

# **Policy Coordination in a Federal State: Lessons from the Canadian Covid-19 Vaccine Implementation Experience**

**by  
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## Declaration of Committee

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## **Abstract**

Why were some components of Canadian Covid-19 vaccine policy design effectively coordinated across federal-provincial-territorial (F/P/T) levels while others were not? Effective coordination of F/P/T policy is a central challenge to Canadian federalism. The Covid-19 vaccine rollout was subject to F/P/T coordination process failures which this paper examines as a symptom of ineffective intergovernmental health policy network management. Using network management and procedural policy tool design theories, this paper examines F/P/T policy coordination and executive network management activity in Health Canada and Transport Canada during the first 18 months of the pandemic. Through hypothesis coding and archival analysis, this paper finds that the Council of Health Ministers was underutilized as a horizontally collaborative network manager in coordinating invasive Covid-19 vaccine policies. In addition, it finds that collaborative executive horizontal network management is an effective and viable tool for increasing F/P/T coordination and harmonizing national policy mixtures with minimal P/T jurisdiction infringement.

**Keywords:** Covid-19; Policy design; Policy tools; Network management; Federalism

## **Dedication**

This paper is dedicated to those essential workers and medical personnel who worked tirelessly at great personal risk through the worst of these unprecedented times; and to all those families who have lost loved ones to Covid-19.

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# Chapter 1.

## Introduction

The sudden onset of the Covid-19 pandemic strained relationships between national and regional policy networks in their attempts to respond to the sudden shock of economic stagnation, lockdowns, and overloaded healthcare systems (Salvati, 2022). Faced with these challenges, the Canadian public health system responded through pre-established federal, provincial, and territorial (F/P/T) arrangements, leaving the provinces to independently construct the vaccination rollout frameworks and subsequent supporting policies (PHAC, 2021b). The general Canadian health system under federalism is a complex network of stakeholders from both the public and private sectors of the respective F/P/T jurisdictions. This complex network's intergovernmental coordination, policy networking, and F/P/T relationships, organizations, hierarchies, and jurisdictional authority have been the subject of academic scrutiny for decades (Simeon, 1979; Dunn, 1995; Meekison et al., 2004; Poirier & Michelin, 2021).

Beginning in December 2020, Canada was one of the first Western countries to implement a mass vaccination program (Jacobs, 2020). Since then, the provincial and territorial (P/T) vaccination programs have become the subject of both domestic and international politicization, leading to accusations of asymmetrical policy between the jurisdictions as emphasised by news media publications (e.g. Lindeman, 2021). Answering the research question of 'why were some components of Canadian Covid-19 vaccine policy design effectively federally-provincially-territorially (F/PT) coordinated when others were not?', this paper adds to the discussion on the Canadian federalized healthcare system, using Covid-19 vaccination rollout policy as a lesson-learning opportunity with respect to intergovernmental networking, health crisis management, and more optimal usage of executive management tools for better coordination of intergovernmental health policy to increase policy compliance and lower compliance barriers (Weaver, 2013). This research seeks to explain factors contributing to the asymmetrical success of Covid-19 response policies in different regions of Canada by examining the composition of the Canadian Covid-19 vaccine rollout policy tool mixture between F/P/T jurisdictions, how these structures impacted policy

compliance/politicization, and the specific role of collaborative executive network management in potentially offsetting these coordination issues.

Framed in network management theory and procedural policy tool design and analysis literature, this paper argues that, while multi-level intergovernmental policy network management can offset asymmetrical F/P/T policies during times of national crisis, there was marginal effort expended at the federal executive level to coordinate F/P/T vaccine policy during Covid-19. While not necessarily leading to *substantive* policy failure, this is perceived as a failure of coordination *process* as weak collaborative policymaking and lack of common ground in project management. Such issues have been noted to lead to policy difficulties ‘downstream’ (Hudson et al., 2019, p. 4). This is exemplified by weak formal intergovernmental program management, leading to contradictions in policy efforts between jurisdictions (Peters, 2018). Drawing on the rich literature of policy network management, two hypotheses are established:

H1: Ineffective use of executive network managers of a complex network creates coordination issues by allowing for an inconsistent inter-jurisdictional tool mixture to address coherent goals at the national level.

H2: Increased usage of network management tools and government communication can act as effective F/P/T coordination tools without intervening in the autonomous P/T jurisdictions.

To test these hypotheses, data are drawn from F/P/T policy releases, government publications, and policy implementation timelines assembled by various NGOs in areas of both vaccine frameworks and restrictive travel policies during the first 18 months of Covid-19’s presence in Canada. Predominantly an examination of vaccine policy to highlight coordination issues in the Health Canada system, this paper uses the most-similar comparative case of transport and travel policy—directed by the Council of Ministers Responsible for Transportation and Highway Safety—to show that executive-level process coordination issues are not endemic to Canadian federalism.

In the following sections, the study first investigates the existing health policy network management mechanisms, F/P/T coordination of vaccine policy, and how varying levels of these factors can contribute to coherency and consistency issues in a national policy mix. It then seeks to explain potential reasons for the lack of a unified F/P/T vaccine framework policy, examines the situational and structural consequences of this asymmetry, and contributes to the understanding of if or how this proclivity could

be overcome in the future. This is compared to, and supported by, the comparative case of best practice which undergoes the same analysis protocol as the vaccine frameworks case. This case of best practice is first discussed for its demonstration of network management success in sector-specific Covid-19 response policy, and is then qualified to show that it is not anomalous within the Canadian system and that it serves as a good demonstration of effective crisis response under network management principles. Finally, the paper culminates in policy learning recommendations of using effective, collaborative, action-oriented policy network managers in the form of Councils of Ministers to assist in increasing F/P/T coordination of visible and invasive policies during nation-wide policy efforts. These lessons are contextually applied to the case study of vaccine frameworks and the Council Health Ministers, with recommendations made to minimize cost, waste, visibility, and invasiveness of system restructuring and future policy making. The recommendations are made to increase the efficiency of the inter-jurisdictional crisis response to epidemic events so as to reduce policy contradiction and overlap between F/P/T jurisdictions to increase policy compliance, lower compliance barriers, and ensure a more consistent approach to provincial programs which target national goals.

## Chapter 2.

# Theory and Literature Review: The Policy Legacy of Health Canada

## 2.1. Federalism, Federal Health Policy Making, and F/P/T Health Policy Interaction

The primary F/P/T bodies being analyzed in this study are the Public Health Association of Canada (PHAC), the Pan-Canadian Health Network (PHN), and the Conferences of Deputy and First Ministers of Health. In the context of a pan-Canadian health policy initiative, the provincial governments are responsible for the substantive elements of Canadian healthcare policy implementation (Health Canada, 2019). The financial arrangement of the Canada Health Transfer is the primary F/P/T interaction of health jurisdictions which allows provinces to maintain the principles of the Canada Health Act (the Act henceforth) and to provide the “best possible health care system for Canadians” (FPFAA, 1985, sec. 24b)<sup>1</sup>. This transfer is designed to ensure successful implementation of Canada’s universal healthcare program in provincial and territorial jurisdictions. These cash distributions are derived from an equation<sup>2</sup> which results in a tailored cash contribution to P/T health jurisdictions, ensuring that those provinces with smaller per-capita income tax bases receive larger federal transfers to support healthcare expenses (which account for between 30 and 50 percent of a P/T budget) (Mou, 2021).

Maioni (2002, p. iv) recommended that the federal government should be an enabler, rather than enforcer, of P/T health policy. Other scholarship has noted the alteration of federal institutions in the wake of the steadily increasing power of P/T governments, subsequently providing a meta-timeline of attempts to promote centrally-organized intergovernmental networking (e.g.: Simeon, 1979; Dunn, 1995; Meekison et al., 2004; see Poirier & Michelin, 2021 for full discussion on Canadian federalism and Covid-19). Section 23 of the Act indicates that the only time the F/P/T Ministers of Health

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<sup>1</sup> See Speer & Goldberg, 2020 for discussion of post Covid-19 fiscal federalism reformation

<sup>2</sup> See FPFAA, 1985, sec. 24.2(1) for formula

need to report to Health Canada is to ensure jurisdictionally appropriate action under the Act to ensure transfer payments (*Canada Health Act*, 1985), enforcing the financial nature of the F/P/T health policy relationship. This financial approach is reflected in the federal Covid-19 response, with their primary decisions and actions being made through the Department of Finance, the Treasury Secretariat, and the Privy Council (Brock et al., 2020, p. 35). These F/P/T policy interactions and the isolationism of provincial policy making renders central leadership during times of national crisis difficult, a fact which this paper argues can be overcome by collaborative executive network management and policymaking between jurisdictions.

There are two main hierarchies which assist in coordinating F/P/T health policy. The first hierarchy, the PHN, is the primary F/P/T health policy network whose specific mandate is to help Canadians “benefit from an effective federation dedicated to collaboratively addressing current and emerging issues in public health” (PHN, 2022a). The PHN is the formal F/P/T governance body for the health policy network of actors responsible for interprovincial coordination of health and is accountable to the Conference of F/P/T Deputy Ministers of Health (PHN, 2022a). The 2017 Public Health Response Plan for Biological Events was drafted to support the PHN to help assess whether an event requires an F/P/T response. The second hierarchy is the Health Portfolio Operations Centre (HPOC), whose Concepts of Operations flowchart stipulates that once the PHAC is notified of an event potentially requiring an F/P/T response, the HPOC assesses the situation for its F/P/T impact leading to appropriate task distribution to a relevant federal actor (see PHN, 2018 for flowchart and updated response plan). While this chain of operations is strong, it relies on a similar F/P/T governance structure to the PHN with final policy decision-making authority being conferred to the Conferences of First and Deputy Ministers of Health (PHN, 2018). This study analyzes how this chain of command could improve with increased presence of collaborative, executive-level network management of the PHN and F/P/T response structure for the invasive/visible policies of pan-Canadian health policy projects and crisis management, overcoming issues of policy isolationism and F/P/T policy tool contradictions.

## 2.2. Previous Pandemic Policy and the Importance of F/P/T Coordination

Covid-19 is not unprecedented in modern times as a pathogen of global concern leading to domestic policy response and policy learning opportunities. Other recent novel coronavirus outbreaks in the 21<sup>st</sup> century include SARS of 2003, H1N1 of 2009, and MERS of 2012 (Piret & Boivin, 2021). A comprehensive literature summary on influenza vaccination programs noted that there are general difficulties with influenza-type vaccination programs at the national-level of decision making due to complex stakeholder interactions potentially leading to communication issues (Silva et al., 2015). The 2003 SARS epidemic garnered serious policy design-related attention in Canada with respect to the federal role in F/P/T policy coordination and creation of a cohesive national response program. Policy recommendations were made ranging from increased federal access to provincial data (Wilson, 2006), direct federal intervention (Wilson & Lazar, 2005), and a recognition of the need for increased federal leadership during a public health crisis (Wilson & Lazar, 2006).

The H1N1 pandemic of 2009 was addressed with a similar national policy response as seen in the effort against Covid-19, with countries like Canada and the United States responding with large-scale immunization programs to curb infection rates (Piret & Boivin, 2021). While historical evidence has shown that vaccines have been one of the most effective ways of controlling diseases and epidemics (Centers for Disease Control and Prevention, 2020), Covid-specific vaccines were not available at the time of outbreak in 2019/2020. Recent studies have shown that early adoption of effective policy tools is one of the best ways to curb infection rates and provide alternatives to costly and disruptive policy tools (e.g. public/private institution closures, stay at home orders, economic shutdowns) (An et al., 2021). Early adoption of effective tools applies to the vaccine framework issue due to the need for governments to “identify the most effective policy instruments and learn fast enough to determine which measures to embrace and abandon” (An et al., 2021, p. 1169). That is, if a tool is deemed effective, it should be adopted in jurisdictions relevant to a national policy mix.

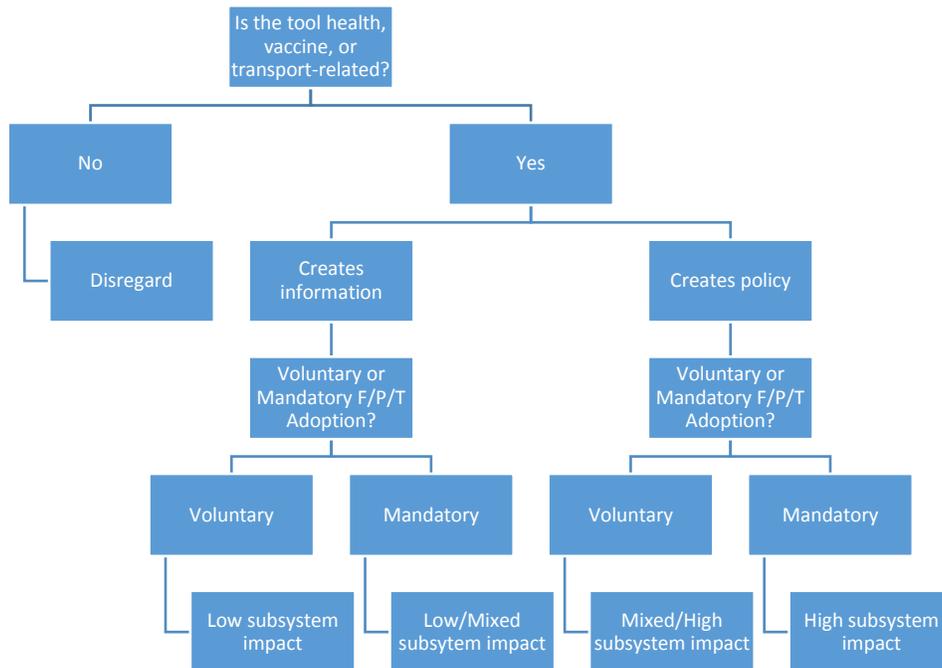
Support for F/P/T policymaking from the PHN network and *ad hoc*, informal meetings of the Conference of Deputy Health Ministers is a noted trend in Canadian epidemic/pandemic response (PHAC, 2010). The official Canadian Senate report on the

H1N1 response highlights the tensions in a federalized pandemic response, pointing out that provincial officials were satisfied with cooperation yet re-inforced their wish for autonomy in decision implementation (Standing Senate Committee on Social Affairs, Science and Technology [SSCSAST], 2010, p. 24). This is in contrast to sentiments from some front-line workers who called for more explicit federal leadership and more uniformity of national response as a main goal of pandemic response (SSCSAST, 2010, p. 23). While generally positive on Canada's response, the SSCAST (2010) report concluded that the Canadian public health pandemic plans and infrastructure might not have stood up to a harsher influenza pandemic (p. 54). Considering this admission, Covid-19 provides a unique policy learning opportunity for F/P/T collaboration when compared to previous cases due to the scale of policy response and scale of the illness' impacts on socio-economic factors. For example, in H1N1 school closures were considered but generally opted against by municipal School Boards (Migone, 2020, p. 397). This policy *consideration* can be contrasted to the sudden and total closures of public and private establishments during Covid-19, along with other massive shifts in social and economic policy. This is to say that the scale of the strain the Covid-19 pandemic put on F/P/T governments, and their cooperation contingency plans, offers a unique opportunity to study the mechanisms and character of the different jurisdictional roles and behaviours in a 'worst case' scenario. The case-specific recommendations of a more central approach to health policy making during epidemic response are used to inform the generation of this study's hypotheses as discussed in the next section.

### **2.3. Network Management, Intergovernmental Procedural Policy Tools, and Hypothesis Generation**

This study's hypotheses are rooted in policy network management theory to support the main investigation into procedural policy tools used by F/P/T governments to enact their substantive policy goals. Howlett's (2000, fig. 5) Spectrum of Procedural Policy Instruments informs a policy tool analysis logic designed to identify tools relevant to this study and measure their impact on their respective policy subsystems (see figure 2.1). This paper uses this applied logic to analyze procedural tool strength in the pan-Canadian health system, as well as Transport Canada and its respective intergovernmental policy network. Procedural policy tools are unique in the study of policy design due to their meta-level 'character' as policy tools; what that character

reveals about policy design programmes and packages; how governments plan to attain their policy goals; and understanding the complexity of tool choices when multiple goals and sectors are involved in a policy making program (Howlett, 2019a, p. 28). This is to say that Howlett’s Spectrum is an appropriate framework to study the PHN and the F/P/T health policy network for multiple reasons. First, Health Canada has many procedural tools (e.g. task forces, committees, councils) which come together to guide policy design programmes in different issue areas. This is especially relevant as multiple vaccine and Covid-19 specific procedural tools were created by Health Canada which define the ‘character’ of the vaccine policy tool mix at the federal level. Second, this ‘character’ indicates the attitude of the Federal policy response toward the pandemic. This establishes how much effort there was to guide and contribute to F/P/T collaborative policymaking. Finally, the Spectrum analysis helps us to understand federal policy tool choices during the Covid-19 response. This is especially important to understand given the complexity of the PHN/policy network and the interactions of its actors, goals, and jurisdictional authority.



**Figure 2.1. Logic of procedural tool analysis.**  
Source: Adapted from Howlett (2000)

This study borrows the definition of ‘network management’ from Klijn and Koppenjan (2000, p. 136) as the theoretical basis of mediation and coordination of inter-

organizational policy creation, a concept which has been used in the literature for decades (e.g., Agranoff, 2003; Hanf & Scharpf, 1978). Klijn and Koppenjan use the term 'process management' to indicate steering strategies designed to solve organizational problems between actors; improve mutual perceptions of a problem/solution/situation to package mutually acceptable goals; create temporary inter-organizational arrangements; and to supervise and manage policy conflicts within the network of policy actors (2000, pp. 140-141). This is especially important when vertical coordination is involved in a federal system, as central governments may need to situationally be involved in a large-scale policy project and act as the 'steerer' of the policy system (Peters, 2018).

Extensive works by Agranoff and McGuire homologate network management theory for a federalized policy network (Agranoff & McGuire, 1998; Agranoff, 2006; McGuire, 2006; McGuire & Agranoff, 2011). A policy network must act as a method to manage complex public problems and connect public policies to the strategic and institutionalized contexts in which they are created (Agranoff, 2006, p. 56). A network manager in a federal system operates within a hierarchical system wherein it is expected that the network manager behaves in a 'part-time' capacity, typically meeting monthly or quarterly and making decisions on mutual learning and adjustment from the network partners (Agranoff, 2006, pp. 57 & 59). As a collaborative form of public management (Agranoff, 2006), policy networks can either be short-term collaborative efforts or coalitions/network structures (McGuire, 2006, p. 35). These structured policy networks are seen to have a "strong commitment to multi organizational-level goals" with coalitions disbanding after task completion, and networks remaining and evolving as the problem's nature changes (McGuire, 2006, p. 35). Agranoff (2003, p. 10) presents four different policy network types in his study, with *informational networks* (information exchange network; action is voluntarily adopted) and *action networks* (interagency adjustments, formally collaborative action plans, and exchange/deliver services) being of the greatest interest to this paper due to the types of tools and collaborative efforts present in the PHAC/PHN decision making hierarchy.

This section of the literature is operationalized through H1: ineffective use of executive network managers of a complex network creates coordination issues by allowing for an inconsistent inter-jurisdictional tool mixture to address coherent goals at the national level. This is heavily informed by Howlett and Rayner's (2007) work on policy mixtures in new governance arrangements, which stipulates that coherent policy

goals and inconsistent tool mixes lead to ineffective policy (p.8). Specifically, coherent goals and inconsistent tool mixtures lead to a drift scenario where policy goals change relative to the tool choice, therefore decreasing effectiveness of the tools in achieving the original goals (Howlett & Rayner, 2007, p. 9). This is to say that if a policy program is not effectively coordinated between jurisdictions, the provincial-level tools become inadequate to address the goals at the national-level, creating contradictions between the jurisdictions' policy programs rendering the policies individually less effective within their jurisdictions.

Based on this literature of network management, the theoretical 'steps' of a successful network manager can be determined which would follow the process of effective management of a network from policy idea to substantive output of a policy program. In a well-managed network, observations of a group of similarly oriented bodies would convene to address a complex policy issue (Agranoff, 2006). This network management body would meet semi-regularly to discuss policy facilitation and program delivery (Agranoff, 2003; 2006). The programs would be discussed collaboratively at multiple levels of government with formal adoption of policy by the network participants (Agranoff, 2003; McGuire, 2006). Procedural tools (task forces, committees, etc.) would be used by the network to facilitate intergovernmental policy and service implementation (Agranoff, 2003). The outcome of this network management is a theoretical increase in policy coordination between jurisdictions. This paper will use this stepwise theory of 'good' network management to evaluate the process of the effective use of an intergovernmental policy network manager in the policy areas of health and travel/transport. This section of the literature was operationalized through H2: increased usage of network management tools and government communication can act as effective F/P/T coordination tools without intervening in the autonomous P/T jurisdictions. These hypotheses anticipate that the Health Ministry 'failed' this process in F/P/T vaccine framework coordination, and the proposed case of best practice 'passed', indicating that this theoretical process is plausible in Canada's federal system.

Network management theory has a robust theoretical literature discussing the merits of complex network management, yet it has been noted that few empirical studies have been conducted to connect the theory to the policy world (Ysa et al., 2014). Previous seminal work has been done to support the connection between facilitative network management and increased network trust and policy outcome achievement

(Ysa et al., 2014; Klein et al., 2010; Meier & O'toole, 2001). While there is a relative lack of empirics, those studies which have been conducted have shown that network management is a good policy theory subset to employ in the study of the Health Canada network in the context of Covid-19 as it has been shown that there is a non-linear component to network component interaction (Meier & O'toole, 2001), and that the network manager specifically may wield substantial power over the dynamics of the network itself (Ysa et al., 2014). This is to say that network management theory is appropriate for this study due to the complexity of the Health Canada/Covid-19 network, the complexity of the F/P/T network relationship, the ability for taskforces and information-based tools to contribute at various stages in the decision making hierarchy, and the potential for a strong network manager to promote coordination within the network.

Network management theory was not the only theoretical framework considered for this study. Sabatier (1986) highlights criticisms with both top-down and bottom-up policy hierarchy analysis. 'Top-downers' are accused of maintaining a flawed belief that because the executive policy decision makers are the key actors in a network, it ignores lower-level actors both in their influence over policy making and their ability to maneuver around central policy to fit their contextual needs (Sabatier, 1986, p. 30). This, and the criticism that top-down models are difficult to apply in a situation with no dominant statute or agency (Sabatier, 1986, p. 30), poses a challenge to this study. However, network management theory is still seen as the better theoretical framework for this study due to the F/P/T health policy network having a central statute (Canada Health Act, 1985), central agencies in the form of Health Canada and the PHAC, and an admitted network hierarchy in the form of the PHN and the HPOC which delineate the nature of the decision making process within P/T jurisdictions and where they interact. These factors make bottom-up analysis less useful in the study of the network manager of the F/P/T policy network. While Sabatier's (1986) advocacy coalition framework does well to provide a synthesis of the pros and cons of both bottom-up/top-down approaches to policy analysis, this study holds that network management theory is still a better option for analyzing the F/P/T coordination of the Canadian Covid-19 vaccination program. Canadian federalism is a system of executive-dominated governments (Howlett & Migone, 2018) which makes top-down analysis of F/P/T bargaining feasible. Following from this is the internally described federalized hierarchy of the executive-level

network of decision making in the PHN and the far-reaching impact of executive-level dictums in handling Covid-19 response policies (e.g. Provincial Health Officer dictates and Deputy/First Minister policy implementations). This executive-level domination, both as a general feature of Canadian federalism and of the F/P/T health system, make network management theory an appropriate analysis framework for this study.

## Chapter 3.

### Methodology

Qualitative methodologies of archival analysis, documentary analysis, and hypothesis coding are employed in this paper to make sense of policy implementation timelines, policy tool choices, and connect policy publications to their relevant ramifications.

#### 3.1. Case Selection and Case Study Methodology

To support its causal claims of minister-level network management leading to greater F/P/T policy coordination, this study takes a comparative case study approach to the analysis of Health Canada. The comparative case of travel policy and the Ministers of Transportation is used as a most similar case of best practice. To be considered 'best practice', a case must be measured through two conditions: i) completeness; and ii) comparability (Bretschneider, 2004, p. 311). Completeness is rarely obtainable in a case; therefore, one relies on theory-based definitions of comparability and early consideration of variable measurement for desired outcomes (Bretschneider, 2004, pp. 311-312). The cases of travel and health policy are considered appropriate comparators on the grounds of Bretschneider et al. 's (2004) best practice methodology principles and Gerring's (2008) classifications of 'most similar' case studies. The best 'most similar' cases are those that are matched on 'case-based' grounds, deemed appropriate by the researcher, which enable a 'thick' description of a case's story (Gerring, 2008, p. 670). This is appropriate for this study as it relies on qualitative data which requires 'thick' description of context to make the different F/P/T policies meaningfully comparable. This study is conducted with the intent of examining the causal relationship between decreased or non-existent F/P/T policy coordination mechanisms and inconsistent inter-jurisdictional tool mixture, making coherent national-level goals difficult to address in the provincial jurisdictions. To investigate this relationship, this study specifically holds that the cases of health and transportation policy are appropriate comparators on most-similar grounds in the context of Covid-19 policy due to:

- Both being federalized systems with well-defined federal, provincial, and territorial policy jurisdictions;<sup>3</sup>
- Both having access to robust procedural policy tools to coordinate inter-jurisdictional, multi-level policies between both public and private entities;
- And both maintaining federal and provincial ministers and ministries in their policy areas.

The relevant differentiating factor is the respective usage of a central federal-level ministry to act as a network manager for an intergovernmental policy network. The presence, utilisation, and jurisdiction of these central Ministries of Health and Transport is analyzed and discussed through archival analysis of the Canadian Intergovernmental Conference Secretariat database news releases and meeting schedules. Other intervention areas lack similar data sets (limiting meaningful comparison) or are seen as sub-categories of travel/transport and health; for example, health services, distancing measures, and case management (Canadian Institute of Health Information, n.d.).

### **3.2. Hypothesis Coding and Archival Analysis**

Data are drawn from publicly accessible archives—the Canadian Institute of Health Information (CIHI) and the Canadian Intergovernmental Conference Secretariat (CICS). The CIHI data presents Covid-19 related policy interventions in F/P/T jurisdictions along a timeline relative to daily case counts and other policy intervention areas (e.g., case management, public information, state of emergency) (CIHI, n.d.). At the time of analysis, the timeline ranged from March 2020 to September 2021.

Due to the focus of this study being specifically on asymmetry of F/P/T vaccination policy pertaining to the rollout frameworks, the CIHI policy intervention categories of ‘implementation plans and frameworks’ and ‘vaccination status’ were selected as the policy areas for F/P/T coding. The asymmetrical implementation of vaccinations—and treatment of the (non)vaccinated—is perceived to have caused issues both in the procedural and substantive policy goals of vaccinating the population. This is due to the tensions introduced in the most visible and invasive policies of the vaccine component of the pandemic response, with the policy tool mixture being inconsistent, allowing the goals of the policy program to drift and potentially ‘undermine’ the policies of

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<sup>3</sup> See: Canada Health Act, 1985; Canada Transportation Act, 1996

adjacent jurisdictions (Howlett & Rayner, 2007, p. 7). The 'other' section presented several interesting points which are used in the results and discussion sections of the paper. For the comparative case of travel policy, the CIHI timeline presented 'restrictions' and 'self-isolation' intervention types. Both categories were included in the coding analysis as they are both relevant to F/P/T coordination of travel and transportation policy interventions. The federal mandates for self isolation for international travel pertained to all P/T jurisdictions, and inter-provincial travel restrictions necessarily requires coordination between neighbouring provinces and territories at the very least. This highlights the different trends between federal and P/T decision making, the 'character' of their tool choices, as well as reveals what kinds of travel policies were relevant to the national-level policy mix compared to the P/T jurisdictions.

The coding that was applied to the adapted CIHI data tables was constructed on hypothesis coding principles as discussed by Saldaña (2016). Coding followed the proceeding logic to determine that policy was:

- Coordinated if F/P/T policies are similarly worded, of similar intent, and are roughly implemented at the same time;<sup>4</sup>
- Uncoordinated if they had similar intent with different substantive requirements, different parameters or 'goal-posts' of policy targets for the same ultimate policy goal;
- Neither coordinated or uncoordinated if the policy was regionally specific or jurisdictionally appropriate.

Coordination is defined as either a mutual adjustment that would not have been chosen unilaterally, or as a structural alignment to facilitate horizontal objectives, reduce overlap, and not impede other actors' actions (Bakvis & Brown, 2010, p. 484). This is to avoid phenomenon such as program duplication or contradictions between jurisdictions' policy choices (Peters, 2018, pp. 3-4). It is noted that coordination is difficult to achieve in the Canadian federal system but can be accomplished through intergovernmental 'bargaining' (enhanced by the small number of negotiators; i.e. F/P/T ministers) (Bakvis & Brown, 2010, p. 485). Howlett and Rayner (2007) emphasize the need for the coherency of goals and consistency of tools in new governance arrangements in order to defend against sub-optimal outcomes for a policy program. This study's coding protocol

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<sup>4</sup> Note: exact date of implementation is not relevant to accommodate for pre-existing F/P/T asymmetries already in the system.

uses these definitions to support its logic, as if F/P/T policies are shown to overlap, work against horizontal objectives, or show absence of intergovernmental bargaining then it is seen to reduce policy coordination, policy harmony, and the coherence of the national policy mix.

The coding schema identifies the dependent variable of policy coordination on the independent variable of intergovernmental policy network manager activity. The variables are measured through their fit with network management theory based on a 'present or not present' binary that fits with the specific context of the case under study. This is deemed as a valid measurement as it fits the systematized concept (content validity), is associated with different variables (criterion validity), and matches theoretical expectations about the relationship between the variables (construct validity) (Adcock & Collier, 2001, p. 537). See table 3.1 for examples of coded data. This coordination style does not work against P/T tailoring of policies to their jurisdictions as there were unifying, national-level principles which all F/P/T jurisdictions were working towards<sup>5</sup>. Generally, because public health issues spread across local/regional/provincial/national boundaries, decisions made by one government have direct impact on governments in related jurisdictions making it such that there must be coordination of approach to ensure effective crisis management (Wilson et al., 2004, p. 179). This same logic also counters potential objections of comparability issues of P/T jurisdictional behaviour. That is, the coding protocol could face reliability issues due to the fact that the F/P/T jurisdictions have such tailored policies that comparing them does not reveal anything substantial about their intergovernmental policymaking. However, because of the requirements of coordination between related jurisdictions being emphasized in public health, official F/P/T policy decisions are meaningfully comparable when discussing intergovernmental policy coordination and P/T contribution to a national policy mixture. This coding protocol specifically analyzes (dis)similarities of F/P/T approaches and exposes coordination issues which could have direct impact on public health crisis management both between, and within, their respective jurisdictions.

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<sup>5</sup> See PHAC, 2021a for list of F/P/T principles.

**Table 3.1. Examples of Hypothesis Coding Logic in Vaccine Interventions**

Policy Interventions with Date of Announcement			Coded Coordination Outcome	Explanation
Sample Jurisdictions				
British Columbia	Alberta	Federal		
<p>3-June-2021:</p> <p>Announced 1<sup>st</sup>-dose AstraZeneca recipients may choose to receive a 2<sup>nd</sup> dose of either AstraZeneca or an mRNA Vaccine –</p>	<p>1-June-2021:</p> <p>Announced 1<sup>st</sup> dose AstraZeneca recipients may choose to receive a 2<sup>nd</sup> dose of either AstraZeneca or an mRNA Vaccine</p>	<p>2-June-2021:</p> <p>Guidance on mixed vaccine procedures updated; those who got 1<sup>st</sup> dose of viral vector vaccine (e.g. AstraZeneca) can get 2<sup>nd</sup> dose of either viral vector or mRNA</p>	Coordinated	<p>Similar wording</p> <p>Close date of implementation</p> <p>Coherent goal (vaccine safety) and consistent mix</p>
<p>27-September-2021</p> <p>Starting today, the BC Vaccine Card will be the only acceptable proof of vaccination to enjoy certain businesses/recreational events safely</p>	<p>20-September-2021</p> <p>Businesses participating in the Restrictions Exemptions Program can operate as usual if patrons 12+ show vaccine proof/recent negative test result</p>	<p>No relevant entry about vaccine passports.</p>	Uncoordinated	<p>Different requirements of usage of tool</p> <p>Coherent goal (safety of population) with inconsistent mix</p>
<p>27-July-2021</p> <p>Launched Vax for BC, the next step in the province’s campaign to help as many eligible people as possible get vaccinated</p>	<p>7-June-2021</p> <p>Opened the first drive-through vaccine clinic in NE Calgary</p>	<p>13-August-2021</p> <p>Announced the requirement of vaccination for workers across the federal public service</p>	Not considered	<p>Only apply to respective F/P/T jurisdiction</p>

Note: Coding took place in excel spreadsheets with minimal editing from their original CIHI versions. This table reduces the CIHI spreadsheets to demonstrate the coding logic. Please see Appendix A for full data sheet information. Sourced from CIHI, n.d. and author research.

## Chapter 4.

### Results

The applied methodology presented results in levels of F/P/T coordination, jurisdictional behaviours of F/P/T governments, policy network behaviour, and information about procedural policy tools related to Covid-19 available to F/P/T governments. The CIHI charts were analyzed with the coding methodology whose trends were re-analyzed for policy system implications.

#### 4.1. F/P/T Coordination of Vaccine Framework Policy

The CIHI database coding revealed success in F/P/T coordination of the vaccine framework policies related to vaccine safety and dose scheduling which demonstrates the coordinating power of federal/central procedural tools. The main area of non-coordination in this category were differences in phase-based vaccination program outlines with two- three- and four-phase programs being made with different requirements at each level. The main area of F/P/T asymmetry with vaccine policy were the follow-up policies such as vaccine passports, lockdowns, and mandated vaccination of government workers. Federal activity in the ‘implementation plans and frameworks’ maintains a single entry: the National Advisory Committee on Immunization (NACI) recommendation to defer the second dose of Covid-19 vaccinations to increase vaccine supply for first-dose applications under the justification that “extending the dose intervals of mRNA vaccines could have short-term public health benefits... while vaccine supply is constrained” (NACI, 2021). This federal policy recommendation was F/P/T coordinated with all provinces announcing similarly worded policy amendments within a ten-day window of the NACI announcement on March 1st, 2021 (territories do not have official entries). The NACI maintains a coordinating power over the different health jurisdictions, with their ‘regulatory approval’ recommendation—pausing administration of AstraZeneca vaccines for those under 55 on March 29th, 2021—resulting in all provinces announcing symmetrical policies on the same day<sup>6</sup>.

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<sup>6</sup> Nova Scotia paused May 12<sup>th</sup>, 2021; province not impacted in their rollout as it was only offered to 60-64 year-olds at the time of intervention; (Cousins, 2021)

Vaccine rollout asymmetries were present in the phase-based plans with two-, three-, and four-phase plans being present between provinces with different requirements for the various phases. Vaccine Status policies were the main area of F/P/T asymmetry, with variations of implementation date of vaccine passport programs, policy targets and tool types to address healthcare worker vaccine mandates, and policy goals. These are specifically discussed in section 5.1 and serve as the main evidence to support process failure of the coordinating the most visible and invasive policies between F/P/T jurisdictions.

## **4.2. Procedural Policy Tool Impact on the PHN**

The federal government uses many procedural tools for health and vaccine information creation as well as policy formulation and implementation. Health Canada and the PHAC are classical tools with codified coordination protocols in the Act (Canada Health Act, 1985). Task forces and special advisory groups specific to vaccines and Covid-19 were pre-existing or specifically established to deal with Covid-19 (table 4.1). These tools were selected for analysis based on statements from the PHAC and the PHN which highlight these tools as central in the generation of evidence for, or direct coordination of, F/P/T Covid-19 vaccine or health policy. These tools were analyzed using Howlett's (2000) Spectrum following the logic laid out in fig. 2.1. The NACI, Covid-19 Vaccine Task Force (VTF), Covid-19 Immunization Task Force (CITF), Canadian Council of Medical Officers of Health (CCMOH), and PHN are the bodies of interest to this study due to their vaccine-specific fields. The CCMOH, PHN, and F/P/T Conference of Deputy Health Ministers are of specific note to this paper's policy learning recommendations. The majority of available procedural tools are primarily advisory bodies and task forces which supply specific information to pre-existent intergovernmental bodies like the CICS and Minister/Deputy Minister conferences. In the context of Covid-19, the CCMOH is the main F/P/T process for emergency support, acting through the PHN's special advisory committee on Covid-19 (PHAC, 2021b). While they issue joint statements of mutual interest, their impact is still seen as low-medium as the implementation of their advice is reliant on the PHN hierarchy of decision making, ultimately leaving policy action up to the Conference of Deputy Ministers of Health.

**Table 4.1. Federal Procedural Health Policy Tools**

<b>Tool</b>	<b>Purpose</b>	<b>Subsystem Impact</b>
National Advisory Council on Immunization (NACI)	Advisors to PHAC on target prioritization and vaccine usage	Low; voluntary compliance, information-based
The Covid-19 Testing and Screening Expert Advisory Panel	'Big picture' examination panel of diagnostic technologies	Low; voluntary compliance, information-based
The Industrial Advisory Roundtable on Covid-19 Testing, Screening, Tracing, and Data Management	Evidence-based policy information advisors	Low; voluntary compliance, information-based
The Covid-19 Exposure Notification App Advisory Council	COVID-Alert Mobile App development	High; compulsory restructuring of app, institutional
The Expert Advisory Group on the pan-Canadian Health Data Strategy	Advisor for Pan-Canadian Health Data Strategy Program	Low; voluntary-mixed compliance, information-based
Covid-19 Vaccine Taskforce (VTF)	Multi-disciplinary group voluntary insight provision for vaccine-related issues, evidence-based policy making	Low; voluntary compliance, information-based
Covid-19 Therapeutics Task Force	Covid-related therapeutic advisory group	Mixed; information based, can change institutional organization
Covid-19 Immunity Task Force (CITF)	Coordinates national research efforts into immunity and antibody testing protocols	Mixed; information and funding-based
Conference of F/P/T Deputy Ministers of Health	Intermediary to First Ministers	High; institutional, can incite major changes
Council of Chief Medical Health Officers (CCMOH)	Technical public health forum; promotes collaboration, technical guidance, and evidence-based policy advice	Low-mixed; information-based
Pan-Canadian Health Network (PHN)	Strengthen F/P/T coordination; prepare for health events; strengthen Canadian health policy	Low-mixed; voluntary to mixed compliance, information and funding-based

Sources: PHN, 2022a; PHAC, 2021b; Howlett, 2000

Health Ministers’ meetings have been *ad hoc* with a lack of formal meeting schedule or structure. At the time of writing, there has been one First Ministers’ meeting held on December 10th, 2020, announcing the federal financing of vaccine procurement and the federal intent to “work with the provinces and territories... to immunize Canadians through a process that is fair and well-coordinated” (Prime Minister’s Office, 2020). There were five Deputy Health Ministers’ conferences at the time of analysis (table 4.2). One of the few F/P/T projects related to Covid-19 is the \$19.9 billion Safe Restart Agreement adopted by the First Ministers resulting in a 23% increase in Canada Health Transfer funds to provinces relative to the 2016-2019 period (Department of Finance, 2020).

**Table 4.2. Deputy Health Minister Conferences; 2020-2022**

Date	Intergovernmental Level
Nov 4, 2020	F/P/T
Nov 20, 2020	P/T
February 26th, 2021	P/T
April 5, 2022	P/T
April 28, 2022	F/P/T

Source: CICS, n.d.

### **4.3. F/P/T Coordination of Travel Policy**

As the comparative case of best practice, understanding how the Council of Ministers Responsible for Transportation and Highway Safety (COMT) operated at an F/P/T level, as well as an understanding of how coordinated F/P/T policy was in their respective issue area, is imperative. Travel policy presented different patterns of coordination when subjected to the hypothesis coding protocol compared to the patterns which emerged from the vaccine policy analysis. Federal activity was elevated compared to individual provinces, with 33 restriction orders between March 30th, 2020, and September 21st, 2021. These were announced by Transport Canada, PHAC, the

Government of Canada, Canada Border Services, the Prime Minister's Office, and Immigration, Refugees and Citizenship Canada. Specific international travel bans for early outbreak countries (Iran, China, Italy), non-essential international travel bans, USA/Canada border control policy, and Covid-19 testing policy were all announced by different federal bodies. Mandatory 14-day self-isolation for international travellers was initiated March 24, 2020 with provinces initiating international travel bans from the 5th of March 2020 (New Brunswick) to the 8th of April 2020 (British Columbia). Several provinces issued 14-day isolation orders for interprovincial travel during the same time period. Maritime provinces introduced more policy interventions than the central and western provinces.

Policy de-synchronization began in the summer of 2021, with varying F/P/T levels of de-restriction between June and August 2021. While the federal government began easing fully vaccinated traveler restrictions on July 5th, 2021, P/T governments, began various levels of restriction easing for travel with some (like Manitoba) removing certain vaccination requirements as early as June 8th, 2021. Depending on the different phase-based economic reopening plans of P/T governments, different phase frameworks within the different provinces and territories also lead to variations on restrictions during this time period<sup>7</sup>.

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<sup>7</sup> See: Retail Council of Canada (n.d.) for P/T economic reopening phase variations as of September 2021.

## Chapter 5.

### Analysis

The results indicate two main trends in the construction of the vaccine network. First, the existing procedural tools make the Health Canada network primarily an *information network* designed to harmonize information access and production with mainly voluntary adoption of recommendations. Second, there are minimal *action network* elements, with political executive actions being *ad hoc*. The following sections discuss the potential effects of these trends as having the potential effect of reducing policy coordination during times of national crisis due to the reliance on voluntary usage of information by individual autonomous P/T governments.

#### 5.1. The Nature of Vaccine Coordination

Vaccine implementation frameworks were generally well coordinated with five key coordinated policies and one visible policy asymmetry. Vaccination status was F/P/T asymmetrical with two main areas of asymmetry: vaccine passport implementation dates (early June to late September 2021), requirements, and severity; and mandated vaccinations of government employees and healthcare workers<sup>8</sup>.

The most successful coordination efforts were federal procedural tool recommendations, principally the NACI, pertaining to vaccination dose scheduling and the safe use of the AstraZeneca vaccine (PHAC, 2021c). Federal activity was jurisdictionally appropriate being mainly vaccination purchasing and allocation. Relevant asymmetries were present between provinces in visible policy areas. Phase-based vaccine rollout programs varied between provinces with two-, three-, and four- phase plans being announced in late 2020. Vaccine passports and proof-of-vaccination programs were also asymmetrical, with variations in wording ('passport' versus 'proof of

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<sup>8</sup> *Prima facie* a substantive success with *announcement* of mandatory vaccination of health and social workers being well coordinated between P/T jurisdictions (mid-August to early September 2021). However, variations in mandatory *vaccinations* versus mandatory *testing* between P/T jurisdictions, date of ultimate policy implementation, and other factors were asymmetrical. By the time the policy came into effect, implementation asymmetries were present with Ontario and Quebec notably repealing their mandate policy. See news reports Jackson, 2021 and Aziz, 2021 for further discussion.

vaccination'), activity allowances, and dates of implementation (early June to late September 2021). Alberta is a noticeable extreme, explicitly stating that the province would not use vaccine passports on July 12, 2021 (although it ultimately required proof of vaccination September 20, 2021) (CBC News, 2021). Data limitations (asymmetrical quantity of policy interventions recorded between provinces) invalidate meaningful quantitative comparison of this data.

## **5.2. Travel and Transport Policy Coordination**

As discussed in section 4.3, travel and Transportation policy had high levels of federal policy activity with 33 restriction orders between March 30th, 2020, and September 21st, 2021. Early F/P/T adoption of federal isolation orders (full F/P/T coordination of the 14-day self-isolation orders in early-mid March 2020; B.C. announced on April 8, 2020) and numerous P/T region-specific policies were present. There were F/P/T asymmetries in the easing of isolation rules during the summer of 2021, yet these were mainly announced by Departments of Health and potentially stemming from reopening framework asymmetries between the F/P/T governments (similar to the phase-based vaccine frameworks). While the COMT and transportation policy was not explicitly visible in travel policy, the regular meeting schedule of the Deputy and First Ministers of Transportation and Highway Safety indicates an active network manager supporting a robust information-based policy network (table 6.1). This mirrors Agranoff's (2003, p.7) observations that most network managers spend the majority of their activity working on jurisdictional issues, convening semi-regularly to work on collaborative network management. This activity allowed for P/T jurisdictions to focus on issues relevant to their contexts such as regional travel 'bubbles' (e.g. British Columbia, Alberta, and Yukon Territory; Maritime bubble), and restrictions to at-risk communities or specific inter-regional corridor closures.

## **5.3. Procedural Vaccine Policy Tools: The Strengths and Weaknesses of the Network**

There were robust procedural vaccine policy tools present in the Health Canada network, some of which were very effective at coordinating F/P/T policy (specifically: vaccine implementation frameworks). The NACI and CCMOH were particularly effective.

The NACI's recommendations influenced F/P/T policy, particularly their recommendation of pausing the use of AstraZeneca vaccination (PHAC, 2021c). The VTF and CITF were not explicitly mentioned in F/P/T policy decision-making, reflecting their mandates of low-impact, voluntary information provision (Government of Canada, 2022) and harmonizing F/P/T research and immunity information to policymakers to encourage evidence-based decision making (CITF, n.d.). These vaccine-specific tools have low or mixed impact on their target actors yet achieved situational influence (particularly the NACI) in evidence-based policy making and federally sourced policy coordination. The NACI recommendations were the best coordinated policies of F/P/T vaccine rollout frameworks. These NACI dictates were supported by the CCMOH as they are a key component of the PHN designed to strengthen Canadian health policy, anticipate and respond to public health events, enable F/P/T policy coordination, and promote evidence-based policy advice to decision makers (PHN, 2022a). The Council was also given special dispensation as part of the Special Advisory Committee on Covid-19 to issue joint statements to communicate public health approaches to Covid-19 vaccines (PHAC, 2021b). These joint position statements<sup>9</sup> were released at regular intervals which indicates support for F/P/T coordination of vaccine safety protocols mirrored in the coordination of the implementation frameworks (PHN, 2022b). However, they do not discuss or impact those visible policy areas which have been shown to be the least F/P/T coordinated such as phase-based vaccine program frameworks or vaccine passports (PHN, 2022b).

Those tools which are in key positions to help actively coordinate and network F/P/T policy did not discuss those areas of policy which were most visible, invasive, and ultimately politicized. The Provincial Health Officers (PHOs) are the most visible spokespeople of the Health Ministries' efforts to contain the pandemic and have been the subject of considerable media and public backlash (e.g., McIntyre, 2022; Perry, 2021; Shephert, 2022). The PHOs have statutory powers under the Act and were given key roles in active policy tuning pertaining to specifics of mandates, lockdowns, and vaccination protocols *within their provincial jurisdictions* (Fafard et al., 2018; B.C. Ministry of Health, n.d.). However, as indicated by their joint statements, the CCMOH

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<sup>9</sup> 14 at the time of writing. See PHN, 2022b for up-to-date list.

positions mainly concerned those policies of implementation frameworks and did not specifically indicate joint positions on vaccination status (PHN, 2022b).

The PHN Council “provides advice and direction to *FPT Deputy Ministers of Health* on public health policy and risks” and is “accountable... to the *Conference of Federal, Provincial, and Territorial (FPT) Deputy Ministers of Health*, which is accountable to the *FPT Ministers of Health*” (PHN, 2022a, emphasis added). This emphasizes the low-medium subsystem impact of the CCMOH as, while the decisions of the individual PHOs have power within their jurisdictions to influence policy, their advice must be vetted by the Conference of the Deputy Ministers of Health as stipulated within both the PHN and HPOC hierarchies. It is unclear why the CCMOH did not officially discuss F/P/T proof-of-vaccination policy, however the CIHI vaccine policy charts indicate that vaccine passport policies were announced by either Ministries of Health, Premier’s Offices, or general government publication, indicating that these policy interventions may have been influenced by factors beyond the specific influence of the PHOs. The Minister of Health links individual components of the healthcare system within their jurisdictions and has extensive decision making authority within a health system (New Brunswick Health Council, 2013) presumably giving them high levels of control over invasive policy tools and, therefore, giving their assembled F/P/T Council the ability to collaboratively create policies that are F/P/T coordinated regardless of the invasiveness of the policy being discussed. This preliminarily notes that their underutilization with respect to formally collaborating on invasive and visible vaccine policies could have serious effects on the F/P/T coordination of those policies, creating interjurisdictional contradictions thus lowering consistency of the tool mixture used to address national-level goals.

As delineated by the described chain of authority within the PHN, the Conference of (Deputy) Health Ministers should have a large presence in F/P/T vaccine policy coordination due to their being specifically provided advice on coordination from the PHN and its special advisory committee on Covid-19 (PHN, 2022a). This is re-enforced by the HPOC’s Governance Structure for a Coordinated Response (PHN, 2018, fig. 2) which also places the Conference of F/P/T Deputy Ministers and First Ministers of health as ultimate authority for policy implementation. As discussed in section 4.2, the F/P/T Ministers of Health convened once during the early stages of the pandemic, the F/P/T Deputy Ministers of Health convened twice (once during the relevant CIHI data timeline),

and the P/T Deputy Ministers of Health met thrice (twice during the CIHI Data timeline). This is a strong piece of preliminary evidence to support the assertion of a misuse of the executive management component of an effectively functioning, minister-led policy network which could otherwise have had the power to coordinate invasive policy in a structured way as-per policy network management theory. *This supports assertion of ineffective usage of the executive network manager leading to a policy coordination process failure due to ineffective communication between F/P/T jurisdictions on policy relevant to the national-level, creating a coherent but inconsistent policy mix, supporting the first hypothesis of this study.*

## Chapter 6.

### Discussion

These results indicate several trends in Health Canada's approach to F/P/T coordination efforts with respect to the vaccine rollout:

- A. There are numerous procedural tools in place designed to supply expert information to policy makers in their respective fields.
- B. Many of the F/P/T policies in both vaccination and travel were jurisdictionally appropriate with respect to issues areas such as regionally specific restrictions and demographically tailored 'population to be vaccinated' plans.
- C. Policies originating from federally organized bodies were well F/P/T coordinated.
- D. Vaccine implementation and safety was well coordinated, but the invasive areas of F/P/T policy for vaccination frameworks (vaccine passports, proof-of-vaccination requirements, and phase-based de-restriction plans) were largely asymmetrical, manifesting as coordination issues in both vaccine and travel policy.
- E. The councils of Health Ministers were underutilized for promoting inter-governmental policy coordination.
- F. The NACI and CCMOH success in vaccine implementation and safety coordination support the first hypothesis in that executive-level management can encourage coordination.

#### **6.1. Impact of Provincial Control on Consistency and Coherency of National Policy Initiatives**

Provincial government individualism in visible policy areas caters to the perceived needs of their respective populations but disregards their contribution to the national Covid-19 response policy mix. By adapting the principles of Howlett and Rayner's (2007) matrix of (in)consistent instrument mixes and (in)coherent policy goals in new governance arrangements to an analysis of F/P/T policy coordination, we can determine whether or not the tool mix at the P/T level undermines the national goals. The F/P/T governments were united in their goals of case management, maximising vaccination rate, and ensuring vaccine safety. However, with several visible tools pertaining to vaccination status not being fully F/P/T coordinated, the situation arose

where the means of policy goal achievement were inconsistent between P/T jurisdictions. This asymmetrical F/P/T policy tool mix leads to an inconsistent national-level tool mix. As-per the adapted Howlett and Rayner's (2007, p.8) matrix, coherent policy goals and inconsistent tool mixes lead to ineffective policy and governance arrangements. Specifically, coherent goals and inconsistent tool mixtures lead to a *drift* scenario where policy goals change relative to the tool choice, therefor decreasing effectiveness of the tools in achieving the original goals (Howlett & Rayner, 2007, p. 9). This is to say that the inconsistent tool mix between the provinces allowed for their internal goals to shift away from the national goals, making their tools less effective at contributing to those original goals at the national level. This coupled with Wilson et al.'s (2002) observation that one jurisdiction's actions impact their adjacent or related jurisdictions, potentially creating a situation of 'mutual undermining' of policy between jurisdictions. For example, the provinces and territories ultimately utilized variations of vaccine passports/proof-of-vaccination requirements, the inconsistency of these visible tools provided grounds for policy politicization, leading to increased compliance barriers and decreased compliance levels (Weaver, 2013, p. 253). This discussion further supports the first hypothesis of this study insofar as it has shown that the failure of policy coordination was likely due to *ad hoc* executive management of the policy network leading to ineffective F/P/T coordination and low-usage of those procedural tools which support and mandate networking-style policymaking efforts at a cross-national and multi-level capacity.

The fiscal federalism practiced in the F/P/T health policy arrangement supports P/T policy autonomy, but obfuscates the federal role in substantive healthcare policy making which itself has become more unilateral in process and less effective in practice (Maioni, 2002, p. iv). That is, the federal government's policies tend to target single actors, and its primary role is policy system financier opposed to substantive policy maker. This is symptomatic of the federal government generally vacating its role in health policy management with increased power given to provincial premiers (Bakvis, 2020, p. 320). While the decrease of federal substantive policy creation is a necessary trade off to increase P/T ability to tailor policies, the apparent degree of concurrent power, as well as federal use of criminal code law in public health matters, has created confusion over 'who can do what' with respects to substantive health policy (Poirier & Michelin, 2021, p. 203). This is to say that the dilution of the federal role in substantive

policymaking has strengthened P/T governments but has also led to depletion of the process of central policy guidance, diluting the federal role in health policy making to the point where their efforts may overlap with provincial jurisdictions, creating a situation of confusion over which goals and whose instruments ought to be followed.

The provincial responsibility for planning and administering public health programs has exposed endemic issues pertaining to asymmetrical F/P/T policy response within the PHN and HPOC coordination protocols. These structural inconsistencies, coupled with the rising tension between politically aligned parties and general increase of partisan behaviour, created the permissive conditions for a situation where it is increasingly difficult for provinces to reach consensus on nationally relevant decisions (Fox & Beland, 2019). Content-based models of policy advisory systems place content and location of policy advice origins at the same level when it comes to political influence that they might enact (Hustedt, 2020, p. 204). While tailored policymaking via P/T autonomy is a definitive component of the Canadian federal system (Smith, 1998), leaving provinces to enact nationally relevant policies can compound or amplify existing issues with F/P/T policy consensus. Furthering these asymmetries are structural differences such as varying levels of power and conflicting roles between the PHOs in their jurisdictions (Fafard et al., 2018), as well as the low structural impact of information-based policy tools feeding into an underutilized action-network manager of the (Deputy) Health Ministers with respect to coordinating vaccine status policies. It is for these reasons that this paper recommends a more central approach to formulation of nationally relevant policy interventions and frameworks through an action-oriented network manager.

## **6.2. Best Practice: Council of Ministers Responsible for Transportation and Highway Safety (COMT)**

The Councils of Ministers and Deputy Ministers Responsible for Transportation and Highway Safety (COMT) were highly active during the first 18 months of the Covid-19 pandemic (table 6.1). This is preliminary evidence to support the stepwise 'best practice' network management anticipated in section 2.3 being demonstrated by the COMT's handling of inter-governmental coordination. Procedural policy tools relevant to Covid-19 management in transportation policy (table 6.2) were sparse compared to the

PHN/vaccine network. While a limited selection, these tools have low-, mixed-, and high-impacts on their respective policy subsystems (Howlett, 2000).

**Table 6.1. Council of (Deputy) Ministers Responsible for Transportation and Highway Safety Meetings**

Date	Minister Level
April 7, 2020	Deputy
April 28, 2020	Deputy
May 14, 2020	Deputy
May 21, 2020	Deputy
June 2, 2020	First
July 21, 2020	Deputy
October 26, 2020	Deputy
December 15, 2020	Deputy
January 29, 2021	Deputy
February 12, 2021	First
April 29, 2021	Deputy
July 27, 2021	Deputy
November 4, 2021	Deputy
January 27, 2022	Deputy
February 25, 2022	First
April 28, 2022	Deputy

Source: CICS, n.d.

**Table 6.2. Procedural Tools for Transportation Policy Network**

<b>Tool</b>	<b>Purpose</b>	<b>Subsystem Impact</b>
Council of Ministers Responsible for Transportation and Highway Safety (COMT)	Principle forum of joint action for (inter)national transport policy	High; joint action initiatives, policy testing, multi-stakeholder cooperation
Council of Deputy Ministers Responsible for Transportation and Highway Safety	Intermediary for task forces, etc, report-issuing to COMT	Mixed, supply information but are given recognition within policymaking process
Canadian Council of Motor Transport Administrators (CCMTA)	Coordinates administration and implementation of COMT highway initiatives	High; institutional
Transport Association of Canada (TAC)	Establish guidelines for harmonizing cross-jurisdictional plans for road, highway, and urban transportation	Low, information-based

Sources: CCMTA, n.d.; COMT, n.d.(a); TAC, 2019; TAC, n.d.; Howlett, 2000

The COMT is an example of best practice for this analysis and a model of Canadian executive-level network management. Unlike the Health Minister’s failure to model an effective network manager, the COMT and its relevant tools (table 6.2) behave as an effectively managed F/P/T agency with the Deputy/First Ministers councils acting as network managers. During the same timeframe as the *conference* of Deputy/First Health Ministers’ meetings, the *Councils* of Deputy and First Ministers responsible for Transportation and Highway Safety met thirteen and three times respectively. While no publicly accessible documents were published for the Deputy Minister’s meetings, First Minister’s meetings were accompanied with news releases which reinforced commitment to intergovernmental leadership, collaborative F/P/T policy following public health and First Minister principles and guidance, national support for risk mitigation factors like mask wearing enforced by the CCMTA, and commitment to inter-departmental and multi-level coordination to address the pandemic (COMT, 2020; 2021; 2022). Of particular note is the explicit mention of the function of Ministers’ close collaboration which will “support mitigating the impacts of COVID-19 on all those involved with the transportation system, and identifying gaps that may need to be addressed in the months ahead” (COMT, 2020). There was First Minister discussion of intergovernmental policy being piloted in various jurisdictions and a “nationally based approach [to policies

which]<sup>10</sup> will provide clear advice... [to] consumers, the tourism sector, regulatory agencies and enforcement officials” (COMT, 2022). This demonstrates continuous and reinforced action-oriented F/P/T network management with commitment to inter-jurisdictional cohesion and coherence.

Emphasis on *formal* inter-organizational policy networking is seen as necessary during crisis management situations, as formal bodies with official leadership roles allow for more *action network* activity such as formal adoption of collaborative projects, service delivery, and information exchange (Agranoff, 2003, p. 10; 2006, p. 59). *To summarize the ‘good network management’ behaviour in the COMT case, sector-relevant procedural tools convened to solve a complex problem, the network managers (COMT and Deputy Ministers) met semi-regularly to discuss F/P/T policy facilitation, and the procedural tools of the CCMTA and TAC were utilized to implement F/P/T program delivery resulting in increased coordination and coherency supporting this study’s second hypothesis.*

Compared to this, the vaccine policy/Health Canada network convened similarly oriented bodies to address the crisis. However, it lacked a coherent action-based network manager which conducted semi-regular formal meetings to encourage F/P/T discussion, homogenous utilisation of the robust information-based procedural tools, and therefore had areas of highly visible policy (e.g. vaccine passports) become the subject of politicisation due to their lack of national coherence. *If the Council of Canadian Health Ministers was to be revitalized as network manager of the PHN in the same way the COMT managed transport policy, the turmoil surrounding vaccination policy asymmetries could have potentially been offset.*

To reiterate, one of the principal reasons for potential process failure of intergovernmental coordination is the lack of network managers to manage the robust information network established within the F/P/T health system. As evidenced in table 4.2, the Conferences (not *Councils*) of Deputy Health Ministers and First Health Ministers were sparsely engaged in formal meetings. This presented a flaw in the chain of actionable F/P/T policy as all of the information-based procedural tools are designed to give advice to the Deputy and First Ministers of Health who confirm policy action

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<sup>10</sup> Specifically mentioned non Covid-related pilots

(PHN, 2022a). *It is the suggestion of this paper that the First and Deputy Ministers of Health be revitalized as the action network managers of the PHN and health information network in accordance with the literature on network management, horizontal network collaboration (Klijn & Koppenjan, 2015), and the calls for increased federal/central guidance during national crisis (Wilson, 2006; Wilson & Lazar, 2005; 2006).* This would contribute to strength of epidemic response, addressing the concluding concerns of the SSCSAST (2010) report. This recommendation of reformation of the PHN's executive-level *action network* manager has some issues of plausibility with inhibiting factors such as excessive visibility and invasiveness—common issues cited with executive policy networks (Howlett, 2019b, p. 181). However, this type of network management already exists at the federal level within Canada at minimal levels of provincial invasion and public visibility as demonstrated by the COMT's behaviour in crisis management, a feature further supported in the following section.

### **6.3. Farther Qualifying the COMT Case**

The first potential issue with the COMT case is the difficulty of recognizing which case is anomalous to federalism in Canada with respects to intergovernmental network management and collaborative policymaking between executives. That is, is Health Canada/PHAC/PHN/Conference of Deputy Health Ministers the anomaly in that it was *ad hoc* and underutilized in its power to coordinate visible policy? Or is the COMT the anomaly with its active meeting schedule and executive-led network management style. Besides the case-based justification discussed in section 3.1 (selection based on comparability of available data in the issue area), the CICS database search showed that there were other ministries engaging in frequent formal networking which directly pertained to the issue area. Specifically, the Council of Tourism Ministers demonstrated behaviour like the stepwise network management principles laid out in section 2.3, but lacked data in the CIHI policy interventions timeline therefor limiting meaningful comparison to the Health Canada case with respects to correlating management activity to increased F/P/T coordination. However, their regular meetings and a declared commitment to collaborating between jurisdictions for coherent F/P/T policy for a coordinated recovery of the sector (evidenced in press release data, e.g. Canadian Council of Tourism Ministers, 2022) indicates that active and formal executive-level policy coordination from a Council of Ministers is not unique to the COMT case.

The COMT is not explicitly responsible for *travel* policy which was largely the domain of Canada Border Services and the jurisdictional decisions of the F/P/T Ministries of Health with regards to within- and inter-provincial travel. However, Transport Canada is responsible for national and international travel policies and explicitly issued ministerial dictums for essential travel policies during the Covid-19 pandemic (Transport Canada, n.d.) and the COMT represented in and by Transport Canada (COMT, n.d.[b]). Transport and travel policy issues may have arisen due to being susceptible to the inconsistent mixture of F/P/T vaccine policies. In their June 2, 2020, news release, the COMT “acknowledged the lead role of public health agencies... as well as regional differences” and based their “collaborative [F/P/T] approach... [on] principles established by First Ministers and Public Health guidance” (COMT, 2020). While this helps inter-agency policy coordination, it leaves transportation policy open to being influenced by the discussed flaws in the vaccine policy network as the transportation policy network must incorporate an inconsistent policy mixture into their planned policy initiatives. This inconsistency *may* have been relevant to the inciting events of the ‘freedom convoys’ which protested federal vaccination mandates for cross-border industrial transporters (e.g., Woods & Pringle, 2022). It is beyond the scope of this paper to investigate policy past the CIHI policy timeline available at the time of analysis.

Issues with air travel in the summer of 2022 (Harris, 2022) makes appraising travel policy as an unmitigated success of F/P/T coordination difficult. Recent comprehensive case studies of Canadian policy success stipulate that policy must achieve its goals and sustain performance for a considerable period even in the face of changing circumstances to be considered successful (Lindquist et al., 2022, p. 5). This study’s appraisal of the COMT is still seen to be appropriate as it achieved its goals of harmonising policy during the study’s timeframe and the health-mandated shutdowns created extra-situational factors (such as labour shortage) affecting policy coordination effectiveness (Pereira, 2022). The COMT also focuses on road-based travel, limiting their involvement in airline management (COMT, n.d.[a]). However, their role in facilitating general travel policy is not to be neglected due to Transport Canada’s presence in the COMT and their comparative success as an effectively managed, F/P/T coordinated policy network in multiple areas of policy intervention.

## Chapter 7.

### Conclusion

This study presents two key findings which support its hypotheses, contribute to the empirical literature on network management, and create policy recommendations for structural reconfiguration of the Health Canada policy network, the PHN, and the PHAC for improved efficiency in the next pandemic response.

The first key finding is that the initial vaccine implementation framework policies for the Covid-19 vaccination rollout were well F/P/T coordinated by the CCMOH and the NACI. Major F/P/T asymmetries were mainly present in the ‘vaccination status’ policies involving the invasive policies of vaccine passports and government worker vaccination mandates. While the NACI and the CCMOH did well to coordinate the implementation of vaccine safety policies, the Council of (Deputy) Health Ministers engaged in an *ad hoc* meeting schedule, reducing formal coordination and may have contributed to the drift of P/T goals from national goals via an inconsistent inter-jurisdictional policy tool mixture, especially in vaccine status policy interventions; this supports H1. Compared to transport and travel policy, the federal control over nationally-relevant policies (international travel restrictions, isolation orders) and regular meeting schedule of the COMT contributed to a less politicized policy mixture until subjected to policy asymmetries from other sectors (phase-based reopening plans in particular).

The second key finding is that there is a relationship between effective leadership and the coherency and consistency of a national policy network. The activity of the respective Council of Ministers, and the resulting apparent impact on F/P/T coordination of policy, indicates that the political executive and committed cabinet ministers can provide support for policy innovation (Lindquist et al., 2022, p. 485) which can lead to increased consistency and coherency of an area-specific national policy mixture. This study’s analysis of the structural differences between the network management styles of the respective policy areas revealed potential reasons for why certain policy intervention areas were coordinated or not due to the impact on F/P/T policy collaboration and coordination. The COMT followed a F/P/T policy model of effective network management with the transport policy network maintaining information-based tools

which harmonized F/P/T policy in relevant intervention areas; this supports H2. To make explicit comparison, Health Canada and the F/P/T vaccine policy framework maintains a large information-based network which has voluntary influence over F/P/T coordination. However, the Conferences of Health Ministers engaged in significantly less formal network management when compared to the COMT leading to the drift scenario mentioned previously.

These findings present three lessons to help remedy issues with the F/P/T health policy framework. The first lesson is that central Councils of Ministers can act as a collaborative policy network manager, encouraging national policy harmony while preserving P/T jurisdictional authority over relevant interventions. The Health Policy network is more complex than travel and transport both in substantive and strategic terms (Klijn & Koppenjan, 2015). Complex networks require combinations of tools managed through horizontal resource exchange and negotiation strategies, opposed to 'command and control' hierarchies, for effective and stable objective completion (Klijn & Koppenjan, 2015, p. 75)<sup>11</sup>.

The second lesson from the presented analysis is that horizontal information exchange promoted by Councils of Ministers is feasible—and currently used—in the Canadian system. Horizontal exchange and bargaining in the COMT's management of the highway-transport policy sector demonstrates the potential for inter-jurisdictional health policy bargaining in the PHN facilitated by effective management by the Council of (Deputy) Health Ministers. Klijn & Koppenjan's (2015) work indicates that effective leadership requires effective horizontal exchange of resources and information to encourage effective policy. This fits with effective federal network management literature and helps mitigate the invasiveness of executive management bodies into P/T autonomy (Howlett, 2019b, p. 181). Intergovernmental meetings of Councils of Ministers can facilitate this horizontal bargaining and can help maximize network efficiency and its substantive results. This could be encouraged by increased scope of F/P/T policy initiative consideration by the HPOC and PHAC in their early-stage analysis of health-related crises in Canada. That is, those policies which directly rely on policies relevant to F/P/T bargaining should, themselves, be F/P/T bargained.

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<sup>11</sup> Page 75 of Taylor and Francis e-book

The third lesson is that this management style of policy networks could harmonize the national policy mix, increase intergovernmental policy coordination, and decrease compliance barriers during pandemic (and other national-level crisis) response. This leads to the policy recommendation of adding to the inter-governmental conversation increased F/P/T discussion and negotiation of policies which directly rely upon previously negotiated policies. That is, in Covid-19's case, being vaccine passports, vaccination mandates of healthcare workers, and others to 1) ensure coordination of those policies and 2) discourage 'spill-over' politicization to the previous effective policies. It makes sense for regionally specific vaccination and transport policies to be left to provincial jurisdictions (targeted vaccination populations, inter-regional travel restrictions) as the federal-regional disconnect would likely lead to ineffective policy. Those visible tools which contribute towards national policy goals and initiatives (restrictions, passport requirements, international travel, vaccine mandates) require harmonisation at the national level to constrain action of both policy makers and 'takers' (Howlett, 2020). This mitigates unnecessary policy politicization at the P/T level, and therefore should be promoted by an executive manager with the power to initiate visible and invasive policies.

The number of committees, subcommittees, and executive-level F/P/T meetings make overstating the complexity of federal arrangements in Canadian federalism difficult (Howlett & Migone, 2018, p. 144). More research into complex network management in the context of the Canadian health system would help bring insight into the precise nature of actor preferences, trends, and actions to help reveal where to focus horizontal collaboration for quick and effective national policy response during times that have a united national goal. Research into complex networks is increasingly relevant to establish where and how professional policy advice is acted upon in an age where it is no longer the only component of the advice network (Dobuzinskis & Howlett, 2018). It is noted that there was much informal consultation through informal governmental channels during Covid-19 response planning (Poirier & Michelin, 2021, p. 203). Due to limitations of data availability, this study informed the analysis of the content of Council of Deputy Ministers meetings with their equivalent First Minister meeting press releases. This was done to ensure that quantity and regularity of Conference of Minister meetings were not the only criteria to judge network effectiveness. The First Minister press releases discussed meeting content and general attitudes towards F/P/T collaborative

policymaking in their issue areas, showing that constant and collaborative policymaking was at the forefront of the conference meeting agendas with the intent of increasing cohesiveness of the inter-jurisdictional response (especially in the case of the COMT). Increased investigation into precise meeting content would inform how these meetings were conducted, what their purpose was, and how productive the regular meeting schedule was compared to the *ad hoc* alternative. Interviews with PHOs and First/Deputy Ministers of Health would inform the informal element of policy networking during the Covid-19 crisis response. Large-C studies of other policy intervention areas, and their ministries, would help support these conclusions of F/P/T coordination failure in the absence of effective Minister-led executive management as a ‘horizontal harmonizer’ of policy.

## References

- Adcock, R., & Collier, D. (2001). Measurement validity: A shared standard for qualitative and quantitative research. *American Political Science Review*, 95(3), 529–546. <https://doi.org/10.1017/s0003055401003100>
- Agranoff, R. (2003). (rep.). *Leveraging Networks: A Guide for Public Managers Working across Organizations* (pp. 1–44). Washington, DC: e IBM Endowment for The Business of Government. Retrieved from <https://www.businessofgovernment.org/sites/default/files/LeveragingNetworks.pdf>
- Agranoff, R. (2006). Inside collaborative networks: Ten lessons for public managers. *Public Administration Review*, 66(s1), 56–65. <https://doi.org/10.1111/j.1540-6210.2006.00666.x>
- Agranoff, R., & McGuire, M. (1998). Multinetwork management: Collaboration and the hollow state in local economic policy. *Journal of Public Administration Research and Theory*, 8(1), 67–91. <https://doi.org/10.1093/oxfordjournals.jpart.a024374>
- An, B. Y., Porcher, S., Tang, S. Y., & Kim, E. E. (2021). Policy Design for COVID-19: Worldwide Evidence on the Efficacies of Early Mask Mandates and Other Policy Interventions. *Public Administration Review*, 81(6), 1157–1182. <https://doi.org/10.1111/puar.13426>
- Aziz, S. (2021, November 4). *Doctors outraged as Ontario, Quebec deny covid-19 vaccine mandates for Health Workers*. Global News. Retrieved November 22, 2022, from <https://globalnews.ca/news/8348623/covid-vaccine-mandate-health-workers-ontario-quebec/>
- Bakvis, H. (2020). 12. Federalism and Universal Healthcare: A Question of Performance and Effectiveness. In Herman Bakvis and Grace Skogstad (Eds.) *Canadian federalism: Performance, effectiveness, and legitimacy* (pp. 310–336). chapter, University of Toronto Press.
- Bakvis, H., & Brown, D. (2010). Policy coordination in federal systems: Comparing intergovernmental processes and outcomes in Canada and the United States. *Publius: The Journal of Federalism*, 40(3), 484–507. <https://doi.org/10.1093/publius/pjq011>
- B.C. Ministry of Health. (n.d.). *Medical Health Officers*. Province of British Columbia. Retrieved July 8, 2022, from <https://www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/medical-health-officers>
- Bennett, A. (2010). Process Tracing and Causal Inference. In H. E. Brady & D. Collier (Eds.), *Rethinking social inquiry diverse tools, shared standards* (2nd ed., pp. 207–219). essay, Rowman & Littlefield Publishers.

- Bretschneider, S., Marc-Aurele, F. J., & Wu, J. (2004). "Best practices" research: A methodological guide for the perplexed. *Journal of Public Administration Research and Theory*, 15(2), 307–323. <https://doi.org/10.1093/jopart/mui017>
- Brock, K.L., Cooper, H., Fyfe, T., Graham, A., Hanniman, K., Kieffer, S., Lang, E., Murray, G., Rose, J., Tardi, G., Turnbull, L., Walters, M., Webber, G., Weinrib, J. (2020) *The Impact of COVID-19 on the Future of Governance in Canada*. School of Policy Studies. Queen's University. Retrieved from <https://www.queensu.ca/sps/sites/webpublish.queensu.ca.spswww/files/files/Publications/The%20Impact%20of%20COVID-19%20on%20the%20Future%20of%20Governance%20in%20Canada.pdf>
- Canada Health Act (1985, c. C-6) Retrieved from the Justice Laws Website: <https://laws-lois.justice.gc.ca/eng/acts/c-6/page-1.html>
- Canada Transportation Act (1996, c. 10) Retrieved from the Justice Laws Website: <https://laws-lois.justice.gc.ca/eng/Acts/C-10.4/index.html>
- Canadian Council of Motor Transport Administrators. [CCMTA] (n.d.). Canadian Council of Motor Transport Administrators | Home Page. CCMTA. Retrieved July 14, 2022, from <https://ccmta.ca/en/>
- Canadian Council of Tourism Ministers. (2022, January 20). *News Release – Videoconference of the Canadian Council of Tourism Ministers (CCTM)*. Canadian Intergovernmental Conference Secretariat. Retrieved November 20, 2022, from <https://scics.ca/en/product-produit/news-release-videoconference-of-the-canadian-council-of-tourism-ministers-cctm/>
- Canadian Institute of Health Information. (n.d.). *Covid-19 Intervention Timeline in Canada*. Canadian Institute of Health Information. Retrieved March 19, 2022, from <https://www.cihi.ca/en/covid-19-intervention-timeline-in-canada>.
- Canadian Intergovernmental Conference Secretariat. (n.d.). *CICS Newsroom*. Newsroom – CICS / SCIC. Retrieved July 8, 2022, from <https://scics.ca/en/newsroom/>
- CBC News. (2021, September 20). *Alberta's proof-of-vaccination program begins today. here's what you need to know*. CBCnews. Retrieved July 8, 2022, from <https://www.cbc.ca/news/canada/edmonton/vaccine-passport-proof-of-vaccination-alberta-1.6182352>
- Centers for Disease Control and Prevention. (2020, May 8). *14 diseases you almost forgot about (thanks to vaccines)*. Centers for Disease Control and Prevention. Retrieved December 16, 2021, from <https://www.cdc.gov/vaccines/parents/diseases/forgot-14-diseases.html>

- Council of Ministers Responsible for Transportation and Highway Safety. (2020, June 2). News Release: Transportation and Highway Safety Ministers Take Action to Protect Canadian Transportation Workers and Travellers. Ottawa, ON; Council of Ministers Responsible for Transportation and Highway Safety. Retrieved July 14, 2022, from <https://www.comt.ca/News%20E/communique-june2020.pdf>.
- Council of Ministers Responsible for Transportation and Highway Safety. (2021, February 12). News Release: Transportation and Highway Ministers Collaborate on the Safe and Economic Recovery of Canada's Transportation Sector. Ottawa, ON; Council of Ministers Responsible for Transportation and Highway Safety. Retrieved July 14th, 2022, from <https://www.comt.ca/News%20E/communique-feb2021.pdf>.
- Council of Ministers Responsible for Transportation and Highway Safety. (2022, February 25). News Release: Transportation and Highway Safety Ministers Working Together for a Safe and Successful Recovery of the Transportation Sector in Canada. Ottawa, ON; Council of Ministers Responsible for Transportation and Highway Safety. Retrieved July 14, 2022, from <https://www.comt.ca/News%20E/communique-feb2022.pdf>.
- Council Of Ministers Responsible for Transportation and Highway Safety. (n.d.[a]). *Council Of Ministers Responsible for Transportation and Highway Safety | Home Page*. Comt.ca. Retrieved July 14, 2022, from <https://www.comt.ca/>
- Council of Ministers Responsible for Transportation and Highway Safety. (n.d.[b]). *Council of Ministers Responsible for Transportation and Highway Safety | Membership*. Comt.ca. Retrieved July 15, 2022, from <https://www.comt.ca/Members%20Ministers.htm>
- Cousins, B. (2021, March 29). *Several provinces halt AstraZeneca vaccine for those under 55 in wake of new naci guidelines*. CTV News. Retrieved July 8, 2022, from <https://www.ctvnews.ca/health/coronavirus/several-provinces-halt-astrazeneca-vaccine-for-those-under-55-in-wake-of-new-naci-guidelines-1.5366808>
- Covid-19 Immunity Taskforce (CITF). (n.d.). *Mandate & Strategy*. Covid-19 Immunity Taskforce. Retrieved July 8, 2022, from <https://www.covid19immunitytaskforce.ca/mandate-strategy/>
- Department of Finance. (2020, November 30). *Supporting Canadians and fighting covid-19*. Government of Canada. Retrieved December 16, 2021, from <https://www.budget.gc.ca/fes-eea/2020/themes/supporting-provinces-territories-appuyer-provinces-territoires-en.html>
- Dobuzinskis, L., & Howlett, M. (2018). Policy analysis in Canada: an introduction. In L. Dobuzinskis & M. Howlett (Eds.), *Policy Analysis in Canada* (1st ed., pp. 1–24). essay, The Policy Press.

- Dunn, C. (1995). *The institutionalized cabinet: Governing the western provinces*. McGill-Queen's University Press. Retrieved Jul 3, 2022, from <https://ebookcentral-proquest-com.proxy.lib.sfu.ca/lib/sfu-ebooks/reader.action?docID=3331181&ppg=218>.
- Fafard, P., McNena, B., Suszek, A., & Hoffman, S. J. (2018). Contested roles of Canada's Chief Medical Officers of Health. *Canadian Journal of Public Health*, 109(4), 585–589. <https://doi.org/10.17269/s41997-018-0080-3>
- Federal-Provincial Fiscal Arrangements Act [FPFAA] (1985, c. F-8). Retrieved from the Justice Laws Website: <https://laws-lois.justice.gc.ca/eng/acts/f-8/FullText.html>
- Fox, G., & Beland, D. (2019, June 3). *Federal-provincial tensions loom over 2019 campaign*. Policy Options. Retrieved December 16, 2021, from <https://policyoptions.irpp.org/magazines/june-2019/federal-provincial-tensions-loom-over-2019-campaign/>
- Gerring, J. (2008). Case Selection for Case Study Analysis: Qualitative and Quantitative Techniques. In *The Oxford Handbook of Political Methodology* (pp. 645–684). essay, Oxford University Press.
- Government of Canada. (2022, July 8). *COVID-19 Vaccine Task Force*. Government of Canada | COVID-19 Vaccine Task Force. Retrieved July 8, 2022, from <https://ised-isde.canada.ca/site/biomanufacturing/en/covid-19-vaccine-task-force>
- Harris, S. (2022, July 15). *More Air Canada, WestJet passengers baffled by reasons for denied compensation* | CBC News. CBCnews. Retrieved July 21, 2022, from <https://www.cbc.ca/news/business/westjet-air-canada-compensation-delay-1.6520962>
- Hanf, K., & Scharpf, F. W. (1978). *Interorganizational policy making. limits to coordination and Central Control*. archive.org. Sage Publications. Retrieved from [https://archive.org/details/interorganizatio0000unse\\_j0i1/page/346/mode/2up](https://archive.org/details/interorganizatio0000unse_j0i1/page/346/mode/2up).
- Health Canada. (2019, September 17). *Canada's Health Care System*. Canada.ca. Retrieved July 15, 2022, from <https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/health-care-system/canada.html#a6>
- Howlett, M. (2000). Managing the "Hollow State": Procedural policy instruments and modern governance. *Canadian Public Administration/Administration Publique Du Canada*, 43(4), 412–431. <https://doi.org/10.1111/j.1754-7121.2000.tb01152.x>
- Howlett, M. (2019a). Procedural policy tools and the temporal dimensions of policy design. *International Review of Public Policy*, 1(1), 27–45. <https://doi.org/10.4000/irpp.310>
- Howlett, M. (2019b). Chapter 8: Organizational Implementation Tools. In *Designing public policies principles and instruments* (pp. 165–189). essay, Routledge.

- Howlett, M. (2020). Dealing with the dark side of policy-making: Managing behavioural risk and volatility in policy designs. *Journal of Comparative Policy Analysis: Research and Practice*, 22(6), 612–625. <https://doi.org/10.1080/13876988.2020.1788942>
- Howlett, M., & Migone, A. (2018). Over-Promising and under-delivering: The Canadian policy style of punctuated gradualism. In M. Howlett & J. Tosun (Eds.), *Policy styles and policy-making: Exploring the linkages* (1st ed., pp. 137–156). essay, Routledge.
- Howlett, M., & Rayner, J. (2007). Design principles for policy mixes: Cohesion and coherence in 'new governance arrangements.' *Policy and Society*, 26(4), 1–18. [https://doi.org/10.1016/s1449-4035\(07\)70118-2](https://doi.org/10.1016/s1449-4035(07)70118-2)
- Hudson, B., Hunter, D., & Peckham, S. (2019). Policy failure and the policy-implementation gap: Can policy support programs help? *Policy Design and Practice*, 2(1), 1–14. <https://doi.org/10.1080/25741292.2018.1540378>
- Hustedt, T. (2020). 13. Policy Design and Policy Advisory Systems. In M. Howlett & I. Mukherjee (Eds.), *Routledge Handbook of Policy Design* (pp. 201–211). essay, Routledge.
- Jackson, H. (2021, November 4). *Canadian Medical Association 'disappointed' Quebec, Ontario not mandating COVID-19 vaccines for health workers*. CTVNews. Retrieved November 22, 2022, from <https://www.ctvnews.ca/health/coronavirus/canadian-medical-association-disappointed-quebec-ontario-not-mandating-covid-19-vaccines-for-health-workers-1.5652285>
- Jacobs, E. (2020, December 14). *Canada administers its 1st covid-19 vaccine shots*. NPR. Retrieved July 8, 2022, from <https://www.npr.org/sections/coronavirus-live-updates/2020/12/14/946301025/canada-administers-its-1st-covid-19-vaccine-shots#:~:text=Press-,Canada%20Administers%20Its%201st%20COVID%2D19%20Vaccine%20Shots%20%3A%20Coronavirus%20Updates,coronavirus%20pandemic%20rages%20toward%20winter>
- Klijn, E.-H., Steijn, B., & Edelenbos, J. (2010). The impact of network management on outcomes in Governance Networks. *Public Administration*, 88(4), 1063–1082. <https://doi.org/10.1111/j.1467-9299.2010.01826.x>
- Klijn, E. H., & Koppenjan, J. F. (2000). Public management and policy networks: Foundations of a network approach to governance. *Public Management*, 2(2), 135–158. <https://doi.org/10.1080/146166700411201>

- Klijn, E. H., & Koppenjan, J. (2015). 4: Strategic Complexity in Governance Networks. In *Governance Networks in the Public Sector* (pp. 80–111). essay, Routledge. Retrieved January 30, 2022, from <https://www-taylorfrancis-com.proxy.lib.sfu.ca/books/mono/10.4324/9781315887098/governance-networks-public-sector-erik-hans-klijn-joop-koppenjan>.
- Lindeman, T. (2021, April 6). *Canada's Vaccine Mess*. The Atlantic. Retrieved April 12, 2022, from <https://www.theatlantic.com/international/archive/2021/04/canada-vaccine-rollout-problems/618516/>
- Lindquist, E. A., Howlett, M., Skogstad, G., Tellier, G., & 't Hart, P. (Eds.). (2022). *Policy success in Canada: cases, lessons, challenges*. Oxford University Press.
- Maioni, A. (2002). *Roles and responsibilities in Health Care Policy*. Commission on the Future of Health Care in Canada. Retrieved July 15, 2022, from [https://qspace.library.queensu.ca/bitstream/handle/1974/6884/discussion\\_paper\\_34\\_e.pdf?sequence=7](https://qspace.library.queensu.ca/bitstream/handle/1974/6884/discussion_paper_34_e.pdf?sequence=7).
- McGuire, M. (2006). Collaborative Public Management: Assessing what we know and how we know it. *Public Administration Review*, 66(s1), 33–43. <https://doi.org/10.1111/j.1540-6210.2006.00664.x>
- McGuire, M., & Agranoff, R. (2011). The limitations of Public Management Networks. *Public Administration*, 89(2), 265–284. <https://doi.org/10.1111/j.1467-9299.2011.01917.x>
- McIntyre, G. (2022, January 9). *Covid-19: Popularity plummets for dr. Bonnie Henry, Adrian Dix: Poll*. Vancouver Sun. Retrieved July 9, 2022, from <https://vancouversun.com/news/local-news/covid-19-popularity-plummets-for-dr-bonnie-henry-adrian-dix-poll>
- Meekison, P. J., Telford, H., & Lazar, H. (2004). *Canada, the State of the Federation 2002*. McGill-Queen's University Press. Retrieved from <https://www.queensu.ca/iigr/sites/webpublish.queensu.ca.iigrwww/files/files/pub/archive/SOTF/SOTF2002.pdf>.
- Meier, K. J., & O'toole, L. J. (2001). Managerial strategies and behavior in networks: A model with evidence from U.S. Public Education. *Journal of Public Administration Research and Theory*, 11(3), 271–294. <https://doi.org/10.1093/oxfordjournals.jpart.a003503>
- Migone, A. R. (2020). Trust, but customize: Federalism's impact on the Canadian covid-19 response. *Policy and Society*, 39(3), 382–402. <https://doi.org/10.1080/14494035.2020.1783788>
- Mou, H. (2021, May). What Now? Canada Health Transfer Background and Future. Calgary, AB; Canada West Foundation. Retrieved from [https://cwf.ca/wp-content/uploads/2021/05/CWF\\_IFRC\\_WhatNow\\_CanadaHealthTransfer.pdf](https://cwf.ca/wp-content/uploads/2021/05/CWF_IFRC_WhatNow_CanadaHealthTransfer.pdf).

- National Advisory Committee on Immunization. (2021, March 8). *Archived 5: NACI rapid response: Extended dose intervals for COVID-19 vaccines to optimize early vaccine rollout and population protection in Canada [2021-03-03]*. Government of Canada. Retrieved July 8th, 2022, from <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/rapid-response-extended-dose-intervals-covid-19-vaccines-early-rollout-population-protection.html>
- Pan Canadian Public Health Network (PHN). (2022a). *About the Pan-Canadian Public Health Network*. Pan-Canadian Public Health Network. Retrieved July 22, 2022, from <https://www.phn-rsp.ca/en/about/index.html>
- Pan-Canadian Public Health Network. (2022b). *Position statements*. Pan-Canadian Public Health Network. Retrieved August 1, 2022, from <https://www.phn-rsp.ca/en/position-statements/index.html>
- Pan-Canadian Public Health Network. (2018). *Federal/Provincial/Territorial Public Health Response Plan for Biological Events*. Ottawa; Pan-Canadian Public Health Network. Retrieved from <https://www.canada.ca/content/dam/phac-aspc/documents/services/emergency-preparedness/public-health-response-plan-biological-events/pub1-eng.pdf>
- Pereira, A. P. B. (2022, July 11). *'A brutal summer': Air Canada paying the price for airport chaos*. Financial Post. Retrieved July 22, 2022, from <https://financialpost.com/transportation/airlines/air-canada-is-left-behind-as-nations-airports-see-major-delays>
- Perry, W. (2021, December 26). Letter: Faith in Bonnie Henry has been shaken. Saanich News. Retrieved July 8, 2022, from <https://www.saanichnews.com/opinion/letter-faith-in-bonnie-henry-has-been-shaken/>
- Peters, G. B. (2018). The challenge of Policy Coordination. *Policy Design and Practice*, 1(1), 1–11. <https://doi.org/10.1080/25741292.2018.1437946>
- Piret, J., & Boivin, G. (2021). Pandemics throughout history. *Frontiers in Microbiology*, 11, 1–16. <https://doi.org/10.3389/fmicb.2020.631736>
- Poirier, J., & Michelin, J. (2021). Facing the Coronavirus Pandemic in the Canadian Federation: Reinforced Dualism and Muted Cooperation? In N. Steytler (Ed.), *Comparative federalism and covid-19: Combating the pandemic* (1st ed., pp. 200–219). essay, Routledge.
- Prime Minister's Office. (2020, December 10). *Prime minister hosts first ministers' meeting on fighting covid-19 and strengthening health care*. Prime Minister of Canada. Retrieved July 8, 2022, from <https://pm.gc.ca/en/news/news-releases/2020/12/10/prime-minister-hosts-first-ministers-meeting-fighting-covid-19-and>

- Public Health Agency of Canada. (2010, December 8). *ARCHIVED - Lessons Learned Review: Public Health Agency of Canada and Health Canada Response to the 2009 H1N1 Pandemic*. Canada.ca. Retrieved November 14, 2022, from <https://www.canada.ca/en/public-health/corporate/mandate/about-agency/office-evaluation/evaluation-reports/lessons-learned-review-public-health-agency-canada-health-canada-response-2009-h1n1-pandemic/background-context.html>
- Public Health Agency of Canada. (2021a, August 11). *COVID-19 immunization: Federal, provincial and territorial statement of common principles*. Canada.ca. Retrieved November 11, 2022, from <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/canadas-reponse/covid-19-immunization-federal-provincial-territorial-statement-common-principles.html>
- Public Health Agency of Canada. (2021b, August 11). *Government of Canada*. Canada.ca. Retrieved July 8, 2022, from <https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19/vaccines/provinces-territories-decisions-how-who-when-vaccinate.html>
- Public Health Agency of Canada. (2021c, March 29). *Use of AstraZeneca covid-19 vaccine in younger adults*. Canada.ca. Retrieved July 14, 2022, from <https://www.canada.ca/en/public-health/news/2021/03/use-of-astrazeneca-covid-19-vaccine.html>
- Retail Council of Canada. (n.d.). *Provincial reopening frameworks*. Retail Council of Canada. Retrieved July 15, 2022, from <https://www.retailcouncil.org/coronavirus-info-for-retailers/provincial-reopening-frameworks/>
- Sabatier, P. A. (1986). Top-down and bottom-up approaches to implementation research: A critical analysis and suggested synthesis. *Journal of Public Policy*, 6(1), 21–48. <https://doi.org/10.1017/s0143814x00003846>
- Saldaña Johnny. (2016). *The coding manual for qualitative researchers* (3rd ed.). SAGE Publications.
- Salvati, E. (2022). Fragmentation and intergovernmental conflict during the covid-19 crisis. the complex relationship between national and regional governments in Italy. *Regional & Federal Studies*, 1–30. <https://doi.org/10.1080/13597566.2022.2100769>
- Shepert, E. (2022, May 13). 'managed to clean my hands enough': Dr. Bonnie Henry under fire for controversial comment. Vancouver Is Awesome. Retrieved July 8, 2022, from <https://www.vancouverisawesome.com/coronavirus-covid-19-local-news/clean-hands-enough-dr-bonnie-henry-controversial-comment-5363686>
- Silva, M. L., Perrier, L., Cohen, J. M., Paget, W. J., Mosnier, A., & Späth, H. M. (2015). A literature review to identify factors that determine policies for influenza vaccination. *Health Policy*, 119(6), 697–708. <https://doi.org/10.1016/j.healthpol.2015.04.006>

- Simeon, R. (1979, August). *Intergovernmental Relations and the Challenges to Canadian Federalism*. Queens University. Retrieved July 3, 2022, from <https://www.queensu.ca/iigr/sites/webpublish.queensu.ca.iigrwww/files/files/pub/archive/DemocraticDilemma/ReformingTheSCC/SCCpapers/FesshaFINAL.pdf>.
- Smith, J. (1998). The Meaning of Provincial Equality in Canadian Federalism. Kingston, ON; Queen's University. Retrieved Dec 15, 2022, from [https://www.queensu.ca/iigr/sites/iirwww/files/uploaded\\_files/1998-1JenniferSmith.pdf](https://www.queensu.ca/iigr/sites/iirwww/files/uploaded_files/1998-1JenniferSmith.pdf)
- Speer, S., & Goldberg, J. (2020, November 12). *Reforming canadian fiscal federalism: The case for intergovernmental disentanglement*. Ontario 360. Retrieved November 18, 2022, from [https://on360.ca/policy-papers/fiscal-federalism/#\\_edn1](https://on360.ca/policy-papers/fiscal-federalism/#_edn1)
- Standing Senate Committee on Social Affairs, Science and Technology. (2010, December). Canada's Response to the 2009 H1N1 Influenza Pandemic. Ottawa, Ont.; Senate of Canada. Retrieved November 15, 2022, from <https://sencanada.ca/content/sen/Committee/403/soci/rep/rep15dec10-e.pdf>
- Transport Association of Canada. [TAC] (2019, September 24). Council of Deputy Ministers Responsible for Transportation and Highway Safety Governance Review Update. Ottawa, ON; Transport Association of Canada. Retrieved July 3, 2022, from [https://www.tac-atc.ca/sites/default/files/site/doc/about-us/f2019\\_am\\_5d\\_council\\_of\\_dms\\_secretariat\\_update\\_september\\_2019.pdf](https://www.tac-atc.ca/sites/default/files/site/doc/about-us/f2019_am_5d_council_of_dms_secretariat_update_september_2019.pdf)
- Transport Association of Canada. (n.d.). *About TAC*. Transport Association of Canada. Retrieved July 14, 2022, from <https://www.tac-atc.ca/en/about-tac>
- Transport Canada. (n.d.). *Welcome to transport Canada*. Transport Canada. Retrieved July 15, 2022, from <https://tc.canada.ca/en/corporate-services/welcome-transport-canada>
- Weaver, R. K. (2013). Compliance regimes and barriers to behavioral change. *Governance*, 27(2), 243–265. <https://doi.org/10.1111/gove.12032>
- Wilson, K. (2006). Pandemic threats and the need for new emergency public health legislation in Canada. *Healthcare Policy | Politiques De Santé*, 2(2), 35–42. <https://doi.org/10.12927/hcpol.2007.18526>
- Wilson, K., & Lazar, H. (2005, November 15). *Planning for the next pandemic threat*. Institute for Research on Public Policy. Retrieved October 31, 2021, from <https://irpp.org/research-studies/planning-for-the-next-pandemic-threat/>.
- Wilson, K., & Lazar, H. (2006, February). *From sars to avian flu - why Ottawa must lead Canada's response*. University of Victoria | Center for Global Studies. Retrieved October 31, 2021, from <https://www.uvic.ca/research/centres/globalstudies/publications/publicationsdb/pubs/from-sars-to-avian-flu---why-ottawa-id-353.php>.

- Wilson, K., McCrea-Logie, J., & Lazar, H. (2004). Understanding the impact of intergovernmental relations on Public Health: Lessons from Reform Initiatives in the blood system and health surveillance. *Canadian Public Policy / Analyse De Politiques*, 30(2), 177–194. <https://doi.org/10.2307/3552391>
- Woods, M., & Pringle, J. (2022, January 28). *Heavy police presence as truckers arrive in downtown Ottawa*. CTV News. Retrieved July 15, 2022, from <https://ottawa.ctvnews.ca/heavy-police-presence-as-truckers-arrive-in-downtown-ottawa-1.5757761>
- Ysa, T., Sierra, V., & Esteve, M. (2014). Determinants of network outcomes: The Impact of Management Strategies. *Public Administration*, 92(3), 636–655. <https://doi.org/10.1111/padm.12076>

## **Appendix A.**

### **Supplementary Data Files**

**Description:**

The accompanying Excel spreadsheet shows the coded data from the Canadian Institute of Health Information on the Covid-19 vaccine policy intervention timelines of vaccine implementation frameworks, vaccination status, and 'other' interventions from the federal, provincial, and territorial governments of Canada. Original datafiles were downloaded in late March of 2022. In accordance with the coding protocol in section 3.2 of this paper, those policies highlighted green are considered 'coordinated', those in red are 'uncoordinated', and those left white are considered jurisdictionally appropriate or regionally specific and are not considered coordinated or uncoordinated in this analysis.

**Filename:**

RamsbottomConnor\_coded\_vaccine\_policy\_charts.xlsx

**Description:**

The accompanying Excel spreadsheet shows the coded data from the Canadian Institute of Health Information on the Covid-19 related travel and transportation policy timelines of restrictions and self-isolation policy interventions from the federal, provincial, and territorial governments of Canada. Original datafiles were downloaded in March of 2022. In accordance with the coding protocol in section 3.2 of this paper, those policies highlighted green are considered 'coordinated', those in red are 'uncoordinated', and those left white are considered jurisdictionally appropriate or regionally specific and are not considered coordinated or uncoordinated in this analysis.

**Filename:**

RamsbottomConnor\_coded\_travel\_policy\_charts.xlsx