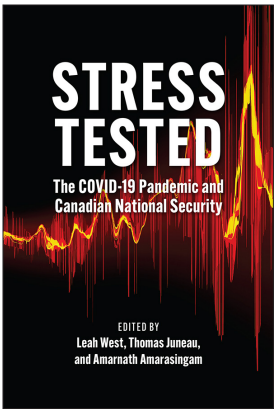

STRESS TESTED: THE COVID-19 PANDEMIC AND CANADIAN NATIONAL SECURITY

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PART II:
Responses

5

A Health Intelligence Priority for Canada? Costs, Benefits, and Considerations

Jessica Davis and Alexander Corbeil

Introduction

International responses to the COVID-19 pandemic have been mixed. Some states have responded effectively and proactively, while others have lagged in their policy responses, with devastating consequences. A few of these responses have incorporated surveillance techniques usually associated with national or international security in an effort to stop the spread of this deadly disease. In Canada, to date, national security tools and practices have not been used to track the spread of COVID-19 or respond to the pandemic. While there have been some calls for expanding the scope of Canada's intelligence activities to include health intelligence, the question remains whether Canadian intelligence institutions should treat health events as intelligence priorities. Greater integration and information sharing between Canada's traditional security and intelligence community and its health intelligence community could yield earlier warning, and by extension better policy responses.

At the same time, there are very real concerns about a possible expansion of the Canadian intelligence community's mandate and practices to include more of a focus on health intelligence, including proportionality, the right use of tools and technologies, and privacy. Further issues with expanding that mandate include the limited resources Canada currently has

to respond to and engage with security threats. While a wholescale adoption of health intelligence as a national security and intelligence priority might be premature, better integration and information sharing are certainly warranted. In this chapter, we canvas these arguments and ultimately propose that Canada's existing health intelligence capabilities could be better resourced and supported, both domestically and internationally.

Intelligence in Canada

Michael Warner defines intelligence as "secret, state activity to understand or influence foreign entities" (2002). In the intelligence literature, this broad definition is often broken down into component parts, such that intelligence is defined by specific intelligence actions, such as collection, analysis, and dissemination. The practice of intelligence is best, although imperfectly, understood through reference to the intelligence cycle. Under this model, intelligence is conceptualized in five phases: planning and coordination; collection; processing; production and analysis; and dissemination and feedback (Johnson in Gill, Marrin, and Phythian 2008). Underpinning the intelligence process are four constants: activity—gathering and exploitation of information; subjects—the targets of intelligence gathering; product—converting unprocessed data into an informative intelligence product; and function—to understand relevance, seek truth, and provide useful information to decision-makers (Herman 2001).

This definition applies in Canada, where intelligence is often employed against threats to the security of Canada and in support of Canadian interests (*Canadian Security Intelligence Service Act*, RSC, 1985, c C-23). Canadian intelligence agencies provide different kinds of intelligence to the Government of Canada, including strategic intelligence, warning intelligence, and security intelligence. For instance, several departments and agencies produce strategic intelligence products, including the Financial Transactions and Reports Analysis Centre of Canada (FINTRAC 2018), the Privy Council Office's Intelligence Assessment Secretariat (Barnes 2020), and CSIS (SIRC 1997), while other departments and agencies produce intelligence tailored for their specific operations. Canadian intelligence also includes foreign, criminal, and defence intelligence (PCO 2021, 21).

In this chapter, the authors conceive of threats to the security of Canada as primarily emanating from individuals, states, and non-state actors. Events such as pandemics and natural disasters can compound the threats posed by these actors. While some may conceive of events as threats in and of themselves, it is important to remember that threat is, in most commonly understood definitions, a combination of intent, capability, and opportunity (Riehle 2013). Events have no intent; their capacity to be disruptive or cause destruction is a function of the type of event. As such, these events can certainly shape and impact threats and national security, but in and of themselves are not threats. However, some governments have an incentive to both underplay the extent and impact of events within their jurisdiction, such as pandemics, and oversell the effectiveness of their responses, as we have seen with the COVID-19 pandemic (N. P. Walsh 2020). This is not to say that events like pandemics and natural disasters should necessarily be excluded from intelligence collection, but rather that there are limits on what intelligence and threat assessment can offer. Focusing on the (in)actions of governments in relation to an event, whether it be a pandemic or natural disaster, may hold the most promise. In addition, risk assessment, done by the appropriate agencies with specialized knowledge, has much to offer Canadian preparedness.

As the COVID-19 pandemic progressed, traditional Canadian intelligence activities expanded to include enhanced cybersecurity and outreach to the private sector to protect intellectual property, such as vaccine development (CSE 2020). While there is a clear role for intelligence agencies to play, the question remains whether health events such as pandemics should be intelligence priorities and whether Canada's intelligence resources should be divided among traditional threats and health events. Ultimately, Canada should review its existing early warning processes and pandemic alert systems to see where our response can be improved. Once a full assessment of these tools is complete (and utilized), there may be scope for expanding the intelligence community's mandate to include a limited health intelligence priority. However, we should not view health intelligence as a panacea to solve problems generated by current gaps in early warning systems, lack of response, or under-resourced programs in other departments. The following discussion on this topic also has

implications for Canada's approach to other global events, such as climate change and related instability and forced migration.

Global Health Environment

The global health environment is rapidly changing, as evidenced by the current COVID-19 pandemic. We have now entered the "Pandemic Era" (*Lancet Planetary Health* 2021). A convergence of factors has created the conditions for an increase in the frequency of future global pandemics, to which Canada will not be immune. Four interrelated global trends are at the centre of this change: climate change, income growth, urbanization, and globalization (Wu et al. 2017). Increasing the likelihood of the emergence and re-emergence of new zoonoses[1] is climate change, which negatively impacts ecosystem processes and functioning, making disease more likely. Income growth is associated with an increase in the consumption of animal protein in developing countries, resulting in the expanded transfer of land to livestock production. Increased interaction between humans and animals enhances the likelihood that diseases will spread from one species to another. Urbanization—the greater clustering and interaction of people in dense urban environments—increases the speed at which disease spreads. Globalization ensures that such diseases are not contained within national boundaries but instead proliferate from one internationally connected urban centre to another. Together, these trends have increased the probability of the emergence and global spread of zoonoses. These trends have made outbreaks of new zoonoses difficult to control, even with significant increases in international co-operation, including through the World Health Organization (WHO).

It may be tempting to focus on China as the source of many of these global health security challenges, given the current COVID-19 pandemic and other historical influenza pandemics originating in that country. However, the convergence of climate change, income growth, urbanization, and globalization presents similar risks in other countries. India, Indonesia, and Nigeria are a few examples of countries with similar predisposing socio-ecological risk factors. As stated by Wu et al., these countries all have "large and growing human and livestock populations, high levels of interaction between species, and large-scale ecological change"

(2017, 25). Unlike China, these and other countries are increasingly at risk of zoonosis transmission while simultaneously facing public health conditions that increase vulnerability to disease (Wu et al. 2017).

India, Indonesia, and Nigeria, among other countries, are also experiencing the negative ecological impacts of climate change. The warming of the climate is a principal driver of the loss of species diversity, reducing the resiliency of ecosystems and the flora and fauna contained within. Stressed ecosystems that encounter expanding livestock production can lead to the development of new zoonoses, as shown by epidemiologists studying the roots of disease in South Asia (Lustgarten 2020). Urbanization and globalization then provide the conduits through which such emergent diseases become global pandemics.

Health Intelligence

Health intelligence, a specific brand of intelligence focused on health surveillance (Mykhalovskiy and Weir 2006), generally falls into the category of early warning or warning intelligence, which is meant to provide the government with decision advantage and create options for policy action. In the United States, the National Center for Medical Intelligence (NCMI) is partially responsible for early pandemic warning. Located in Fort Detrick, Maryland, the NCMI is home to around a hundred epidemiologists, virologists, chemical engineers, toxicologists, biologists, and military medical experts trained in intelligence tradecraft (Riechmann 2020). It uses all-source methods, from communication intercepts to satellite imagery, social media, and classified intelligence, to gather information on public health issues for its primary consumer, the US military. This includes information relevant to overseas troop deployments and health threats to the homeland. In addition to efforts to identify emergent and re-emergent zoonoses, the NCMI also assesses whether foreign governments are forthcoming and truthful about public health crises and the effectiveness of their responses (Dilanian 2020). In November 2019, the NCMI released its first warning that a contagion was sweeping through China's Wuhan region, concluding that it could become a cataclysmic event, according to a source familiar with the assessment (Margolin and Meek 2020). NCMI reporting continued into December, culminating in a

detailed analysis in the President's Daily Brief in January 2020 (Margolin and Meek 2020). Furthermore, on 25 February 2020, the NCMI shared its conclusion that COVID-19 would become a pandemic within thirty days; a conclusion that came fifteen days before the WHO declared COVID-19 a global pandemic (Riechmann 2020). It is unknown whether the Trump administration received the NCMI's conclusion that COVID-19 would become a pandemic, though we know a briefing provided to the Joint Chiefs of Staff included such an assessment (Riechmann 2020). The United States likely shared this information with the Canadian military's medical intelligence unit through the Quadripartite Medical Intelligence Committee,[2] which began issuing warnings about COVID-19 in January 2020 (Brewster 2021).

Unlike the United States, which has an established intelligence agency dedicated to emerging public health issues, Israel turned its intelligence apparatus to the COVID-19 pandemic once it had taken hold globally. In March 2020, Israel declared a national state of emergency, which included a decision to leverage the capabilities of its intelligence community. Three national intelligence agencies were instructed to help with the national response to COVID-19: the Military Intelligence Directorate, the Israeli Security Agency (Shin Bet), and the Mossad (Kahana 2020). Unit-8200 and the Research Division of the Military Intelligence Directorate engaged in data collection and research for civilian medical needs within Israel. This included upgrading antiquated Health Ministry computer systems, establishing the Information and Knowledge Centre to study the effectiveness and dynamics of other governments' responses to the crisis, and liaising with international intelligence partners. Together, Unit-8200 and Unit-269 of the Israeli Defence Forces also assisted in monitoring COVID-19 testing. Until a recent Supreme Court ruling, the Shin Bet took responsibility for digital tracking (Kahana 2020). Using both a national ID and cell phone number, it tracked every individual exposed to COVID-19, transferring this information to the Ministry of Health. For its part, the Mossad supported the Israeli Ministry of Health in securing medical equipment by leveraging its international contacts. This included 1.5 million surgical masks, tens of thousands of N-95 masks, testing kits, protective clothes, medications, and expertise for the domestic manufacturing of ventilators (Kahana 2020).

While it is unknown whether the Trump administration received the NCMI's assessment that COVID-19 would become a pandemic, we also know that the administration continually received an abundance of information and projections underlining the severity of the pandemic and the danger posed to Americans, as highlighted by the inclusion of the NCMI's January analysis in the President's Daily Brief (Mangan and Breuninger 2020). However, for political gain, former President Donald Trump, most of his staff, and surrogates continually downplayed the gravity of the situation, mischaracterized the effectiveness of his government's response, and provided mixed and at times contradictory public health guidance (Summers 2020). Given the politicization of the COVID-19 response and incompetence of the Trump administration in its attempt to address the pandemic (Reuters 2021)—dynamics that were beyond the influence of the US intelligence community—it is difficult to assess whether early warning would have been beneficial to the US COVID-19 response had the country had more effective leadership.

Unlike the Trump administration, the Israeli government used its intelligence community to great, although at times controversial, effect. In Israel, the intelligence community leveraged its traditional activities and tools to combat the pandemic. These tools included data mining and analysis, technological monitoring, covert operations to obtain medical supplies, and recommendations for national decision-making (Shapira 2020). One Israeli intelligence commentator and former practitioner sees the response of the Israeli intelligence community as an extension of Israeli national intelligence culture. This culture can be described as a culture of practice, friction, initiative, and adaptation that favours reflection after the fact, including questions about whether the intelligence community should play a role in medical issues (Shapira 2020). From the evidence provided through public reporting and academic analysis, it seems that the Israeli intelligence community's most significant contributions came at the beginning of the pandemic. At that time, Israel did not have a clear understanding of the disease and its global spread or whether the effectiveness of specific health measures employed by other states required updates to its domestic health infrastructure, and it needed to procure crucial medical supplies (Kahana 2020). Israel used this information to manage its response to the pandemic and adjust existing intelligence tools

(Huggard and Sachs 2020) to track coronavirus disease spread (with limited success).

Intelligence Priorities in Canada

In Canada, the collection priorities of security and intelligence services are set at the highest levels of government and direct the types of intelligence that the government needs, which in turn dictates the capabilities and products of the intelligence community (NSICOP 2019, 34). They are established at two-year intervals by a cabinet committee through a Memorandum to Cabinet (MC). The priorities are broad, unranked, and meant to direct the intelligence community's focus "to the issues of greatest importance to the Government of Canada, but do not provide specific activities or entities of interest" (PCO 2021, 2).[3] These priorities remain classified. Even the broader subjects of these priorities are classified, so it is unknown if health intelligence is currently a priority for the Government of Canada or a standing intelligence requirement for one (or more) of the members of the security and intelligence community.

Despite this lack of information, some academics have called for Canada to adopt a "health intelligence mission" (Wark 2020). Wark suggests that "communications intercepts, satellite imagery, diplomatic reporting, open-source information and even traditional spying (HUMINT)" should be deployed to create health intelligence reporting. Wark further argues that assessment of this intelligence reporting could be done through Canada's existing assessment capability at CSIS, the Privy Council Office, the Department of National Defence, and Global Affairs Canada. The main argument supporting the idea of an enhanced health intelligence mission for Canadian security and intelligence agencies suggests that early warning of the pandemic would have created decision-making advantages for Canada. Moreover, it would have allowed the Canadian government to proactively address the pandemic through a series of policies geared toward stopping the spread of COVID-19.

There are several issues with this argument that require exploration of the counterfactual. First, early warning does not necessarily equal early action. Government officials could well have received better early warning of the emergence of the pandemic; the question remains what they would

have done with that information. Indeed, this was the case with the NCMI in the United States; they had intelligence earlier than the WHO, but the US government did not respond to the pandemic in an effective manner.

In Canada, with more warning, government officials could have perhaps ordered more personal protective equipment (PPE) or provided the intelligence to health officials to better understand how the virus works, or perhaps had more time to design better policies to combat the spread of COVID-19, but this is not a given. The US and Israeli examples highlight that the intelligence community can play important early warning and response roles during global health events like pandemics. However, as shown by the US example, political leaders must be willing to listen to and act upon information provided by intelligence institutions as part of an effective response. The politicization or plain ignoring of intelligence highlighting the severity of a global health event and other states' responses diminishes the effectiveness of this early warning role.

To facilitate a successful early response to a global health event, the Canadian government would have to receive those warnings and act on them. Additionally, the intelligence would have to provide sufficient detail to allow for better interventions, and the federal government would have to be successful in implementing better policies federally and convincing its provincial counterparts to do the same. Given the different responses from various levels of government in terms of accepting and acting on intelligence in managing the pandemic, these are significant hurdles to overcome when reacting to such an event.

At the same time, intelligence priorities are not just about national security—in fact, those priorities need to be broader and support a range of policy actions by the government, including foreign, defence, security, and public safety policy. Indeed, the aims of intelligence in Canada are to avoid strategic surprise, provide long-term expertise, and support the policy process (PCO 2021, 20). As our experience with COVID-19 has demonstrated, health issues like a global pandemic can impact all aspects of society, including what we see as traditional national security issues. For instance, the pandemic is believed to have increased radicalization among ideologically motivated violent extremists and encouraged the spread of conspiracy theories (see Argentino and Amarasingam, this volume; Babb and Wilner, this volume; CTED 2020). Indeed, global pandemics, along

with other international events, can certainly impact Canadian national security (Carvin and Davis 2020).

Health issues like disease outbreaks are a collective-action problem and require the international community to track the spread and use data collected to benefit the general population (Youde 2012, 83). While classified intelligence may provide early warning of an impending pandemic, and this information could easily be shared among the Five Eyes (P. F. Walsh 2020, 598), the classified nature of that information may hinder the global sharing necessary for a successful response. This hesitation stems from the need to protect sources and methods, while states are also reluctant to share information that could provide decision advantages to their adversaries. Still, states have a moral and legal international obligation to share this information broadly and quickly (WHO 2016; Youde 2012, 83). For this reason, health intelligence collected through classified means has some utility.

Privacy and Health Intelligence for Canada

There are other concerns about adopting health intelligence as a priority, ranging from the practical (like Canada's limited intelligence resources) to the ethical. As Buzan, Wæver, and de Wilde note, successfully labelling an issue a security (or intelligence) issue removes it from the realm of ordinary political discourse and permits the undertaking of exceptional actions (1998, 24). The exceptional circumstances created by the pandemic (and other crises) enable emergency measures and allow the suspension of normal politics (Kamradt-Scott and McInnes 2012, 96). A number of countries, such as Singapore, China (Kharpal 2020), Russia (Rainsford 2020), and Israel (Davis 2020), have used their intelligence-collection capabilities in an attempt to limit the spread of the pandemic within their borders. These actions have raised significant concerns about privacy, the lawful use of these powers and information collected through these mechanisms, and the authority used to collect that information, etc. (Davis 2020; see also West, this volume).

For instance, it has now come to light that the Singaporean government has and will continue to leverage its TraceTogether contact tracing program for law enforcement investigations after previously stating that

data would only be used for tracking COVID-19 exposure (Illmer 2021). In Israel, the Shin Bet's role in contact tracing came under scrutiny after civil rights organizations brought a petition before the Supreme Court and a state comptroller's report showed that the Shin Bet app is not effective enough when compared with investigations carried out by the Israeli Health Ministry (Bandel 2020). The Shin Bet is now only permitted to use digital tracking to find contacts of coronavirus patients when they refuse to take part in epidemiological investigations (Estrin 2021).

Certainly, surveillance systems are necessary to detect the spread of infectious diseases, but it is also critical to note that these systems can be used in discriminatory ways, such as to abrogate freedom of movement and speech (Youde 2012, 83). As intelligence scholars Omand (2006) and Bellaby (2012) note in their respective work on ethics, surveillance and the recourse to secret intelligence should be a last resort.

So, the question becomes: Do we really need health intelligence, or is this a solution looking for a problem? Certainly, the intelligence community has a role to play in providing any relevant intelligence to decision-makers on a host of intelligence issues, including those that relate to public safety, as intelligence relating to a pandemic clearly does. But are there better mechanisms to collect and share information about pandemics and to respond to this type of international event, both with our close allies and the wider international community?

The Way Forward

It is difficult to argue that states would not benefit from better early warning of a pandemic or other natural events and the associated responses by other governments that will have an impact on national security. As other chapters in this book illustrate, Canadian security and intelligence agencies' work has clearly been impacted by the pandemic, both in terms of their day-to-day function and the threats that they are investigating, mitigating, and disrupting. While it is still early to assess the federal government's performance during the pandemic, there are a few points of near universal agreement when it comes to assessing how Canada could have better managed the pandemic.

Adequate PPE

The Canadian government had insufficient levels of PPE during the early days of the pandemic, and little in the way of a plan to secure more, particularly in a competitive environment (Dyer 2020; Carvin et al., this volume). While early warning could help Canada gain a competitive advantage in terms of securing PPE when a pandemic is imminent, that preparedness could also be maintained on a continual basis. In addition, as other states adopt early warning systems for pandemics, any advantage that a Canadian system would have on this front would be diminished by increased competition.

Implementing or Bolstering the Capabilities of the Global Public Health Intelligence Network

Scientists within the Global Public Health Intelligence Network (GPHIN) accused the government of placing a higher priority on information provided by China and the WHO than the information held by GPHIN during the early days of the COVID-19 pandemic (Robertson 2020; Lee and Piper, this volume). Information provided by the intelligence community to GPHIN and public health decision-makers could have been used to verify, provide context for, or clarify information held by other government departments and agencies regarding the situation in other countries and the responses of other governments. Reviving a 2004 proposal to develop a mechanism that would allow the Public Health Agency of Canada, which houses GPHIN, to incorporate classified intelligence would be an appropriate place to begin (Brewster 2021).

Increased Coordination and Engagement with the Global Health Security Agenda

Launched in February 2014 and endorsed by the G7 in June of that year, the Global Health Security Agenda (GHSA) was established to address the global threat posed by infectious diseases such as SARS and COVID-19.[4] Among the GHSA's objectives are enhancing countries' capacities to address infectious disease, emphasizing global health security at the national level, and promoting multi-sectoral collaboration. As a member of the GHSA, Canada has committed to a number of 2024 targets, including investing in health security to strengthen national and global responses

(GHSA n.d.). Through the GHSA, Canada has also committed to distributing $5 million to international partners to bolster capacity in the area of global health security. An improved public health capacity in Canada could enhance Ottawa's contribution to the GHSA, and Canada's support to international institutions and developing countries.

Conclusion

Since the outset of the global pandemic, commentators have criticized the Canadian response to the crisis on various grounds. One of the propositions to improve our response to future pandemics and similar events is to include health intelligence as an intelligence priority. Certainly, enhancing existing Canadian health intelligence institutions such as GPHIN and contributing to international initiatives like the GHSA would improve the possibility of a more coordinated and proactive Canadian response. However, expanding health intelligence into the mandate of the broader intelligence community may not yield the desired results of early warning and better response. Warning intelligence, to be effective, must be listened to and acted upon by decision-makers. To be credible, that warning needs to come from experts who work within Canada's existing health intelligence infrastructure.

Without a doubt, better coordination and information sharing between health intelligence actors and the intelligence community would improve Canadian warning and policy responses. Whether Canada needs to dedicate some of its intelligence-collection efforts, such as its limited HUMINT and SIGINT capacities, is another question entirely. This proposition has not been sufficiently supported, particularly in the absence of a robust review of Canada's existing tools and responses to the COVID-19 pandemic. Pandemics certainly have national security implications. However, a move to broaden the scope of the Canadian intelligence community's collections efforts, dilute existing collection on national security threats, and duplicate efforts within the existing health intelligence framework may not lead to better warning and policy responses.

NOTES

1 Diseases or infections that are naturally transmissible from vertebrate animals to humans. For more information, see WHO (2020).

2 The Quadripartite Medical Intelligence Committee was established during the Second World War and facilitates the sharing of military medical intelligence between member countries Canada, the United States, Britain, Australia, and New Zealand.

3 This unclassified, for-official-use report was released by the PCO to the authors upon request in January 2021.

4 P.F. Walsh (2020) has put forward the idea of linking the work of the GHSA to the Five Eyes intelligence community. Others, such as Bowsher, Bernard, and Sullivan (2020), have argued that this should be expanded to include NATO countries.

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