

PERSPECTIVES

November 24, 2025

Apples, oranges and the definition of public health

Investments in public health in Quebec and elsewhere in Canada

OLIVIER JACQUES

Assistant Professor
School of Public Health, Université de Montréal
CIRANO Researcher

ALEXANDRE PRUD'HOMME

Research Professional
CIRANO

EMNA BEN JELILI

PhD Candidate
School of Public Health, Université de Montréal

EMMANUELLE ARPIN

Assistant Professor
School of Public Health, Université de Montréal
CIRANO Researcher

Public health can be defined in several ways. In Canada, provinces have considerable latitude in deciding which programs make up what is normally referred to as public health. This makes interprovincial comparisons very difficult. Recent analyses by the Canadian Institute for Health Information (CIHI) suggest that Quebec spends the least on public health. But is this really the case?

A CIRANO study (Jacques et al., 2025) offers a new perspective on the public health efforts of Quebec compared to Ontario, Alberta and British Columbia. Contrary to Quebec, the three latter provinces do not publish detailed budget allocations to different health care functions, such as public health. This limits the possibility for a perfectly

harmonized comparison. Based on a conceptual reclassification of the definition of public health and using publicly available provincial budget data, the authors arrive at an estimate of public health expenditures in Quebec that is close to the amounts reported by CIHI. In the case of the three other provinces, the analyses reveal public health expenditures that are significantly lower than the amounts reported by CIHI.

This study highlights the importance of a standardized definition of public health and illustrates the difficulty of comparing public health expenditures among Canadian provinces.

According to the World Health Organization (WHO), public health encompasses five Essential Public Health Operations (EPHOs): public health surveillance; monitoring and response to health emergencies and hazards; health protection, including environmental health; health promotion, including action on social determinants of health; and disease prevention, including early detection (Harris et al., 2017).

Four provinces, four different definitions of public health

All provinces share the same goals of monitoring the health status of the population, promoting healthy lifestyles and creating supportive environments as specified by the WHO's EPHO. However, each province appears to focus on its own priorities, thus advancing different definitions of public health.

With its 2015–2025 National Public Health Program (NPHP), Quebec's approach focuses on a structured and legal programming framework, with a strong bent toward supporting vulnerable populations. This approach aims to ensure that interventions not only comply with established standards, but that they are also tailored to the specific needs of the most at-risk groups (Bernier, 2006; Gouvernement du Québec, 2015, 2023; Arpin et al., 2021).

Of the provinces studied, Ontario most easily compares to Quebec. The neighbouring provinces' health services and public health administrations most resemble each other. Ontario uses a strategic framework and detailed standards to define public health, emphasizing health equity as a foundational principle. Its goal is to create a healthcare system that reduces inequalities and ensures that all citizens have equitable access to services (Smith et al., 2021). Alberta stands out for its scientific and pragmatic approach, delivering evidence-based policies and implementing key components of prevention, health promotion and emergency management (Smith et al., 2022a). A final comparison has British Columbia adopting an inclusive, community-based approach, embracing values of social justice and equity in health promotion. This philosophy reflects a commitment to improving community health while promoting inclusive and equitable practices (Smith et al., 2022b).

Baskets of public health programs vary widely from province to province

The Canadian Institute for Health Information (CIHI) aims to harmonize provincial and territorial data to facilitate comparisons. Despite these efforts, significant discrepancies persist between the measure of public health documented by CIHI and the expenditures reported by each province (Ammi et al., 2021; Ballinger, 2007; Champagne et al., 2022). The CIHI is left with compiling data based on different definitions from various sources that do not measure exactly the same thing.

Provinces have considerable latitude in deciding whether a specific program should be classified as public health, which makes interprovincial comparisons challenging. In addition, responsibility for public health is spread across several public organizations and government departments. In Quebec, these include the *ministère de la Santé et des Services sociaux* (MSSS) (the Department of Health and Social Services), the *ministère des Finances* (the Department of Finance), the *Conseil du trésor* (the Treasury Board), and the *Institut national de santé publique du Québec* (INSPQ) (Quebec's National Institute of Public Health). In other provinces, these include Ontario's Ministry of Health and Ministry of Long-Term Care and Public Health Ontario, Alberta's Treasury Board and Finance, Alberta Health Services, the Ministry of Primary and Preventative Health Services, the Ministry of Mental Health and Addiction, and the Ministry of Assisted Living and Social Services, and British Columbia's Provincial Health Services Authority and the BC Centre for Disease Control.

In addition, there is Quebec's *ministère de l'Agriculture, des Pêcheries et de l'Alimentation* (MAPAQ) (Ministry of Agriculture, Fisheries and Food) and the *ministère de l'Environnement, de la Lutte contre les changements climatiques* (MELCCFP) (the Ministry of the Environment, Climate Change, Wildlife and Parks), Ontario's Ministry of Agriculture, Food and Agribusiness and the Ministry of the Environment, Conservation and Parks, overseeing animal health, food inspection, and water and air safety. Furthermore, there is Quebec's *Commission des normes*,

de l'équité, de la santé et de la sécurité du travail (CNESST) (the Commission on Standards, Equity, Health and Safety in the workplace), Ontario's Ministry of Labour, Immigration, Training and Skills Development, Workplace Health and Safety, and British Columbia's Work Safe BC for occupational health and safety.

A broader understanding of public health conditions our perspective on provincial spending

Our study covers Alberta, Ontario, British Columbia and Quebec, four provinces that account for nearly 85% of Canada's population. Our goal was to explore how a broader definition of public health can shape our understanding of provincial public health initiatives. We conducted an interprovincial comparison of government spending on public health using a common definition of public health, using the data reported by CIHI.

Let's look at Quebec. According to the financial framework of the MSSS, every health program encompasses an array of health services grouped into activity centres. The MSSS separates expenditures by program, each program corresponding to one of 300 activity centres.

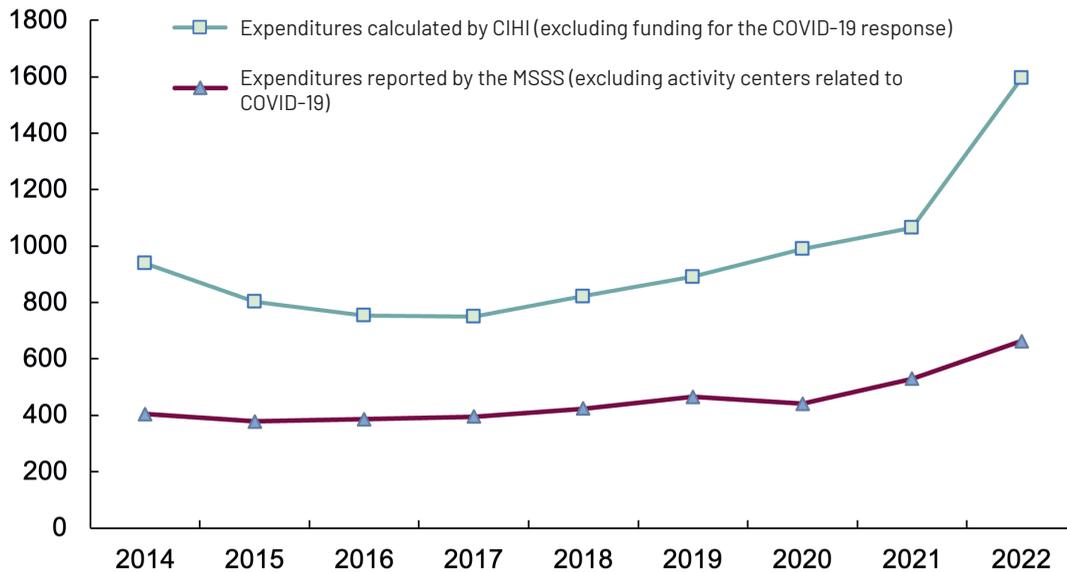
There are two principal categories of programs: support programs and service programs. Support programs include administration, logistical support for those services, and the management of buildings and equipment. Service programs combine the activities of healthcare and social service professionals to meet the needs of the entire population and the specific needs of subgroups within the population. These are arranged into nine categories: public health; general services; support for seniors' independent living; physical disabilities; intellectual disabilities and autism spectrum

disorders; youth at risk; addictions; mental health; and physical health.

The MSSS releases its financial statements by fiscal year, covering the period from April 1 to March 31. In 2022-2023, government health spending on programs that fall strictly within the "public health" service program category accounted for nearly \$1.1 billion, including spending related to the COVID-19 pandemic. When spending allocated to the pandemic and urgent mass vaccination is excluded, public health spending, strictly speaking, amounted to approximately \$570 million. How does this amount compare to the CIHI estimates?

CIHI uses the calendar year (January 1-December 31) when calculating expenses. For Quebec, CIHI reported expenditures of nearly \$1.6 billion in 2022. It is important to note that CIHI includes allocations from provincial governments to bodies with a public health mandate: INSPQ in Quebec, Public Health Ontario and the BC Centre for Disease Control (BCCDC). For Quebec, that means nearly \$100 million, corresponding to the funds allocated to the INSPQ, must be added to the \$570 million drawn from the MSSS's financial framework (Ammi et al., 2021). Public health spending thus totalled \$670 million.

From 2014 to 2022, expenditures as recorded in the MSSS financial statements topped up with funds allocated to the INSPQ are systematically and significantly lower than those reported by the CIHI. This is because several initiatives and programs that can be considered public health functions are administered by government departments, corporations, or agencies other than the MSSS. The expenses associated with these programs are therefore not included in the MSSS's financial framework, even though they are likely included in CIHI's calculations for Quebec and other provinces, and rightly so.



Public health expenditure in Quebec according to CIHI data and MSSS financial outlines, including funds allocated to the INSPQ, in millions of dollars (current dollars)

Source : Jacques, O., Ben Jelili, E., Prud'homme, A., & Arpin, E. (2025)

These initiatives and programs include health protection related to food safety and water quality, responsibilities shared by MAPAQ and MELCCFP, the cannabis prevention and research fund financed by revenues from the *Société québécoise du cannabis* (SQDC), the *Régie des alcools, des courses et des jeux* (RACJ) assistance program for compulsive gamblers, the Ministry of Education’s *À l’école, on bouge!* program, and health prevention funds allocated to the CNESST , including the *Pour une maternité sans danger* program.

A further element to consider is that the public health actions taken by family doctors and public health

physicians are also excluded from public health expenditures reported within the MSSS’s financial framework. These doctors assess the needs of the population, monitor the spread of diseases, identify risks to health, and implement measures to improve the health and well-being of the population. The costs of compensating them should also be included.

We estimate that the supplemental cost of these programs and initiatives—including compensation to family physicians and public health physicians—could total nearly \$700 million in Quebec for the 2022–2023 fiscal year.

Should we include or exclude initiatives designed to have an impact on the social determinants of health?

The key difference in the various definitions of public health is the targeting of social determinants of health. The WHO, in its definition of public health, does include programs that address the social determinants of health. Quebec does as well. However, Quebec excludes its anti-poverty and income support policies. Its public health policy is based on a collective treatment of the population, whereas the anti-poverty and income support payments benefit individuals.

Most provinces tend not to consider anti-poverty policies and income supports as public health measures, even though they are closely linked to the

social determinants of health (Jacques and Noël, 2022). However, if there is no social safety net to insure against lost labour income, or if the government fails to ensure a decent standard of living for its citizens, the increased risk of indigence will put a heavier strain on the health of the population.

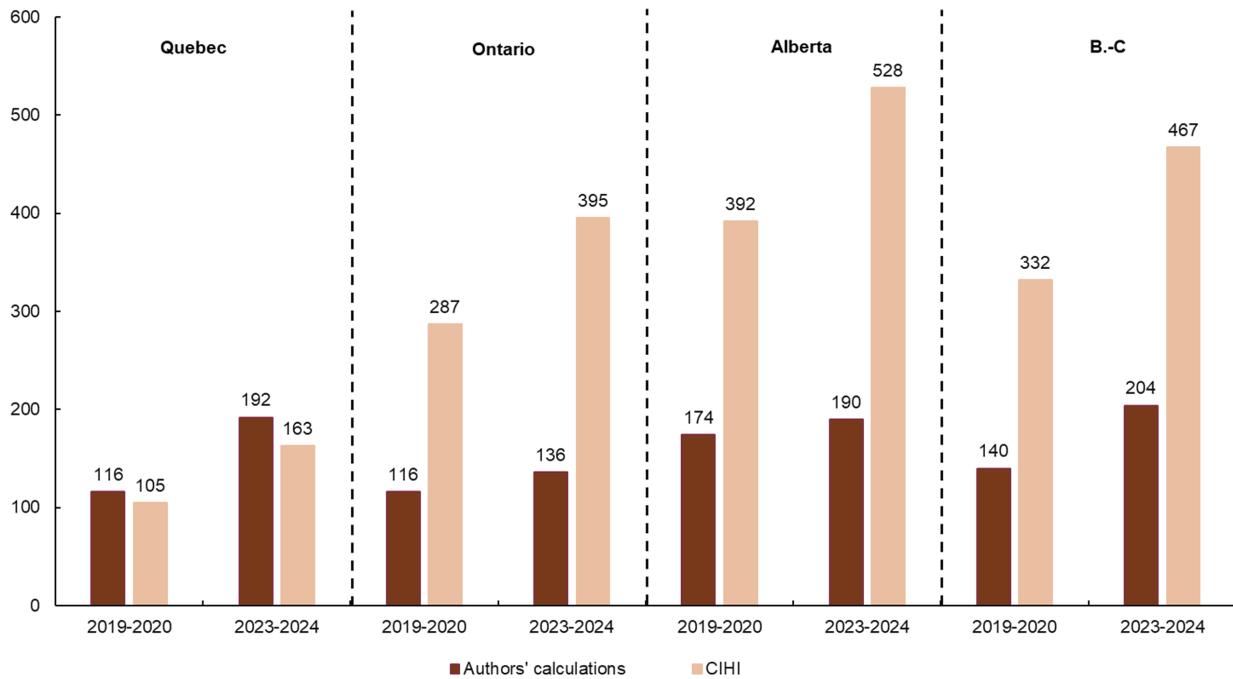
If Quebec were to count spending on poverty reduction and income support, it would compare favourably with other provinces. Efforts in this area are after all significantly higher in Quebec, thanks in particular to a more progressive tax system and more generous income support policies.

Investments in public health are fairly similar from one province to the next

Based on a shared definition of public health and using the data available to us, we calculate per capita public health expenditures in each of the four provinces and compare them to the amounts published by CIHI. This comparison reveals that CIHI tends to overestimate public health care spending in all provinces except Quebec. Performing the calculation described above, we arrive at total government healthcare spending of \$192 per capita in 2023–2024, which corresponds closely to the \$163 per capita reported by CIHI. In other words, CIHI adequately reports Quebec's public health expenditure in the broadest terms.

However, the levels of government spending on public health reported by CIHI are much higher than those we were able to calculate for Ontario, Alberta and British Columbia. We employed a method similar to the one we used for Quebec, adopting a common definition of public health and using available data.

Excluding mental health and community health expenditures and including pandemic-related spending, per capita spending on public health in Quebec and Alberta are fairly similar, approximately \$190 per capita in 2023–2024. British Columbia leads with \$204 per capita, while Ontario spends the least with \$136 per capita.



Public health expenditure in current dollars per capita based on CIHI data and authors' calculations

Source : Jacques, O., Ben Jelili, E., Prud'homme, A., & Arpin, E. (2025)

Slight variations in definitions imply significant differences when calculating public health expenditures

The public health budgets published by Ontario, Alberta and British Columbia do not offer the same level of detail as those of Quebec, making a full comparison

challenging. Furthermore, CIHI does not make available the data it relies on, which makes it difficult to determine precisely what is included or excluded in each province.

Public health expenditures represent a fraction of overall healthcare budgets. Slight variations on how they are classified can make a significant difference in how much of government spending they represent.

Money does not tell the full story

Our analysis provides a quantitative snapshot of government investment in public health. However, it does not shed light on the effectiveness of the programs implemented, the resulting improvements in the health or well-being of the population, or the efficient use of resources. Focusing exclusively on the amounts spent can mask structural inefficiencies or failures to address the particular needs of vulnerable populations.

A future avenue of research would be to evaluate not only the amounts invested, but also the mechanisms at work for these public health programs, as well as their outcomes. This integrative approach would provide a better understanding of whether resources are optimally allocated to meet the provinces' healthcare objectives, while accounting for the specific characteristics and needs of their respective populations.

References

- Ammi, M., Arpin, E., & Allin, S. (2021). Interpreting forty-three-year trends of expenditures on public health in Canada: Long-run trends, temporal periods, and data differences. *Health Policy*, 125(12), 1557-1564. <https://doi.org/10.1016/j.healthpol.2021.10.004>
- Arpin, E., Smith, R., Cheung, A., Thomas, M., Luu, K., Li, J., Rosella, L., Allin, S., Pinto, A., & Quesnel-Vallée, A. (2021). Profiles of Public Health Systems in Canada: Québec. National Collaborating Centre for Healthy Public Policy.
- Ballinger, G. (2007). Refining Estimates of Public Health Spending as Measured in National Health Expenditure Accounts: The Canadian Experience. *Journal of Public Health Management and Practice*, 13(2), 115-120.
- Bernier, N. F. (2006). Quebec's Approach to Population Health: An Overview of Policy. Content and Organization. *Journal of Public Health Policy*, 27(1), 22-37. <https://doi.org/10.1057/palgrave.jphp.3200057>
- Champagne, C., Denis, J.-L., Allin, S., & Smith, R. (2022). L'organisation de la santé publique au Québec, en Nouvelle-Écosse, en Ontario, en Alberta et en Colombie-Britannique [Rapport]. Commissaire à la santé et au bien-être du Québec. https://www.csbe.gouv.qc.ca/fileadmin/www/2022/Rapportfinal_Mandat/RapportAssocies/CSBE-Rapport_organisation_sante_publique_QC_hors_QC.pdf
- Gouvernement du Québec. (2015). Programme national de santé publique 2015-2025. Retrieved August 8, 2023 <https://publications.msss.gouv.qc.ca/msss/fichiers/2015/15-216-01W.pdf>
- Gouvernement du Québec. (2023). Santé publique au Québec – Professionnels de la santé – MSSS. <https://www.msss.gouv.qc.ca/professionnels/programme-national-de-sante-publique-pnsp/sante-publique-au-quebec/>
- Harris, M., Ruseva, M., Mircheva, D., Mircheva, P., Mircheva, T. et al. (2017). Self-assessments of the essential public health operations in the WHO European Region 2007-2015: Experiences and lessons from seven Member States. World Health Organisation, Regional Office for Europe. <https://iris.who.int/handle/10665/351404>
- Jacques, O., Ben Jelili, E., Prud'homme, A., & Arpin, E. (2025). Mesurer la dépense de santé publique au Québec et dans les provinces canadiennes : une analyse comparative (2025RP-12, Project Reports, CIRANO.) <https://doi.org/10.54932/OFTR7568>
- Jacques, O., & Noël, A. (2022). Welfare state decommodification and population health. *Plos one*, 17(8), e0272698.

Public Health Agency of Canada. (2008, June 17). The Chief Public Health Officer's report on the state of public health in Canada 2008: Addressing Health Inequalities [Education and awareness; navigation page]. Aem. <https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/report-on-state-public-health-canada-2008.html>

Smith, R. W., Allin, S., Rosella, L., Luu, K., Thomas, M., Li, J., & Pinto, A. D. (2021). Profiles of Public Health Systems in Canada: Ontario. National Collaborating Centre for Healthy Public Policy

WHO. (2015). Self-assessment tool for the evaluation of essential public health operations in the WHO European Region (p. 113)

Smith, R. W., Allin, S., Luu, K., Jarvis, T., Thomas, M., Li, J., Rodrigues, A., Rosella, L. & Pinto, A. D. (2022a). Profiles of Public Health Systems in Canada: Alberta. National Collaborating Centre for Healthy Public Policy.

Smith, R. W., Allin, S., Thomas, M., Li, J., Luu, K., Rosella, L. & Pinto, A. D. (2022b). Profiles of Public Health Systems in Canada: British Columbia. National Collaborating Centre for Healthy Public Policy

To cite this article:

Jacques, O., Ben Jelili, E., Prud'homme, A., & Arpin, E. (2025). Apples, oranges and the definition of public health (2025PJ-19, Revue PERSPECTIVES, CIRANO.) <https://doi.org/10.54932/GANS4827>

PERSPECTIVES is CIRANO's journal for the dissemination and valorization of research. Written in a format that is accessible to a wider audience, the articles in PERSPECTIVES provide visibility to the work and expertise of CIRANO's research community. As with all CIRANO publications, the articles are based on a rigorously documented analysis by CIRANO researchers and Fellows.

The articles published in PERSPECTIVES are the sole responsibility of their authors.

ISSN 2563-7258 (online version)

Director of the journal:
Nathalie de Marcellis-Warin, Chief executive officer
Chief editor:
Carole Vincent, Director of knowledge mobilization

www.cirano.qc.ca