

Article details: 2020-0100	
Title	Characterizing early Canadian federal, provincial, territorial, and municipal non-pharmaceutical interventions in response to COVID-19: a descriptive analysis
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Reviewer 1	Dr. Dena Schanzer
Institution	Public Health Agency of Canada, Infectious Disease and Emergency Preparedness Branch
General comments and author response	<p>This is an impressive database of emergency advisories and enacted interventions in response to COVID-19. This information will be needed by researchers as web pages tend to list only the current advisories and restrictions. Though I was aware of the incremental nature of these emergency measures, the list of interventions is very large. To some extent, the information is overwhelming.</p> <p>The primary purpose of this manuscript is to document the database and make it as accessible as possible. The manuscript seems to focus mostly on the methods used to create the database and presents selected summaries from the database. It wasn't obvious once I followed your link how to extract summary information that I may be interested in.</p> <p>1. Could you give some consideration to guiding potential users on how to extract summary tables rather than just looking at the records? Can you tie the figures and tables to extractions available from the database? To some extent, I am thinking of the Stat Can's CANSIM product where I can extract a table at various levels of detail. [Editor's note: this information might be helpful in an appendix] - We thank the reviewer for their comment. To facilitate ease of accessing and using the dataset, we have added an open code statement and included all of the code used to generate summaries, tables, and figures alongside the CAN-NPI dataset at https://github.com/jajsmith/cannpi-cmaj. Our data is available in its raw format, with guidance found at the GitHub, but we do not have an application programming interface or public facing SQL database for the data. For most readers, downloading the NPI dataset and manipulating with excel or python should be straightforward.</p> <p>2. Figure 3 is hard to read. [Editor's note: please be sure to include editable files for figures and tables.] - We have uploaded a high-res version of this figure for the final publication.</p> <p>3. Figure 5 may work better as an interactive chart (linked to your database app). [Editor's note: while we appreciate this comment, for the purposes of this publication, this figure can be static.] - We thank the reviewer for this suggestion. However, as the editor has noted, an interactive format does not work well with the format of this publication. To ensure ease of access we are constantly updating analyses at our website howsmyleftening.ca including versions of these analyses (https://howsmyleftening.ca/#/analysis).</p> <p>4. As a general rule, it is very helpful to provide the data associated with each figure as a supplementary table. I was thinking that I might be able to get more out of these presentations if I changed the presentation or otherwise fiddled with it a bit. [Editor's note: this could be considered, but is not mandatory.] - We thank the reviewer for their comment and suggestion. We have included both the base data, and the code that was used to generate each figure in our GitHub repository (https://github.com/jajsmith/cannpi-cmaj) and added an open code statement on lines 318 to 320 to direct the reader. This allows users to re-generate the figures and manipulate them as they see fit.</p> <p>5. Interventions related to testing restrictions are not included. This is likely another project, as testing seems to be still fairly restricted and non-transparent, at least in Ontario. I have</p>

	<p>heard that Ontario still uses a less than transparent app for the public to request a test based on symptoms and other characteristics (or at least up to a couple of weeks ago). Are any other interventions omitted? Contact tracing is also an NPI. There are have been a few announcements related to contact tracing recently. I am not sure what has been done? Do you have any info on this? These are interventions that are not necessarily related to an announcement. Still, these types of interventions should be discussed in the manuscript as they are important, even if out of scope. [Editor’s note: this could be mentioned in the Interpretation section, or Limitations subsection, as appropriate.]</p> <p>- Thank you for pointing out this concern - we agree that testing restrictions and definitions are very important to characterizing this pandemic response. Information on procedures related to testing and contact tracing is unfortunately not universally made publicly available by the organizations responsible for carrying it out. Where released publicly, this information has been included in the dataset under headings such as “test definition change” or “case definition change”. We have expanded our limitations section to address this issue directly on lines 268 to 269.</p> <p>-</p> <p>6. A few thoughts on what I would like to see from this dataset: When I look over Table 1, I notice that many of the announcements are not necessarily aiming to reduce transmission, but rather to mitigate the economic damage. Would it be possible to list the major interventions based on some of the categories in Table 1 or other categories? [Editor’s note: the reviewer notes below some important interventions. Would these be included in the categories in Table 1? That’s where definitions for the categories, as outlined in the Editors comments would be useful.]</p> <p>a. To control imported cases: interventions such as border closures, and recognition of community transmission, i.e., by testing persons with severe symptoms but without recent travel or exposure to a known case. There was also the call for all Canadians to return home. This resulted in chaos at the airports. How would I find information on this topic in this database?</p> <p>b. For super-spreading events: What was done to reduce super spreading events? I can think of specific interventions such as closing schools. What other type of closures, or other announcements, were aiming to control super-spreading events?</p> <p>c. Highly restrictive measures: When did the most restrictive measures take place?</p> <p>d. Essential services declarations</p> <p>e. Long-term care precautions? Looks like we were late on these!</p> <p>f. Financial assistance to businesses and individuals (with dollar amounts?)</p> <p>- We thank the reviewer for their insightful comments. These questions get at precisely the sort of research questions we hope to enable answering through this dataset. The nature of the open dataset allows for characterization and re-categorization of the data to enable researchers to answer these questions and others like them by generating new categories that may be more or less restrictive based on the needs of a specific project. The inclusion of both free-text summaries and the full texts of the announcements enables flexibility by researchers beyond the specific categories that have been used. For example, most of the interventions described in (a) would be found within the “Federal” section of the dataset, while the amounts requested in (f) would be found by summing the “oxford_fiscal_measure_cad” columns for all interventions tagged as “emergency economic funding”.</p> <p>- We have increased the clarity of these categories by adding definitions to Table 2 (formerly Table 1) as per the editor’s suggestions (lines 406 to 407).</p>
Reviewer 2	Dr. Giulio DiDiodato
Institution	Royal Victoria Regional Health Centre, Critical Care Medicine
General comments and author response	<p>Thank you for undertaking this important task. This database will surely be critical in evaluating the size of the impact and variation of NPIs across different jurisdictions. My questions/comments include the following:</p> <p>1. Many NPIs were substantially modified after introduction. How did the authors deal with this issue as it is not clear from the methods whether any of the content of the NPIs was ever revisited?</p> <p>- We thank the reviewer for their comment. We handled the modification of an NPI after its introduction by introducing an “end date” for the initial NPI and coding the new and modified version as a novel NPI. This ongoing process has become particularly important</p>

given the emergence of complex and varied re-opening plans in various jurisdictions, and can be seen in greater depth in the latest version of the dataset. The manuscript has been updated on lines 132 to 133 to reflect this.

2. Some NPIs involved actions that were dichotomous (for example, school closures) while others involved actions that were both continuous and, possibly, time-variant (for example, proportion of population that was compliant with social distancing). Presumably the OSI was only used for those NPIs that were dichotomous, but how did the authors evaluate the rigor and time-to-implementation of these other continuous NPIs?

- We thank the reviewer for pointing out this complexity. While much of our data is categorical, we do code public event sizes and magnitudes of funding responses (e.g. economic relief, or emergency healthcare funding) as continuous variables.

- The OSI was calculated in line with previously established methods (<https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker>) to ensure external validity in comparison with other regions on a global scale.

- Our work is limited in that it characterizes the NPIs as announced and brought into policy by the various governments, but it does not extend to evaluation of public compliance or the magnitude of real-world enforcement (e.g. number of fines levied) for these NPIs. Thus, our recorded start and end dates are based upon the government announcements, and not any subsequent assessment of effectiveness. The limitations section has been updated to reflect this in lines 271 to 272.

GENERAL MANUSCRIPT REQUIREMENTS:

- Please include study type in your title.

- We have added “: A Descriptive Analysis” to the title.

- Abstract: CMAJ Open requires a structured abstract of no more than 250 words that contains the following sections:

- o Background: Includes a clear statement of the study aim and research question. (2 sentences)

- o Methods: Includes the research design, setting of the study, and participants, including number participating and criteria for selection, entry and exclusion. The interventions, if applicable, should be clearly outlined, as well as primary and secondary outcome measures.

- o Results: The main findings should be quantified with 95% confidence intervals and the number needed to treat or harm, if applicable. Absolute, rather than relative, risks are preferable.

- o Interpretation: This should include the main conclusions and implications. (2 sentences)

- o Trial registration: Registry and number should be included for clinical trials and, if available, for other study types.

- Introduction: Please ensure this is no longer than 2 paragraphs. A statement of the study aim and research question should be included at the end of the introduction.

- Methods: Subheadings (e.g., setting, design, sources of data, statistical analysis) are helpful for readers; these will vary depending on the study type.

- Interpretation. Include the following 5 main categories: main findings (discuss implications; do not repeat results); comparison with other studies; future directions; limitations; and conclusions (include implications for practice).

- Please ensure your final word count is below 2500 words.

- The additional words required to effectively and comprehensively address the reviewers' comments have raised the final word count to 2655.

- Data-sharing statement: Please supply a statement that indicates (1) whether any, all or portions of the data are available to others; (2) where, through whom, when and on what terms data will be available; and (3) how data may be accessed.

- Our data sharing statement has been updated on lines 318 to 320 and has been expanded to meet these criteria.

- Abbreviations: For only the most standard abbreviations (i.e., 95% CI, SD, OR, RR, HR), please spell out at first mention and include the abbreviation in parentheses. The abbreviations may be used throughout the remainder of the manuscript. Please remove all other abbreviations.

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| | <ul style="list-style-type: none">• Please include up to 1 academic and 1 professional degree after each author's name.- We have removed additional academic degrees from a few of our authors.• Please include a reporting guideline checklist (if applicable for your study type) from the appropriate reporting guideline. For more information, see the Equator Network (www.equator-network.org/)- No applicable or appropriate reporting guideline checklist was found for our study type, which is a descriptive analysis. |
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