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STATE OF WORLD HEALTH SECURITY & DIPLOMACY



Canada's pandemic preparedness: moving forward



European Union External Action. (2021). https://www.eeas.europa.eu/eeas/world-health-assembly-paves-way-towards-pandemic-treaty_und_en

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Vanderwesten & Rutherford INC. (2019). Health Canada Building. <https://www.vreng.ca/health-canada-building.html>

Executive Summary

Canada was not adequately prepared to respond to the COVID-19 pandemic, and as a result, gaps in the preparedness and response mechanisms have been uncovered¹. The lack of a centralized preparedness and response mechanism, and the lack of multilateral partnerships are some of the missing pieces to the current response tactic². This policy brief presents an independent evaluation by the Center for Global Health Security and Diplomacy, focusing on the gaps in Canada's pandemic preparedness and response. It examines global health security authorities from the U.S. and EU, and how these can be seen as case studies for implementing a central authority in the Canadian context³. This document also examines the U.S. GHSS and addresses aspects of this strategy that are missing in a Canadian version⁴. This policy brief offers recommendations on how Canada can strengthen its global health security capacity to support the ability to prepare and respond to future health threats.

¹ Office of the Auditor General of Canada. (2021, February 4). Report 8—Pandemic preparedness, surveillance, and border control measures. https://www.oag-bvg.gc.ca/internet/English/parl_oag_202103_03_e_43785.html

² Waddell, C. (2024, April 24). The next one. Public Policy Forum.

<https://ppforum.ca/publications/canadians-health-security/>; Aslanyan, G., Di Ruggiero, E., Kickbusch, I., Kuruvila, D., Michaelides, O., & Robertson, N. (2022). Towards a global health strategy for Canada. https://www.dlsph.utoronto.ca/wp-content/uploads/2022/07/Towards-a-Global-Health-Strategy_FINAL.pdf

³ Assistant Secretary for Preparedness and Response. (2022). BARDA Strategic Plan 2022–2026. U.S. Department of Health and Human Services.

<https://www.medicalcountermeasures.gov/media/38717/barda-strategic-plan-2022-2026.pdf>; European Commission. (2024). Health emergency preparedness and response (HERA).

https://health.ec.europa.eu/health-emergency-preparedness-and-response-hera_en

⁴ The White House. (2024). U.S. Government Global Health Security Strategy 2024.

https://www.whitehouse.gov/wp-content/uploads/2024/04/Global-Health-Security-Strategy-2024-1.pdf?utm_source=PPF%3A+Health+Security&utm_campaign=d9267350fb-EMAIL_CAMPAIGN_2024_01_23_02_11_COPY_01&utm_medium=email&utm_term=0_-55fad7d5d5-%5BLIST_EMAIL_ID%5D

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1. Background

1.1. Pandemic preparedness and global health security in Canada

In Canada, all government levels are involved in disaster or emergency preparedness and response⁵. For local emergencies, municipal governments are responsible while provincial and territorial governments respond to emergencies within provincial and territorial borders⁶. If the issue exceeds the available resources of these governments or involves multiple provinces or territories, the federal government becomes of assistance and will mobilize its resources⁷. For emergencies that pose a public health risk, the Public Health Agency of Canada (PHAC) plays an important role⁸. In Canada, provinces and territories report “infections of international concern” to PHAC through established protocols⁹. Once the situation is assessed, if the notification criteria that are established by the International Health Regulations (IHR) (2005) are met, PHAC will notify the World Health Organization (WHO) about a potential public health concern with international implications¹⁰. WHO then assesses the event to determine the next steps¹¹.

According to the Government of Canada (GC), in a situation such as a pandemic, there is an ideal response¹². This includes “a pan-Canadian whole-of-government response ... so that all potential resources can be applied to minimizing the pandemic's negative health, social and economic impacts. Pandemic plans should be aligned across jurisdictions to facilitate successful ... collaboration”¹³. This can be done via a system of emergency management frameworks and plans¹⁴. A coordinated pan-Canadian response would require collective infrastructures, coordinated activities, and response capacities¹⁵. However, this was not put into action during the 2019 COVID-19 pandemic, leading to a dysregulated pandemic response in Canada¹⁶.

⁵ Government of Canada. (2012, June 18). Bioterrorism and emergency preparedness. Canada.ca. <https://www.canada.ca/en/public-health/services/emergency-preparedness-response/bioterrorism-emergency-preparedness.html>

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ Government of Canada. (2016, February 12). Table of contents: Canadian pandemic influenza preparedness: Planning guidance for the health sector. Canada.ca. <https://www.canada.ca/en/public-health/services/flu-influenza/canadian-pandemic-influenza-preparedness-planning-guidance-health-sector/table-of-contents.html#pre>

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Office of the Auditor General of Canada. (2021, February 4). Report 8—Pandemic preparedness, surveillance, and border control measures. https://www.oag-bvg.gc.ca/internet/English/parl_oag_202103_03_e_43785.html

1.1.1. PHAC

The PHAC is an agency of the Canadian Government responsible for developing national public health guidelines¹⁷. The agency was founded in 2004 after the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak¹⁸. Canada had some of the highest incidence and mortality rates of SARS in the world, raising concerns regarding the country's ability to effectively respond to emerging public health threats and highlighting the need for change¹⁹. The PHAC is part of the Federal Health Portfolio, which consists of agencies that play important roles in ensuring and improving the health of Canadians²⁰. This portfolio comprises PHAC, Health Canada, the Canadian Institutes of Health Research, the Canadian Food Inspection Agency, and the Patented Medicine Prices Review Board²¹. These are all established to assist the Minister of Health with their duties concerning public health²².

The PHAC's mandate involves; health promotion, control and prevention of infectious and chronic diseases, preparation and response to public health emergencies, communicating Canada's health expertise with other countries, improving Canada's public health programs by applying international research, and strengthening public health collaboration among governments to facilitate national public health policies²³. However, the PHAC does not have the power to direct territorial and provincial public health bodies to implement its recommendations²⁴. This is because decision makers are not coordinated among various jurisdictions, thus each province or territory formulates their own timelines and interventions (i.e. masking requirements, border closures, gathering prohibitions, etc.)²⁵.

The PHAC is under the coordination of Health Canada and Public Safety Canada, among other governmental departments, and has formed the Centre for Emergency Preparedness and Response (CEPR)²⁶. PHAC's CEPR is "Canada's central coordinating point for public health

¹⁷ Bubela, T., Flood, C. M., McGrail, K., Straus, S. E., & Mishra, S. (2023). How Canada's decentralised COVID-19 response affected public health data and decision making. *BMJ*, e075665.

<https://doi.org/10.1136/bmj-2023-075665>

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Government of Canada. (2024, February 12). Health portfolio. Canada.ca.

<https://www.canada.ca/en/health-canada/corporate/health-portfolio.htm>

²¹ Ibid.

²² Government of Canada. (2015, February 5). Public health agency of Canada act. Justice Laws Website. <https://lois-laws.justice.gc.ca/eng/acts/p-29.5/page-1.html>

²³ Government of Canada. (2023, September 20). About the public health agency of Canada. Canada.ca. <https://www.canada.ca/en/public-health/corporate/mandate/about-agency.html>

²⁴ Bubela, T., Flood, C. M., McGrail, K., Straus, S. E., & Mishra, S. (2023). How Canada's decentralised COVID-19 response affected public health data and decision making. *BMJ*, e075665.

<https://doi.org/10.1136/bmj-2023-075665>

²⁵ Ibid.

²⁶ Government of Canada. (2012, June 18). Bioterrorism and emergency preparedness. Canada.ca.

<https://www.canada.ca/en/public-health/services/emergency-preparedness-response/bioterrorism-emergency-preparedness.html>; Government of Canada. (2005, October 17). Public health agency of Canada centre for emergency preparedness and response (CEPR). Canada.ca.

<https://www.canada.ca/en/public-health/services/emergency-preparedness-response/centre-emergency-preparedness-response.html>

security issues”²⁷. It is divided into several offices including the Office of Emergency Preparedness, and supported by the federal government²⁸.

According to the Office of the Auditor General of Canada, PHAC “was not adequately prepared to respond to the [COVID-19] pandemic, and it did not address long-standing health surveillance information issues prior to the pandemic”, highlighting the gaps in Canada’s pandemic preparedness, surveillance, and control measures²⁹. There have been recent attempts to bridge these gaps. On June 5, 2024, the Parliament of Canada passed BILL C-293, to establish the Pandemic Prevention and Preparedness Act³⁰. This Act requires the establishment of a pandemic prevention and preparedness plan by the Minister of Health, with consultation from other ministers³¹. The purpose of this Act is to aid in preparation for future pandemics, reduce the risks involved, and promote accountability and transparency in the federal government’s efforts³². In addition, in May 2024, the Government of Canada allocated funding for multidisciplinary projects that will help increase the life sciences and biomanufacturing sector, build capacity, and aid in preparing Canada for future health threats³³.

1.1.2. Canada’s role in global health security

Canada is an important actor in strengthening international efforts to increase global health security and for the prevention of future global health risks³⁴. For one, Canada is playing a role in developing a WHO Pandemic Agreement by working with international partners and other countries to “strengthen and coordinate national and international efforts to prevent, prepare for, and respond to pandemics”³⁵. Canada is supporting the development of this international agreement to strengthen collective accountability and action, ameliorate global cooperation, and address the current gaps in pandemic response, prevention, and preparedness³⁶. In addition, through PHAC, Canada is among the countries working on improving the IHR (2005)³⁷. IHR requires countries to collaborate for global health security and focuses broadly on the detection and response of public health emergencies on an

²⁷ Ibid.

²⁸ Ibid.

²⁹ Office of the Auditor General of Canada. (2021, February 4). Report 8—Pandemic preparedness, surveillance, and border control measures. https://www.oag-bvg.gc.ca/internet/English/parl_oag_202103_03_e_43785.html

³⁰ Parliament of Canada. (2024, June 5). Private member’s bill C-293 (44-1) - Pandemic prevention and preparedness act. <https://www.parl.ca/documentviewer/en/44-1/bill/C-293/third-reading>

³¹ Ibid.

³² Ibid.

³³ Tri-agency Institutional Programs Secretariat. (2024, May 6). Government of Canada funds new projects to further grow the domestic biomanufacturing and life sciences sector. Canada.ca. <https://www.canada.ca/en/research-chairs/news/2024/05/government-of-canada-funds-new-projects-to-further-grow-the-domestic-biomanufacturing-and-life-sciences-sector.html>

³⁴ Government of Canada. (2024, February 7). Canada’s role in the development of an international pandemic agreement. Canada.ca. <https://www.canada.ca/en/public-health/services/emergency-preparedness-response/canada-role-international-pandemic-instrument.html>

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

international level³⁸. Conversely, the WHO Pandemic Agreement aims to “strengthen prevention, preparedness and response actions specifically for pandemics using a whole-of-government, whole-of-society approach.”³⁹. Thus, Canada is making efforts to increase global health security in broad and narrow ways. However, Canada does not have a Global Health Security Strategy (GHSS).

1.2. The U.S. GHSS

Within this policy brief, key aspects of the United States (U.S.) GHSS will be applied in a Canadian context. In April 2024, the U.S. government administration launched a new GHSS⁴⁰. The goals of the GHSS rely on a science-based approach and whole-of-government strategies to strengthen global health security⁴¹. According to the U.S. GHSS, effective and timely response to the pandemic relied on already existing relationships and platforms that support the global health security objectives set by the government⁴². This included complementary national global health programs run by organizations such as UNICEF and the WHO⁴³.

During the COVID-19 pandemic, over 19 billion USD was allocated to COVID-19 assistance⁴⁴. The U.S. GHSS considers lessons learned from this pandemic response to prepare, detect, respond, and prevent future global health security threats⁴⁵. Building on this, the GHSS aims to reach the goals from the “bipartisan” Global Health Security and International Pandemic Prevention, Preparedness and Response Act of 2022 and 2022 National Biodefense Strategy and Implementation Plan⁴⁶. The strategy also “places county-driven action, equity, and inclusion at its core” and utilizes stronger commitment and

³⁸ Ibid.; Government of Canada. (2023, June 29). Canada and the international health regulations: Overview. Canada.ca.

<https://www.canada.ca/en/public-health/services/emergency-preparedness-response/international-health-regulations.html>

³⁹ Ibid.

⁴⁰ The White House. (2024). U.S. Government Global Health Security Strategy 2024.

https://www.whitehouse.gov/wp-content/uploads/2024/04/Global-Health-Security-Strategy-2024-1.pdf?utm_source=PPF%3A+Health+Security&utm_campaign=d9267350fb-EMAIL_CAMPAIGN_2024_01_23_02_11_COPY_01&utm_medium=email&utm_term=0_-55fad7d5d5-%5BLIST_EMAIL_ID%5D

⁴¹ Ibid.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ The White House. (2024, April 15). Fact sheet: Biden-Harris administration releases strategy to strengthen global health security.

https://www.whitehouse.gov/briefing-room/statements-releases/2024/04/16/fact-sheet-biden-%E2%81%A0harris-administration-releases-strategy-to-strengthen-global-health-security/?utm_source=PPF%3A+Health+Security&utm_campaign=d9267350fb-EMAIL_CAMPAIGN_2024_01_23_02_11_COPY_01&utm_medium=email&utm_term=0_-55fad7d5d5-%5BLIST_EMAIL_ID%5D

⁴⁵ Ibid.

⁴⁶ The White House. (2024). U.S. Government Global Health Security Strategy 2024.

https://www.whitehouse.gov/wp-content/uploads/2024/04/Global-Health-Security-Strategy-2024-1.pdf?utm_source=PPF%3A+Health+Security&utm_campaign=d9267350fb-EMAIL_CAMPAIGN_2024_01_23_02_11_COPY_01&utm_medium=email&utm_term=0_-55fad7d5d5-%5BLIST_EMAIL_ID%5D

investment from other countries to aid in driving global action towards common goals to combat global health security threats⁴⁷.

1.3. Other authorities

Due to the decentralized and complex governance of public health and healthcare in Canada, systemic issues in public health decision-making have led to an ineffective response to the COVID-19 pandemic⁴⁸. Unlike Canada, other countries have implemented overarching bodies that coordinate public health security responses, leading to increased preparedness to health security threats⁴⁹. For example, the U.S. has the Biomedical Advanced Research and Development Authority (BARDA) and the European Union has the Health Emergency Preparedness and Response Authority (HERA)⁵⁰.

The BARDA is an office within the U.S. Department of Health and Human Services that provides systematic and integrated approaches in the development of medical countermeasures⁵¹. Such countermeasures include therapies and diagnostic tools that are to be used for public health emergencies and health security threats⁵². The HERA, from the European Union (EU), is an authority made up of a combination of member state representatives as well as the European Commission⁵³. This body was created to increase preparedness and response to future public health threats by using the lessons learned from the EU COVID-19 pandemic response⁵⁴. Ultimately, these authorities have been formulated with mandates from national governments, creating what currently needs to be improved in Canada - clear governance and ensuring health security preparedness⁵⁵.

2. Methodology

Within this policy brief, qualitative case study analyses were conducted on existing global health security authorities BARDA and HERA, as well as the new U.S. GHSS. This was done to explore the patterns, meanings, and contexts of each case, to capture a better and

⁴⁷ The White House. (2024, April 15). Fact sheet: Biden-Harris administration releases strategy to strengthen global health security.

https://www.whitehouse.gov/briefing-room/statements-releases/2024/04/16/fact-sheet-biden-%E2%81%A0harris-administration-releases-strategy-to-strengthen-global-health-security/?utm_source=PPF%3A+Health+Security&utm_campaign=d9267350fb-EMAIL_CAMPAIGN_2024_01_23_02_11_COPY_01&utm_medium=email&utm_term=0_-55fad7d5d5-%5BLIST_EMAIL_ID%5D

⁴⁸ Bubela, T., Flood, C. M., McGrail, K., Straus, S. E., & Mishra, S. (2023). How Canada's decentralised COVID-19 response affected public health data and decision making. *BMJ*, e075665. <https://doi.org/10.1136/bmj-2023-075665>

⁴⁹ Hogberg, S. (2024, April 22). Budget 2024: A glaring omission in Canada's health security defenses. *Public Policy Forum*.

<https://ppforum.ca/policy-speaking/budget-2024-a-glaring-omission-in-canadas-health-security-defenses/>

⁵⁰ Ibid.

⁵¹ U.S. Department of Health and Human Services. (n.d.). Biomedical Advanced Research and Development Authority. <https://aspr.hhs.gov/AboutASPR/ProgramOffices/BARDA/Pages/default.aspx>

⁵² Ibid.

⁵³ European Commission. (2024). Health emergency preparedness and response (HERA). https://health.ec.europa.eu/health-emergency-preparedness-and-response-hera_en

⁵⁴ Ibid.

⁵⁵ Waddell, C. (2024, April 24). The next one. *Public Policy Forum*. <https://ppforum.ca/publications/canadians-health-security/>

more well-rounded understanding of the topic, and to gain insights into how they may be applicable in a Canadian context. Since this is a qualitative research methodology, bracketing (i.e. when researchers manage their assumptions and preconceptions) was important in avoiding the incorporation of bias into the final results⁵⁶. In addition, a critical analysis of the operation of these bodies was then performed to further determine their applicability to a Canadian context. This provided insight into a global health security strategy that recommends a global health security authority for Canada. Data will be collected by searching relevant government publications, interviews, documents, and other scientific and gray literature.

3. Policy Analysis

The following policy analysis analyzes the global health security authorities BARDA and HERA, and the U.S. GHSS, to understand how components of these can be applied in a Canadian context, and the implications involved.

3.1. Global health security authorities

This section provides an overview and comparison of the main goals that have been outlined by the two global health security authority case studies; BARDA and HERA.

3.1.1. BARDA

According to the BARDA Strategic Plan, “the price of pursuing these activities is small compared to the cost and consequences of waiting to respond to health security threats after they occur.”⁵⁷. Thus, BARDA created a 2022-2026 strategic plan with four goals; (1) to develop effective, safe, and available medical countermeasures rapidly for Americans, (2) to maintain a sustainable and available response tactic, (3) to foster public-private partnerships, and (4) to support and increase the organization’s workforce⁵⁸.

3.1.2. HERA

HERA has four components to its mission: (1) to increase the health security coordination between EU members before and during health crises, (2) to improve collaboration among researchers, industry, and relevant stakeholders in EU member states, (3) to improve the equitable distribution of medical countermeasures and improve the production, procurement, development, and stockpiling of them, and (4) to reinforce the already existing global health response architecture⁵⁹.

⁵⁶ Nieswiadomy, R. M. (2012). Qualitative research designs. In *Foundations of nursing research* (6th ed., pp. 171-184). Pearson Education, Inc.

⁵⁷ Assistant Secretary for Preparedness and Response. (2022). BARDA Strategic Plan 2022–2026. U.S. Department of Health and Human Services.
<https://www.medicalcountermeasures.gov/media/38717/barda-strategic-plan-2022-2026.pdf>

⁵⁸ Ibid.

⁵⁹ European Commission. (2024). Health emergency preparedness and response (HERA).
https://health.ec.europa.eu/health-emergency-preparedness-and-response-hera_en

3.1.3. Comparison of BARDA and HERA

Both BARDA and HERA are taking a preventative, instead of reactionary, approach to global health threats⁶⁰. In addition, both authorities are focusing on the development of medical countermeasures that are equitably accessible, supporting partnerships from a variety of stakeholders, and building off of the response tactic that they already have in place⁶¹. The difference between the two is that BARDA also has the objective of increasing the workforce, while HERA is focusing on increasing collaboration among EU member states⁶².

3.2. Existing GHSS

The following is an overview of the U.S. GHSS and the available Canadian strategy, highlighting the gaps in the Canadian strategy that can be filled by the goals of the U.S. GHSS.

3.2.1. The U.S. GHSS

To advance global health security, the 2024 U.S. GHSS set three goals. Goal 1 is to “Strengthen Global Health Security Capacities through Bilateral Partnerships”⁶³. The partnerships have already expanded from 19 to 50 countries and this goal leverages partnerships with other countries to ensure that they have the capacity to deal with global health security threats⁶⁴. Goal 2 is to “Catalyze Political Commitment, Financing, and Leadership to Achieve Health Security”, requiring partnerships at local, regional, national, and global levels⁶⁵. Lastly, goal 3 is to “Increase Linkages Between Health Security and Complementary Programs to Maximize Impact”⁶⁶. This goal requires building relationships between global health security programs and other programs to increase sustainability, produce better outcomes, and use existing resources more effectively⁶⁷.

3.2.2. Canada’s Biomanufacturing and Life Sciences Strategy 2021

In early 2021, Health Canada, PHAC, and the COVID-19 Vaccine Task Force collaborated with Innovation, Science and Economic Development Canada in engaging stakeholders on

⁶⁰ Assistant Secretary for Preparedness and Response. (2022). BARDA Strategic Plan 2022–2026. U.S. Department of Health and Human Services.

<https://www.medicalcountermeasures.gov/media/38717/barda-strategic-plan-2022-2026.pdf>; European Commission. (2024). Health emergency preparedness and response (HERA). https://health.ec.europa.eu/health-emergency-preparedness-and-response-hera_en

⁶¹ Ibid.

⁶² Ibid.

⁶³ The White House. (2024). U.S. Government Global Health Security Strategy 2024.

https://www.whitehouse.gov/wp-content/uploads/2024/04/Global-Health-Security-Strategy-2024-1.pdf?utm_source=PPF%3A+Health+Security&utm_campaign=d9267350fb-EMAIL_CAMPAIGN_2024_01_23_02_11_COPY_01&utm_medium=email&utm_term=0_-55fad7d5d5-%5BLIST_EMAIL_ID%5D

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Ibid.

their thoughts about Canada's COVID-19 pandemic response and the current biomanufacturing sector⁶⁸. The results of this initiative highlighted two major gaps.

The gaps are as follows. First, Canada is missing the domestic manufacturing and research capacity that would allow the country to prepare for the next pandemic or sustain other health threats⁶⁹. This suggests that “the scope of operations should also include surveillance systems, a supply chain of active pharmaceutical ingredients, and effective distribution mechanisms.”⁷⁰. Both HERA and BARDA have the objectives to improve the production and equitable distribution of medical countermeasures, thus Canada can use these as blueprints⁷¹. Second, Canada is missing partnerships that could be used to leverage the existing strengths of the system⁷². Thus, fostering public-private partnerships and collaboration among researchers, industry, and relevant stakeholders would allow for a well-rounded authority. In addition, Canada has a foundation that it can build upon, just like both HERA and BARDA are building off of the existing architecture that has been put in place⁷³.

The GC published *Canada's Biomanufacturing and Life Sciences Strategy* in 2021⁷⁴. This strategy has two main objectives: (1) to increase the biomanufacturing capacity in the domestic life sciences sector, and (2) to ensure preparedness for other health emergencies and future pandemics⁷⁵. Although this strategy touches on the importance of national capacity in overcoming health crises, it lacks some aspects that are present in the U.S. GHSS that we believe are crucial for pandemic preparedness and response.

3.2.3. What the Canadian strategy lacks

Firstly, the Canadian strategy is outdated, since it was published three years ago⁷⁶. Thus, the current global landscape should be taken into consideration in updating the strategy if needed.

⁶⁸ Innovation, Science and Economic Development Canada. (2021). What we heard: Considering the creation of new biomanufacturing capacity for Canada. <https://ised-isde.canada.ca/site/biomanufacturing/sites/default/files/attachments/What-We-Heard-Considering-Creation-NewBioman-Capacity.pdf>

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Assistant Secretary for Preparedness and Response. (2022). BARDA Strategic Plan 2022–2026. U.S. Department of Health and Human Services.

<https://www.medicalcountermeasures.gov/media/38717/barda-strategic-plan-2022-2026.pdf>; European Commission. (2024). Health emergency preparedness and response (HERA).

https://health.ec.europa.eu/health-emergency-preparedness-and-response-hera_en

⁷² Innovation, Science and Economic Development Canada. (2021). What we heard: Considering the creation of new biomanufacturing capacity for Canada. <https://ised-isde.canada.ca/site/biomanufacturing/sites/default/files/attachments/What-We-Heard-Considering-Creation-NewBioman-Capacity.pdf>

⁷³ Assistant Secretary for Preparedness and Response. (2022). BARDA Strategic Plan 2022–2026. U.S. Department of Health and Human Services.

<https://www.medicalcountermeasures.gov/media/38717/barda-strategic-plan-2022-2026.pdf>; European Commission. (2024). Health emergency preparedness and response (HERA).

https://health.ec.europa.eu/health-emergency-preparedness-and-response-hera_en

⁷⁴ Government of Canada. (2021). Canada's biomanufacturing and life sciences strategy.

https://ised-isde.canada.ca/site/biomanufacturing/sites/default/files/attachments/1098_01_21_Biomanufacturing_Strategy_EN_WEB.pdf

⁷⁵ Ibid.

⁷⁶ Ibid.

Next, there is no single authority that is tasked with implementing and overseeing the Canadian strategy in practice (i.e. like BARDA and HERA in the U.S. and EU respectively), perpetuating the decentralized preparedness and response that has been seen in the past⁷⁷. Lastly, although the Canadian strategy highlights the gaps in domestic biomanufacturing during health crises and some ways in which these can be tackled, it is missing one of the main goals that is included in the U.S. strategy - the importance of bilateral partnerships⁷⁸. International partnerships are important during health crises because “no country can tackle global challenges on their own”, and collaboration is required to respond to the challenges⁷⁹.

4. Recommendations

See [Appendix A](#) for a summary of the key recommendations to strengthen Canada’s global health security capacity.

4.1. Recommendation #1: Improve Canadian capacity and collaboration

Firstly, *Canada’s Biomanufacturing and Life Sciences Strategy* is outdated and should be updated to strengthen the national ability to respond to health crises by increasing research capacity, production, and equitable distribution of medical countermeasures⁸⁰. Moreover, the decentralization of governance in health crisis response has been evident in the lack of a specified authority to lead the implementation and functioning of the Canadian strategy. This policy brief recommends establishing an authority to implement a Canadian strategy, just like the U.S. has BARDA and the EU has HERA. This is because, as previously mentioned, these authorities have been formulated with mandates from national governments, creating clear governance and ensuring health security preparedness⁸¹. Thus, implementing this recommendation would allow for a more coordinated response to future health crises.

In addition, a whole of government approach to global health security is required, just like the one that is implemented in the U.S. GHSS⁸². As previously mentioned, Canada has a

⁷⁷ Bubela, T., Flood, C. M., McGrail, K., Straus, S. E., & Mishra, S. (2023). How Canada’s decentralised COVID-19 response affected public health data and decision making. *BMJ*, e075665. <https://doi.org/10.1136/bmj-2023-075665>

⁷⁸ Government of Canada. (2021). *Canada’s biomanufacturing and life sciences strategy*. https://ised-isde.canada.ca/site/biomanufacturing/sites/default/files/attachments/1098_01_21_Biomanufacturing_Strategy_EN_WEB.pdf; The White House. (2024). *U.S. Government Global Health Security Strategy 2024*. https://www.whitehouse.gov/wp-content/uploads/2024/04/Global-Health-Security-Strategy-2024-1.pdf?utm_source=PPF%3A+Health+Security&utm_campaign=d9267350fb-EMAIL_CAMPAIGN_2024_01_23_02_11_COPY_01&utm_medium=email&utm_term=0_-55fad7d5d5-%5BLIST_EMAIL_ID%5D

⁷⁹ Aslanyan, G., Di Ruggiero, E., Kickbusch, I., Kuruvila, D., Michaelides, O., & Robertson, N. (2022). *Towards a global health strategy for Canada*. https://www.dlsph.utoronto.ca/wp-content/uploads/2022/07/Towards-a-Global-Health-Strategy_FINAL.pdf

⁸⁰ Government of Canada. (2021). *Canada’s biomanufacturing and life sciences strategy*. https://ised-isde.canada.ca/site/biomanufacturing/sites/default/files/attachments/1098_01_21_Biomanufacturing_Strategy_EN_WEB.pdf

⁸¹ Waddell, C. (2024, April 24). *The next one*. Public Policy Forum. <https://ppforum.ca/publications/canadians-health-security/>

⁸² The White House. (2024). *U.S. Government Global Health Security Strategy 2024*. https://www.whitehouse.gov/wp-content/uploads/2024/04/Global-Health-Security-Strategy-2024-1.pdf?utm_source=PPF%3A+Health+Security&utm_campaign=d9267350fb-EMAIL_CAMPAIGN_2024_01_23_02_11_COPY_01&utm_medium=email&utm_term=0_-55fad7d5d5-%5BLIST_EMAIL_ID%5D; Aslanyan, G., Di

decentralized approach to health and preparedness for health emergencies, due to the divisions of power in provincial/territorial jurisdictions, but also in divisions at the federal level between various ministries⁸³. Thus, improving Canada's global health security capacity would require bringing together the various governmental branches and jurisdictions, as well as non-state organizations, for a cohesive approach to align global and national priorities.

4.2. Recommendation #2: Implement a Canadian GHSS

The COVID-19 pandemic has underscored the importance of building a more resilient global health security architecture, including organizations, institutions, policies, international legal frameworks, and measures to respond to and address international health threats while protecting national sovereignty and security⁸⁴. Attaining this would require coordinated and strategic effort from all levels (ie. provincial/territorial, national, and global) that encompass political commitments, legal preparedness, financing, and maintaining and building public health capacities and other global health security tools⁸⁵. Ultimately, the pandemic has highlighted some major lessons learned, including the importance of strong and resilient health systems, political leadership, diplomatic engagement, multisectoral approaches, research partnerships, community engagement and risk communications, and improving equitable access to vaccines and other medical countermeasures⁸⁶. Therefore, a GHSS should incorporate these lessons to ensure that Canada is prepared for future pandemics.

The goals of the GHSS should guide Canada's global health security agenda, focusing specifically on international partnerships, a whole-of-government approach, equity and inclusion, and country ownership. International partnerships are crucial because global health threats cannot be tackled by any single country⁸⁷. A whole-of-government approach is

Ruggiero, E., Kickbusch, I., Kuruvila, D., Michaelides, O., & Robertson, N. (2022). Towards a global health strategy for Canada.

https://www.dlsph.utoronto.ca/wp-content/uploads/2022/07/Towards-a-Global-Health-Strategy_FINAL.pdf

⁸³ Ibid.; Bubela, T., Flood, C. M., McGrail, K., Straus, S. E., & Mishra, S. (2023). How Canada's decentralised COVID-19 response affected public health data and decision making. *BMJ*, e075665.

<https://doi.org/10.1136/bmj-2023-075665>

⁸⁴ Innovation, Science and Economic Development Canada. (2021). What we heard: Considering the creation of new biomanufacturing capacity for Canada.

<https://ised-isde.canada.ca/site/biomanufacturing/sites/default/files/attachments/What-We-Heard-Considering-Creation-NewBioman-Capacity.pdf>; Office of the Auditor General of Canada. (2021, February 4). Report 8—Pandemic preparedness, surveillance, and border control measures.

https://www.oag-bvg.gc.ca/internet/English/parl_oag_202103_03_e_43785.html

⁸⁵ Ibid.

⁸⁶ Innovation, Science and Economic Development Canada. (2021). What we heard: Considering the creation of new biomanufacturing capacity for Canada.

<https://ised-isde.canada.ca/site/biomanufacturing/sites/default/files/attachments/What-We-Heard-Considering-Creation-NewBioman-Capacity.pdf>; Government of Canada. (2021). Canada's biomanufacturing and life sciences strategy.

https://ised-isde.canada.ca/site/biomanufacturing/sites/default/files/attachments/1098_01_21_Biomanufacturing_Strategy_EN_WEB.pdf; Government of Canada. (2024, February 7). Canada's role in the development of an international pandemic agreement. *Canada.ca*.

<https://www.canada.ca/en/public-health/services/emergency-preparedness-response/canada-role-international-pandemic-instrument.html>

⁸⁷ The White House. (2024). U.S. Government Global Health Security Strategy 2024.

important in coordinating a national response effectively and efficiently⁸⁸. Equity and inclusion require addressing the barriers in advancing the goals and ensuring that the strategy benefits all Canadians regardless of race, ethnicity, gender, age, etc⁸⁹. Lastly, country ownership requires Canada to support national processes and identify ways in which Canada can increase its capacity in preventing and mitigating health threats⁹⁰.

According to Aslanyan et al., “establishing a national global health strategy is critical to the alignment of a country’s political interests with global policy solutions for health”⁹¹. Therefore, this policy brief recommends establishing a GHSS similar to the one the U.S. implemented. Collaboration by bilateral and multilateral approaches is imperative for global health diplomacy because health crises and challenges transcend national borders⁹². Specifically, it is recommended to include both new and existing international and bilateral partnerships as goals in the strategy. Additionally, political will is vital for partnerships to be implemented and for change to be made⁹³. Ultimately, challenges in implementing these recommendations must be considered, and financial, political, and contextual considerations must be made.

https://www.whitehouse.gov/wp-content/uploads/2024/04/Global-Health-Security-Strategy-2024-1.pdf?utm_source=PPF%3A+Health+Security&utm_campaign=d9267350fb-EMAIL_CAMPAIGN_2024_01_23_02_11_COPY_01&utm_medium=email&utm_term=0_-55fad7d5d5-%5BLIST_EMAIL_ID%5D

⁸⁸ Government of Canada. (2016, February 12). Table of contents: Canadian pandemic influenza preparedness: Planning guidance for the health sector. Canada.ca.

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⁸⁹ Ibid.

⁹⁰ Ibid.

⁹¹ Aslanyan, G., Di Ruggieroa, E., Kickbusch, I., Kuruvila, D., Michaelides, O., & Robertson, N.(2022). Towards a global health strategy for Canada.

https://www.dlsph.utoronto.ca/wp-content/uploads/2022/07/Towards-a-Global-Health-Strategy_FINAL.pdf

⁹² Ibid.

⁹³ Ibid.

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Appendix A: Key Recommendations

Key recommendation: Strengthen Canada's global health security capacity

1. Within Canada

- a. **Update Canada's *Biomanufacturing and Life Sciences Strategy* to strengthen the national ability to respond to health crises**
 - i. This should include building off of existing Canadian global health architecture to increase research capacity, production, and equitable distribution of medical countermeasures.
- b. **Form a Canadian version of a global health security authority to allow for the implementation of a whole of government approach**
 - i. This would increase national coordination and collaboration among provinces and territories, requiring collaboration among government agencies, indigenous communities, academia, the private sector, and other stakeholders.

2. On a global scale

- a. **Create a Canadian GHSS to increase global capacity to respond to future health crises**
 - i. This will foster international, bilateral, and multilateral partnerships, and leverage existing connections, to increase international collaboration. Additionally, this will require an increase in political will.
 - ii. The following goals adapted from the new U.S. GHSS should guide Canada's global health security agenda⁹⁴:
 1. Goal 1 - Increase bilateral partnerships to strengthen global health security capacity
 2. Goal 2 - Achieve health security by improving political commitment
 3. Goal 3 - Increase connections between complementary programs and health security

⁹⁴ The White House. (2024). U.S. Government Global Health Security Strategy 2024. https://www.whitehouse.gov/wp-content/uploads/2024/04/Global-Health-Security-Strategy-2024-1.pdf?utm_source=PPF%3A+Health+Security&utm_campaign=d9267350fb-EMAIL_CAMPAIGN_2024_01_23_02_11_COP_Y_01&utm_medium=email&utm_term=0_-55fad7d5d5-%5BLIST_EMAIL_ID%5D

Appendix B: List of Abbreviations

BARDA	Biomedical Advanced Research and Development Authority
CEPR	Centre for Emergency Preparedness and Response
COVID-19	Coronavirus disease of 2019
EU	European Union
GC	Government of Canada
GHSS	Global Health Security Strategy
HERA	Health Emergency Preparedness and Response Authority
IHR	International Health Regulations
PHAC	Public Health Agency of Canada
SARS	Severe Acute Respiratory Syndrome
U.S.	United States of America
WHO	World Health Organization
