



Rapid Review Update 1: What is known about the response of the Public Health Network and the Special Advisory Committee in Canada to the COVID-19 pandemic?

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The authors declare they have no conflicts of interest to report.

Executive Summary

Background

The Public Health Agency of Canada's Public Health Network (PHN) is Canada's primary governance structure for Federal/Provincial/Territorial (FPT) collaboration in public health. In this role, the PHN mobilizes coordinated action and response efforts in times of an urgent public health event of national concern.

In January 2020, the Public Health Network Council activated the FPT Special Advisory Committee (SAC) on COVID-19. The mandate of SAC is to advise the Conference of FPT Deputy Ministers of Health on coordination, public health policy and technical content related to the COVID-19 pandemic. Since its inception, SAC has been at the core of the pan-Canadian public health response to COVID-19, including national guidance, communications, and technical public health deliverables in key areas of COVID-19 response. The activation of the SAC on COVID-19 has resulted in the pause of regular PHN business while dealing with the COVID-19 response.¹

There is a time-sensitive need to begin capturing the lessons learned from the activation of the SAC on COVID-19, as various ongoing audits, assessments and reflection exercises will require an FPT perspective. The Public Health Agency of Canada's SAC Secretariat requested a literature review that analyzed what has been published on PHN/SAC leadership and performance throughout the COVID-19 pandemic.

This rapid review was produced to support learning from the PHN/SAC response to the COVID-19 pandemic. A previous version was completed on May 31, 2022. This updated version includes evidence available up to January 17, 2023.

This rapid review answers the question: **What is known about the response of the Public Health Network and the Special Advisory Committee in Canada to the COVID-19 pandemic?**

What Has Changed in This Version?

- Two case studies have been added in this update, focused on the PHN and the SAC as structures for science advice.

Key Points

- The PHN activated the SAC as a planned response to the COVID-19 pandemic,^{2,3} along with the establishment of other federal public health advisory structures. Post-pandemic, the relative roles of each structure may benefit from evaluation, including the implementation of the PHN Council's planned performance measurement strategy.⁴
- There is evidence of coordination across jurisdictions and departments, with meetings of the SAC, Technical Advisory Committee (TAC), Deputy Ministers, Ministers and others contributing to inter-jurisdictional coordination.⁵ Other evidence of coordination, in the early weeks of the pandemic, was identified in the consistent messaging from Chief Medical Officers of Health (CMOH) across Canada, reflecting one of the key functions of

the SAC.^{6,7} By December 2021, the Council of Chief Medical Officers of Health had issued over 14 public statements on behalf of the SAC, most of which focused on COVID-19 vaccination, endorsing the National Advisory Committee on Immunization (NACI) COVID-19 vaccination guidance.⁸

- Along with coordination of CMOH messaging, there was also evidence of localized tailoring of messaging to reflect current information and the emerging status of the pandemic.^{6,7}
- Although evidence exists of vertical coordination between FPT actors within the health sector, a critique of the current PHN structure and pandemic response suggests that horizontal coordination across sectors is lacking. With respect to science advice systems, a time-limited mandate for the SAC and other advisory bodies may limit sustained preparedness for future public health emergencies.⁸
- The role the SAC played with respect to informing decisions about border management and travel restrictions in response to COVID-19 is unclear. Although a science- and evidence-base for these decisions was noted by government actors, there is a perceived lack of transparency for these claims.⁹
- Evidence-based approaches such as rapid evidence syntheses and convening of experts were employed by FPT decision- and policy-makers, who leveraged information from other organizations.^{7,10} Criticisms were raised about the extent to which evidence on the perceived (modelled) adverse effects of public health measures was equally considered alongside modelling of COVID-19 disease impacts to inform decisions.¹¹
- Criticisms of CMOH responses to COVID-19 describe the perceived adverse impacts of lockdowns on surgery wait-times and other health, social and economic outcomes.^{11,12}
- The meaningful involvement of healthcare workers and their unions in FPT governance with respect to safety guidelines and procedures was a perceived gap in the preparation for and response to the COVID-19 pandemic. Despite lessons learned from SARS in 2003, FPT governance was perceived to be slow to act and failed to prepare with adequate supply of PPE.¹³
- Other than the finding that the SAC has made progress with respect to Indigenous engagement,^{4,5} the studies included in this review do not provide strong evidence of the explicit engagement of the PHN and the SAC with respect to the experiences of populations who live with social and structural inequities, such as Indigenous or racialized communities. Further analysis is required to ensure adequate consideration of these populations.

Overview of Evidence and Knowledge Gaps

- To date, there continues to be very limited evidence analyzing the role of the PHN and the SAC in the COVID-19 pandemic response. Although the need for formal evaluation of governance structures including the PHN and the SAC has been identified,⁴ and a performance measurement strategy for PHN had been described in 2019, no such evaluations were identified at the time of the review.

References (Executive Summary)

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Methods

A description of the development of the National Collaborating Centre for Methods and Tools' Rapid Evidence Service has been published (Neil-Sztramko et al., 2021). The paper provides an overview of the review process with rationale for methodological decisions.

Research Question

What is known about the response of the Public Health Network and Special Advisory Committee in Canada to the COVID-19 pandemic?

Search

On January 17, 2023 the following databases were searched using key terms: Pan-Canadian Public Health Network*, Public Health Network*, Public Health Network Council*, Chief Medical Officer*, Public Health Agency of Canada, PHAC, Special Advisory Committee, coronavirus, ncov, cov, 2019-nCoV, COVID-19, SARS-CoV-2, pandemic and lessons learned:

- [MEDLINE](#) database
- [Political Science Database \(via ProQuest\)](#)
- [Factiva](#)
- [Office of the Auditor General of Canada](#)
- [NCCHPP](#)
- [NCCPH](#)
- [Pan-Canadian Public Health Network](#)
- Public Health Agency of Canada [Reports and Publications](#)

Grey literature was also identified through key contacts.

A copy of the full search strategy is available in [Appendix 1](#).

Study Selection Criteria

The search results were first screened for recent guidelines and syntheses. Single studies were included when no syntheses were available. English-language, peer-reviewed sources and sources published ahead-of-print before peer review were included. Guidance documents and expert opinion sources were included. Surveillance sources were excluded.

	Inclusion Criteria	Exclusion Criteria
Population	Public Health Network (PHN) Special Advisory Committee (SAC) Committees and organizations directly affected by or that impact PHN/SAC.	Committees and organizations not directly impacted by PHN/SAC.
Concept	Policies and response directly related to or affected by the COVID-19 pandemic	Policies and response related to other public health crises in Canada, e.g., H1N1, opioids
Context	Canada COVID-19 pandemic	All other countries
Limits	January 1, 2020-present	

Data Extraction and Synthesis

Data relevant to the research question, such as study design, setting, location, population characteristics, interventions or exposure and outcomes were extracted when reported. We synthesized the results narratively due to the variation in methodology and outcomes for the included studies.

Appraisal of Evidence Quality

We evaluated the quality of included evidence using critical appraisal tools as indicated by the study design below. Quality assessment was completed by one reviewer and verified by a second reviewer. Conflicts were resolved through discussion. We did not assess the methodological quality of protocols.

Study Design

Case Study/Report

Expert Opinion

Qualitative

Critical Appraisal Tool

Joanna Briggs Institute (JBI) [Checklist for Case Reports](#)

Joanna Briggs Institute (JBI) [Checklist for Text and Opinion](#)

Joanna Briggs Institute (JBI) [Checklist for Qualitative Research](#)

Completed quality assessments for each included study are available on request.

The Grading of Recommendations, Assessment, Development and Evaluations ([GRADE](#)) (Schünemann *et al.*, 2013) approach was used to assess the certainty in the findings based on eight key domains.

In the GRADE approach to quality of evidence, **observational studies**, as included in this review, provide **low quality** evidence, and this assessment can be further reduced based on other domains:

- High risk of bias
- Inconsistency in effects
- Indirectness of interventions/outcomes
- Imprecision in effect estimate
- Publication bias

and can be upgraded based on:

- Large effect
- Dose-response relationship
- Accounting for confounding.

The overall certainty in the evidence for each outcome was determined taking into account the characteristics of the available evidence (observational and uncontrolled studies, some not peer-reviewed, unaccounted-for potential confounding factors, lack of valid comparison groups). A judgement of 'overall certainty is very low' means that the findings are very likely to change as more evidence accumulates.

Findings

Summary of Evidence Quality

This document includes 4 completed single studies and 1 in progress single study, 5 grey literature sources and 3 news articles, for a total of 13 publications included in this review. The quality of the evidence included in this review is as follows:

Research Question	Evidence included		Overall certainty in evidence based on completed evidence
What is known about the response of the Public Health Network and the Special Advisory Committee in Canada to the COVID-19 pandemic?	Completed syntheses	0	Very Low
	In progress syntheses	0	
	Single studies	4	
	In progress single studies	1	
	Grey literature	5	
	News articles	3	

Warning

Given the need to make emerging COVID-19 evidence quickly available, many emerging studies have not been peer reviewed. As such, we advise caution when using and interpreting the evidence included in this rapid review. We have provided a summary of overall certainty of the evidence to support the process of decision making. Where possible, make decisions using the highest quality evidence available.

Table 1: Single Studies

Reference	Date Released	Study Design	Participants	Summary of findings	Quality Rating:
New evidence reported January, 17 2023					
Bhatia, D., Allin, S., & Di Ruggiero, E. (2023). Mobilization of science advice by the Canadian federal government to support the COVID-19 pandemic response. <i>Humanities and Social Sciences Communications</i> 10 (19).	Jan 17, 2023	Case study	Public Health System	<p>In consideration of the system of science advice available during the COVID-19 pandemic, it was noted that by December 2021, the Council of Chief Medical Officers of Health had issued over 14 public statements on behalf of the SAC, with 10 of these statements focused on COVID-19 vaccination, endorsing the National Advisory Committee on Immunization (NACI) COVID-19 vaccination guidance.</p> <p>A critique of the current PHN governance structure and pandemic response suggests that there is a focus on vertical coordination between FPT actors within the health sector, but what is lacking is horizontal coordination of science advice across health and other sectors . With respect to science advice systems, a time-limited mandate for the SAC and other advisory bodies may limit sustained preparedness for future public health emergencies.</p>	High
Piper, J., Gomis, B., & Lee, K. (2022). "Guided by Science and Evidence"? The Politics of Border Management in Canada's Response to the COVID-19 Pandemic. <i>Frontiers in Political Science</i> 4.	Apr 19, 2022	Case study	Public health system	<p>The SAC was activated on January 28, 2020 to guide FPT decision-making in health emergency responses. In March 2020, significant travel measures were announced, citing the science and evidence base for these measures. It is unclear how influential the SAC was in informing decision-making on border management. The authors point to a perceived lack of transparency about the scientific evidence base for these decisions and the possible influence of political factors.</p>	High

Previously reported evidence					
Dobbins, M., Dubois, A., Atkinson, D., Bellefleur, O., Betker, C., Haworth-Brockman, M., & Ma, L. (2021). Nimble, efficient and evolving: the rapid response of the National Collaborating Centres to COVID-19 in Canada . <i>Health Promotion and Chronic Disease Prevention in Canada</i> 41(5): 165-170.	Feb 17, 2021	Case study	Public Health System	FPT decision- and policy-makers leveraged information and network sharing from organizations such as the National Collaborating Centres to rapidly respond to the pandemic with evidence-based approaches.	High
Fafard, P., Wilson, L.A., Cassola, A., & Hoffman, S.J. (2020). Communication about COVID-19 from Canadian provincial chief medical officers of health: a qualitative study . <i>CMAJ Open</i> 8(3): e560-e567.	Sept 1, 2020	Qualitative study	Chief Medical Officers of Health	<p>This qualitative study included 209 news releases from 10 provinces (territories not included due to low COVID cases).</p> <p>Public communication and messaging from the 10 provincial Chief Medical Officers of Health (CMOH) during the early weeks of the COVID-19 pandemic remained cohesive and shifted in tandem with changing information and local prevalence, reflecting coordination among CMOHs with respect to cancellations, closures and other social distancing measures. The authors suggest there is value in having provincial-level CMOHs who can tailor their responses to their jurisdiction's local context while also sharing information and coordinating measures at the pan-Canadian level.</p>	Moderate

Table 2: In-progress Single Studies

Reference	Date Released	Study Design	Participants	Summary of findings
Previously reported evidence				
MacAulay, M., Macintyre, A.K., Yashadhana, A., Cassola, A., Harris, P., Woodward, C., ... Fafard, P. (2022). Under the spotlight: understanding the role of the Chief Medical Officer in a pandemic . <i>Journal of Epidemiology and Community Health</i> 76(1): 100-104.	Aug 18, 2021	Case study protocol	Chief Medical Officers of Health	<p>This article provides an overview of the CMOH role, explains its prominence in a pandemic, and examines debates and questions surrounding the role, based on an ongoing comparative analysis of the position across five countries, including Canada.</p> <p>The comparative analysis will examine the role of CMOH prior to COVID-19 and how it changed in the context of the COVID-19 pandemic. The authors will systemically analyze:</p> <ol style="list-style-type: none"> 1. Legal and public administration documents to uncover similarities and differences in how the role of CMOH is structured; 2. Government communications about and media coverage of what CMOHs are saying and what has been said about them publicly; 3. Public opinion survey data regarding how members of the public receive, understand and trust messaging from CMOHs and governments; and 4. Interviews with current and former CMOHs and other senior public health officials to understand their experiences of the role and the challenges faced during the pandemic.

Table 3: Grey Literature

Reference	Date Released	Summary of findings	Quality Rating:
Previously reported evidence			
<p>Di Ruggiero, E., Bhatia, D., Umar, I., Arpin, E., Champagne, C., Clavier, C., ... Hunter, D. (2022). Governing for the Public’s Health: Governance Options for a Strengthened and Renewed Public Health System in Canada.</p>	<p>2022</p>	<p>The authors describe governance mechanisms for public health in Canada, including the Pan-Canadian PHN, created to bring together different sectors and levels of government to facilitate intergovernmental collaboration and coordination on public health issues while respecting jurisdictional responsibilities in public health; and the SAC (a mechanism that is activated to support the public health response to emergencies (e.g., opioid crisis, COVID-19) under the PHN umbrella). It was noted that time-limited task groups have also been formed at the request of Steering Committees to provide advice and advance technical and policy work. The Council of Chief Medical Officers of Health (CCMOH) offers technical and scientific guidance to the PHN Council, Steering Committees and Task Groups.</p> <p>Considering the proliferation of federal public health advisory structures during the COVID-19 pandemic (e.g., expert advisory committees and task forces established by the Health Portfolio and the Office of the Chief Science Advisor), the authors suggest that further evaluation of the role of the SAC is needed following the pandemic.</p> <p>The PHN Council adopted a performance measurement strategy in 2019. While this strategy holds promise and responds to a notable gap in the evaluation of governance structures for public health, it has yet to be implemented due to COVID-19.</p> <p>The authors note that SAC has made progress with respect to Indigenous engagement (e.g., Public Health Working Group on Remote and Isolated Indigenous Communities).</p>	<p>High</p> <p><i>NOT PEER REVIEWED</i></p>

Reference	Date Released	Summary of findings	Quality Rating:
<p>Public Health Physicians of Canada (PHPC). (2022). Public health lessons learned from the COVID-19 pandemic.</p>	<p>Jan 2022</p>	<p>The authors outline lessons learned from the COVID-19 pandemic as it relates to the practice of public health in the larger context of Canada’s health system. Lessons learned and recommendations are informed by frontline local and regional public health service providers and intended for senior decision-makers and policy-makers, within and outside government.</p> <p>The authors recognize “what’s working” in Canada’s current COVID-19 response, noting that coordination across jurisdictions and departments has improved through COVID-19 compared to previous pandemics. Acknowledging that there are still significant improvements to be made, the frequent meetings of the SAC, Technical Advisory Committee (TAC), Deputy Ministers, Ministers and others were identified as being a contributing factor to inter-jurisdictional coordination. The authors highlighted the nation-wide vaccine prioritization, including remote and isolated Indigenous communities as an example of coordination success. Additional insight into what’s working includes the existence of federal and provincial public health agencies (i.e., PHAC, Public Health Ontario, B.C. Centre for Disease Control and Institut national de santé publique du Québec) allowing for more streamlined expertise, communications and response strategies.</p> <p>Recommendations include mechanisms to prioritize feedback, input from local and regional public health practice into FPT decision making systems, and the establishment of regional hubs of expertise as seen in Ontario, B.C. and Québec. The authors further issue a call to continue the work of the National Advisory Committee (NAC) on SARS to strengthen the links between public health and acute care, noting this system should be in collaboration with FPT governments and in consultation with non-governmental stakeholders.</p>	<p>High</p> <p><i>NOT PEER REVIEWED</i></p>

Reference	Date Released	Summary of findings	Quality Rating:
<p>Public Health Agency of Canada. (2021). A Vision to Transform Canada's Public Health System - The Chief Public Health Officer's Report on the State of Public Health in Canada 2021.</p>	<p>Dec 13, 2021</p>	<p>In response to the COVID-19 pandemic, collaboration was required to create and expand partnerships, roles and responsibilities, and decision-making processes. The Pan-Canadian PHN is an example of cross-jurisdictional governance that involves leveraging networks to facilitate flexible intergovernmental collaboration and coordination in public health. The SAC was activated by the PHN to lead the pan-Canadian pandemic response.</p> <p>During the COVID-19 pandemic, SAC published national recommendations and guidance on a wide array of pandemic-related topics.</p> <p>The Council of the Chief Medical Officers of Health released joint statements intended to establish unified, expert and trusted messaging.</p>	<p>High</p> <p><i>NOT PEER REVIEWED</i></p>
<p>Auditor General of Canada. (2021). 2021 Reports of the Auditor General of Canada to the Parliament of Canada: Report 8 - Pandemic Preparedness, Surveillance, and Border Control Measures.</p>	<p>Mar 25, 2021</p>	<p>Roles and responsibilities were previously established at the FPT level that supported engagement between the FPT governments; part of the planned response was the initiation of the SAC which was activated 28 Jan 2020. The SAC met regularly and approved and coordinated guidance for the pandemic response, including COVID-19 surveillance guidelines.</p>	<p>High</p> <p><i>NOT PEER REVIEWED</i></p>
<p>Public Health Agency of Canada. (2020). From risk to resilience: An equity approach to COVID-19 - The Chief Public Health Officer of Canada's Report on the State of Public Health in Canada 2020.</p>	<p>Oct 2020</p>	<p>The PHN followed established planning protocols and mobilized quickly to establish the SAC on COVID-19. Prior to the formation of the SAC, Canada's Chief Medical Officers of Health had begun meeting to discuss situational updates and domestic preparedness.</p>	<p>High</p> <p><i>NOT PEER REVIEWED</i></p>

Table 4: Newspaper Articles

Reference	Date Released	Summary of findings	Quality Rating:
Previously reported evidence			
Justice Centre For Constitutional Freedoms. (2020, November 5). Chief Medical Officers ignore death toll of surgeries cancelled by lockdowns. <i>CE Think Tank Newswire.</i>	Nov 5, 2020	FPT CMOHs were criticized and questioned on a perceived unilateral strategic priority-setting measure that resulted in cancelling medically necessary surgeries following “lockdown” measures.	Moderate <i>NOT PEER REVIEWED</i>
Bains, C. (2020, October 6). SARS was 'dress rehearsal for COVID-19,' report finds; Author outlines multiple shortcomings by Public Health Agency of Canada. <i>The Canadian Press.</i>	Oct 5, 2020	Healthcare workers and their unions were not involved in FPT governance to develop safety guidelines and procedures, leading to systemic and preventable failure to adequately prepare and respond to the COVID-19 pandemic. FPTs failed to implement lessons learned from SARS in the following ways: <ul style="list-style-type: none"> • Slow to act despite the precautionary principle as recommended in the SARS commission; • Inadequate supply and maintenance of PPE. Future considerations: <ul style="list-style-type: none"> • FPT legislation requiring CMOHs to report annually on the state of their jurisdictions’ public health emergency preparedness • CMOHs should be empowered to make recommendations to address shortcomings in the jurisdiction’s public health preparedness. 	Moderate <i>NOT PEER REVIEWED</i>
Justice Centre For Constitutional Freedoms. (2020, April 29). Chief Medical Officers questioned on lockdown’s adverse health impacts. <i>CE Think Tank Newswire.</i>	Apr 29, 2020	FPT CMOHs were questioned on whether modelling, projections and estimates exist with respect to the negative social, economic and health effects of “lockdown” measures; if so, whether they have been relied upon in the same way that COVID-19 disease modelling, projections and estimates have been used to support such measures.	Low <i>NOT PEER REVIEWED</i>

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