportunities are created for confusion, overlapping guidelines, or restrictions that go unrecognized by the public. The burden is thus much higher on authorities, who need to communicate extraordinarily clearly and effectively to help citizens navigate this rapidly-growing thicket of emergency guidelines.

Another revealing counter-example is Sweden, which notoriously granted its citizens as much autonomy as possible. Chief Epidemiologist Dr. Anders Tegnell refused to issue shelter-in-place orders and kept lockdowns light. Swedish officials instead invoked the country's traditions of personal responsibility and social trust. Yet while official communications were technical and clear. conveying specific hygiene measures effectively (e.g. handwashing, physical distancing, staying home when sick), messaging offered little support to citizens navigating the complex moral decisions required of their autonomy. Responsibility was repeatedly affirmed in an abstract context, or defined, surprisingly, by the Prime Minister as a matter of obedience, or "following the advice of the authorities."41 Swedish pandemic communications did not clearly bridge values with actions by offering applicable middle-ground principles for safe socializing or good decision-making.

Alongside the articulation of clear principles, effective autonomy also requires transparency from governments and their public health communications. If citizens are going to be meaningfully empowered to make their own judgments of risk and responsibility, they need as much information as possible about official response plans, the anticipated course of the pandemic, the state of scientific knowledge, and facts that remain uncertain. In several of the cases we analyzed (e.g. British Columbia, Ontario, New Zealand), governments shared epidemiological modelling data with the population. Beginning in July, British Columbia also began reporting on the number of residents currently under self-isolation due to potential exposure to Covid-19. Officials in Senegal released detailed information about donations made to a Covid-19 relief fund. German leaders, including Chancellor Angela Merkel and Health

Minister Jens Spahn, have regularly explained that transparency and open communication are democratic values necessary for an effective pandemic response.

Failures in public health transparency can damage democratic trust.

Alternately, failures in public health transparency can damage democratic trust and make it more difficult for citizens to take responsibility with confidence. In Denmark, the government has faced allegations that it imposed a stricter lockdown than was recommended by public health officials, due to political considerations. Politicians have been unwilling to clarify this decision-making process, obscuring responsibility and allegedly hiding documents issued by public health experts. Norway's contact-tracing app, developed by the Norwegian Institute of Public Health, was deemed one of the most intrusive in the world, with few privacy protections for individual data. In June, the government's own Data Protection Authority recommended against the app and health authorities began voluntarily deleting all data collected. Ontario has also struggled with transparency and openness. The province's antiquated public health infrastructure, combined with a stricter communications strategy, meant that Covid-19 data was slowly reported and insufficiently detailed.42 In June, the government was criticized for failing to disclose the structure or personnel of its centralized Covid-19 Command Table, leaving citizens and journalists in the dark about how scientific advice was being processed and which voices were shaping the government's response.43

Relying on civic autonomy to readjust social behaviour during a pandemic (rather than specific orders) is a strategy with potential benefits for both public and democratic health. This strategy may:

- Generate more widespread involvement and investment in the response beyond government decision-makers and public health officials:
- Encourage active habit-formation rather than passive obedience, for internalized reflexes and behaviours are likely to be more sustainable than external orders;44
- Reduce confusion by avoiding an overlapping and increasingly granular set of orders and rules for particular daily behaviours; principles may carry over across stages of the pandemic, further streamlining public health messaging;
- Support mental health by maximizing citizens' sense of personal agency and control during a challenging and uncertain time; and
- Reinforce the population's democratic self-understanding and feeling of political efficacy by emphasizing responsibility, active participation, and shared citizenship; successes are credited not to authorities, but to collective action by individuals.

In other words, autonomy functions as a threeway trust generator. First, offering autonomy to citizens means trusting them to make responsible decisions. Policymakers extend trust to citizens. Second, citizens are encouraged to trust each other. Assuming relatively widespread compliance (as seen in the cases analyzed here), individuals witness their neighbors making responsible, autonomous decisions to safeguard the community's collective health. Governments can model trusting behaviour among citizens by stressing good faith and incomplete knowledge instead of shaming rulebreakers. Officials can model behaviours such as mask-wearing or self-isolating. Most importantly, governments can retain trust by ensuring that public figures face consequences when they contravene guidelines. David Clark, New Zealand's Health Minister, was demoted in April 2020 after twice breaking the country's Covid-19 regulations; he resigned in July. 45 (In the United Kingdom, by contrast, Dominic Cummings, chief adviser to the Prime Minister, broke lockdown rules and faced no consequences. A study in The Lancet finds that this weakened public faith in the government's Covid-19 response.46) Finally, by reducing the distance between citizens and leaders, a strategy of autonomy lays the groundwork for restoring trust in institutions and politicians, which in many countries has eroded.47

Autonomy carries certain risks. Some individuals or businesses will inevitably take advantage of the freedom afforded them to behave in ways that threaten the public good. Governments may wish to calibrate the autonomy they provide during an emergency with existing levels of social trust and local political traditions. Crucially and counterintuitively, autonomy may increase compliance more effectively than heavy-handed enforcement, which can generate knee-jerk disagreement and long-term discontent. Enforcement will necessarily figure into any state's Covid-19 strategy. But our comparative analysis indicates that it is valuable to adopt messaging strategies that assume widespread good faith, social trust, and responsible autonomous decision-making rather than communicating in ways that threaten enforcement or shame bad actors.



How to **Rely on Autonomy, Not Orders**

- Develop and repeatedly communicate a set of universal principles for making responsible and safe decisions in pandemic circumstances;
- Find "middle-distance" principles that link abstract values with concrete behaviours;
- Use language that emphasizes individual responsibility and good judgment, reminding citizens that they must be active moral decision-makers on a daily basis;
- Invite industry groups and stakeholders to participate in developing their own ways of adhering to general guidelines and achieving public health outcomes;
- Assume good faith, responsibility, and compliance rather than selfishness, reckless behaviour, or rule-breaking;
- Maintain enforcement measures, but minimize them in public health communications.

Attend to Values, **Emotions, and Stories**

o complement individual autonomy, the most effective democratic health communications sustain and build community by incorporating societal values, emotions, and stories. Facts alone are insufficient. Emotions, shared values, and narrative build trust and make health information relatable. A field epidemiology manual developed by the U.S. Centers for Disease Control and Prevention notes four factors that determine whether an audience will perceive a messenger as trusted and credible: (1) empathy and caring; (2) honesty and openness; (3) dedication and commitment; and (4) competence and expertise.48 The most effective communicators found among our case studies could be described using these four factors. Many of them exhibited these qualities by doing more than clearly presenting scientific data: they attended to the emotional needs of citizens and played a role in lending social and political meaning to the pandemic.

Many countries adopted a division-of-labour approach to communicating political and scientific information. Most often, politicians framed the pandemic and helped citizens understand the meaning of their collective response; public health experts have often focused on communicating clear scientific and epidemiological information. In New Zealand, the difference was particularly stark: Director-General of Health Dr. Ashley Bloomfield spoke exclusively about scientific and health considerations, while Prime Minister Jacinda Ardern reinforced health messaging and explained the values (solidarity, teamwork, kindness, collective action) that justified new pandemic restrictions.

Similar differentiation has occurred elsewhere. Dr. Jeong Eun-kyeong, the Director of South Korea's Center for Disease Control and Prevention, shared facts calmly, while President Moon Jae-in spoke of sympathy, optimism, resilience, and solidarity. In Germany, Chancellor Merkel joined her own scientific expertise with concern and empathy, while Bavarian Minister President Markus Söder burnished his leadership credentials by adopting a strict, no-nonsense stance on Covid-19. One of the country's top virologists (Dr. Christian Drosten, Robert Koch Institute) became a household name during the pandemic, breaking down complex scientific ideas in an accessible way without oversimplification.

There are key exceptions. In British Columbia, Provincial Health Officer Dr. Bonnie Henry communicated both scientific information and civic values. Elected officials in B.C. tended to share logistical information about education and economic supports, but (with rare exceptions) the business of narratively framing the Covid response, articulating both social virtues and democratic values, has been left in Henry's hands. Support from opposition leaders allowed govern-

"Humour over Rumour:" Taiwan's Spokesdog

The Taiwanese government worked with local comedians to create memes as part of their "humour over rumour" strategy to engage with the public. The image to the right is an example of one of the memes produced by the government to communicate its policies. Zongchai, the shiba inu, is the Taiwanese government's mascot and is the centre of many memes used by the government to communicate safety regulations to the public.



ment politicians to step back and allow public health officials to be the face of the response.

There is no single best practice for how to do the work of values-framing, or who should be responsible. In some of our case countries, it was handled exclusively by political leaders; in others, it was combined with medical guidance from public health professionals. What is important, however, is that someone repeatedly and carefully communicates how pandemic measures relate to existing social and political values. Health researchers, too, argue that we can better encourage widespread adoption of face masks, for example, by seeing them as a social practice buttressed by cultural values rather than framing them as a medical intervention. 49 A communications strategy that relies entirely upon scientific information and justifications without providing meaning may struggle to secure public support and compliance.

At the same time, social values are not a monolith. It is important to consider the diversity of the population and find strategies that avoid stigmatization. In **South Korea**, the LGBTQ community prizes anonymity because of lingering prejudice. After an outbreak at the Itaewon gay nightclub in late April, many attendees avoided testing because they feared being outed. In response, health authorities introduced nationwide anonymous testing during the first week of May to encourage voluntary testing. Government officials tried to reassure the LGBTQ community that it would respect their privacy as much as possible, and advised the public not to spread rumours. To avoid scapegoating, public health officials described those involved as "clubgoers" and framed the event as an ordinary failure of social distancing. In short, the government tried to be empathetic towards the minority group and avoided singling them out by addressing the situation more generally.50

Many countries have explained their pandemic response responsibilities in terms of solidarity, kindness, and even love. In New Zealand, citizens were implored to "be kind" with one another. The Prime Minister and cabinet took a 20-percent salary cut in solidarity with the public. The informality and empathy of the Prime Minister's communication style emphasized that she was part of the team, one citizen among many, working alongside others.⁵¹ In **Taiwan**, physical distancing was framed as an act of civic love. "The deeper the love," ran one key government slogan, "the greater the distance you keep." The Health and Welfare Minister, Chen Shih-chung, has called for journalists and citizens alike to have empathy for other Taiwanese. "Have a heart!" Chen reminded the public regularly. A notable feature of Covid-19 communications in British Columbia was Dr. Bonnie Henry's refusal to shame those not following the rules and her emphasis on humility. She repeatedly called for empathy, noting that "we don't know everyone's story... we are all working hard to stay safe."52 Social values like humility, kindness, patience, and love are not explicitly democratic, but they foster the friendship, sympathy, and good faith demanded by democratic citizenship.

Social values are not a monolith.

Counterintuitively, other officials have communicated values by not communicating. In South Korea, the CDC's Director Dr. Jeong was only available during press briefings. She declined all media interview requests, explaining that she would rather spend her time working behind the scenes. Media reports claimed that she rarely slept and barely left her office. Jeong's quiet modesty, humility, and dedication seem to have inspired trust and potentially greater compliance amongst Koreans.53

We found that effective democratic communications relied more consistently on pro-social hygiene and behavioural messaging than pro-self messaging. In places like British Columbia and New Zealand, for example, officials relentlessly focused on pro-social motives for handwashing, staying home when sick, keeping social bubbles small, and practicing physical distancing. Citizens were asked to change their behaviours not to keep themselves safe, but to protect others: neighbours, vulnerable groups, and the community more generally. In **Ontario**, an early emphasis on protecting oneself and one's closest contacts gradually developed into messaging (e.g. the slogan "Distance Matters. Protect Others.") that asked Ontarians to expand their circles of care to include those they might not know. In Sweden, meanwhile, the Prime Minister and King stressed the importance of responsibility; President Moon in South Korea conveyed resilience, solidarity, and optimism; Chancellor Merkel in Germany often invoked the principle of solidarity, noting that everyone could save lives by following the rules.54 Many of the most effective and democratic responses have taken the need for explicit values-framing of scientific information seriously.

Alongside social values, officials can build trust by recognizing and communicating emotions. The massive disruption of the pandemic has taken almost everyone on a psychological roller-coaster. Some experienced positive emotions such as excitement, or even gratitude, for a lockdown that created time for family and other pursuits. Others may experience negative emotions such as grief, loneliness, anxieties about loss of employment or finances, and fear of contracting Covid-19. In many cases, these emotions may develop into longer-term conditions of depression or anxiety disorders.

Communicators should publicly acknowledge these feelings, articulating them alongside facts, science, and public health directives. In some of our case countries, public health officials themselves were praised for expressing their own emotions. Taiwan's Minister of Health and Welfare, Dr. Chen Shih-chung, has been lauded for his calm and informative style, his empathy, and even his occasional displays of humour.55 After Chen broke down during a briefing about Taiwan's eleventh coronavirus case, many Taiwanese users responded positively by sharing supportive comments on Taiwan's CDC Facebook page.⁵⁶ Dr. Bonnie Henry of British Columbia was also praised for her compassion after a display of feeling during a briefing in March.⁵⁷ When Chancellor Angela Merkel of Germany was required to quarantine for two weeks, she used her podcast and a televised speech to discuss her own loneliness during that period and to empathize with all the citizens also stuck at home. While Merkel's public remarks often remain factual, her quarantine messaging represented a bid to connect on a more emotional level. Displaying vulnerability, officials have seemed more compassionate and relatable.

Humility, kindness, patience, and love foster the friendship, sympathy, and good faith demanded by democratic citizenship.

Many officials have also expressed sympathy for those who have lost loved ones. Much media reporting has unintentionally dehumanized Covid-19 victims by focusing on numbers. "League tables" of cases and deaths leave little room for officials and fellow citizens to grieve. They can also undermine the efficacy of public health recommendations by making Covid-19 seem more abstract. In Senegal, however, public health officials added a personal note for every death announced, acknowledging each individual and offering condolences to the family. British Columbia's Dr. Bonnie Henry and Premier John Horgan both convey sympathy for those who have lost loved ones.

More broadly, we find that the most robust communicators acknowledge and consider mental health. Mental health presents individual and collective challenges during a pandemic: individual issues like stress, depression, loneliness, anxiety, weight fluctuations, but also collective struggles to cope with changes required by the pandemic. Alongside increasing funding to address mental health, governments can communicate care around the issue. The government in South Korea, for example, paid careful attention to the mental health consequences of self-isolation. It produced a batch of 2,000 "pet plant kits," offered to people living in quarantine to help them battle depression and other mental health conditions caused or exacerbated by the pandemic. The packaging came with the message "The government is with you: from overcoming the disaster to healing your mind." Dr. Yoon Tae-ho, the head quarantine official from the Central Disaster and Safety Countermeasure Headquarters, asked the public not to "endure the stress and anxiety caused by Covid-19 in solitude but... actively reach out to the nearest public health center, community mental health service, and/or counselling hotline for support."58 President Moon Jae-in also asked schools to consider the mental health of its students prone to experiencing feelings of isolation or even bullying from peers due to stigmatization.59

Although pandemic communications often acknowledge hardship and difficulties, gratitude is crucial for compliance, too. We know that gratitude can increase pro-social behaviour and strengthen social bonds. In the case of Wikipedia, for instance, one experiment found that anonymously thanking other editors increases by two points (from 11 to 13 percent) how many people

continue to edit. 60 Imagine if simple expressions of gratitude increased pandemic compliance by a similar margin. Provincial officials in British Columbia specifically thanked journalists for providing high-quality information,61 and expressed gratitude to religious groups and volunteers for their contributions.62 In South Korea, citizens started a hashtag campaign for doctors and nurses: #ThankstoHealthWorkers. This evolved into the #ThankstoYou challenge. The government embraced both hashtag campaigns.

Finally, narratives can serve as mobilizing tools. 63 While facts can be hard to interpret or values too abstract, individual stories convey the real-life implications of pandemic conditions. They may also cultivate empathy, in the case that stories involve someone like the reader/listener/viewer. In Senegal, stories from personal experiences are shared on the Ministry of Health's social media feeds alongside frequent updates on the current numbers and status in the country. Users respond on Facebook with well-wishes and thanks for sharing these testimonies.⁶⁴ We have seen this technique used more by media outlets than governments, possibly because sharing individual stories raises privacy concerns. Stories effectively convey the differential impacts of Covid-19 (e.g. those with long-term symptoms or slow recoveries), and create connections with diverse communities who may not see themselves or their life experiences reflected in public health officials or politicians. One study on misinformation in British Columbia has proposed that visual representations better reflect the province's diversity. 65 Visual narratives matter as much as written ones.

Beyond abstract notions of social solidarity, these communication strategies are crucial to build rapport with citizens who may be experiencing high levels of anxiety and depression. Rapport in turn enables officials to better persuade people to follow public health recommendations. That rapport can also prove critical when asking citizens for information, e.g. about their contacts for tracing efforts.66 Our case studies used emotions, values, and stories in ways that made sense within specific contexts. These tools exist in every society; they only need to be identified and put to work. Governments are asking a great deal of citizens during Covid-19. The least we can ask in return is that they communicate in ways that meet members of the public where they are at.

Visual narratives matter as much as written ones.



- Be thoughtful and deliberate about dividing responsibilities for health information and values-framing among health officials and politicians;
- Identify, express, and repeatedly reinforce the social and political meaning of the response;
- Attend to pandemic feelings and consider how best to channel them: negative emotions (fear, anxiety, anger, resentment) as well as positive sentiments (gratitude, love, kindness, hope);
- Recognize and express sympathy for mental health conditions;
- Use stories and narratives to mobilize populations, create empathy, and help a wider range of diverse groups feel seen and acknowledged by government communications.

Pull in Citizens and Civil Society



Thile officials play an essential role in communicating, citizen participation and civil society are essential parts of a healthy democracy. Public health responses sometimes adopt top-down tones that limit opportunities for civil society to help solve public health issues. Civil society can act directly to solve critical problems, but indirect support is no less important.⁶⁷ Encouraging participation and collaboration, especially on issues like public health, reduces burdens on public-sector actors. Citizens may also have a greater capacity for awareness-raising than government, to say nothing of their ability to inform authorities about how their communities have been affected by a pandemic, sometimes disproportionately. Collaborating with citizens and civil society may create a more robust response; in turn, listening and responding to citizens' problems and concerns strengthens democratic values such as solidarity and collective responsibility.

What we call "pulling in civil society" can also prevent governments from viewing "the public" as a monolith. "One of the challenges that governments have sometimes is their marketing... doesn't necessarily come out very quickly or in a language that appeals to the target audience," acknowledged Canadian Health Minister Patty Hajdu on July 24. She added that the federal government would now "try and change that" by having "more nimble, more appropriate conversations with segmented parts of Canadian society."68 Too often, public health engagement occurs based on what officials think the public looks like, rather than trying to understand citizens as many overlapping groups of individuals with different ideas, beliefs, or capacities. 69 A British Columbia survey to understand misinformation around Covid-19, for example, has recommended more diverse visual representations that reflect the diversity of the provincial population, in part because Chinese, South Asian, and Indigenous residents reported "bad treatment due to race" and experienced the pandemic differently from white residents.70

Too often, public health engagement occurs based on what officials think the public looks like.

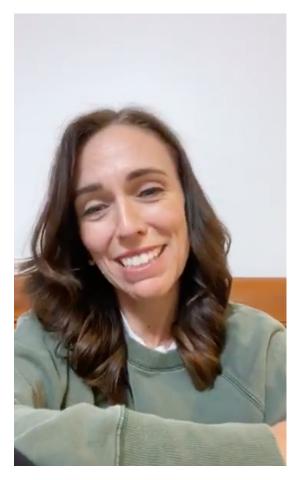
Officials must also recognize that historical or current experiences with malpractice may make particular groups understandably uncomfortable with medical or public health interventions by state authorities. Indeed, legacies of mistreatment inform people's present-day choices.71 Without efforts to comprehend the specific con-

Livestreaming Leader: New Zealand's Jacinda Ardern

New Zealand's Prime Minister Jacinda Ardern has been omnipresent during Covid-19. She appears regularly at formal briefings, but she also beams herself onto citizens' smartphones, tablets, and laptops using livestreaming tools embedded within social media platforms.

Using Facebook and Instagram, Ardern speaks directly into her phone or tablet, answering questions as they scroll across the screen. On March 25, as the country's national lockdown began, Ardern recorded from her couch at home (see image) to express sympathy. Ardern also hosted a video podcast titled "Conversations through Covid" with guests from diverse social groups.

Ardern appears determined to find citizens where they live: on their phones and within their social media feeds. The informality of livestreaming also highlights Ardern's role as fellow citizen and reinforces her case that Covid-19 requires joint democratic action. This livestreaming leader is a reminder that democratic health communications require attention to both style and substance.



Jacinda Ardern livestreaming to New Zealanders on the evening of March 25, 2020. Video still from Facebook.

cerns of marginalized communities and include them in communications, officials may unintentionally perpetuate historical injustices and further undermine trust.

In many of our case studies, officials sought more differentiated understandings of the public by establishing feedback loops rather than relying on unidirectional or didactic communication tools. In **Sweden**, the Civil Contingencies Agency worked with research firms to poll public opinion during the pandemic, especially views of the state response. British Columbia, too, has used provincewide surveys (with more than 400,000 responses in a province of five million people) to gauge public support and learn more about how the pandemic is affecting different segments of the population. In addition to polling, **Taiwan** has used text-mining to pull opinions from Facebook or the popular PTT Bulletin Board System. Only with participation from civil society, however, can officials create democratic communications

that meet people where they live: whether that is on Snapchat, in the pages of print newspapers, or at a community centre.

At the most basic level, government agencies can collaborate with civil society to leverage their vast expertise-especially when it comes to technology. Technology was a key part of South Korea's pandemic response. Public-private partnerships, new mobile apps, and websites were developed to stem the spread of Covid-19. Putting numerous civil society capacities to work during a pandemic not only provides solutions to emerging problems but also strengthens the government's relationship with these institutions, their partners, and consumers or users. Taiwanese citizens started the "I'm okay, you go first" campaign to encourage people to leave face masks for those who needed them the most while manufacturers were still ramping up their production capacity. After the government restricted the distribution of masks to mitigate panic-buying, this campaign spread through social media, where citizens encouraged each other to be more selfless. This exemplified the Taiwanese view that citizens bore a collective responsibility to fight Covid.72

After non-governmental groups in Germany criticized the lack of privacy protections in the country's first contact-tracing app, the state turned to companies like SAP and Deutsche Telekom to develop an open-source Corona-Warn-App. The app was downloaded 6.5 million times in the first 24 hours after its launch on June 15.73 Canada, too, has developed a contract-tracing app (COVID Alert): spearheaded by the federal government, it was initially adopted by **Ontario** and is being used on a province-by-province basis. Privacy commissioners at the provincial and federal level have approved the tool, developed by government coding teams with support from external partners and open-source frameworks.74

Official government channels can also be used to amplify public voices and local efforts. This

involves monitoring these efforts, identifying those that align with public health directives, and sharing these on government channels, thereby demonstrating the diversity of voices and initiatives working together. Government social media channels in **Senegal** often shared materials from other sources and applauded work by NGOs, citizens, and even other governments. On Facebook, the government publicized messages from footballers, donations, and music videos by local artists.⁷⁵ In **New Zealand,** Prime Minister Ardern's "Conversations through Covid" talkshow series involved non-governmental actors, including a children's musician, female Indigenous scholars, and experts in mental health. She also answered public questions using Facebook Live videostreaming.76 Ardern strongly emphasized what was being asked of ordinary people, describing the nation as a "team of five million" and arguing that success rested on civic responsibility and the contributions of citizens.

Governments around the world have also found creative ways to call for citizen involvement using tools already at their disposal. Public health officials asked regular British Columbians to serve as communicators and validators of key information, especially on social media. Bonnie Henry asked young people in particular to "be my voice on social media, use your influence to share [the] message: don't let Covid-19 spoil our summer."77 The goal was for individuals to amplify health messaging among their trusted friends and family: "We are asking everyone to use your connections and influence, whether on social media or in-person, to share the message to socialize safely and spread kindness, not the virus. Be the voice that helps to keep Covid-19 away from your friends and family."78 While President Moon in South Korea acknowledged government responsibilities, there were also active calls for civic engagement. Celebrities, authors, athletes, and musicians were very involved in public communications to raise further awareness, educate the public about basic hygiene guidelines, and build solidarity.79

National and regional contexts are crucial for identifying the specific groups and individuals best to involve in communications. Senegal offers a compelling example of this careful attention to context. Senegal's messaging made religious leaders integral and called on them to encourage others to comply with health guidelines, while also showing them leading the way (e.g. videos of them washing hands and avoiding large gatherings).80 Although Islam is the country's largest religion, messaging targeted both Muslims and Christians. The Ministry of Health and the Health Emergency Operation Centre worked with the Pasteur Institute, the World Health Organization, and other UN organisations. Women's groups mobilized to mitigate the impact of Covid-19 on women, girls, children, and other marginalized populations.81 Citizens set up a platform to further promote the work of the Ministry of Health.82 The government's posts on social media included messages from religious leaders like imams, calling for respect for and compliance with government guidelines as well as relaying prayers and good wishes. The President also appealed in his statements for religious leaders to join the government and state services in implementing Covid-19 recommendations.83 Civil society can and should play a central role in democratic health communications.



How to **Pull in Citizens and Civil Society**

- Draw upon civil society initiatives and expertise (e.g. technology) to solve problems and reduce burdens on government institutions;
- Identify key groups and populations by carefully attending to local context;
- Amplify work being done by civil society using government media channels and communications strategies;
- Use surveys, polling data, social media monitoring, or text mining to track the population's diverse experiences, their feelings about the response, and their needs from government;
- Find trusted local validators to share health information with friends, families, and followers (e.g. young people, influencers on social media, celebrities, religious leaders).

Institutionalize **Communications**



■ he principles we have explored thus far are short-term and can be implemented rapidly. Yet some of the best communications can only occur quickly when they are embedded within institutions. Institutional structures for communications provide an essential infrastructure to support non-medical interventions during a pandemic. Public health is often underfunded, to our collective detriment, but public health communications are barely a rounding error. They need to become a serious line item.

This will not be the only pandemic of our lifetime. Since 2007, the World Health Organization has declared a Public Health Emergency of International Concern (PHEIC) six times, including Covid-19.84 But a rapid response, paradoxically, requires structures built far in advance. An institution enables a swift response. Countries without communications units have sometimes struggled to deliver consistent information over time or to update citizens swiftly on how pandemic guidelines might be changing. On the other hand, jurisdictions with institutional strategies for pandemic communications had the capacity to produce differentiated government messaging that embraced openness and transparency. It takes time and considerable resources, after all, to streamline consistent, clear messaging tailored to a wide variety of platforms. A video message on YouTube for children will look considerably different from a social media sticker aimed at teenagers or a newspaper ad aimed at older citizens.

A rapid response, paradoxically, requires structures built far in advance.

Most of our case studies established their communications within existing structures, without a specific unit designated for pandemic communications but Taiwan's system provides an example of a rapid-response epidemic control system that integrates communications. Many, including current Vice-President Chen Chien-jen, saw poor governmental communications as a factor that exacerbated a lackluster response to the SARS outbreak of 2003.85 Lessons learned from that event pushed officials "to build the comprehensive public health system we see today," commented Lin Chia-lung, Taiwan's Minister of Transportation and Communication.86 Now, the government's central policymaking arm, the Executive Yuan, can approve the creation of a Central Epidemics Command Control (CECC) by Taiwan's Ministry of Health and Welfare. One day before Taiwan's first case of Covid-19 on January 21, Taiwan established a CECC, with the Minister of Health and Welfare, Chen Shih-chung, as the CECC commander. To integrate the CECC with the existing Centre for Disease Control, its spokesperson is Chuang Jen-hsiang, who also works as the Deputy Director-General of the Taiwanese CDC.87

The CECC is responsible for surveillance, operations, and communications. It includes teams dedicated to public information and information management. The Taiwanese government allocated nearly \$7.5 million (USD) towards communication efforts and building better infrastructure to reach citizens. This budget helped to establish an epidemic prevention service platform, coordinate the telecommunications industry to share information on epidemic prevention, and improve cellular and internet services in remote areas.88 The response thus incorporated infrastructure-building to ensure that as many citizens as possible could access online resources.

Together with the National Communications Commission, the CECC produced materials for myriad platforms: broadcast media, YouTube videos, infomercials, memes, and even downloadable stickers/emojis featuring cartoon representations of the health minister and memorable slogans. Just two days after its creation, the CECC began livestreamed daily press conferences. Daily briefings also offered the opportunity to counter harmful stereotypes and stigmatization. For instance, Taiwanese residents could not initially choose the colours of their masks. In mid-April, officials wore pink masks at the daily briefing after hearing that male students had been bullied for donning their pink masks at school.89 Health Minister Chen Shih-chung commented that "it's fine for a man to wear pink. Pink is for everyone."90

The CECC coordinated responses among government ministries, created coherent messaging, and helped to ensure that communications were not entirely top-down. Taiwan's CDC participated in communication efforts by addressing individ-

ual concerns on Facebook, Line (a popular messaging app), and a telephone hotline (the 1922 Communicable Disease Reporting and Consultation hotline). The CDC's official Line account also served as a Q&A service to respond to public concerns: by May, more than 2.2 million people had subscribed to the account.91 Digital Minister Audrey Tang, the first transgender cabinet minister in Taiwan's history as well as a self-described anarchist, helped to create online resources, including a Line chatbot to answer questions about where and how to buy masks.92

The Taiwanese model involves a temporary arm, complementing its CDC and Health Ministry. In other cases, like New Zealand, government officials acted on existing plans that clearly laid out responsibilities for pandemic communication, with the National Health Coordination Centre located in the Ministry of Health taking charge. Canada took a different approach, relying on an innovation initiative called Impact Canada. Started in 2017 and located in the Privy Council Office, Impact Canada is a team of innovation and design experts available to support various government departments. With the onset of Covid-19, Impact Canada moved to support the government's Covid-19 communications (housed within the Public Health Agency of Canada), using insights drawn from behavioural science to develop iteratively more effective health messaging.93 In this model, additional institutional capacity is held in reserve to be deployed when required (e.g. during a pandemic). Still, the expertise is not specifically dedicated to public health, which may have made the response less nimble or tailored.

Alternatively, countries could build permanent pandemic communication units, independently or embedded within existing institutions. During the 2015 MERS outbreak, **South Korea's** response was hampered by overlapping chains of command and unclear guidelines for interagency cooperation. Perceived failures of communication fostered fear among the public. Subsequent legal and institutional reforms addressed these issues: the Korean Centres for Disease Control and Prevention (KCDC) gained primary authority over emerging infectious diseases; the KCDC's director was promoted to the level of a deputy minister to ensure political clout; and the KCDC built an Office of Communication to prevent misinformation.94 One of its nine tasks is to "perform communication in the emergence of infectious diseases."95 During Covid-19, then, communications were effective and efficient because channels of distribution (e.g. an emergency text message system) already existed.

Such institutions also expand capacity and opportunities to measure, understand, and respond to public sentiment. The Office of Communication in South Korea operates, reviews, and assesses the CDC's social media. Since 2016, the Office of Communication has recruited public representatives through social media channels (Twitter, Facebook, Naver) to develop transparent and effective public health communications. In February and March 2020, the Office recruited 50 individuals over the age of 19 (foreigners living in Korea were also eligible to apply) to provide feedback on how to improve.96

Beyond more swiftly mobilizing a rapid response, a pandemic communications unit could lay the groundwork for communicating quickly during future epidemics by creating links to religious and other community leaders, following the latest research on effective public health communications, and establishing liaisons with large social media companies to combat misinformation.97 Providing reams of reliable content on a regular basis might seem burdensome and unnecessary to a government struggling with an emergency. But it is fundamental. A pandemic communications unit ensures that there is capacity for that task. In turn, a consistent and tailored supply of reliable information might reduce rumours and

poor-quality information. Finally, a specific unit indicates that communications are seen as an integral part of public health rather than ancillary.

A consistent and tailored supply of reliable information might reduce rumours and poor-quality information.



Potential Functions for a Pandemic Communications Unit

- Create tailored communications on multiple channels and provide media training to officials;
- Innovate around new communications technologies, e.g. chatbots to answer questions;
- Measure and assess public reactions to guidelines and establish two-way communications, rather than solely top-down messaging;
- Draw up standard signage with instructions to take the burden off businesses;
- Adapt and translate messages for different groups of citizens;
- Liaise with media and platforms to provide accurate information from trusted sources;
- Depoliticize messages by putting health officials at the centre of communications;
- Compile accurate data;
- Publish compelling data visualizations.

Describe It Democratically



■ he most obvious way to keep democracies healthy during an emergency is to maintain the business of institutions: find means for parliaments and legislatures to continue meeting, means for elections to be held safely and securely, means for opposition politicians to hold leaders to account. Many countries that have effectively managed Covid-19 have also found new ways for their democratic institutions to operate, from physically-distanced parliamentary sessions with fewer representatives present (e.g. Canada) to the use of digital tools like remote voting and videoconferencing (e.g. New Zealand). South Korea is the only major country analyzed here to have held a national parliamentary election during the pandemic (although New Zealand will do so in September after a Covid delay). Measures in South Korea included advance voting, mandatory mask-wearing and temperature checks, and separate voting booths for citizens in self-isolation. Turnout was the highest since 1996.98

Institutional innovations like these are extremely valuable ways of communicating to the public that democracy will not be sacrificed to the pandemic, that representative government will continue to operate even during a period of restricted liberties and emergency powers. South Korean President Moon Jae-in commented that by holding elections despite Covid-19, his country was "embodying the spirit of democracy."99

But if democracy is not reducible to formal institutions, neither are effective democratic health communications. If democracy is a set of practices and habits that structure our daily lives together as citizens, it is essential for the sake of democratic health that we understand our changed experiences and responsibilities under Covid-19 in relation to our democratic obligations to one another. In other words, communicators should describe the pandemic response democratically.

The vocabulary used by governments to frame or explain Covid-19 is at least as important as the measures they have asked citizens to take. As linguists like George Lakoff and others have shown, metaphors and imagery structure our thinking in subtle but powerful ways.100 In the case of Covid-19, specific vocabularies and narratives can influence how citizens understand their role in the pandemic, their expectations of others, their level of investment in the response, and the meaning of a successful outcome. Many public health officials know this intuitively. At an early stage in the Covid-19 pandemic, the WHO-recommended term social distancing was replaced in many jurisdictions by the concept of physical distancing. Officials recognized that the isolation implied by social distancing was unnecessary, harmful to mental health, and could jeopardize the response to Covid-19 by accelerating fatigue. (That the initial terminology of social distancing

remains so widespread in popular discourse and media coverage makes this a cautionary tale.) British Columbia's Centre for Disease Control issued a Covid-19 Language Guide in July, acknowledging that certain wording could affect civic fatigue, compliance, and mental health-and issuing recommendations for preferred terms and metaphors.101

Metaphors and imagery structure our thinking in subtle but powerful ways.

In many of the countries analyzed in this report, leading communicators thought carefully about the language used to describe Covid-19: the metaphors and imagery they invoked, the narrative they offered to citizens about the challenge ahead, and the values they emphasized. In these countries, language and rhetoric served as tools not only for improving compliance, but for encouraging citizens to see their collective response to Covid-19 as an act of popular sovereignty. Work to contain the virus was framed not as a conflict to be won against a mysterious enemy, or as the result of following orders issued by authorities, but as an achievement of free and equal citizens exercising public judgment and working together. In different ways, these countries adopted Covid-19 messaging that reinforced democratic values and gave meaning to the pandemic experience as a democratic project.

In some cases, the framing of Covid as a particularly democratic challenge has been remarkably explicit. German Chancellor Angela Merkel, for instance, in a rare televised address on March 18, explained how the country's "democratic self-understanding" would shape the response to Covid-19. She emphasized transparency and solidarity, stressed that restrictions on freedom of movement would only be temporary, and reminded Germans that "we live not by coercion but by knowledge and collaboration [and the belief that] every life and every person counts."102 Merkel referred to her own upbringing in communist East Germany to underscore that she did not restrict civil liberties lightly.

Leaders in South Korea and Taiwan have also drawn clear connections between democratic values and Covid-19. "Democracy is in our DNA. It is what makes us Taiwanese," explained President Tsai Ing-wen in June 2020. "It is possible to control the spread of the virus without sacrificing our most important democratic principles."103 Taiwanese Digital Minister Audrey Tang has explained that "the pandemic... actually strengthened our democracy."104 In June, South Korean President Moon Jae-in expressly framed the country's effective handling of the pandemic as a democratic achievement: "In the process of overcoming the Covid-19 crisis," he explained, "we have demonstrated democratic solidarity and cooperation."105 Chung Sye-kyun, the Prime Minister of South Korea, narrated events to the public in a similar fashion, noting that Korea had "turned the crisis into an opportunity for democracy to mature."106 Each of these leaders recognized the importance of describing Covid-19 as a democratic challenge.

We found that militaristic metaphors-comparing the Covid-19 response to a war, fight, or battle to be won-while prominent in the United States and the United Kingdom, were generally avoided by the most effective democratic states analyzed here.107 Metaphors of war are not conducive to democratic self-understanding or habit-formation. Most obviously, they demand the identification of an enemy outside the body politic, a narrative frame which runs the risk of exacerbating xenophobic sentiment and even violence. 108

Alternate Universes: British Columbia and Ontario

The Canadian provinces of Ontario and British Columbia (B.C.) have adopted very different strategies for communicating public health information and framing the Covid-19 pandemic. A brief comparison reveals several of our RAPID principles in action.

| | British Columbia | Ontario |
|--|---|---|
| Communicators | Relatively few, all provincial: mainly Dr. Bonnie Henry and Health Minister Adrian Dix | A wide range of provincial, regional, and municipal lead communicators |
| Division-of-Labour | Henry communicates hygiene guidelines as well as civic values | Politicians (Premier Doug Ford) convey values; science from health officials |
| Role of Chief Public Health Officer | Dr. Bonnie Henry visible and praised; most quoted woman in Canadian media since March | Calls for Dr. David Williams to resign due to mishandling and poor communications |
| Values-Framing | Resilience, solidarity, kindness, calmness, patience, know-how | Toughness, solidarity, pride, triumphalism, determination |
| Pro-Self vs. Pro-Social Framing | Relentlessly pro-social, stressing protection of communities and the most vulnerable (e.g. elders) | Initial pro-self emphasis, but then increasingly pro-social |
| Metaphors | Natural and environmental (e.g. caught in the storm, viral waves) | Military, conflict, combat (e.g. fighting an enemy) |
| Autonomy | Emphasis on individual and institutional autonomy, use of guiding principles for safe social interactions | Granular and changing regulations, heavy reliance on enforcement and shaming of bad actors |
| Controversies | Communication with young people; back-to-school plans | Many: back-to-school plans, regional reopenings, testing and transparency, confusion about social gathering orders, race and data collection, etc |

Metaphors of war are not conducive to democratic self-understanding or habitformation.

Military metaphors also limit space for judgment and agency, framing individual choices in relation to obedience, duty, and emergency. They are hierarchical, not egalitarian. And they imply that any individuals not following new social norms are traitors or deserters, not fellow citizens trying their best to evaluate risk in a spirit of good faith.109

Pandemic messaging in the countries analyzed here typically relied on an alternate set of more democratically-aligned metaphors to understand the virus. In South Korea, Covid-19 has been framed as a relay race to be run together, a challenge demanding collaboration and teamwork. In this image, victory is defined not by defeating an enemy but by crossing the finish line and achieving a personal best.110 Natural metaphors are much more common, signifying that the pandemic is a natural disaster: a destructive challenge to be responded to but for which no social group or entity is to blame. In British Columbia, provincial officials have repeatedly compared Covid-19 to a powerful storm. On April 17, Health Minister Adrian Dix and Provincial Health Officer Dr. Bonnie Henry said that B.C. was "in the eye of the storm in a Category 5 hurricane. The risk is still very high and there are many unknowns, but we are hopeful that with all of us standing strong, the storm will continue to lessen."111

The most commonly used metaphor is the wave, which has been used to help citizens visualize the recurrence of the virus ("a second wave") as well as the need to flatten the curve. As epidemiologist David S. Jones and anthropologist Stefan Helmreich have pointed out, however, wave metaphors do not effectively capture the complexity of the pandemic, which is affecting different groups and regions in different ways, and will likely spread in more complex ways than discrete wave patterns. 112 Others have begun suggesting that Covid-19 is more like a wildfire, though this metaphor has not yet been adopted by government officials in any of the cases analyzed in this report.113

Even in countries that eschewed metaphor and imagery, we found repeated efforts to frame the Covid-19 response in terms of human and collective agency. In other words, officials have tended to downplay technical or scientific solutions (e.g. vaccines) and rather emphasized that citizens control the course of the pandemic. British Columbia has favored the slogan "Our well-being and our future is in our hands, so let's continue to wash them."114 In Germany, Angela Merkel reminded her fellow citizens that "we are not condemned to passive acquiescence as the virus spreads... This situation is serious, and it is open. I am utterly sure that we will overcome this crisis. But how many casualties will there be? How

many loved ones will we lose? To a great degree, we have this in our own hands."115 This language affirms feelings of popular sovereignty and, in the case of effective pandemic outcomes, may strengthen feelings of democratic trust and collective political capacity.

Democratic description lends itself to national addresses and speechmaking by elected officials, but it should be regularly sustained as part of an everyday communications strategy rather than treated as a rhetorical flourish. Just as citizens need repeated messaging on handwashing or physical distancing, they need repeated messaging on compassion or their democratic duties during times of emergency.

Framing the Covid-19 response as a democratic challenge matters not only for the present; it could shape how citizens will remember it in the future. Like institutionalization, democratic framing better prepares us for the next pandemic even as it gives citizens new tools for addressing this one. In many countries, we found that histories of pandemic experience helped communicators frame events for the public. New Zealand's Influenza Pandemic Plan, for instance, draws extensively on historical scholarship about the 1918 influenza pandemic, and notes that limited public health knowledge exacerbated the effects. 116

The more recent past mattered in territories like Taiwan, South Korea, or Senegal: pandemics still within living memory shaped government response and public compliance. Senegal's experience with Ebola (in 2014, and then most recently

Only effective, thoughtful democratic health communications can secure the public memory of Covid-19 in a constructive way.

in early 2020) meant that laboratories were prepared to immediately develop rapid testing tools, and the government had a new disease operations center. Senegal's extensive communications strategy for Covid-19 was owed to lessons learned from the 2014 Ebola outbreak.¹¹⁷ In Taiwan, memories of a botched response to SARS in 2003 led the government to establish mechanisms to create a pandemic communications unit (see above). In South Korea, the MERS outbreak of 2015 dramatically affected the country's institutional response as well as the behaviour and understanding of its citizens. Legal changes post-2015 enshrined transparency and a public right to be informed about disease outbreaks, made it possible to accelerate approval of new testing technologies during an emergency, and created an Office of Risk Communication within the KCDC. The recent memory of MERS and its effects on families and loved ones also transformed public response to Covid-19. Painful and traumatic memories of a recent pandemic inspired citizens to enthusiastically adopt new hygiene protocols; one study found dramatic increases in compliant behaviour compared with 2015.118

How democratic citizens will remember their experience of the Covid-19 pandemic depends, in part, on how governments acted to look after them. But it will also hinge on the meaning of the memories they associate with the response. Will Covid-19 be seen as a failure of democratic power? Or as a moment when populist strongmen leading decisive governments rode to everyone's rescue? Alternately, will the response be remembered as a collective achievement and a triumph of effective democratic governance and true popular sovereignty, the work of citizens shaping their future together? Scientific breakthroughs or logistical wizardry cannot answer this question. It can be difficult during a crisis to take this longer view. But only effective, thoughtful democratic health communications can secure the public memory of Covid-19 in a constructive way, and

ensure that it reinforces democratic practice and self-understanding for years to come.



How to **Describe it Democratically**

- Explicitly frame Covid-19 prevention behaviours as democratic behaviours and habits;
- Remind citizens that they are sovereign, that the measure of a successful response will be their capacity to act collectively, that they can still shape their own futures;
- Communicate values and meaning as repeatedly and systematically as hygiene measures;
- Think carefully about metaphors and their implications for public understanding and expectations (e.g. instead of war imagery, consider natural disasters, team sports, etc.);
- Draw upon relevant national histories and recent memories to guide the response in a productive way that is attuned to local context;
- Take the long view and consider how the pandemic will be collectively remembered.

Conclusion

t is important to face the facts about Covid-19. There is no guarantee of an effective vaccine or even drug treatments. 119 Very few epidemics end with complete elimination.120 What is currently an epidemic disease may well become an endemic one. Should this be the case (and even if we do locate effective treatments), non-pharmaceutical interventions like communications will remain among the most critical tools at our disposal for managing Covid-19.

Add to those facts several questions about the future. Although this pandemic has wrought terrific havoc and devastation, we must reckon with the distinct possibility that SARS-CoV-2 may look mild compared to future pandemics, which could well include a deadlier coronavirus (like MERS) or a more contagious disease (like measles). Covid-19 is "a rehearsal for the really big pandemic, which I still believe is overdue," worried Singapore's Foreign Minister Vivian Balakrishnan in August 2020.121 Communicating clearly and rapidly remains essential to mitigate the potentially more lethal pandemic around the corner.

Social media dynamics have exacerbated the challenges of communications. Misinformation around vaccines and masks has spread swiftly online. One study estimated that nearly 800 people died after a rumour that drinking very concentrated alcohol would kill Covid-19.122 But we focus solely on the so-called "infodemic" at our peril. While social media regulation can offer long-term solutions to some of those problems, a pandemic also requires short-term solutions. The countries studied in this report offer many exam-

ples of how officials and civil society pushed back against such online dynamics.

Democracies around the world have much to teach one other about communicating on Covid-19. Selective English-language media coverage has neglected some of the very best practices. Although their strategies differ, we can see well-executed and clear communications in many different countries effectively containing the virus. One Parisian doctor wondered in July why France was "not prepared" and found it "very surprising that every country had to realize itself what was going on, as if they didn't have the examples of other countries."123 Any effective response to Covid-19 and future pandemics will combine local specificity with comparative learning from global examples.124

In the coming months, democratic health communications will become ever more essential as citizens grow tired of restrictive measures and countries deal with the sparks and flames of Covid-19. We have already seen individual and organized political resistance to lockdown measures, from local jurisdictions defying restrictions (e.g. Ukraine in March) to armed protests (e.g. Michigan in April).125 On August 9, thousands of people marched in Montreal against mask mandates.¹²⁶ Several weeks later, a larger-than-expected Berlin demonstration against Covid-19 measures ended by trying to storm the German parliament.¹²⁷ Rather than simply condemning protesters as fools or "Covidiots," our report considers the deeper and more salient questions: Which democratic methods best ensure

widespread compliance? Which forms of public health communication can avoid exacerbating divisions within societies? Which communications best include citizens?

Covid-19 has given illiberal politicians cover to acquire additional powers and further weaken the rule of law. 128 Coups and seizures of power via emergency measures loom large in our political imaginations, but they are not the only ways in which democracies can wither. Democracy cannot long survive if citizens do not trust their institutions or one another; democracy is also threatened when it no longer seems like the most effective way to solve complex problems or for ordinary people to feel a sense of agency over the world around them. In many ways, the lingering twilight of the Covid-19 experience is most concerning. The longer restrictions continue and the virus goes unresolved, the greater the risk that citizens will turn against protective measures and lose faith in their ability to chart their own course as a self-governing democratic people.

Throughout the modern history of democracy, crises have regularly been moments for change and dramatic reform. Whether political, economic, or even epidemiological, times of crisis have been opportunities for democratic societies to rethink basic assumptions and innovatively outfit themselves for a future taking shape before their eyes. Among the cases in this study, those that communicated most effectively and democratically about Covid-19 did so on the basis of very recent and sweeping reforms (e.g. South Korea, Taiwan)-innovations that were themselves the result of previous public health crises. Journalists John Micklethwait and Adrian Wooldridge have argued that this moment has presented democracies with an urgent opportunity to rethink the state. 129 Covid-19 is also an opportunity to adopt bold and visionary new ways of communicating health information democratically.

The five principles for effective democratic health communications in this report are a toolbox for sustaining democratic trust, practice, and self-understanding in an age of great uncertainty. They enable policymakers to recognize and frame this crisis not only as a threat to democracy-but as an opportunity for citizens to feel more trusting than they did before, more resilient than they did before, and more sovereign than they did before Covid-19 emerged. It is important that policymakers, elected officials, and citizens alike recognize the importance of clear and compassionate communications during a time of crisis. Public health depends on it. The health of democracy does, too.

Covid-19 is also an opportunity to adopt bold and visionary new ways of communicating health information democratically.

Appendix of Case Studies

| * | Canada by Ian Beacock | 55 |
|--------------|---|----|
| | British Columbia by Ian Beacock | 59 |
| | Ontario by lan Beacock | 63 |
| | Denmark by Sean Wu | 68 |
| | Germany by David Metzger and Sudha David-Wilp | 72 |
| * * * | New Zealand by Ian Beacock | 77 |
| # | Norway by Sean Wu | 82 |
| * | Senegal by Eseohe Ojo | 86 |
| # • # | South Korea by Yoojung Lee | 90 |
| + | Sweden by Sean Wu | 94 |
| * | Taiwan by Victoria Ker | 99 |

NB: Statistics on Covid-19 confirmed cases and deaths are sourced from Worldometer as of September 10, 2020. Statistics for Canadian provinces sourced from respective provincial health authorities.



| Population | Tested | Cases | Deaths | |
|------------|-----------|---------|--------|--|
| 37,806,000 | 5,930,000 | 134,000 | 9,100 | |

Major Takeaways

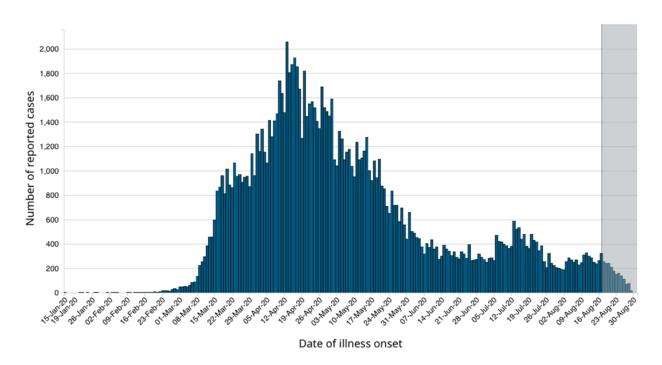
- Provincial authorities led the public health response in this decentralized federation; federal officials coordinated funding and best practices, managed border restrictions, reiterated hygiene principles, and articulated civic values within a national narrative.
- Federal public health communications were clear and understandable, emphasizing science and expertise; an innovation team embedded within the federal government incorporated insights from behavioural science to shape Covid-19 messaging.
- Extensive values-framing, but without explicitly democratic language or military/war metaphors; Prime Minister Justin Trudeau emphasized a gentle patriotism grounded in local communities and neighbourly care. Polling has suggested that Canadians feel more united in August than they did before the pandemic.
- The Prime Minister was a steady presence during the initial months of the pandemic: delivering daily briefings from his residence, responding to concerns and answering questions with empathy, and repeatedly articulating social and civic values.

Canada's Covid-19 Trajectory

A decentralized federal state with dramatic variation in population density from coast to coast to coast, Canada experienced Covid-19 differently from province to province. Overall, however, the country's Covid curve was brought under control through strict border measures, good provincial public health responses, and attention to communications.

Canada reported its first case of Covid-19 on January 25, in the province of Ontario: a man who had recently returned from Wuhan. The first death occurred in British Columbia on March 8. At the peak of the pandemic in mid-April, Canada was reporting approximately 1,800 new daily cases. Ontario and Quebec (the two most populous provinces) became the sites of Canada's greatest caseloads. By the summer months, however, both provinces had succeeded in "flattening" their pandemic curves. Alberta and British Columbia experienced relatively mild initial phases of Covid-19, but both provinces witnessed significant surges in July and August. Cases have been reported in all provinces and territories (except Nunavut); those with smaller populations have seen fewer cases. By September 1, this nation of roughly 37 million people had reported 128,948 total cases of Covid-19 and 9,126 deaths.

Health is a provincial jurisdiction in Canada, and so individual provinces responded to Covid-19 in slightly different ways (see, for instance, the case studies for British Columbia and Ontario). A special advisory committee was struck in January 2020, linking federal public health officials with their provincial counterparts to coordinate strategy and best practices. In addition to coordinating emergency supports, awareness campaigns, and supplies of personal protective equipment for provincial health authorities, Ottawa was responsible for strict new border protocols. On March 16, Canadians were advised against all non-essential travel. The border was also closed to everyone but Canadian citizens or permanent residents. On March 25, Canada imposed mandatory self-isolation on all returning travellers. Federal public health officials updated Canadians on epidemiological data and protective hygiene measures using in-person briefings and public awareness campaigns; lockdowns and economic closures were managed by provincial authorities. Justin Trudeau, the prime minister, appeared daily during the first months of the pandemic, repeating basic hygiene principles, encouraging citizens to stay home, and framing Covid-19 in patriotic terms. The federal government also played an essential role in developing a contact-tracing app that has been adopted by several provinces. In September 2020, border restrictions and travel advisories remained in effect. Criticism of the federal government mounted in the late summer months. Both opposition members and journalists called attention to possible conflicts-of-interest in Ottawa's emergency economic support measures, to poor coordination among federal and provincial officials, and to a lack of urgency about acquiring personal protective equipment in early 2020.



Daily reported Covid-19 cases in Canada, January 15 through September 1, 2020 reported by the Government of Canada Epidemiological Update. Note that the shaded area indicates "lag-time" zone in which cases have likely occurred but have not yet been reported nationally.

Communications Personnel & Institutions

Prime Minister Justin Trudeau has been the most important federal face of Canada's Covid-19 response. Young, empathetic, and charismatic, he received praise for being present on a daily basis, clear in his communications, and appropriately tough as well as reassuring. Less visible although still prominent has been Chief Public Health Officer Dr. Theresa Tam, who has been Ottawa's primary communicator for scientific or epidemiological information about Covid-19. A small number of cabinet ministers have been involved in messaging that narrowly relates to their portfolios, including Health Minister Patty Hajdu and (now former) Finance Minister Bill Morneau. In provinces and territories with less effective public health communications, these federal figures have become household names. Elsewhere, however, provincial officials (e.g. British Columbia's Bonnie Henry) have been more visible. Federal public awareness campaigns about Covid-19, branded as "messages from the Government of Canada," have been developed by the Public Health Agency of Canada with support from the Impact Canada team within the Impact and Innovation Unit of the Privy Council Office.

Canada's Communications Strategy & Structure

Responsibility for Covid-19 communications in Canada has been distributed among municipal, provincial, and federal authorities. Agencies and policymakers in Ottawa created nationwide public health awareness campaigns while federal politicians framed the response in terms of social and civic values. Canada's federal Covid-19 communications emphasized science and expertise, encouraged a Canadian nationalism of neighbourly concern, and used insights from behavioural science to iteratively drive more effective health communications.

Federal Canadian officials made effective use of traditional tools of communication, including daily press conferences. Chief Public Health Officer Dr. Theresa Tam and deputy Dr. Howard Njoo provided daily updates on reported nationwide cases of Covid-19 as well as hygiene recommendations; these briefings typically made news when Tam introduced new guidelines or altered a previous stance (e.g. on mask-wearing). Prime Minister Justin Trudeau was much more visible. From mid-March through the end of June, Trudeau conducted daily outdoor press briefings covered live on national television. Self-isolating for two weeks after his wife tested positive for Covid-19, Trudeau updated Canadians on the pandemic, repeated key public health messaging, reported the latest government actions (from border measures to its emergency economic programs), and acted as the country's moral leader. Trudeau was praised for his stable presence as well as for his ability to combine empathy and reassurance with toughness and disappointment when needed. That halo was lost in July and August as Trudeau faced criticism for potential conflicts-of-interest in the implementation of Covid-19 emergency support measures.

Canadian Covid-19 messaging was mostly (though not exclusively) pro-social, asking the population to take measures to "protect each other" by slowing the spread of Covid-19. In his daily briefings, Trudeau emphasized neighbourly acts of care and concern as often as he did public health measures. He also framed supportive community behaviours in patriotic rather than democratic language, inviting Canadians to support one another as part of their duty to the nation. In a famously diverse and sometimes divided country, Trudeau used the pandemic experience to strengthen feelings of national unity—not with recourse to history or ethnicity or democratic citizenship, but with the local language of neighbourliness. A poll from August found that 66 percent of Canadians believed that the country was more united after Covid-19 than it had been before.

The federal Covid-19 public awareness campaign used a wide range of technologies and media. The Public Health Agency of Canada produced factsheets for Canadian airports, guidance for specific groups (e.g. caregivers and pregnant women, Indigenous communities, travellers returning to Canada, young children, etc.), advertisements for television, print, and radio as well as social media. National celebrities like astronaut Chris Hadfield and Olympic hockey star Hayley Wickenheiser appeared in TV ads. Social media messaging, used by more than 30 federal departments, was developed in concert with the Impact and Innovation Unit of the Privy Council Office, which used behavioural insights to hone messaging on physical distancing recommendations.

Sources & Further Reading

This case study is based chiefly on an analysis of several months of public briefings featuring Prime Minister Justin Trudeau and Chief Public Health Officer Dr. Theresa Tam. Additional materials consulted include pandemic planning and ethics documents, resources made available online by the Public Health Agency of Canada, public awareness campaigns (print, digital, TV, radio, etc.), and news coverage. Sources of particular interest include:

- Representative daily Covid-19 press briefings by Prime Minister Justin Trudeau on the steps of his home, e.g. on March 16 (statement and video);
- Social media messaging developed using behavioural science insights by the Impact Canada team, housed within the Impact and Innovation Unit of the Privy Council Office.
- Health Canada's Public Health Ethics Framework for Covid-19, reflecting in particular on autonomy during a global pandemic.
- A web video/TV advertisement featuring two Canadian celebrities (astronaut Chris Hadfield and Olympic medallist Hayley Wickenheiser) as well as Theresa Tam, combining pro-self with pro-social messaging.
- An August polling report from the Pew Research Center that found Canadians feeling more united than before the pandemic as well as overwhelmingly positive on the government's response.
- This reporting on Ottawa's delays in acquiring personal protective equipment during the early months of the pandemic as well as poor communication and coordination with the provinces, by Robyn Doolittle, Michelle Carbert, and Daniel Leblanc of The Globe and Mail.



By Ian Beacock

| Population | Tested | Cases | Deaths | |
|------------|---------|-------|--------|--|
| 5,120,000 | 408,300 | 6,700 | 213 | |

Major Takeaways

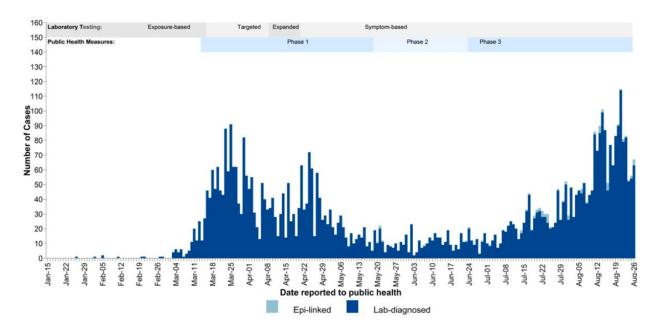
- Provincial Health Officer Dr. Bonnie Henry has led the communication of public health information and conveyed democratic values; elected officials are secondary.
- Emphasis on autonomy rather than widespread enforcement or detailed regulation: citizens are invited to make their own individual decisions about risk, guided by the province's established principles for safe social interaction.
- Use of memorable slogans to convey hygiene measures, help with habit-formation, and frame British Columbia's response as a work of collective democratic action.
- Determination to cultivate trust (among citizens as well as between government and public) in order to strengthen solidarity, collaboration, and the longer-term response.
- Serious, sustained attention to emotions: officials express concern for mental health, acknowledge shared difficulties or uncertainties, urge citizens to be kind and patient.

British Columbia's Covid-19 Trajectory

This spring, British Columbia was the envy of the world for its effective management of Covid-19. The first case in this Canadian province of approximately 5.1 million people was reported on January 28, and the first death on March 8. By late March, the province was reporting between 60 and 100 cases daily. Between mid-March and late May, B.C. was able to "flatten the curve." The healthcare system was never pushed to its limits, and by June the province was reporting between 10 and 20 cases per day. B.C.'s goal was not elimination, but rather management and containment. By late May, restrictions began to be loosened and the province began reopening its economy.

In July and August, the province entered a second phase of the pandemic in which reported cases surged once again; by late August, these numbers (sometimes more than 100 per day) exceeded the highest daily rates from March. These new cases were overwhelmingly concentrated among younger British Columbians, spreading via private parties and indoor social events. Hospitalizations remained extremely low and total deaths remained steady. As of September 1, British Columbia had reported a total of 5,790 cases and 208 deaths for the entire pandemic period.

The province moved quickly in response to Covid-19. In mid-March, citizens were warned against non-essential travel and a public health emergency was declared (March 17). While certain businesses were temporarily closed (e.g. bars, nightclubs, dine-in restaurants, salons, etc.), others were permitted to remain open if they could maintain physical distancing protocols. A full lockdown or shelter-in-place order was never issued. The province began reopening its economy on May 19, though new Covid hygiene protocols remained in place and British Columbians were still advised to limit their social interactions, practice hygiene, and maintain physical distancing. The second phase of the pandemic, appearing particularly among young people in July and August, led to greater focus on enforcement from political authorities, including fines for social gatherings in violation of public health orders. Plans to safely reopen schools, developed in concert with teachers' unions and local school districts, have been heavily criticized by anxious parents and concerned teachers. Henry has warned that the fall months, which are likely to include a further spike in Covid-19 cases as well as seasonal influenza, will require British Columbians to reduce their social interactions again.



Daily reported Covid-19 cases in British Columbia, January 15 - August 26, 2020 shown from the British Columbia Centre for Disease Control's Surveillance Report.

Communications Personnel & Institutions

Provincial Health Officer Dr. Bonnie Henry has been the most important voice for British Columbia's Covid-19 communications strategy. Her daily briefings, which started in late January, have made her the province's clearest and most visible communicator. Friendly, calm, and empathetic, her gentle but firm style has been widely praised. Adrian Dix, Minister of Health, often joined Henry to reiterate messaging and explain the government's response. Education Minister Rob Fleming has recently been a leading figure, addressing the reopening of public schools. Unusually, Premier John Horgan has not been a terribly visible part of the communications strategy. B.C.'s pandemic communications strategy is led by the Ministry of Health and the B.C. Centre for Disease Control, but messaging is additionally distributed by municipalities, transit agencies, and regional health authorities.

Communications Strategy & Structure

British Columbia's pandemic communications have been characterized by patience and empathy, impressive scientific and political clarity, and real attention to social trust.

They have also been practically synonymous with a single figure: Dr. Bonnie Henry, the Provincial Health Officer. Whereas many other jurisdictions have divided responsibilities between health officials and politicians, British Columbia has relied on Henry to achieve the two central tasks of pandemic communications herself: she explains scientific information, hygiene measures, and social regulations clearly—but she also speaks in terms of social and political values, helping British Columbians understand the meaning of the response and the civic role each of them should play. There has been little confusion or contradiction in B.C.'s pandemic response. Citizens know that Henry's is the one voice to which they should listen.

British Columbia has generally not relied on flashy technologies or innovative tools to communicate public health information about Covid-19. Instead, the province has used classic methods, executed effectively. Daily press conferences headlined by Henry have been the principal vehicle for communicating epidemiological data, restrictions and requirements for individuals and businesses, and suggested hygiene habits. Memorable slogans and rhymes have also been a critical part of B.C.'s communications strategy, including Henry's trademark sign-off ("Be kind, be calm, be safe.") as well as "Keeping our curve low and slow," "Fewer faces in larger spaces," "Stand together while standing apart," and "Our well-being and our future is in our hands, so let's continue to wash them." These traditional strategies have been effective, in part, because Henry is an exceptionally good communicator, praised widely for her calm presence and clarity of message as well as the spirit of patience and kindness which she has modelled and encouraged citizens to adopt. Beyond the press conferences, messages have been amplified by provincial posters and advertisements (print, TV, radio, digital, etc.) as well as by ads developed by regional health authorities, municipalities, and transit agencies. Attention to social media has been more limited, although certain regional health authorities began using TikTok and asking young people to advise them on digital messaging during the second phase of the pandemic in August. Communications are identified as a critical health intervention in B.C.'s pandemic response plans; in early August, the B.C. Centre for Disease Control issued a Covid-19 language guide, reflective of its attention to narrative framing.

In British Columbia, epidemiological information has been accompanied by regular and extensive reference to social or civic values. Relentlessly pro-social in its framing, B.C.'s messaging has emphasized the need for solidarity and unity in the face of Covid-19. It has further reminded citizens of their own power to take collective action. As the pandemic goes on and case numbers rise, Henry has reminded British Columbians of their previous success: "we know how to do this." Public health messaging has also paid particular attention to the psychological consequences of the pandemic and the emotions felt by ordinary people, from anxiety, isolation, and uncertainty to frustration or impatience. Henry regularly acknowledges the difficulty of adhering to Covid-19 guidelines in daily life and invites citizens to behave responsibly but with kindness and compassion, assuming the best of one another and acting in good faith. Sympathy is frequently accompanied by gratitude: provincial authorities often thank citizens, businesses, and organizations for their contributions and sacrifices.

British Columbia has afforded its citizens as much individual autonomy as possible in making responsible decisions during Covid-19. Rather than regulating social behaviour in all circumstances (the province, for instance, never formally banned gatherings smaller than 50 people), B.C. has relied on effective communications to equip citizens with principles for safe pandemic socializing. These principles are widely applicable and easily understandable: handwashing, physical distancing, and staying home when sick. Henry has often argued that individuals are the best judges of their own behaviour, asking them to consider "fewer faces, smaller groups, shorter time together, and bigger spaces. Always thinking about location, duration, and our relations will help to keep all of us safe." Many businesses were allowed to remain open after building their own Covid-19 safety protocols in concert with the province. The reopening of schools followed the same logic, as individual institutions developed their own plans in line with provincial guidelines. Henry has expressed skepticism about excessive enforcement in a pandemic, though a new wave of cases has resulted in political authorities (not Henry) taking a harder line on fines for private social events.

Trust-building has been an essential part of B.C.'s communications strategy as well as its wider Covid-19 response. Provincial authorities have expressed their trust in citizens by granting them autonomy; they have also regularly shared epidemiological modelling data and been transparent about anticipated measures and new risks. B.C. has also solicited feedback and input from the population using surveys about disinformation, anxiety, economic strain, and the province's response. The province's communications have ensured that information flows in both directions between citizens and officials, perhaps acknowledging that trust and solidarity will be required as much as obedience as the pandemic stretches beyond 2020.

Sources & Further Reading

This case study is based primarily upon an extensive analysis of the joint statements and press briefings delivered several times per week by Bonnie Henry and selected ministers. Additional materials consulted include provincial pandemic plans, public health information provided online by B.C.'s Centre for Disease Control, and advertising produced by the province as well as aligned municipal and transit authorities for Covid-19 awareness campaigns (e.g. print, digital, TV, etc.). Sources of particular interest include:

- The official provincial web portals for Covid-19 information: health information from the B.C. Centre for Disease Control and details on B.C.'s provincial recovery plan and economic reopening measures.
- Provincial planning documents including the Pandemic Provincial Coordination Plan, the Covid-19 Response Plan, the B.C. Pandemic Influenza Communication and Education Framework, and the B.C. Pandemic Influenza Ethics Framework.
- Representative joint statements and press briefings from Bonnie Henry and Adrian Dix, e.g. on May 14 (statement and video); a full archive of provincial joint Covid-19 statements can be found at the Vancouver Coastal Health webpage.
- Bonnie Henry's Good Times Guide, an example of how the province has tried to pivot its autonomy-through-principles approach towards young people as the virus spread more widely in July and August 2020.
- The B.C. Centre for Disease Control's Covid-19 Language Guide, issued in August 2020, which considers the social effects of medical terminology and recommends particular language and metaphors over others for messaging purposes.



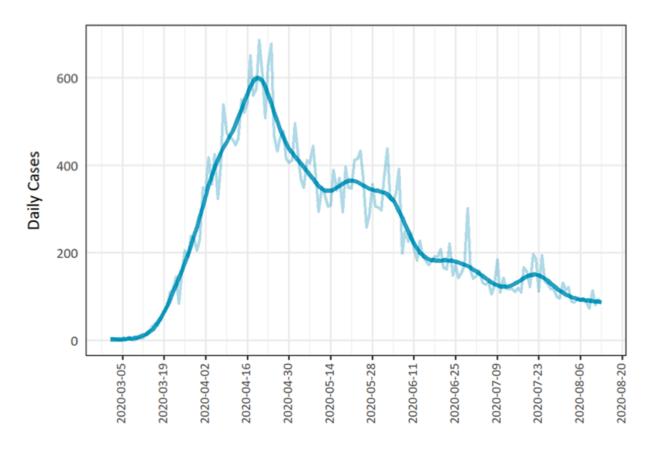
Population Tested Cases Deaths 14,745,000 3,014,000 43,700 2,813

Major Takeaways

- Ontario's Covid-19 communications were confusing and insufficiently transparent, but the province nevertheless succeeded in flattening its curve; this was, however, a missed opportunity for democratic framing, trust-building, and civic solidarity.
- Too many communicators and sometimes poor individual communication styles led to contradictory messaging and little sense of popular sovereignty or shared purpose.
- Rather than outlining general principles for responsible behaviour, the province issued increasingly granular (and sometimes overlapping) guidelines for the appropriate size of social gatherings and social circles; the confusion may have led to a case increase.
- Communications focused strongly on enforcement of public health directives and shaming of bad actors (e.g. partiers, price-gougers, failure to wear masks, etc.).
- Provincial messaging involved little values-framing, no memorable slogans, and the use of military metaphors and triumphalist rhetoric; communications were generally pro-self in the early months, although pro-social messaging was later also deployed

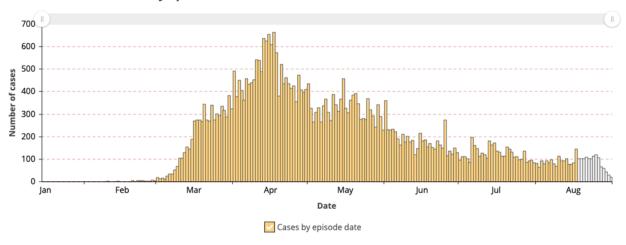
Ontario's Covid-19 Trajectory

Although not heralded for its success (and, indeed, heavily criticized by public health experts and the press), Ontario "flattened the curve" of Covid-19 relatively well and avoided any serious overburdening of its hospital and intensive-care facilities. Ontario's experience of Covid-19 was not as devastating as Quebec, but worse, especially in the initial months of the pandemic, than other provinces, including British Columbia. Ontario reported Canada's first case of Covid-19 on January 25, 2020; the first death was reported on March 11. At the peak of the pandemic, in late April, Ontario was reporting approximately 600 new cases daily for a population of roughly 14.6 million. By August, active cases had declined dramatically and the province was reporting around 100 cases per day. Like Quebec, Ontario saw its seniors' care facilities particularly affected by Covid-19; the overwhelming majority of Covid-19 deaths in Ontario have occurred in retirement or long-term care homes. Other hotspots have included major urban centers like Toronto and migrant farm worker populations in the southern part of the province. As of September 1, Ontario had reported a pandemic total of 42,421 cases and 2,812 deaths—the second highest totals in the country, after Ouebec.



Daily reported Covid-19 cases in Ontario, early March through mid-August 2020, shown from Public Health Ontario's Enhanced Epidemiological Summary on August 26.

Count of COVID-19 cases by episode date in Ontario



Daily reported Covid-19 cases in Ontario, January through September 1, 2020. Note that the grey shaded area indicates "lag-time" zone in which cases may have not yet been reported. Graph from Public Health Ontario's Ontario Covid-19 Data Tool.

The beginning of the province's Covid-19 response was slower and less sure-footed than elsewhere. As late as March 12, Premier Doug Ford was still encouraging Ontarians to travel abroad for spring break and public health officials were resisting pressure to recognize community spread. The province was also slow to embrace widespread contact-tracing and its testing capacity remained low and inefficient for months. Other measures resembled the steps taken by other jurisdictions, including the closure of non-essential businesses (although with a lengthy list of exceptions), schools, and even playgrounds; recommendations for self-isolation and physical distancing; and the banning of social gatherings greater than 5 people (March 28). On May 19, the province began slowly reopening; on June 12, in response to pressure, Ontario shifted to a regional strategy for loosening restrictions; hotspot areas like Toronto and the Windsor-Essex region bordering the United States were slower to reopen. Masks have been mandated by municipalities on an irregular basis, never provincially. The province has heavily emphasized enforcement and fines as part of its Covid-19 response.

Communications Personnel & Institutions

Ontarians have heard from an unusually large number of communicators during the Covid-19 pandemic. Elected officials have been the most prominent. For months, Premier Doug Ford addressed Ontarians in daily press conferences, frequently with cabinet ministers, especially Health Minister Christine Elliott or Education Minister Stephen Lecce. Elliott also published daily Covid-19 caseload information using her official Twitter account. Ontario's Chief Medical Officer of Health, Dr. David Williams, delivered daily technical briefings with his deputy, Dr. Barbara Yaffe; neither became household names. Local officials also played a major role in communicating Covid-19 information, including directors of local public health units and mayors (e.g. Toronto's John Tory). Some Ontarians looked to federal public health officials (e.g. Dr. Theresa Tam) and politicians (e.g. Prime Minister Justin Trudeau) for their Covid-19 information. Ontario's official public awareness campaigns were coordinated through the Ministry of Health and Long-Term Care as well as Public Health Ontario. Local agencies (e.g. public health units, municipalities, transit agencies) also rolled out Covid-19 campaigns. The province does not appear to have a dedicated pandemic communications infrastructure.

Communications Strategy & Structure

Ontario's Covid-19 communications strategy has relied on many of the same basic features used elsewhere, including public awareness campaigns and (most of all) daily press briefings. Yet the use of these methods has been neither smooth nor effective: the province has come under sustained criticism for the poor communication styles of its leading figures as well as repeated confusion in messaging. From the perspective of values and rhetoric, the province's Covid-19 strategy stands as a moderately-successful populist response, but a missed opportunity for bolstering democratic self-understanding and practice.

Due to political considerations, the strengths and weaknesses of individual figures, and the decentralization of Ontario's public health system, Ontarians have heard from an unusually wide range of leading communicators during Covid-19 (see above). Basic hygiene recommendations have included handwashing, physical distancing, and staying home when sick-emphasized by public officials and echoed by billboards, posters, highway traffic signs, advertisements (TV, radio, print, digital), etc. In late May, the province began advising mask-wearing in public spaces. Provincial Covid-19 messaging used pro-self framing earlier in the pandemic, advising Ontarians to protect themselves and their immediate loved ones; into the summer months, pro-social language became more prominent. Memorable slogans or catchy phrases have not featured as part of Ontario's Covid-19 communications. Provincial Chief Medical Officer of Health David Williams has held technical briefings that seem designed to explain epidemiological concepts to journalists, not to inform or reassure the general public.

Williams has played a negligible role in explaining the social and political meaning of Covid-19 and the province's collective response; that duty has fallen largely to Premier Doug Ford. In his daily statements, Ford has emphasized the decisive actions taken by him and his populist government to protect Ontarians (as well as businesses); he has also spoken warmly of a triumphant "Ontario spirit," reminding citizens jingoistically that the province has "the greatest minds, the greatest businesses, and the greatest people in the entire world." Ford has favored military metaphors, describing Covid-19 as a fight to be won, nurses and doctors as frontline workers, and the virus itself as an enemy to be defeated. Surprising his critics, Ford has built strong Covid-19 working relationships with his ideological opposites in the federal government, especially Deputy Prime Minister and Minister of Finance Chrystia Freeland.

Ontario's Covid-19 messaging has focused much more heavily on enforcement than on autonomy or individual responsibility. Ford has frequently chastised bad actors, using his platform to denounce selfish individuals: young people socializing and partying, anti-masking protesters, price-gougers, etc. The imposition of fines and use of enforcement measures by provincial and municipal authorities has been extensive. Messaging suggests little confidence in the willingness of citizens to make reasonable or responsible judgments beyond their own self-interest; rather, they were thought to need granular directives as well as public shaming and enforcement. Ontario also issued a series of increasingly-specific health directives for the appropriate size of social gatherings, including banning all gatherings larger than five people.

Ontario's Covid-19 messaging has been plagued with confusion and contradiction. Physical distancing and hygiene rules were broken on multiple occasions by leading figures, including Doug Ford and Toronto Mayor John Tory, with no repercussions. In mid-March, David Williams reversed himself on the question of community spread within hours, leading to skepticism from journalists. The government has been criticized for failing to disclose the members of its provincial Covid-19 Command Table, as well as for refusing to collect race-based epidemiological data (since reversed). In late March, all non-essential businesses were ordered closed before the province was able to define "essential businesses" that would be permitted to remain open. In April, the province was criticized for failing to offer translation of its daily briefings into French. In early June, Ontario's preference for specific guidelines caused major problems when overlapping orders about ten-person social circles (no physical distancing required) and ten-person social gatherings (distancing still required) led to terrific confusion and possibly an increase in Covid-19 cases. David Williams has faced calls for his resignation and criticism that he was unable to "communicate his way out of a wet paper bag." As one newspaper columnist observed on June 4 in the National Post, "Ontarians have experienced an added sense of distress throughout because no one at the top has credibly presented a clear message and plan - no one has really made us feel that they have this thing in hand, at least as much as it is humanly possible to do so." Calls for Williams' resignation continued into early September, though Ford reiterated his continued confidence.

Sources & Further Reading

This report has relied primarily on a broad, representative sample of daily Covid-19 briefings and press conferences featuring Premier Doug Ford, various cabinet ministers, and the province's Chief Medical Officer of Health David Williams. Additionally consulted were factsheets and online resources produced by public health agencies (provincial and local, e.g. Toronto and Ottawa), advertisements, provincial plans and roadmaps, as well as extensive news coverage and public criticism by epidemiologists. Sources of particular interest include:

- Daily Covid-19 press briefings from Premier Doug Ford, e.g. on April 3 (transcript and video), when he made the province's Covid-19 epidemiological modelling available to the public; a full archive of statements can be found on the Premier's YouTube channel.
- Regular press briefings with the Provincial Chief Medical Officer of Health, Dr. David Williams, and his deputy, Dr. Barbara Yaffe, e.g. March 16, when officials faced sharp questions about their unexpected change of course.
- This May interview with University of Toronto epidemiologist David Fisman, which explains his criticism of the province's Covid-19 response, with specific emphasis on the communications failures of David Williams.
- This July reporting from the CBC about confusion arising from new "social circles" guidance in Ottawa, including speculation from epidemiologists that it had generated a spike in new Covid-19 cases.
- Examples of more detailed guidance from local public health units, e.g. factsheets on how Covid-19 would affect religious practice, produced by Ottawa's public health unit, or Twitter ads from Toronto Public Health emphasizing social cooperation and solidarity.



By Sean Wu

| Population | Tested | Cases | Deaths | |
|------------|-----------|--------|--------|--|
| 5,825,000 | 2,790,000 | 18,600 | 628 | |

Major Takeaways

- The Danish government's decision to lock down on March 17 largely contributed to stopping the spread Covid-19 and greatly boosted its popularity. Despite mixed messages around the initial decision to lock down and on mass testing, the Danish pandemic response has been well-received.
- Denmark's top health official Søren Brostrøm has become one of the country's most prominent figures in communicating around the pandemic. While he has been a divisive figure, his clear and concise communication during press conferences have increased public compliance and understanding of pandemic protocol. His frequent appearances on public media have also greatly increased his popularity.
- Messaging was centered around calls for Danes to be socially responsible, which were accompanied by stern warnings by both government officials and police of the consequences if individuals do not follow physical distancing protocol.
- Denmark became one of the earliest countries in Europe to send children back to primary schools and daycare. In an effort to keep children safe in school, health authorities provided an extensive list of guidelines to teachers that included rigorous physical distancing protocols as well as a hotline for teachers that needed direct support

Denmark's Covid-19 Trajectory

The pandemic in Denmark worsened around the same time as the WHO declared Europe to be the new epicentre of Covid-19. Infections began rising rapidly in early March, with many cases originating from people who had travelled within Europe. By mid-March, the government had initiated widespread lockdowns. While the trend of cases quickly levelled off by April, the government declined to comment on the success of its decision. A staggered plan to reopen the country was then introduced, where the youngest children were ordered to return to school in April. To prevent children from potentially spreading infection, health authorities introduced an extensive list of guidelines to teachers and others in the education sector which included rigorous physical distancing, hand-washing protocols, and cleaning procedures for classroom spaces. A hotline was also introduced for teachers who required direct support from health officials. In response to these measures, some teachers have responded positively, stating that children are much happier back in school, while other teachers have expressed much more stress on the job.

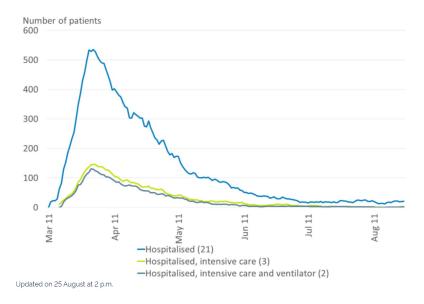
Shortly afterwards, the government permitted business to resume operations, and relaxed travel restrictions. During reopening, the government ordered mass testing and contact tracing of infected Danes, stating that these two strategies best prevented further infections. Officials have also been skeptical about the effectiveness of masks, but reversed their position to recommend masks on public transport in July.

As Danish society began to reopen, internal memos hinted that the government had locked down against the health authority recommendations that a lockdown was unnecessary. Both health authorities and the government have also been criticized for their seesawing positions on mass testing. However, the criticisms did little to lower support for the current government, which has seen its popularity increase during the lockdown. According to the local data firm Voxmeter, 86 percent of Danes supported the government response to the pandemic in April, while overall support for the incumbent government has risen five percent since the pandemic began.

| | Number of tests ¹ | People tested ² | Confirmed cases ³ | Hospitalised ⁴ | In intensive care units | In intensive care units and on ventilator | Recovered ⁵ | Deaths ⁶ | Case fatality |
|-----------------------------------|---------------------------------|-------------------------------|------------------------------|---------------------------|-------------------------------|---|------------------------|---------------------|------------------|
| Denmark | 2,321,685 | 1,629,993 | 16,627 | 19 | 2 | 2 | 14,763 | 624 | 3.8 % |
| Change (in 1 day) ⁷ | 39,905 | 23,676 | 90 | 0 | -1 | 0 | 160 | 1 | |

Updated on 27 August at 2 p.m.

A table from the Danish Health Authority website, last updated on August 27, that shows the trend of infections in Denmark and the state of the Danish health system.



A graph, last updated on August 25, from the same webpage showing the number of hospitalizations in Denmark since March.

Communications Personnel & Institutions

Danish Prime Minister Mette Frederiksen has often led the communication of policy changes and updates related to the pandemic. She is often joined by various cabinet ministers who also report on news relevant to their jurisdictions, including Health Minister Magnus Heunicke.

The government has relied on the Danish Health Authority for public health expertise, as well as the Statens Serum Institut, a child research institute of the Ministry of Health which researches infectious diseases. Dr Søren Brostrøm currently leads the Health Authority, and has provided recommendations on best practices during the pandemic. At the Statens Serum Institut, Dr Kåre Mølbak is currently the Director of Infection Preparedness and has been the primary representative from the institute. He not only provides recommendations, but also reports ongoing research on both the coronavirus and vaccine developments.

Communications Strategy & Structure

During the worst stages of the European pandemic, the Danish government regularly held press conferences led by the Prime Minister, which were usually accompanied by cabinet ministers, civil servants, and medical professionals with relevant information on the pandemic to report. These conferences became less regular as the country slowly reopened.

All three Northern European countries' leaders have consistently invoked the theme of social responsibility. The Prime Minister's regular press conferences combine positive pro-self and pro-social rhetoric around physical distancing. Concurrently, she has warned of consequences for those who do not follow pandemic regulations, a message echoed by the local police.

Alongside press conferences, authorities created a dedicated page in English and Danish on the national police's website that displays the latest updates and information on the pandemic, including messages from other government ministries such as travel restrictions, food regulations, and business guidelines. Additionally, the Danish Health Authority has led public ad campaigns to raise further awareness on the pandemic with print posters and information videos on its YouTube channel. Furthermore, the Health Authority's Director-General Søren Brostrøm has become widely popular due to his availability on a wide array of media interviews, where he discussed his recommendations during a pandemic and even other health issues outside of Covid-19. He has also been praised for his calm attitude and clear communication during press conferences, where his peers have commented that he directed recommendations during the pandemic in such a way that he was even able to reach skeptical parts of the population. However, he has also attracted criticism for spending 135,000 DKK (27,000 CAD) in public funds on only two interviews. Health authorities have also introduced a tracking app known as Smitte|stop (Infection Stop) that traces infections, allowing both users to anonymously notify others of infection, or to be notified of nearby cases.

Sources & Further Reading

This case study is based primarily upon an extensive analysis of government press briefings, official communication material, and reports from popular media. The most important sources are listed below.

The Prime Minister's Office (Danish) contains an archive of all press conferences led by the Prime Minister. Transcripts of entire briefings are also available in Danish.

- coronasmitte.dk (Danish and English) is the central hub for pandemic-related information including FAQs, policy updates, and information for emergency services that has been consolidated by Danish authorities.
- The Danish Health Authority (Danish and English) also provides updated information on the pandemic as well as public campaigns consisting of physical materials and videos for public awareness of Covid-19.
- A running live blog on DR, (Danish) Denmark's public broadcaster, provides domestic updates on the Covid-19 situation.
- The Local DK (English) is a media platform meant for global expats that provides updates on Covid-19 in English.

Relevant Social Media Handles

- Regeringen (Danish Government) Facebook Instagram Twitter
- **Statsministeriet** (Prime Minister's Office) Twitter
- **Sundhedsstyrelsen** (Danish Health Authority) Facebook Twitter YouTube
- Magnus Heunicke (Health Minister) Facebook Instagram Twitter
- Søren Brostrøm (Health Authority Director General) Twitter
- /r/Denmark on Reddit (Public discussions on pandemic)



By David Metzger and Sudha David-Wilp

| Population | Tested | Cases | Deaths | |
|------------|------------|---------|--------|--|
| 83,836,000 | 13,436,300 | 256,000 | 9,410 | |

Major Takeaways

- Chancellor Merkel has already earned her wings as a crisis-tested leader, but her handling of the pandemic has sealed her position as a global leader. During her 15 years in office she saw Germany and Europe through the financial crisis beginning in 2008 and the massive refugee flows from the Afghanistan, Africa, and the Middle East starting in 2015. She has received applause and criticism for both, but her performance thus far during the pandemic has been exemplary. Her approval ratings in Germany have surpassed seventy percent.
- Virologists and physicians such as Dr. Christian Drosten and Dr. Lothar Wieler have become household names in Germany. They were featured on talk shows from the beginning of the pandemic, and also leveraged their own communication channels to inform a broad audience about the novel Corona virus. They advised the federal government and local officials behind the scenes, and often sat alongside policy makers during press conferences.
- The German federal government and state authorities held a united front in combatting the virus. Although initially the states had differing methods to confront the pandemic, once Chancellor Merkel stepped in to coordinate, there was less confusion and Germans saw common regulations throughout the country.
- The German government showed its efficiency and resilience as the pandemic unfolded. The tragedy of Italy gave the German government ample warning of how the Corona virus could overwhelm a health system. German policy makers made use of the lead time to source enough personal protective equipment for healthcare personnel, create additional beds in intensive care units, and implement testing capability.

Germany's Covid-19 Trajectory

Germany reported its first known case of Covid-19 on January 27, 2020. In the following weeks, the virus spread throughout the country, mostly through people returning from abroad, for example ski vacations in Austria, but there was also a local outbreak in North Rhine-Westphalia, Germany's most populous state. The small city of Heinsberg became infamous for human-to-human transmission linked to Carnival festivities in February. Heinsberg was also the location of the first Covid--19-related death on March 9 along with Essen in North Rhine-Westphalia. The number of cases and deaths increased steadily thereafter - Germany was near the top of the list on the Johns Hopkins University dashboard in March.

Since the states administer public health in Germany's federal system, local officials were prompted to act. Events were cancelled, hygiene measures as well as social distancing were recommended. Measures as well as enforcement differed from state to state, and a patchwork of regulations emerged reflecting the severity of the pandemic in each region.

On March 16, the Federal Interior Ministry started border controls with five out of Germany's nine neighboring countries. At this point, Poland and Denmark had already closed their borders entirely. The first country-wide restrictions were adopted on March 22. While these entailed contact restrictions, it was still far from a proper lockdown. Bavaria, one of the most heavily affected regions, enacted stricter rules that forbade leaving the house without a reason and banned all private meetings with minor exceptions. As the curve flattened in Germany and certain goalposts were met such as the rate of infection per 100,000 inhabitants, restrictions were incrementally lifted starting on April 20. At the end of April, Germany was testing close to half a million people per week and had boosted capacity to theoretically roll out 900,000 tests per week. The heads of the federal states consulted regularly with each other, in conjunction with the federal government, to discuss loosening of rules based on medical developments. By the end of May, 181,482 Covid-19 cases had been recorded in Germany with 8,500 Corona-related deaths.

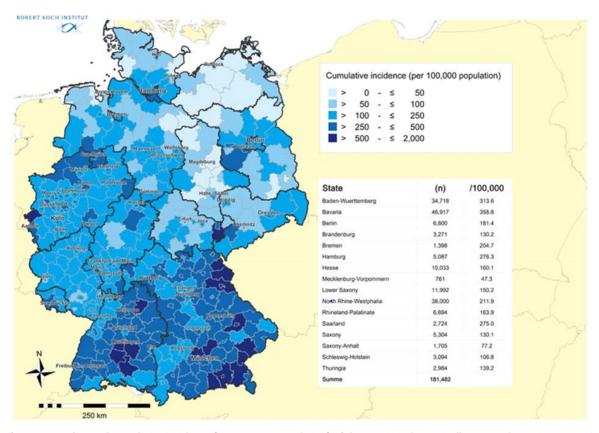


Figure 1: Number and cumulative incidence (per 100,000 population) of the 181,482 electronically reported COVID-19 cases in Germany by county and federal state (31/05/2020, 12:00 AM). Please see the COVID-19 dashboard (https://corona.rki.de/) for information on number of COVID-19 cases by county (local health authority).

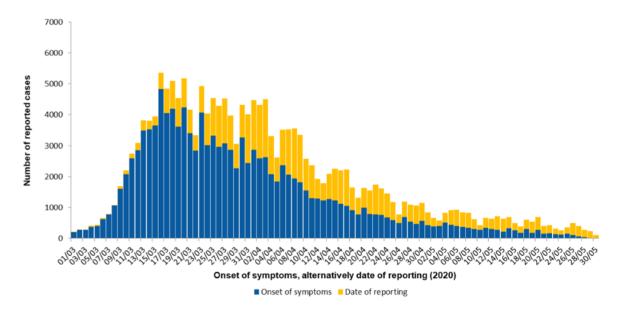


Figure 2: Number of electronically reported COVID-19 cases in Germany by date of symptom onset and by date of reporting from 01/03/2020. For 55,625 cases the onset of symptoms is unknown and the date of reporting is provided in the figure (31/05/2020, 12:00 AM).

Both graphs are sourced from the Robert Koch Institute.

Communications Personnel & Institutions

The Robert Koch Institute is the main agency tasked with providing scientific updates and medical advice during public health situations. The institute is a government-funded institution which formally belongs to the Ministry of Health and is responsible for disease surveillance and prevention. From the end of February to the end of March, it published daily reports on the recent number of infected persons and offered expert views on the trajectory of the pandemic in Germany. Updates dropped down to twice a week throughout the month of April to mid-May. Either the president or vice president of the Robert Koch Institute led the daily press conferences.

One of the most preeminent virologists in the country, Professor Christian Drosten became a household name in Germany. As head of the Institute for Virology at the Charité Hospital in Berlin, he mastered the art of health communications. Due to his expertise in the field of novel viruses, he quickly established himself as one of the lead experts on the implications of the pandemic. He launched a daily podcast, "The Corona-Virus Update," on February 26, which broke down complex scientific concepts in an accessible way without oversimplifying current events. The now biweekly podcast has millions of followers who are interested to remain informed and learn about the latest scientific findings regarding the virus. Other virologists such as Henrik Streeck also enjoyed a lot of publicity through appearances in talk shows or press conferences alongside politicians.

On the political front, Chancellor Angela Merkel and Health Minister Jens Spahn were key personalities during the pandemic. Chancellor Merkel, at the twilight of her career, reconfirmed her reputation as crisis manager extraordinaire both at home and abroad. The pandemic has also cast her potential successors as winners and losers. In addition to Minister Spahn, the Bavarian Minister President Markus Söder has burnished his leadership credentials with his strict stance on controlling the pandemic. Spahn, Söder, and the other Minister Presidents often appeared on talk shows and gave interviews and public statements. But Merkel has become the gold standard for political leadership. Her address to the nation, press conferences, and podcasts mixed scientific expertise, concern, and empathy to catapult her favorability ratings to an all-time high. On March 18, Merkel held an unprecedented, televised speech in which she urged her fellow citizens to take the virus seriously and posited that the pandemic was Germany's biggest challenge in the post-war era.

Communications Strategy & Structure

Jens Spahn described the triad of scientific expertise, careful deliberation, and decisive action as the guiding formula for managing the pandemic in Germany. His evaluation is quite on the mark when considering Merkel's speech on March 16. She pointed out that the criterion for action is not what the politicians want to do but what the scientists say. Scientific expertise has clearly been the foundation for the German approach in dealing with Covid-19 but has also shaped communication strategies.

Germans had a daily morning briefing from the Robert Koch Institute, and scientists were staples on talk shows in the evening. Television broadcasts, coupled with Dr. Drosten's podcast, made scientific information readily available for all Germans. Politicians justified restrictions according to the rate of infection, and numbers were provided on a daily basis for fair warning, while the tragic example of Italy served as the justification for a hard shutdown.

Communications guidance stressed physical distancing and hygiene measures such as washing hands, later the wearing of masks was added although scientists had initially expressed doubts about the positive effects of mask-wearing. Vaccines were mentioned as a long-term solution which was unlikely to appear anytime soon, and self-quarantining was recommended particularly at the beginning of the pandemic when most cases stemmed from international travel. Quarantine was deemed as necessary in case of contact with an infected person. Merkel herself went into quarantine from March 22 to April 2 after her doctor tested positive for the virus. She even recorded a podcast about her quarantine experience showcasing how she led by example and expressed humility by admitting she had been lonely. Most importantly, she offered empathy by recognizing that fellow citizens were undergoing inconveniences during the pandemic. For the most part, politicians stuck to the official recommendations by health officials and refrained from recommending questionable treatments. Moreover, they undertook a clear effort in warning the population about misinformation. Traditional channels for communication were accompanied by the German government's social media campaign on platforms like Facebook and YouTube. The Federal Ministry of Health used Telegram and WhatsApp corona info channels as well as its own Instagram.

In addition to informing the German public about the spread of the virus and how the government was taking steps to safeguard public health infrastructure concerning intensive care beds and personal protective equipment, politicians also acknowledged mental health issues for school children from poor backgrounds as well as the economic stress for large and small businesses. An economic package was efficiently passed at the outset with little political wrangling and companies could furlough workers who in turn received income from the government. Yet, when faced with questions during press conferences, politicians also could not completely ignore the science, they had to show that they had a grasp of the details. Merkel famously explained the importance of the reproduction rate R in a press conference on April 16 and demonstrated her understanding of the underlying science. But most of the time, politicians focused on the communication of the social and economic consequences of the virus and remained consistent and empathetic.

All the levers of government worked relatively seamlessly together in Germany. From expanding hospital capacity to rolling out testing, the international press often refers to Germany as a model country in managing the pandemic. Though hesitant to intervene initially so that state leaders could carry out their responsibilities, the scale of the pandemic required Merkel to coordinate a federal response as well as hold the nation together. She referred to her own history growing up in the authoritarian GDR to show that she did not take the restrictions lightly and realized that they were a necessary imposition on democracy.

By alluding to Germany's past and her own personal history, Merkel conveyed a human and emotional touch layered with scientific statistics in her communication. Merkel urged everyone to follow the rules so that they therefore can play a role in saving lives. The concept of solidarity was a common thread in her remarks, and it helped empower Germans to do their part during the critical phase of flattening the curve.

Sources & Further Reading

This case study is based primarily upon an extensive analysis of statements delivered by high-level politicians and the Robert Koch Institute. Additional materials consulted include media reports as well as ministerial statements and regulations. Sources of particular interest include:

- The daily situation reports (German and English) from the Robert Koch Institute.
- Representative statements and speeches (German) from politicians such as the Minister-President of North-Rhine Westphalia Armin Laschet, Health Minister Jens Spahn, and Chancellor Angela Merkel.
- Merkel's address from quarantine and her speech explaining the R rate. (German)



by Ian Beacock

| Population | Tested | Cases | Deaths |
|------------|---------|-------|--------|
| 5,000,000 | 839,000 | 1,800 | 24 |

Major Takeaways

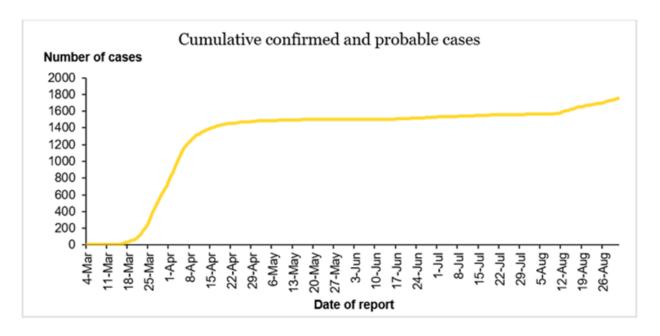
- The swiftness of New Zealand's response allowed the country to focus on full elimination, not just containment. Prime Minister Jacinda Ardern described the strategy as "Go hard, go early."
- Communications were a critical intervention: centerpiece of government response was a four-stage alert system for lockdown measures, introduced and explained clearly to citizens before restrictions were put into effect.
- Overwhelmingly pro-social framing with an emphasis on solidarity, compassion, creativity, and unity; war metaphors were deliberately and consistently avoided.
- Democratic framing was taken seriously: messaging stressed transparency, a spirit of egalitarianism, and the capacity of citizens to shape events through collective action.
- Messaging critically reinforced by Prime Minister Jacinda Ardern: with a background in communications, she was constantly accessible, clear, patient, and empathetic.

New Zealand's Covid-19 Trajectory

With a population of roughly five million people, this island nation has had one of the world's most effective responses to Covid-19. Following a strategy of containment and elimination, New Zealand is a textbook example of "flattening the curve." Cases as well as deaths have remained low, and the virus was eliminated entirely for several months before resurfacing in August.

New Zealand recorded its first case of Covid-19 on February 28, but the first case of person-to-person transmission was recorded on March 5. The peak of the pandemic was in late March and early April, when the country reported approximately 90 new cases every day. By the end of April, very few new cases were reported. On June 8, there were no active cases of Covid-19 in New Zealand. Although the virus returned in August, cases are relatively few. New Zealand has reported a total of 1,752 probable and confirmed cases and only 22 Covid-related deaths during the pandemic period (as of September 1).

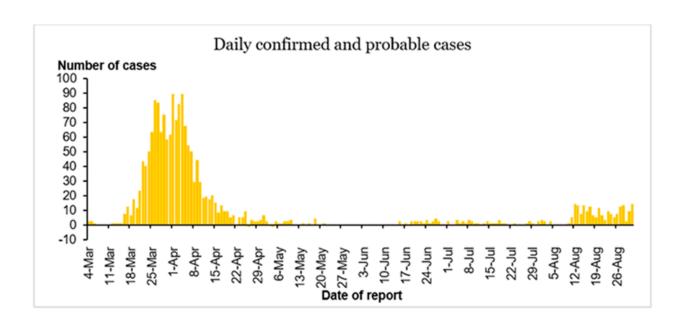
The government's response was swift and decisive, allowing New Zealand to restrict community spread and contain cases at ports of entry. Borders were closed on March 19 and self-isolation was required for returning travellers. Ardern addressed the nation on March 21 to explain plans for a national lockdown. On March 25, New Zealand entered four weeks of national self-isolation: all non-essential businesses were closed and citizens were encouraged to stay home. Restrictions were partially lifted on April 27. On June 8, domestic life returned to normal, though border restrictions remained in place; a hallmark of the response has been mandatory testing and quarantining at the border for all individuals arriving in New Zealand. When Auckland reported a spike of new cases in August, authorities used the four-level alert system to return the country to a higher state of vigilance while imposing harsher lockdown measures locally. The renewed response also included mask mandates on public transit and a four-week delay to scheduled parliamentary elections. Contact tracing has been facilitated by the use of QR codes and a mobile phone app. Covid-19 measures have generally met with wide compliance and virtually unanimous public support.



Total Covid-19 cases in New Zealand, March 4 through September 1, 2020 shown on the Ministry of Health's website.

Communications Personnel & Institutions

The leading faces of New Zealand's Covid-19 response have been Prime Minister Jacinda Ardern and Director-General of Health Dr. Ashley Bloomfield, who provided joint daily press briefings throughout the pandemic. The 39-year-old Ardern holds a bachelor's degree in communications and public relations; she has been praised for her empathetic and clear messaging. Bloomfield, a physician and health executive in his mid-50s, has become a national celebrity for his calming and knowledgeable manner. Cabinet ministers occasionally supported Ardern and Bloomfield to address specific response measures. Responsibility for New Zealand's Covid-19 messaging strategy, run through the Ministry of Health, has been a closely-guarded secret. Officials have also used the country's Civil Defence Alert System and the resources of the National Emergency Management Agency to communicate with citizens using mobile emergency alert messages.



Daily reported Covid-19 cases in New Zealand, March 4 through September 1, 2020. shown on the Ministry of Health's website.

Communications Strategy & Structure

New Zealand's pandemic communications have been characterized by speed, clarity, and careful attention to democratic trust and solidarity.

Top-level communications about the pandemic are channeled through two principal figures (Bloomfield and Ardern), limiting the possibility for confusion or messaging conflict. Bloomfield typically focuses on scientific information, hygiene guidelines, and updates to the country's case data and epidemiological modelling. Ardern reinforces safety guidelines while additionally conveying empathy and uncertainty, explaining the state's response (lockdowns, economic measures, etc.), and emphasizing civic values like kindness and solidarity.

The communications strategy has been diverse and inclusive, designed to address as many New Zealanders as possible. Daily press conferences from Ardern and Bloomfield, as well as weekly political briefings from Ardern have formed the backbone of the response. A public awareness campaign organized by the Ministry of Health has involved TV and radio ads, billboards, posters, traffic signs, digital ads, and more, each using distinctive yellow and white stripes. Similar branding was used for the national contact-tracing app. Ardern has also been a constant digital presence, regularly hosting informal Facebook Live videostreams to answer queries, share updates, and put citizens at ease. Her video podcast ("Conversations through Covid") discussed impacts on children, mental health, Indigenous communities, etc.

New Zealand's strategy has relied on memorable slogans, some developed by Ardern herself, to convey hygiene messages. Repeated lines include "going hard and going early," to justify the government's response; "act as though you already had Covid," to support a pro-social understanding of the pandemic; and "be strong, be kind," to stress essential values for the response. Clear communications have also played a crucial role in expectation-setting and ensuring transparency. As essential as the clarity of the country's fourstage alert system was the fact that it was unveiled and explained before it had to be implemented. Citizens knew in advance the conditions under which their autonomy might be restricted—and when it would be fully restored. In the same spirit, epidemiological modelling was regularly made public.

Empathy has been a hallmark of New Zealand's Covid-19 communications strategy, largely due to the charismatic, informal, and friendly style of Prime Minister Jacinda Ardern. In statements, interviews, and most of all her infamous Facebook Live videostreams, she has communicated directly with citizens (e.g. from her living room couch on the eve of national lockdown), empathizing with anxieties, and encouraging citizens to be kind to one another. While official health messaging stressed distancing, handwashing, and self-isolation, Ardern regularly answered citizen questions via livestream to clarify how those principles should be applied in everyday life (e.g. childcare, exercise, visiting elderly relatives, etc.). Messaging has struck a careful balance between preparedness and uncertainty, expressing faith in planning and hygiene measures but acknowledging that the duration of restrictions remained unclear.

Government messaging emphasized unity and solidarity against Covid-19. Military metaphors were entirely avoided, and New Zealanders were asked to "Unite Against Covid-19" and then to "Unite for the Recovery." Ardern regularly described the country as a "team of five million" and urged citizens to be "creative, practical, and community-minded," not soldiers or heroes. Hygiene measures were regularly framed as pro-social behaviours and as collective responsibilities more than directives. In national addresses, Ardern frequently told New Zealanders that Covid-19 was a shared burden, and that safety was something for the public to create for itself by working together. Success, she explained, would not be granted but would be won collectively by the people. "We will do everything in our power to protect you," Ardern noted typically on March 23. "Now I'm asking you to do everything you can to protect all of us. None of us can do this alone. Your actions will be critical to our collective ability to stop Covid-19."

Sources & Further Reading

The most important communications tool has been the frequent press conferences and public health briefings held by Jacinda Ardern and Ashley Bloomfield. This case study rests upon an extensive analysis of those daily briefings (videos and transcripts) over a six-month period as well as Ardern's weekly post-Cabinet press conferences, formal addresses to the nation, video podcasts with experts, radio and television interviews, and her regular videostreams on Facebook Live. Also consulted were the nation's pandemic preparedness strategies, public awareness advertising campaigns (print, radio, TV, digital), and additional online resources produced by the Ministry of Health. Sources of particular interest include:

- The official New Zealand website for Covid-19 information, branded with characteristic yellow-andwhite stripes and offering hygiene suggestions as well as information on travel, everyday life, and the economic recovery.
- Informal Facebook Live videostreams with Ardern, used to explain new scientific information, hygiene measures, economic restrictions, and answer questions, e.g. the Prime Minister's videostream from March 25 explain the coming lockdown and reassure citizens; livestreams are archived on Ardern's Facebook page.

- A regular video podcast or talkshow series titled "Conversations through Covid," in which the Prime Minister moderates Zoom discussions with experts to address various facets of the pandemic, e.g. the episode from May 8 about the role of Indigenous knowledge and community in responding to Covid-19.
- This in-depth reporting on the country's Covid-19 communications strategy from Duncan Greive of New Zealand news site The Spinoff.



Population Tested Cases Deaths 5,429,000 831,000 11,700 264

Major Takeaways

- With a cautious policy approach, the Norwegian government enjoyed renewed popularity with its decision to quickly lock down on March 12, although it has admitted in hindsight that its imposed measures were too harsh.
- International watchdogs criticized Norway's version of its coronavirus tracking app due to its lack of open-source code and its constant collection of users' location to be stored on private servers. The controversy led to health authorities voluntarily shutting down the app.
- Camilla Stoltenberg and Bjørn Guldvog, who lead Norway's public health agency and health directorate respectively, have become the leading public health professionals in communicating during the pandemic, appearing in most government press conferences.
- Prime Minister Erna Solberg has focused her communication on empathy and unity. While she has been stern in her call for Norwegians to follow pandemic protocol, she also thanked those who have been working to help others during the pandemic and invoked others to use their creative abilities to help each other during difficult times.
- On two occasions, the Prime Minister also held press conferences for children, which have become an effective method of connecting with youth. The government built a relationship with its youngest constituents, while children gained a platform to ask questions. This added channel of communication may also make children more likely to follow health protocol and engage in civil procedures in the future.

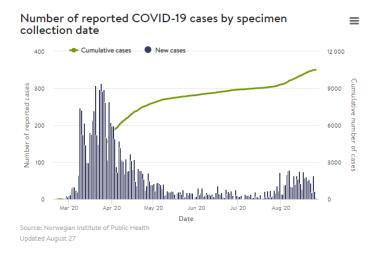
Norway's Covid-19 Trajectory

Due to its tourist attractions in the Arctic circle, the pandemic in Norway started slightly sooner than most European countries. But unlike the rest of Europe, Norway largely avoided the worst of the pandemic when cases in the continent began increasing at an exponential rate in March.

The government decided to lock down completely by mid-March with rising cases, and mostly slowed infection to only a few cases per day by May. While it permitted the youngest children back to school in late April, authorities were reluctant to reopen the country and relax travel restrictions until early June. Although government officials admitted in late May that their lockdown policies were too stringent, the overall success of the pandemic response led to a resurgence in the polls for the incumbent party. As infection numbers have remained stable throughout the summer, officials have largely remained skeptical of facemask use, having only recommended facemasks on crowded public transit. It has also discouraged mass-testing healthy individuals, arguing that the effort exceeded the efficacy.

ADMITTED TO HOSPITAL DEATHS ADMITTED TO ICU

Daily figures Covid-19 figures shown on the Norwegian Public Health Institute's webpage, last updated on August 27.



A graph on the same page showing total Covid-19 cases in Norway by cumulative progression and daily cases.

Communications Personnel & Institutions

Norwegian Prime Minister Erna Solberg has often led the communication of policy changes and addresses to the nation. She is often joined by Health Minister Bent Høie as well as other cabinet ministers who report on updates related to their area of jurisdiction.

Led by Dr. Camilla Stoltenberg, the Norwegian Institute of Public Health directed policy during the pandemic, providing recommendations for best practices during various stages of lockdown and reopening. The Norwegian Directorate of Health, led by Dr. Bjørn Guldvog, administered health services and provided additional policy advice. Stoltenberg and Guldvog have also made frequent appearances in government press conferences, where they share findings from their respective agencies.

Communications Strategy & Structure

The Norwegian government communicated policy changes through a press conference around once a week. They were mostly led by Prime Minister Erna Solberg, who was joined by other cabinet ministers and directors of public health organizations. Unlike its Nordic neighbours, the government also led press conferences for children that generated international attention. These not only addressed concerns from children, but also answered their questions. Compared to its Nordic neighbours, the Norwegian government and its officials have been the most active on social media with both institutional and personal accounts posting reflections and updates related to Covid-19 on Facebook, Instagram, and Twitter.

Language is very direct during press conferences. Solberg has warned fellow citizens to take the public health crisis seriously and to be aware that the situation is rapidly-changing, but also acknowledged and thanked those who have contributed to helping others and stopping the spread of the virus. She also encouraged fellow citizens to use their creative abilities to help each other during difficult times, and in one instance praised a local engineer who developed a method of producing respirators that would prevent shortages. Like Denmark, law enforcement and judicial officials also warned the public of consequences if they violate lockdown or physical distancing protocols.

Outside of direct government communication, the general public can access resources and updates in English and Norwegian on dedicated pages from both the official government website and the Norwegian Institute of Public Health's webpage (NIPH). The consolidated information page on the NIPH website has organized a convenient one-stop-shop for all types of information related to the pandemic, including messages from authorities, statistics on infection rates, plus additional research conducted on both the virus and issues that have emerged during the pandemic. Norwegian residents can also visit helsenorge.no, a public health resource that allows individuals to view their health records, and also fill a quick 'corona check' function, which advises them if they need to be tested for Covid-19.

Like Denmark, health authorities introduced an infection tracing app similarly named Smittestopp in early April. However, the app generated domestic and international outcry as it continuously uploaded users' location and did not grant access to open-source code. The Norwegian Data Protection Authority imposed a soft ban on the app in mid-June, which the health authorities voluntarily complied by deleting all stored data. It is one of the few policy decisions related to the pandemic when the government reversed course.

Sources & Further Reading

This case study is based primarily upon an extensive analysis of government press briefings, official communication material, and reports from popular media. The most important sources are listed below.

- Regjeringen.no (Norwegian, English limited) contains archives of all press conferences led by government officials, with transcripts of the Prime Minister's addresses in Norwegian.
- The Norwegian Public Health Authority (Norwegian and English) provides public campaigns raising awareness on the pandemic, latest statistics, health system updates, and research on the virus in one consolidated page.

- helsenorge.no (Norwegian and English) is a digital public health service run by the Norwegian Health Network that contains advice for best practices in the pandemic, travel advice for foreigners, plus a function that advises all residents if they need to be tested for Covid-19.
- A running live blog on NRK, (Norwegian) Norway's public broadcaster, provides domestic updates on the Covid-19 situation.
- The Local NO (English) is a media platform meant for global expats that provides updates on Covid-19 in English.

Relevant Social Media Profiles

- **Regjeringen** (Norwegian Government) Instagram Twitter YouTube
- Statsministerens Kontor (Prime Minister's Office) Facebook Twitter
- Folkehelseinstituttet (Norwegian Public Health Authority) Facebook Instagram Twitter YouTube
- helsenorge.no (Digital public health service) Facebook
- Erna Solberg (Prime Minister) Facebook Instagram Twitter
- Bent Høie (Health Minister) Facebook Instagram Twitter
- /r/Norge on Reddit (Public discussions on pandemic)



by Eseohe Ojo

| Population | Tested | Cases | Deaths |
|------------|---------|--------|--------|
| 16,825,000 | 154,000 | 14,100 | 293 |

Major Takeaways

- Following the Ebola pandemic of 2014, the Health Emergency Operation Centre (COUS) and a National Epidemic Management Committee (CNGE) were created. After registering the first coronavirus case, the Ministry of Health and Social Action activated COUS and an incident management system was set up with Dr Abdoulaye Bousso, the Director of COUS, appointed as incident manager. COUS reports to the CNGE on a weekly basis and takes its guidelines from the CNGE. The CNGE is set up as a scientific committee which oversees the coordination and general implementation of the Covid-19 contingency plan including strategic coordination of preparedness and response in full collaboration with COUS.
- The government communicated public health guidelines by example as well as through directives and recommendations. The backdrop of briefings was usually a mask and the message to stay home. Public officials themselves wore masks during the briefings and appeared alone or with required spacing between individuals. President Macky Sall went into quarantine for two weeks on June 25 after coming in contact with a Covid-19 positive person.
- Alongside frequent updates reporting the numbers and current state of events on social media and through press briefings, communications included stories from personal experiences of the virus and combined Covid-19 messages with those around events like Ramadan and the Senegalese Independence Day. For every death, public health officials added a personal note, acknowledging each individual and offering condolences to the family.
- Senegal included civil society and citizens in a manner consistent with its religious and cultural contexts. Senegal's messaging strongly included religious leaders and called on them to encourage others to comply with the public health guidelines while also showing them leading the way by their actions. Although Islam is the dominant religion in Senegal and was more prominent in the government's communications, its messaging targeted both Muslims and Christians. The Ministry of Health and the Health Emergency Operation Centre (COUS) worked with the Pasteur Institute, the World Health Organization and other UN institutions as well as with NGOs and international organizations. Government channels especially on Facebook shared good examples of civil society efforts such as messages from footballers, music videos from artists, donations from various sources. The government also shared on social media messages from religious leaders calling for respect for and compliance with the government guidelines while relaying prayers and good wishes.

Senegal's Covid-19 Trajectory

The first reported case of Covid-19 was on March 2, 2020 and the first death on March 31, 2020. From January to June 2020, there were 6,793 confirmed cases of Covid-19, 112 deaths, and 78,388 tests performed. March and April showed very little increase in cases but a steady rise began in May and June. Covid-19 has spread in Senegal primarily through contact and community transmission following a few imported cases. The Ministry of Health and Social Action issued the first press release on the novel coronavirus on January 22, reassuring the populations of arrangements being made including beginning public awareness and sensitisation, strengthening checks at the borders, and disseminating information for health workers. There were no reported cases at this point but the Ministry stated that it was closely monitoring the development of the situation and would regularly inform the public adding a toll-free number to call for additional information. A week later, a follow-up press release was issued with the same information adding the WHO infographic encouraging hand washing, covering hands and mouths with a tissue or fold of the elbow when coughing or sneezing, avoiding contact with persons with flu-like symptoms, cooking meat and eggs well, and avoiding contact with wild or farm animals.

On March 2, the first daily press release and update on the Covid-19 situation was issued covering details of the first case and recommending the entire populate to be calm and comply strictly with recommended measures. On March 14, following a proposal from the CNGE, President Sall decided on measures, including: a 30-day ban on all public events including Independence Day events; temporary suspension of the reception of cruise ships; the strengthening of health controls at land, air, and sea borders; suspension of Muslim and Christian pilgrimage procedures, school, and university activities for a period of three weeks and all hearings in the courts and tribunals for three weeks. Two days later, on March 16, President Sall approved temporary measures, to be escalated if necessary, including the suspension of all air travel between Senegal and France, Spain, Belgium, Italy and Portugal, Algeria, and Tunisia. Senegal entered a state of emergency on March 23 when the President imposed a dawn-to-dusk curfew to remain in force for three months, subject to a review and predicated upon the situation at the expiration of this period. On June 29, in a message to the nation, President Sall lifted the state of emergency starting June 30 to meet the two challenges of health and economy - fighting to preserve lives and health while resuming productive activities to get the economy back on track. This change included the reopening of air borders with strict protocols starting July 15 while land and sea borders remain closed.

Communications Personnel & Institutions

The major figures communicating around Covid-19 in Senegal are the Minister of Health and Social Action, Abdoulaye Diouf Sarr; President Macky Sall; Dr. Abdoualye Bousso, Director of the Health Emergency Operation Centre (COUS), and public health officials from the Ministry of Health. There are occasional appearances from other ministries as necessary, such as Ministry of Tourism and Air Transport on airport shutdowns, reopening, and repatriation flights, Ministry of Finance, Education, etc. Officials communicating are mostly older, middle-aged men with occasional appearances from women. Personnel involved appear to be qualified medical/health professionals, academics, head of departments or units.



Map from the Senegalese Ministry of Health monitoring the trajectory of Covid-19 in Senegal in real time from August 2020.

Communications Strategy & Structure

Senegal adopted a comprehensive communication strategy to raise awareness about the disease and how to curtail its spread. The approach comprises using social media channels such as Facebook and Twitter, radio, television stations, print media – newspapers and flyers to communicate with people in the languages they understand. Communications are mostly in French, occasionally in Wolof. The Ministry of Health also conducted some community visits and family chats in rural areas. There were daily briefings aired at 10am Dakar time (GMT) and broadcast via Facebook Live, daily press releases on the Ministry of Health and Social Action's website providing updates on the number of cases, how they are doing and calling for cooperation with the measures as well as social media posts on different platforms multiple times a day.

The hashtag #COVID19sn was frequently used to communicate Senegalese Covid-related news by most institutions and public officials as well as individuals and civil society. Beginning on March 4, after the first confirmed case, the Covid-19 response coordination team started producing situation reports every Monday and Thursday. It contained all the confirmed or verified information, the activities carried out in response to the epidemic and all details concerning the evolution of the epidemic. The situation reports and some information on the Covid-19 dashboard on the Ministry of Health site are broken down by districts, age, and type of transmission. The government's communications were pro-social, encouraging everyone to protect themselves and those around them, especially the older ones or to support the tireless efforts of the frontline workers by complying with public health guidelines. In different messages, the government encourages compliance with personal health measures for individuals as well as for others and the wider community. The President also expressed solidarity with the Senegalese living in diaspora and called on those living in areas with a high prevalence of Covid-19 to respect the provisions decreed by their host countries.

Sources & Further Reading

This case study is based primarily on extensive analysis of the information found on the official government channels communicating Covid-19 information. These include announcements, daily press briefings and updates available on multiple government websites:

- Office of the President
- **Ministry of Health and Social Action**
- **Health Emergency Operation Center**

Relevant Social Media Profiles

- La Présidence de la République du Sénégal (Presidency of Senegal) Facebook Instagram LinkedIn • Twitter • Vimeo
- Ministère de la Santé et de l'Action Sociale (Ministry of Health and Social Action) Facebook Soundcloud • Twitter
- Centre des Opérations d'Urgence Sanitaire (Health Emergency Operation Center) Facebook Soundcloud • Twitter • YouTube
- Macky Sall (President) Facebook Instagram Twitter
- Abdoulaye Bousso (Health Emergency Operation Center Director) Twitter
- "Chat on WhatsApp with Gouvernement du Sénégal: Dr Covid" (WhatsApp Chatbot)



by Yoojung Lee

| Population | Tested | Cases | Deaths |
|------------|-----------|--------|--------|
| 51,278,000 | 2,100,000 | 21,700 | 346 |

Major Takeaways

- Despite South Korea's proximity to the epidemiological centre and open-border policy, it is one of very few countries to successfully flatten the Covid-19 curve. South Korea has stood out for its speed and innovative technology that enabled the rigorous 3Ts ("test, trace, and treat").
- However, much of the country's success also emerged from its effective democratic communications strategy that promotes transparency, inclusiveness, and solidarity. The costly lessons learnt from the 2015 MERS outbreak formed the basis of this response.
 - Transparency: By disseminating real-time and regular information to the public through the technology of contact tracing, the government has enhanced its credibility and ultimately curbed further spread of Covid-19.
 - Inclusiveness: In efforts to create a more inclusive and cohesive society, South Korea has differentiated its messaging according to age, nationality, region, level of risk, gender, language, and religion. Further, the government's communication highly encourages voluntary participation in response efforts (e.g. physical distancing, 2-week self-quarantine, early testing)
 - Solidarity: Authorities often frame the response as one that is collective and collaborative, building solidarity and relieving anxiety.
- In short, South Korea's (1) clear and accurate messaging in physical and online spaces, (2) transparent messaging via contact tracing and (3) empowering messaging that builds public trust and national solidarity have equipped the country to swiftly and effectively respond to this debilitating pandemic.
- While it is not without its flaws, South Korea's methods can help other countries learn how to better manage the crisis without sacrificing too much the quality of life in liberal societies.

South Korea's Covid-19 Trajectory

Since South Korea's first reported case on January 20, there have been a total of 14,175 confirmed cases (of which 12,905 have recovered) and 299 deaths as of July 27, an incidence of 27.34 per 100,000 people. The crisis came to a head on February 29, with 909 new cases. The outbreak started to stabilize from mid-March when the number of new confirmed cases per day declined sharply to around 10 by the end of April. Figure 1 illustrates the trend of Covid-19 cases in South Korea from January 27 to September 1.

The government has relied on many different platforms to communicate with the public such as, but not limited to, print media (newspaper/magazines), broadcast media (TV/radio), support media (outdoor advertising), and Internet (websites/advertisements). Mobile technology has formed the heart of South Korea's public health communication. While varying in form, Covid-19 communication has generally fulfilled one of the following two functions: (1) to inform and educate readership with the most updated news (on daily happenings, the social impact of the virus, code of conduct, etc) and (2) to build solidarity, resilience, sympathy, and optimism.



Trend of Covid-19 cases in South Korea from January 21 to September 1 displayed on CoronaBoard.

Communications Personnel & Institutions

The communication on Covid-19 primarily occurs through the Ministry of Health and Welfare (MOHW) and the Office of the President. Meanwhile, other ministries and agencies play an integral role in providing pertinent information to the public. For example, the Ministry of Foreign Affairs takes charge of travel restrictions and the Ministry of Education, school reopening.

Under the governance of MOHW, the Korea Centers for Disease Control and Prevention (KCDC) serves as the central control tower in charge of the general coordination of infectious diseases. The current director of KCDC is Jung Eun-kyeong, whose knowledgeable, competent, and composed management of the response (as witnessed during the daily press briefings) has appointed her as a "national hero". Under the Office of the President, President Moon Jae-in has assumed office since 2017, a victory that reinstated the liberals to the Blue House for the first time in a decade. Buoyed by his administration's impressive handling of the pandemic, the Democratic Party of Korea won 180 seats out of 300 in the recent 2020 April Parliamentary Elections, an unprecedented landslide victory since 1987.

Communications Strategy & Structure

In the face of the novel Covid-19, South Korea strengthened border controls and implemented strict quarantine measures within the country. However, it did not have to impose a draconian and economically damaging lockdown due to its robust public health response across detection, containment, and treatment. From the outset, South Korea's public health communications have been grounded on democratic ideals of transparency, inclusiveness, and solidarity. In practice, this meant the government had to simultaneously convey the facts and express sympathy. On the one hand, centered around clear scientific information about the virus, the MOHW under Dr. Jung has prioritized educating the public about basic hygiene guidelines (e.g. mask-wearing, handwashing, coughing etiquette) and physical distancing protocols. On the other hand, President Moon has focused on building solidarity amongst Koreans by repeatedly emphasizing the notion of common responsibility. Moon often describes the fight against Covid-19 as a collaborative task whose success rests on good governance and civic cooperation.

Covid-19 communication is conveyed through various channels, some more prominent than others. First, the twice-daily press briefings have been highly effective in updating the public with the latest announcements on the outbreak. The first daily press briefing started on January 30 and is still active as of August 8.

Second, mobile technology has remained an integral component of South Korea's communication. Through emergency text messages and mobile applications (e.g. Corona Map), authorities have managed to inform the public about the recent whereabouts of new patients. This system was established under a post-MERS reform of the 2015 Infectious Disease Control and Prevention Act that made real-time tracing possible. While this surveillance technology raises privacy concerns, there is nevertheless an overwhelming political and public desire in South Korea to use it for outbreak management purposes. According to a survey conducted on February 26, 89 percent of Koreans regarded contact tracing as necessary for an effective public health response. However, that is not to say that the government has neglected the implications of this technology. South Korea has consistently sought to balance between individual privacy and public health interest as evinced through its renewed contact tracing practice during the Itaewon nightclub (April 30) outbreak.

Third, social media (e.g. Facebook, Instagram, KakaoTalk) has been widely utilized to disseminate vital public information and to build solidarity. For example, the Korean government has focused on hashtag campaigns in particular (#ThankstoYou, #ThankstoHealthWorkers, #Again), to pay gratitude to and laud civic engagement.

Due to such fast and effective communication from all levels of government, there is generally high public compliance, with a few exceptions. Misinformation is rare. However, the high reliance on digital technology makes the digital divide particularly pressing. Especially under the context of the pandemic, certain demographics have been excluded from accessing the most recent, vital information. In response to this digital divide, South Korea has introduced support schemes for vulnerable populations. For example, when 223,000 pupils said they did not have the means to start online schooling, the Ministry of Education started to loan out internet devices and laptops to students, especially those from low-income households. In this regard, South Korea has managed to improve the public's access to digital devices overall. Nevertheless, the country still has yet to create an inclusive digital landscape that is friendly to all of its users. In South Korea, the problem is not so much class-97.1 percent of Koreans have a smartphone or computer -but age. Many senior citizens who lack digital literacy skills have struggled to stay connected. To tackle this problem, the government is planning to establish 1,000 digital education centers to reduce this gap. By implementing these types of access programs, South Korea is laying a foundation for digital equity beyond the pandemic.

South Korea's responsiveness and adaptability in delivering public services have also been the spur behind the country's successful management of the pandemic. Consider the Itaewon nightclub outbreak. This new coronavirus cluster was traced back to several gay clubs in Itaewon, inevitably bringing to the fore the LGBTQ community. As a result, many queers avoided testing for fear of being forcibly outed. While homosexuality is not illegal in South Korea, there is social stigmatization and discrimination against the LGBTQ community, which were exacerbated by this incident. In response to this dilemma, the health authorities introduced nationwide anonymous testing in the first week of May to encourage voluntary testing and revised guidelines to prevent unnecessary and excessive violations of privacy. Further, the government reminded the public to respect the privacy of queer communities and avoid spreading groundless rumours that are subject to punishment. As such, the South Korean government has strived to remain responsive to public concerns and adapt to potential stigmatization without jeopardizing the public health response. With the most recent outbreak (August 12) clustered around a radical, politically active Presbyterian church that pushed the accumulated caseload to 1018 as of August 29, it remains to be seen how the government will respond to potential stigmatization and discrimination against Christians.

Sources & Further Reading

This case study is based primarily upon an extensive analysis of press briefings delivered several times per week by Dr. Jung Eun-kyeong, President Moon Jae-in and selected ministers. Additional materials consulted include public health information provided online by the Ministry of Health and Welfare (MOHW), Covid-19 awareness advertisements (e.g. print, digital, TV, etc.), as well as mainline Korean news outlets. Sources of particular interest include:

- The official clearinghouse website (Korean, English, Chinese) for Covid-19 information from the MOHW
- Press briefings from Dr. Jung Eun-Kyeong (Korean); a full archive of press briefings can be found under the official MOHW YouTube channel
- Covid-19 awareness campaign resources (Korean) from the MOHW
- Social media campaigns (Korean and English) e.g. #ThankstoHealthWorkers and #BabySharkHand-WashChallenge
- A detailed record of patients via contact tracing e.g. in **Seoul** (Korean)
- Summary of legal changes (English) implemented since the 2015 MERS outbreak
- **Creative billboard advertisement** (Korean) on social distancing



by Sean Wu

Population Tested Cases Deaths 10,111,000 1,250,000 85,800 5,842

Major Takeaways

- Compared to other European countries, Sweden implemented a more relaxed protocol of limited lockdowns and unenforced physical distancing. Reception to the strategy has ranged from outrage over the increased number of cases to praise over prospects of better economic recovery, a more sustainable policy in the long term, and better public immunity in the future.
- The Swedish response has also been criticized for the disproportionate amount of deaths from Covid-19 in senior care homes, where healthcare workers argue that the cause is a combination of ineffective measures and the institutional reluctance to admit seniors into hospital.
- Anders Tegnell, Sweden's top epidemiologist and one of the leaders of Sweden's pandemic response, has not only become a household name in Sweden, but has also attracted international attention due to the perceived unorthodox strategy of less stringent lockdowns. He became the leading figure during press conferences and has been known for his straightforward communication-opting to present facts and figures more often than appealing to emotion and values.
- Swedish politicians played a limited role in communicating around the pandemic, leading press conferences on a weekly basis where they only delivered policy updates. Press conferences with only public health and safety professionals occurred on a daily basis during the pandemic's worst stages, which were all led by practitioners from civil or public health organizations.
- During press conferences, the Swedish Civil Contingencies Agency reports additional research on the pandemic such as how behaviour has changed among the Swedish public from physical distancing advisories, plus new emerging issues from the pandemic such as cybersecurity and environmental concerns. These types of research allow the government to better understand public response to public health policy, and also inform the public on lesser-known problems caused by the pandemic.

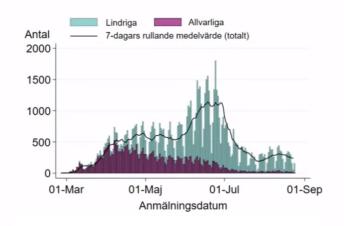
Sweden's Covid-19 Trajectory

With its first case on January 31, Sweden was among the first countries in the world to record active cases of Covid-19. The pandemic in Sweden became a serious issue around the same time as other European countries. Cases began rising rapidly around the second week of March and levelled off in late June. The government did not initiate a total lockdown, but instead ordered high schools to close, banned domestic travel, limited business operations in various sectors, and advised the public to distance physically. However, after most European countries reopened as the rate of infections died down in June, Sweden's measures have remained more stringent, including advisories on travelling as well as extended bans on senior home visits. It did not recommend wearing masks in the public, citing a lack of evidence, while recommending mass testing with priority given to demographics at risk. Concurrently, authorities have conducted tests for Covid-19 antibodies and T-cells, where the latter would be able target and destroy infected cells. So far, the research has not suggested if Sweden is close to achieving herd immunity.

Initially, the Swedish pandemic response was widely praised for placing trust in the public to be socially responsible. However, as cases continued to increase, public opinion began to sour. Compared to its Northern European neighbours, Sweden recorded nearly five times as many deaths and deaths by proportion. Even when examined next to some of the worst-hit countries in Europe such as Italy, Spain, and the UK, the number of cases per million in Sweden is almost double the aforementioned countries. Aside from pointing out that other European countries kept cases low by locking down, critics have also taken aim at the Swedish response within senior homes, as half of Sweden's deaths have been traced to senior care homes. Healthcare workers believe that the lack of physical distancing measures in sprawling complexes, inadequate access to treatment, and the institutional reluctance to admit patients into hospital have been the primary causes. Leading epidemiologist Anders Tegnell also attracted further outrage after his emails obtained under freedom of information laws suggested that greater senior deaths may be acceptable to reach herd immunity. In response to the situation in senior homes, Swedish health authorities have launched an investigation and extended bans on visiting senior homes to the end of August.

However, many continue to support the Swedish model. Proponents praised the response for protecting the economy, countering that lost jobs and extended stays at home would also negatively affect public health, and that the Swedish response can only be effectively evaluated years after the pandemic. The incumbent party in Sweden has not suffered in the polls yet. It enjoyed renewed popularity when other European countries began locking down and support has only dwindled a little afterwards.

Nya fall av covid-19 per dag



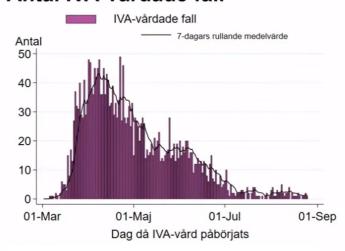
25 augusti 2020



- 86 891 (170 anmälda fall senaste dygnet)
- · Linjen visar 7-dagars rullande medelvärde för totala antalet fall

A graph from the Swedish Health Authority shown during a press conference on August 25, displaying the number of cases per day starting from March. The trajectory of cases is separated by total cases in dotted lines, case with mild symptoms in teal, and case with serious symptoms in purple.

Antal IVA-vårdade fall



27 augusti 2020



- 2 564 personer har vårdats på IVA
- · Linjen visar 7-dagars rullande medelvärde

A graph from a press conference on August 27, displaying the number of people admitted to intensive care every day. The black line shows the seven-day rolling average.

Communications Personnel & Institutions

Swedish authorities have provided two types of press conferences during the pandemic. Officials and cabinet ministers such as Prime Minister Stefan Löfven, Health Minister Lena Hallengren, and Director-General of the Swedish Public Health Agency Johan Carlson lead government press conferences where they provide updates on the trend of infections in the country and policy updates relevant to specific ministers who are present.

On updates related to public health advice and findings, these types of messaging have instead been directed to public health and safety professionals, who lead their own press conferences that are coordinated by the Swedish Public Health Agency. Notable figures include Dr. Anders Tegnell, the country's top epidemiologist, and his deputy Dr. Anders Wallensten, where they both present updates on the coronavirus situation locally and globally. Occasionally, the two epidemiologists are substituted by Dr. Karin Tegmark Wisell, the agency's microbiology head, where she also presents her research on the disease and the overall Swedish strategy. Health services have been administered by the National Board of Health and Welfare, represented by the Head of Emergency Services Johanna Sandwall, who provides updates on the state of the Swedish health system. Public safety has been overseen by the Civil Contingencies Agency (MSB), represented by Strategic Advisor Svante Werger, who shares reports on behavioural changes in Swedish society during the pandemic, plus other issues that have emerged due to the pandemic, such as cybersecurity and environmental concerns.

Communications Strategy and Structure

During the most severe periods of the pandemic, Swedish health authorities provided daily press conferences with updates on infection trends across the world, the state of the health system in Sweden, and other issues related to the pandemic. However, due to public pushback on the overall strategy, briefings from health professionals were reduced to twice a week on the week of June 9, while government press conferences continued on a weekly basis. These conferences usually feature at least one representative from the three organizations assigned to consult during the pandemic.

In the earlier stages of the pandemic, the concept of public trust was invoked frequently in Sweden's communications strategy. At the same time, health authorities also reminded Swedes to be responsible citizens and protect vulnerable demographics by adhering to protocols such as physical distancing and staying home when showing symptoms of the virus.

Beyond official communication, the public can also access resources related to the pandemic on multiple government websites in English and Swedish. The most crucial information can be found on the Swedish Public Health Authority's website. The Swedish National Board of Health and Welfare provides statistics on the pandemic as well as its healthcare strategy, and the Civil Contingencies Agency provides regular reports on behavioural changes of Swedes during the pandemic. It also contributes its research on additional issues from the pandemic, such as cybersecurity vulnerabilities on health data and environmental concerns from a large exodus of park visitors.

Sources & Further Reading

This case study is based primarily upon an extensive analysis of government press briefings, official communication material, and reports from popular media. The most important sources are listed below.

- The Government Offices of Sweden (Swedish, English limited) contains archives of all press conferences led by government officials. Video recordings are also available on YouTube.
- The Public Health Agency of Sweden (Swedish and English) has a webpage consolidating all pandemic-related information including FAQs, policy updates, and advisories for different sectors. Press conferences led by health authorities in Swedish can be found on YouTube as well.
- The Swedish National Board of Health and Welfare (Swedish and English) provides information on the type of healthcare services available to residents during the pandemic, as well as updates on the status of the Swedish health system.
- The Swedish Civil Contingencies Agency (Swedish and English) conducts research on the behaviour of Swedes and their responses to government policy during the pandemic. It also provides information on new societal issues that have emerged due to the pandemic.
- A running live blog on SVT (Swedish), Sweden's public broadcaster, provides domestic updates on the Covid-19 situation.
- The Local SE (English) is a media platform meant for global expats that provides updates on Covid-19 in English.

Relevant Social Media Profiles

- Regeringskansliet (Government Offices of Sweden) YouTube
- Folkhälsomyndigheten (Swedish Public Health Agency) Facebook Twitter YouTube
- Socialstyrelsen (National Board of Health and Welfare) Facebook Instagram Twitter
- Myndigheten för samhällsskydd och beredskap aka MSB (Swedish Civil Contingencies Society) Facebook • Twitter
- **Stefan Löfven** (Prime Minister) Facebook Instagram Twitter
- Lena Hallengren (Health Minister) Facebook Instagram Twitter
- Johan Carlson (Public Health Agency Director) Twitter
- /r/sweden on Reddit (Public discussions on pandemic)



Taiwan

by Victoria Ker

| Population | Tested | Cases | Deaths |
|-------------------|--------|-------|--------|
| 23,825,000 | 89,000 | 495 | 7 |

Major Takeaways

- Taiwan's experience with the SARS virus meant that it had institutions and policies in place prior to the beginning of the pandemic that enabled a quick response to Covid-19.
- The Taiwanese government's efforts to be accessible and transparent about their Covid-19 policies resulted in high levels of trust in the government which led to greater compliance with regulations.
- The Taiwanese government's extensive communications efforts informed residents about policy changes in a timely and accurate manner, enabling them to adjust their behaviour to better prevent transmission of the virus. This was accomplished through:
 - Multiple media platforms such as LINE, YouTube, Instagram, Facebook, radio stations and texting.
 - Informational advertisements hosted by doctors and targeted at different age groups.
 - Development of apps and chatbots that allowed the public to ask questions about policies and to track nearby mask reserves.

Taiwan's Covid-19 Trajectory

On December 31, 2019, Taiwan sent an official letter to the World Health Organization with concerns of human-to-human transmission related to Covid-19. Taiwan's Centers for Disease Control also began to monitor passengers arriving on direct flights from Wuhan. A week later, the government issued a travel advisory for Wuhan. The following week, Covid-19 was listed as a category 5 communicable disease, which is defined by the Communicable Disease Control Act as an emerging disease that is contagious and can be transmitted between individuals. Taiwan's Communicable Disease Control Act organizes diseases into five categories. Each category has specific instructions for reporting methods and quarantine. The formal and legal classification of Covid-19 allowed for mandated reporting and quarantine and the establishment of the Central Epidemic Command Control (CECC) on January 20 to facilitate sharing information between the administrative, academic, medical, and private sectors.

On January 23, Dr. Chen Shih-chung was appointed the commanding official of the CECC and the CECC was upgraded to the second level of its three-tier scale, enabling the government to coordinate inter-ministry communication. The following week, Taiwan banned all visitors from China and the CECC implemented mask-rationing to prevent panic buying. Taiwan reported its first Covid-related death on February 16. Schools reopened on February 26 after an extended winter break.

On February 27, the CECC was upgraded to the highest level in response to the worsening pandemic. This highest level allowed the CECC to coordinate and mobilize resources across all ministries and private stakeholders. The CECC expanded its travel alert to include high risk countries in Europe, North Africa, Dubai, North America, and Australasia during the week of March 14. On April 1, the Ministry of Transportation issued a mask-wearing mandate for all public transportation. The government issued its first national alert using its emergency text messaging system to remind everyone to practice social distancing during the Tomb Sweeping Festival. The number of Covid-19 cases in Taiwan exceeded 400 during the week of April 19 due to an outbreak on three navy vessels and the CECC issued an alert about the movements of the 24 navy personnel who had tested positive for Covid-19. On April 27, the government opened an online platform that allowed Taiwanese to donate their surplus masks to other countries.

On May 20, President Tsai was inaugurated into her second term as president and commended Taiwan's unity and resilience during the pandemic. The government revealed its plans to ease restrictions on May 25 through loosening social distancing rules and raising the limit on mass gatherings. On June 10, the CECC daily briefings switched to weekly conferences. The CECC announced on June 24 that it would allow international air passengers to pass through Taoyuan international airport and that it would permit entry into the country for those entering for reasons other than tourism.



Daily figures Covid-19 figures tracked by the Central Epidemic Command Center.

Communications Personnel & Institutions

Dr. Chen Shih-chung, the Commander of the Central Epidemic Command Center, took the lead on communications related to Taiwan's Covid-19 policy. Dr. Chen Shih-chung, who is also the Minister of Health and Welfare, has been praised for his emotional intelligence and expert communication skills. His attitude has shifted as the pandemic progresses. At first, when asked if Chinese children and spouses of Taiwan citizens should be allowed to enter the country, Dr. Chen Shih-chung stated, "If you didn't choose Taiwanese nationality at the beginning, you can deal with the consequences of that now on your own." Later he encouraged reporters to "Have a heart! [because] We all should keep empathy in dealing with certain matters."

Audrey Tang, Taiwan's digital minister and its youngest minister at the age of 39, has helped to develop many of the country's pandemic policies. Minister Tang is an experienced software programmer, having worked in Silicon Valley at the age of 19, and was responsible for creating apps that the government has used to communicate about the virus. Tang's work includes an app that maps out the availability of masks and a chatbot to answer questions from the public on the virus.

Vice President Dr. Chen Chien-jen, an epidemiologist who studied at Johns Hopkins University, has given regular public service announcements from the office of the president in addition to communicating through his own Facebook page.

President Tsai Ing-wen commended Taiwanese for their resilience and sense of community during her inauguration speech in May, but her focus regarding the pandemic has been Taiwan's role on an international scale. During her speech at the Copenhagen Democracy Summit, she stated that Taiwan has learned how to "control the spread of the virus without sacrificing our most important democratic principles". Tsai's hope is that Taiwan's success might open doors for the country to participate more on the international level.

Communications Strategy and Structure

Taiwan had reformed its epidemic health system after its poor experience with the SARS outbreak in 2003, when Taiwan had 346 cases and 73 deaths. This reform enabled Taiwan's institutions to respond quickly to SARS-CoV-2. Vice President Chen attributed the losses during the SARS epidemic to a poor response from the government, particularly the government's poor communication. In 2003, the government did not have a streamlined means of cross-agency communication. Following the SARS outbreak, the Taiwanese government performed a review that included practice drills of the Communicable Disease Control Act to identify weaknesses and created the National Health Command Center. The Communicable Disease Control Act allows the Ministry of Health and Welfare to seek approval from the Executive Yuan to establish the Central Epidemic Command Center (CECC). The commander of the CECC is responsible for overseeing communication and coordinating all levels of government agencies and private organizations in epidemic prevention. In response to the spread of Covid-19, the Executive Yuan quickly established the CECC in January to ensure a cohesive and organized response to the virus.

The Taiwanese government's efforts to be transparent about their Covid-19 policies have resulted in high levels of trust in the government which led to greater compliance from the public. The CECC held daily press conferences to address fear and disinformation, later moving to weekly press conferences. Dr. Chen Shih-chung, the commander of the CECC, appears at every press conference. During these press conferences, the CECC Expert Advisory Panel shares information on border control measures and new policies, research on the virus, and results of contact tracing, all in easily comprehensible language. The press conferences allow for an unlimited number of questions from the press and are also streamed live on YouTube so that the public can comment. In a May 26 poll, the Taiwanese Public Opinion Foundation reported that 85.6% of respondents shared that they are "fairly" or "very" confident that Tsai's government can keep the

virus under control. By attending to values and emotions, the CECC is able to develop trust with the population which creates a greater sense of community and more incentive to follow social distancing rules.

The Taiwanese government uses myriad media channels to disseminate information to the Taiwanese population. The CECC works jointly with the Centers for Disease Control (CDC) to use radio stations, Facebook, Instagram, LINE (messaging app), and text messages to communicate policies and information. The CDC also has Tumblr, Slideshare, and YouTube accounts. The CECC's daily briefings are streamed through Facebook and YouTube through the Center for Disease Control's official accounts. There are also informational advertisements on policy changes, social distancing measures, and virus information, that air during television program breaks and are hosted by relevant doctors. For instance, a pediatrician hosted the informational advertisement that was created for children prior to schools opening. The CDC's LINE account is used to share information and functions as a question and answer service where individuals can receive answers to their questions and concerns. They can also use LINE to find answers related to where and how to buy masks through a chatbot created by Minister Audrey Tang. Minister Tang has developed a platform that allows the public to track nearby mask reserves through an interactive map. President Tsai also uses regular Facebook posts to share epidemic prevention policies. To ensure that the correct information reaches everyone, even those who might not use the internet or listen to the radio, the government also uses a mass texting system called the Public Warning Cell Broadcast Service to share important information like the proper steps for quarantine. These channels ease any public fears while also mitigating any disinformation by ensuring that reliable information is easily accessible. The government has allocated \$7.15 million USD to communications: \$3.57 million USD was allocated towards mobile phone purchased for epidemic prevention and to establish a service platform (including phone bills, software installation, and maintenance costs), \$3.4 million USD was distributed towards communications on quarantine and isolation (including telecommunication), and \$14 million USD was used for improving cellular and internet services with a focus in areas with remote quarantine stations.

The government uses information from the Taiwan Public Opinion Foundation, a non-governmental, non-profit institute that regularly conducts polls and research on public opinions, to determine the popularity of its polling. Occasionally the government will also use text-mining to gauge opinions from Facebook or PTT (a bulletin board system in Taiwan).

Taiwan has seen success in its Covid-19 response, despite being excluded from the World Health Organization. The #TaiwanCanHelp campaign has tried to draw attention to Taiwan's ability to help fight Covid-19. Crowd-funding financed a full page spread in the April 14 edition of the New York Times with an advertisement that said, "WHO can help? Taiwan. In a time of isolation, we choose solidarity. You are not alone. Taiwan is with you." President Tsai has used the hashtag herself while tweeting about Taiwan's response to Covid-19. Throughout its mask diplomacy (donations of masks to other countries), Taiwan has gained international recognition. In response, the government has tried to publish documents on its response in English; with the help of National Taiwan University, it has developed a website, "Fight Covid Taiwan", with a collection of translated guidelines and policies for the international community to use. The website also has a "Ask Taiwan Anything" option to answer any questions that might not be covered. Taiwan's rising international presence inspired a visit on August 9 from the United States Health and Human Services secretary, Alex Azar. This was the highest-level visit by an American cabinet official since 1979 and resulted in the first memorandum of understanding on health cooperation between the two countries, which will encourage bilateral cooperation related to global health security, digital health, infectious disease prevention and vaccine development. As Taiwan's virus response becomes further politicized domestically, there is concern that the amount of testing for Covid-19 has been reduced to keep case numbers as low as possible to support the government's own foreign policy.

Sources & Further Reading

This case study is based on the analysis of documents provided by the Taiwanese government, particularly the Centers for Disease Control's website on Covid-19. Further sources include online Taiwanese news sources such as Focus Taiwan and Taiwan CDC's official YouTube channel. Dr. Chelsea Chou from National Taiwan University also provided information on budgeting and public opinion. Sources of interest include:

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