National Collaborating Centre
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**Report │ February 2021**

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# Public Policy Competencies for Public Health: A Review of the Literature

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# About the National Collaborating Centre for Healthy Public Policy

The National Collaborating Centre for Healthy Public Policy (NCCHPP) seeks to increase the expertise of public health actors across Canada in healthy public policy through the development, sharing and use of knowledge. The NCCHPP is one of six centres financed by the Public Health Agency of Canada. The six centres form a network across Canada, each hosted by a different institution and each focusing on a specific topic linked to public health. The National Collaborating Centre for Healthy Public Policy is hosted by the Institut national de santé publique du Québec (INSPQ), a leading centre in public health in Canada.

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# Introduction

This report presents findings from a scoping review with analysis of the literature on competencies for healthy public policy. It is intended to inform public health professionals about the trends and tendencies over the past 15 years or so related to what public health schools, organizations, and authorities have done and are doing with regard to developing competency frameworks as one tool for increasing their ability to intervene in public policy. In addition to presenting the findings, we suggest that increasing organizational capacity in this area is a promising way to move policy work forward.

**Background**

In 2015, The National Collaborating Centre for Healthy Public Policy (NCCHPP) published a report outlining A Public Policy Competency Framework for Public Health Actors based on the recognition since the 1980s of the need to foster, develop, and implement healthy public policies, and on the use of competency frameworks to guide and support the work of public health organizations (Benoit et al., 2015). This work followed in the wake of an increase in the use of competency frameworks in public health to compose, develop, and sustain a workforce with the abilities and agilities required by the work. Competency based approaches focus on detailing the specific requirements of a role, usually based on extensive interviews with people in those roles, and are often used for recruitment and performance evaluation of workforces (Brahimi, 2011). In 2008, the Public Health Agency of Canada published Core Competencies for Public Health in Canada and over the following decade, other organizations, in Canada and elsewhere, have followed suit (Council on Linkages Between Academia and Public Health Practice, 2010; Belanger et al., 2012; Pan-Canadian Network for Health Promoter Competencies, 2014; Martin & Brahimi, 2014). The approach by competencies is often used as a tool for improving and streamlining the skills necessary for public health action.

Healthy public policy, as a concept and as a field of activity for public health, has developed over the past several decades as a way to act on the social determinants of health and advance health equity by promoting, adopting, and implementing policies that improve population health (Milio, 1987). First introduced in the 1980s, the World Health Organization [WHO] notes that "healthy public policy is characterized by an explicit concern for health and equity in all areas of policy and by an accountability for health impact" (1988). As part of our mandate to support Canada's public health actors, the NCCHPP undertook a review of the literature on public policy competency frameworks for public health to understand how public policy competencies for public health have evolved over the last 15 years or so. This report presents the findings of the literature review, an analysis of the competencies presented in the documents we considered, and a discussion of what might further bolster public health's ability to intervene effectively in the policy field.

# 1 Methodology[1]

For this study, we conducted a scoping review and analysis of the scientific and grey literature on public policy competencies for public health, searching for frameworks and related documents. Following an adapted version of the Prisma Extension for Scoping Reviews (Tricco et al., 2018), in the fall of 2019, we found a total of 1668 publications: 1575 in the scientific literature and 93 in the grey literature.

**Eligibility and inclusion criteria**

To be eligible for the review, documents had to be published in English or in French between 2000 and 2019,[2] in countries ranked in the top 25 of the United Nations Human Development Index and thus with socioeconomic contexts similar to those in Canada (United Nations Development Programme, 2019). They needed to be concerned with public policy or public policy competencies, or with public health competencies or the evaluation of public health education programs or workforces.

To be included for analysis, the articles thus needed to fulfill the eligibility criteria outlined above as well as one of the following criteria: be about public policy and include a list of competencies; be a competency framework for public health (or another type of document which included a list of public health competencies) with at least a section devoted to public policy; be a compilation of, or discussion of, existing public health competency frameworks; or be a public policy competency framework specifically intended for public health actors.

After designing selection criteria, we read an initial 300 abstracts separately and discussed those concerning which our decisions differed, and refined our understanding of the inclusion criteria. One of us proceeded to read the remaining abstracts and classify them as yes, no, or uncertain. Those classified as uncertain were re-read by both of us and a decision was made together. From there, a second quick read-through of the articles allowed us to eliminate those that did not fit the criteria. The 78 articles included were read comprehensively in their entirety and classified into 4 categories: competency frameworks or related documents that specifically dealt with public policy without mention of public health; those that dealt specifically with healthy public policy; those that dealt with public health and had at least one section on public policy; and those that dealt with public health and had partial mentions of public policy in other sections.

For this project, we analyzed the 43 documents that related either to healthy public policy directly, or that had at least one section devoted to public policy within public health frameworks.[3][4] From the frameworks, we made an exhaustive list of the 361 competencies that appeared in the documents. Through an iterative process of reading, summarizing, and discussing, we were able to unpack a list of 41 different competencies. From there, we returned to the complete list and through a process of constant comparison inquiry (Butler-Kisber, 2010) we generated seven mutually exclusive thematic categories and one residual category, into which we placed each of the 361 competencies.

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[1]  A more detailed methodological account is included in Appendix A.

[2]  Note that the cut-off date was later amended to 2005 to limit the number of articles and to more precisely target the time period when competency frameworks became more widespread in Canada.

[3]  In the remainder of this report, these are referred to as *the frameworks* or *the documents* interchangeably.

[4]  A full flux diagram of the selection process is presented in Figure 3 of Appendix A.

# 2 Categories of competencies in public policy for public health

Our review of the literature on competency frameworks in public health that include a component related to public policy suggests that policy is indeed seen as an area that public health actors need to be able to understand and act upon. Below, we present our thematic categorization of the competencies listed in the various documents and following that, a discussion of what this might mean as public health actors seek to build further capacity in the area of public policy. We outline what the literature suggests are the most important aspects of policy work for public health and provide a brief discussion of suggestions that individual competencies, while important in and of themselves, are best accompanied by capacity building at the organizational level if public health authorities are to more effectively intervene in public policy.

We divided the 361 competencies into eight categories. Some of the competencies are included in more than one category as they combined different elements required for policy intervention. It is worth mentioning here that leadership was mentioned in many of the frameworks, sometimes comprising a subsection within the lists rather than appearing as a standalone competency. When listed as a competency, it was always in relation to other categories and so these instances are categorized under those respective themes. It is further important to note that though the thematic categories are mutually exclusive, many of the competencies, as they appear in the documents, are composite and it was possible to place some of them into more than one category. As a result, the 361 individually listed competencies received a total of 570 category codes. Below, we describe each of the categories and present examples for each category in Table 1.

**Policy Analysis/Development (PAD)**: Includes competencies related to the design, development, implementation, analysis, impact, and evaluation of policies related to public health. This includes knowledge of how policies are made, how they might impact population health, and the ability to delineate policy options for a specific public health problem using evidence based data. This category was by far the most frequently referenced one, accounting for 40% of all of the competencies listed, and mentioned in 41 of the 43 documents.

**Influence/Advocacy (I)**: This category includes all of the competencies derived from the role of public health in advocating for policies that improve population health. Advocacy and influence are mentioned in relation to decision-makers, stakeholders, and the public, as is the ability to take positions on matters of policy that affect, or have the potential to affect, public health. Influence/Advocacy is the second most frequently referenced category of policy competencies, accounting for 14% of the 361 competencies, and is referred to in 32 of the 43 documents.

**Partnership/Collaboration (P)**: This category includes all of the competencies related to forming partnerships and collaborations, working with community members and stakeholders, as well as those related to intersectoral collaboration. This category accounts for 14% of the competencies with mentions related to partnership occurring in 28 of the 43 documents.

**Communication (C)**: The competencies in this category are concerned with the ability to effectively communicate with decision-makers and the public. Included here are competencies such as: strategic use of media; writing clear and concise policy briefs and memos; and stating policy options to different audiences. This category accounts for 13% of the competencies we found, and is referred to in 27 of the 43 documents.

**Policy Context (PC)**: This category includes competencies related to the social, cultural, and political context within which public health intervenes. Knowledge of population composition, cultural awareness, health systems, political context, and jurisdictional responsibilities are classified as policy context competencies. Policy Context accounts for 10% of the competencies, and 21 of the frameworks and related documents mention it.

**Social Determinants/Equity (SDE)**: This category includes all of the competencies that emphasize the importance of the social, economic, political, and environmental determinants of health and issues related to equity and health inequalities. 4% of the competencies we found were classified in this category with mentions in 10 of the 43 documents.

**Policy Theory (PT)**: This includes competencies which emphasize familiarity with different theories of policy, politics, public health, intervention, and social theory. Only a small fraction (1%) of the competencies listed are found in this category and they are limited to four of the documents.

**Other (O)**: This category is made up of competencies that were thematically unrelated to the other categories. These included competencies that related to implementing organizational, rather than public, policies and thus were not related to our inquiry, and some whose meaning we were unable to fully understand. There were competencies categorized as "other" found in 12 of the documents, accounting for 4% of the total competencies listed.

**Table 1        Examples for each of the competency categories**

| Competency category | Examples |
|---|---|
| Policy Analysis/Development | Policy analysis; Policy development/design; Policy options; Public health problem analysis; Policy implementation; Evaluation/assessment; Policy making processes; Ethical analysis of policy; Legislative processes; Effects, impacts, implications of policy; Using data and evidence to inform policy. |
| Influence/Advocacy | Positions on policies and laws; Advocacy; Influencing policy; Influencing decision-makers; Influencing public opinion; Influencing stakeholders. |
| Partnership/Collaboration | Intersectoral collaboration; Partnership/collaboration; Stakeholders (identifying, engaging); Community involvement; Interpersonal skills; Engaging others in projects; Developing and maintaining contacts; leading collaborations. |
| Communication | Communication; Writing policy briefs, statements, memos; Informing partners; Strategic use of media; State policy options. |
| Policy Context | Socio-cultural awareness; Composition of population; Diversity; Evaluation of roles (private, government, sectors); Health system knowledge; Knowledge of political context/agenda; Political savvy; Jurisdiction (local, state, federal, tribal, Indigenous communities); Levels of intervention; Knowledge of laws and regulations; Identifying and seizing opportunities; Cultural differences. |
| Social Determinants/Equity | Understanding social determinants of health; Promoting health equity; Reducing health inequalities; Understanding specific needs of Indigenous populations. |
| Policy Theory | Knowledge of policy theories; Knowledge of public health theories; Knowledge of scientific basis of public health; Systems level thinking; Knowledge of specific approaches to intervention. |
| Other | Translation of policy into organizational planning and public health practice; Application of existing organizational policy; Miscellaneous or unable to categorize. |

Figure 1 below presents the percentage share for each of the seven thematic categories as well as for the residual "other" category.

**Figure 1        Share of each competency category**



Legend:
- Policy Analysis/Development
- Influence/Advocacy
- Partnership/Collaboration
- Communication
- Policy Context
- Other
- Social Determinants/Equity
- Policy Theory
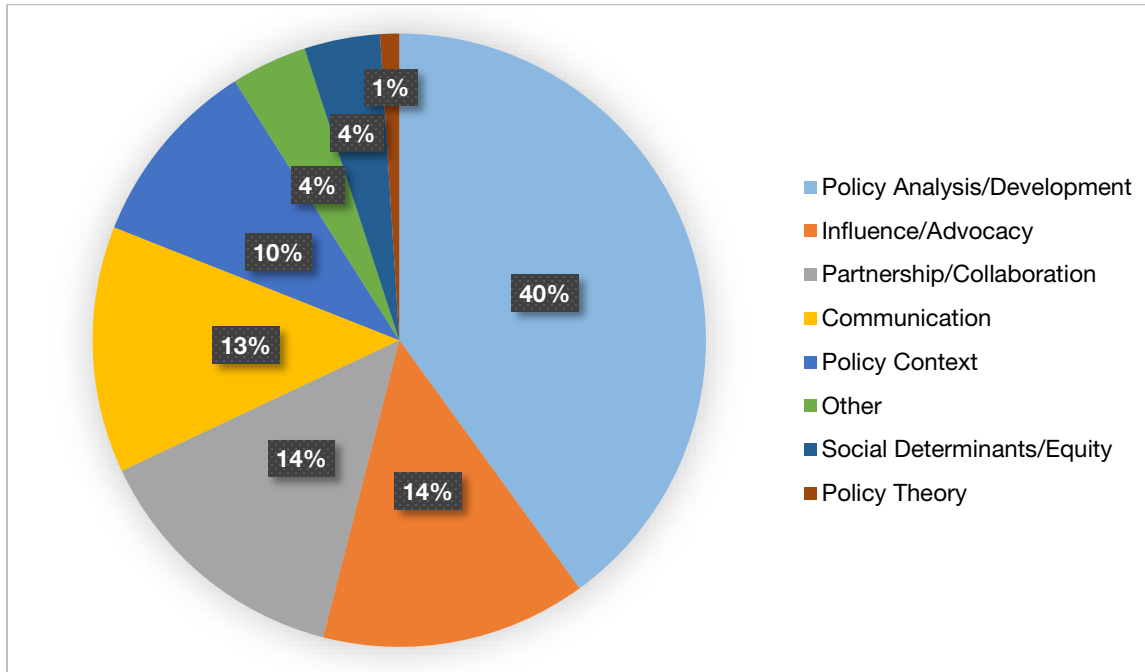
\*    Note that for the above graphic, N=361. In other words, 40% of the 361 competencies fall into the category of Policy Analysis and Development.

# 3    Discussion

It was not surprising that 40% of the 361 competencies listed in the documents we analyzed fall into the **Policy Analysis/Development** category as this category combines many of the skills necessary to understanding and designing policies. Competencies related to policy analysis and development appear in virtually all of the lists. An interesting observation is that many of the competency frameworks do not distinguish between public policy and organizational policies and programs. Indeed, in a large number of the frameworks they are listed together under one competency (for example, one framework lists the ability to "collect and analyze data and other information to guide evidence-based policy and program development" [#2]).[5] This is not an uncommon way to characterize the competencies. The ability to analyze existing policies and their impacts on health outcomes appears frequently, as does the ability to outline policy options and their potential impacts on population health. The role and importance of accessing and using evidence is noted in many of the documents. The ability to understand the policy-making process appears frequently, as well, although, as discussed below, we found very little detail regarding what is involved.

Other sources (David, 2019; Degroote & Lessard, 2016; Guyon et al, 2017) have determined that various health authorities use or have developed tools to help orient their policy work, but this is not mentioned in the frameworks we analyzed and it is therefore difficult to understand how such competencies are developed and supported.

The next three categories had very similar representation. Fully 14% of the 361 competencies fall into the category of **Influence/Advocacy** and, indeed, the majority of the frameworks include some mention of advocacy or the ability to influence stakeholders, whether these be policy-makers or community members, or to influence public opinion on public health and policy matters. These competencies are sometimes framed directly as advocacy, as in, "Advocate for political, social or economic policies and programs that will improve health in diverse populations" (#41), or, as was also frequently the case, in terms of educating others, as in for example, "Educates decision-makers, media partners, and the general public by providing relevant information" (#20). The role of the public health actor, in this instance, is portrayed as that of being both educator and influencer, providing relevant knowledge as well as nudging decision in directions that put public health at the centre of policy considerations.

**Partnership/Collaboration** is mentioned frequently as a competency necessary to doing policy work within public health. Relationships included those between public health and community members and organizations; between public health and decision-makers; as well as between sectors and levels of government. These competencies range from the very general ability to "build alliances, partnerships, and coalitions to improve the health of the community or population being served" (#15) to ones that suggest more systematic approaches to stakeholder analysis, such as, being able to "identify critical stakeholders for the planning, implementation and evaluation of population health policies/programs/interventions" (#4). It is clear from the importance given to this category that partnerships, collaboration, and inter-sectoral work are considered to be crucial to public policy work for public health practitioners and organizations.

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[5]    The numbers listed in parentheses in this section refer to the numbers assigned to the documents analyzed. The full list of documents with their assigned numbers can be found in Appendix C.

**Communication**, and the ability to communicate strategically in different contexts and with different audiences is also an area that is considered to be an important part of the work of public health actors engaged in policy intervention. These competencies ranged from the general ability to communicate with different audiences, as in the "ability to engage diverse audiences" (#29) to using communication devices specific to the policy domain, as in "write policy briefs" (#35) or "understands the role of the media and its interface with public health policy and practice" (#31). There is a clear indication, from the competency frameworks and related documents we analyzed, that communication is key to intervening in public policy for public health actors.

The next most commonly referenced category of competencies is what we have called **Policy Context**. These competencies indicate a perceived need for policy actors to know the sociodemographic and political contexts in which they work. Sometimes these competencies included jurisdictional concerns and knowledge of different agencies, as in "describe federal and state regulatory agencies, programs, policies and guidelines" (#33) and others referred to the importance of understanding the needs of diverse populations, as in for example, "apply awareness of cultural values and practices to the design or implementation of public health policies or programs" (#41). Many of the frameworks also refer to the need to know the specific policy context and be able to understand the policy scene: "knowledge of developing trends to inform the process of policy development" (#30), or "'political savvy' – understand historical and present north-south power dynamics and social and political contexts" (#38). Knowledge of the actors, the populations, and the political dynamics and agendas of a given context are thus deemed essential by many of the competency frameworks.

Surprisingly, only a small percentage of the 361 individual competencies mentioned the **Social Determinants** of health or issues surrounding health inequalities or **Equity**. A typical example of these is "identify opportunities for policy development that will improve health and wellbeing and reduce inequalities" (#36). While the small number is surprising given the centrality of these themes in public health over the past several decades, it is worth keeping in mind that we analyzed only those frameworks, or sections of frameworks, that dealt directly with competencies related to public policy. We suspect that as the vast majority of the material we analyzed came from policy sections of broader frameworks, competencies related to equity and the social determinants of health were very likely found in other sections of the frameworks. Given that policy often drives the conditions that create and sustain both the social and structural determinants of health and health inequalities, the absence of these competencies is notable.

Only a very few of the competencies explicitly mentioned **Policy Theory**. Only one framework, for example, listed "knowledge of policy theories" (#30) as a competency. This was notable to us. The most commonly appearing competencies were found in the Policy Analysis/Development category and to be effective in this area a theoretically informed approach to policy is required. This element may be implicit in many of those competencies, but is only mentioned explicitly in a few instances. Public health actors, of course, are not often political or policy scientists, but given the increasing importance of public policy as a field of activity, the lack of attention to theories of the policy-making process, stakeholder analysis, and other theoretically grounded approaches is significant. In future, knowledge of policy theory might be usefully incorporated into competency frameworks related to policy. Given the infrequent mention of knowledge of policy theory as a necessary competency, we might wonder if policy analysis could be bolstered by policy theory knowledge.

We categorized as **Other** those competencies that we were unable to easily link to other categories. A fair number of them were related to the integration of internal policies and programs within organizations, and so not related to public policy work.

The others, we were unable to place into one of the seven thematic categories because they were insufficiently defined, leaving us unsure as to their exact nature. For example, "assist entities with planning for structural and programmatic adjustments" (#20) may well have been placed in Policy Analysis/Development but worded in this way, it was not clear. In Figure 2 below, this category is excluded as it is neither a clearly defined nor a singularly defined group of competencies.

**Figure 2**     **Number of the 43 frameworks with competencies in each category**
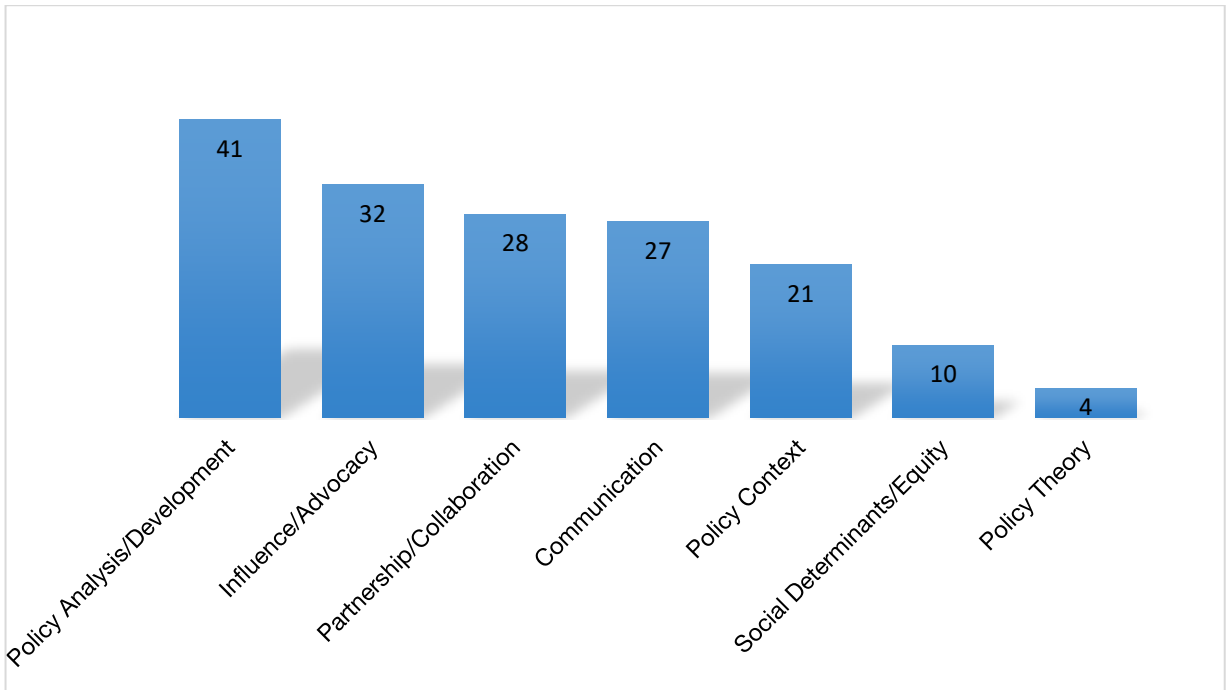
# 4    What next for healthy public policy competencies?

What emerges from our review of the literature on public policy competencies for public health actors is a clear ordering, from most to least frequently occurring mentions, of the following thematic categories: Policy analysis/Development; Influence/Advocacy; Partnership/Collaboration; Communication; Policy context; Social determinants of health and Equity; and Policy Theory. It is worth repeating that very little detail about exactly what these competencies are or how they can be acquired is included in the frameworks. This represents a limitation for those seeking to integrate the competencies into their organizations. It also provides insight into a gap in the literature and thus an opportunity for research and further development of the competencies.

The ability to understand and intervene in the policy domain is increasingly a requirement for public health actors (David, 2019), and the competency categories we have outlined here may be of use as these actors seek to focus their work in this area. Additional work is needed in order to operationalize these competencies in terms of how they are to be learned and integrated into public health practice.

A recent trend in this direction has involved increasing capacity within public health organizations. For example, one regional health authority in Canada conducted a scan of healthy public policy practices in a number of health authorities with one of their objectives being to identify the various capacity building strategies within these organizations. In addition to identifying a need to build staff capacity for policy work, it was noted that support teams for policy work within organizations were needed (David, 2019). Others have made this observation as well and have noted that organizational conditions for healthy public policy work must extend beyond the capacities and competencies of individuals (Guyon et al., 2017). Indeed, public health authorities in Canada are increasingly aware that understanding the role of public policy is an important tool in their work and their organizations have a need to increase their capacity in this area (Guyon et al., 2017; David, 2019; Solorzano, 2019). As David notes in her scan, "A more robust and rigorous structure for healthy public policy is needed moving forward" (David, 2019, p. 2).

# Conclusion

We hope that with this report we have contributed to the policy work being done by public health actors. This summary of competency frameworks will help bring to the fore those competencies that are the most frequently cited. Further, we here add our voice to those calling for this work to be strengthened by thinking about individual competencies within the context of capacity building programs, so as to bolster the former by developing tools and organizational structures which will make them stronger and thus more effective. At the National Collaborating Centre for Healthy Public Policy, we are committed to continuing our efforts to support public health practitioners, decision makers and organizations in this work.

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# Appendix A

# Methodology

For this study, we adapted the PRISMA Extension for Scoping Review (Tricco et al., 2018) and completed a review of the scientific and grey literature on the topic of public policy competencies for public health actors.

On September 9, 2019, we conducted an EBSCO host literature search using the following databases: CINHAL, ERIC, Health Policy Reference Center, MEDLINE complete, Political Science complete, PsycInfo, Public Affairs Index. The search terms are included in Table 2 below.

**Table 2        Search strategy for scientific literature**

| **EBSCO host search** used on **2019/09/09** | |
|---|---|
| S1 | TI(health or healthy or public) OR AB(health or healthy or public) |
| S2 | TI(policy or policies or "public health") OR AB(policy or policies or "public health") |
| S3 | TI(competency or competencies or competent or "skill" or "skills" or skillset or skillsets or expertise or "know how") OR AB(competency or competencies or competent or "skill" or "skills" or skillset or skillsets or expertise or "know how") |
| S4 | S1 N4 S2 N4 S3 |
| **Date: 2000-2019** | |

Our search of the grey literature was conducted from October 9, 2019 to November 30, 2019 on various governmental, organizational, and academic websites and using general internet search engines. For this search, we used the same terms as for the search in the scientific literature and, in order to widen the search, we also explored references cited in the most relevant documents for any we may have missed. Table 3 below shows the search strategy for grey literature.
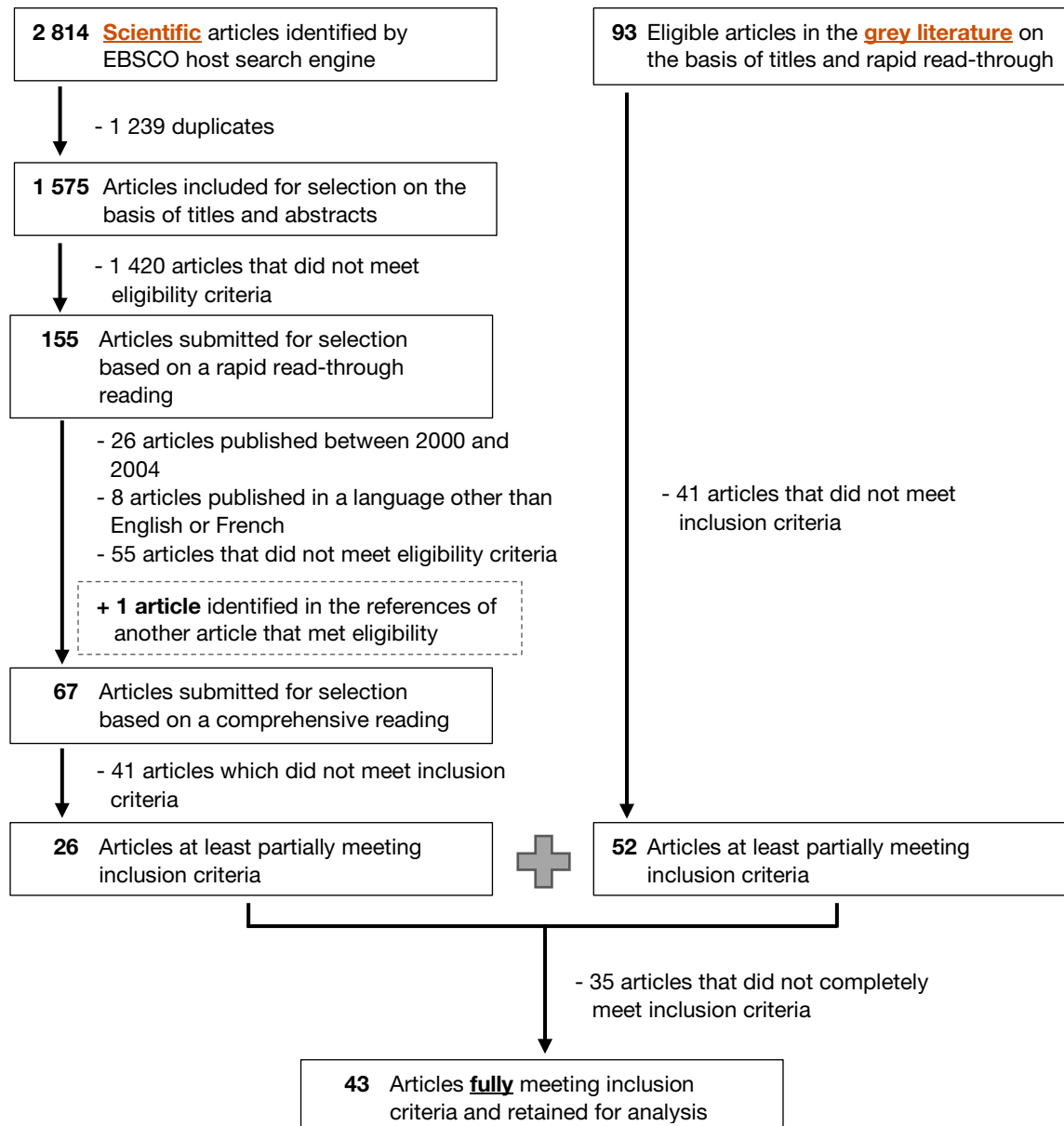
**Table 3        Search strategy for grey literature**

| Websites | Key words | Dates |
|---|---|---|
| Governmental, organizational, and academic | - *Health policy competency*<br>- *Policy competency framework*<br>- *Policy skills*<br>- *Competency OR competencies* | 2019-10-09 to<br>2019-10-30 |
| World Health Organization | *Idem* | 2019-10-09 |
| National Institute for Health and Care Excellence | *Idem* | 2019-10-09 |
| Public Health Association (Australia) | *Idem* | 2019-10-10 |
| Public Health Ontario | *Idem* | 2019-10-10 |
| National Collaborating Centre for Determinants of Health | *Idem* | 2019-10-15 |
| Health Canada | *Idem* | 2019-10-17 |
| Canadian Public Health Association | *Idem* | 2019-10-17 |
| Public Health Agency of Canada | *Idem* | 2019-10-18 |
| Public Health England | *Idem* | 2019-10-18 |
| Canadian Institute for Health Information | *Idem* | 2019-10-28 |
| Alberta Health and Wellness | *Idem* | 2019-10-28 |
| Canadian Agency for Drugs and Technologies in Health | *Idem* | 2019-10-28 |
| Drug Safety and Effectiveness Network | *Idem* | 2019-10-28 |
| Health Quality Council of Alberta | *Idem* | 2019-10-28 |
| Health Quality Ontario | *Idem* | 2019-10-28 |
| Institut national d'excellence en santé et en service sociaux | *Idem* | 2019-10-29 |
| Institute of Health Economics | *Idem* | 2019-10-29 |
| Manitoba Centre for Health Policy | *Idem* | 2019-10-29 |
| McGill University Health Centre | *Idem* | 2019-10-29 |
| Newfoundland and Labrador Centre for Applied Health Research | *Idem* | 2019-10-29 |
| Hospital Research Institute, University of British Columbia | *Idem* | 2019-10-29 |
| Australia and New Zealand Horizon Scanning Network | *Idem* | 2019-10-30 |
| Council of Australian Governments Health Council | *Idem* | 2019-10-30 |

**Table 3        Search strategy for grey literature (cont'd)**

| Websites | Key words | Dates |
|---|---|---|
| Health Care Improvement Scotland | *Idem* | 2019-10-30 |
| U.K. Department of Health | *Idem* | 2019-10-30 |
| Agency for Health Care Research and Quality | *Idem* | 2019-10-30 |
| Santé publique France | -  *Compétences en politiques de santé*<br>-  *Référentiels de compétences en santé publique*<br>-  *Cadre de référence en politiques publiques*<br>-  *Compétences en politique*<br>-  *Compétences* | 2019-10-15 |
| Grey Literature and Study Repertory | -  *Health policy competency*<br>-  *Policy competency framework*<br>-  *Policy skills*<br>-  *Competency OR competencies* | |
| Open Grey | *Idem* | 2019-10-18 |
| McMaster University Health System Evidence | *Idem* | 2019-10-18 |
| What works clearinghouse | *Idem* | 2019-10-21 |
| Search Engines and Databases | | |
| Google | -  *Health policy competency*<br>-  *Policy competency framework*<br>-  *Policy skills*<br>-  *Competency OR competencies*<br>-  *Policy competency toolkit*<br>-  *Public health* | 2019-10-22 |
| Google Scholar | *Idem* | 2019-10-23 |

The flux diagram in Figure 3 below details the stages of the literature review followed to reach the final 43 documents included in the analysis.

**Figure 3      Flux diagram of the document selection steps for this review**



| | |
|---|---|
| **2 814** **Scientific** articles identified by EBSCO host search engine | **93** Eligible articles in the **grey literature** on the basis of titles and rapid read-through |

- 1 239 duplicates

**1 575**  Articles included for selection on the basis of titles and abstracts

- 1 420 articles that did not meet eligibility criteria

**155**  Articles submitted for selection based on a rapid read-through reading

- 26 articles published between 2000 and 2004
- 8 articles published in a language other than English or French
- 55 articles that did not meet eligibility criteria

**+ 1 article** identified in the references of another article that met eligibility

- 41 articles that did not meet inclusion criteria

**67**  Articles submitted for selection based on a comprehensive reading

- 41 articles which did not meet inclusion criteria

**26**  Articles at least partially meeting inclusion criteria       **52** Articles at least partially meeting inclusion criteria

- 35 articles that did not completely meet inclusion criteria

**43**  Articles **fully** meeting inclusion criteria and retained for analysis

# Appendix B

# Mentions for each competency category

**Table 4      Mentions for each competency category and the numbers assigned to the documents as listed in Appendix C**

| Thematic Category | Number of Mentions | Document Numbers | Number of Frameworks |
|---|---|---|---|
| Policy Analysis/Development | 230 | 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 42, 43 | 41 |
| Influence/Advocacy | 80 | 1, 2, 3, 4, 5, 7, 8, 9, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 24, 27, 29, 30, 31, 32, 33, 35, 36, 37, 39, 40, 41, 42 | 32 |
| Partnership/Collaboration | 77 | 3, 4, 5, 6, 8, 9, 11, 12, 14, 15, 16, 18, 20, 24, 25, 26, 27, 30, 31, 32, 33, 35, 36, 37,39, 40, 41, 42 | 28 |
| Communication | 71 | 3, 4, 5, 7, 8, 11, 12, 14, 18, 19, 20, 21, 24, 25, 26, 27, 29, 30, 31, 32, 33, 35, 36, 37, 39, 41, 42 | 27 |
| Policy Context | 58 | 2, 4, 5, 8, 10, 14, 19, 20, 23, 24, 25, 27, 30, 31, 33, 36, 37,38, 39, 41, 42 | 21 |
| Other | 25 | 2, 3, 5, 8, 11, 19, 20, 26, 34, 36, 37, 39 | 12 |
| Social Determinants/Equity | 21 | 2, 14, 23, 33, 35, 36, 38, 40, 41, 42 | 10 |
| Policy Theory | 8 | 3, 29, 30, 37 | 4 |

**Appendix C**

**List of documents analyzed**

**Table 5    Numbered list of documents analyzed**[6]

| Number | Title | Authors | Year | Country |
|---|---|---|---|---|
| 1 | Core competencies for public health in Canada: Release 1.0 | Public Health Agency of Canada | 2008 | Canada |
| 2 | New competencies for the 21st century dental public health specialist | Altman D., & Mascarenhas, A.K. | 2016 | USA |
| 3 | Competencies in transdisciplinary public health education | Arnold, L.D., Hipp, J. A., Kuhlmann, A. S., & Budd, E. | 2013 | USA |
| 4 | Master's degree in public health core competency development project version 2.3 | Association of Schools of Public Health Education Committee | 2006 | USA |
| 5 | ASPHER's Europeans list of core competences for the public health professional | Association of Schools of Public Health in the European Region | 2018 | Europe |
| 6 | Population Health Promotion Practitioners in Saskatchewan: Core competencies | Belanger, L., Kuley, L., Montgomery, M., et al. | 2012 | Canada |
| 7 | A Public Policy Competency Framework for Public Health Actors | Benoit, F., Martin, C., & Malai, D. | 2015 | Canada |
| 8 | Developing competencies for applied epidemiology: from process to product | Birkhead, G.S., Davies, J, Miner, K, Lemmings, J., & Koo, D. | 2008 | USA |
| 9 | Identifying Core Competencies for Public Health Epidemiologists | Bondy, S.J., Johnson, I., Cole, D.C., & Bercovitz, K. | 2008 | Canada |
| 10 | Development of enriched core competencies for health services and policy research | Bornstein, S., Heritage, M., Chudak, A. et al. | 2018 | Canada |
| 11 | Core competencies for doctoral education in public health | Calhoun, J.G., McElligott, J.E., Weist, E.M., et al. | 2012 | USA |
| 12 | Development of a core competency model for the master of public health degree | Calhoun, J. G., Ramiah, K., Weist, E., Shortell, S. M. et al. | 2008 | USA |
| 13 | The Core Competencies for Public Health Professionals | Center for Leadership in Public Health Practice | 2013 | USA |
| 14 | Council on education in public health (CEPH): Universal competencies for the professional MPH degree | Council on Education in Public Health | 2018 | USA |

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6    Please note that documents are listed here by the number assigned to them during the selection process. In some cases, they are not in alphabetical order.

**Table 5        Numbered list of documents analyzed (cont'd)**

| Number | Title | Authors | Year | Country |
|---|---|---|---|---|
| 15 | In search for a public health leadership competency framework to support leadership curriculum–A consensus study | Czabanowska, K., Smith, T., Könings, K. D., Sumskas, L., Otok, R., Bjegovic-Mikanovic, V., et al. | 2013 | Netherlands |
| 16 | Public Health Activist Skills Pyramid: A Model for Implementing Health in All Policies | Damari, B., & Ehsani Chimeh, E. | 2017 | UK |
| 17 | Application of the Intervention Mapping Framework to Develop an Integrated Twenty-First Century Core Curriculum-Part 1: Mobilizing the Community to Revise the Masters of Public Health Core Competencies | DeBate, R., Corvin, J.A., Wolfe-Quintero, K., & Petersen, D.J. | 2017 | USA |
| 18 | Our Practice Is Our Passion: Development and Delivery of a 21st-Century Doctor of Public Health Program | DeBate, R.D., Petersen, D.J., Wathington, D., & Wolfe-Quintero, K. | 2015 | USA |
| 19 | Core Competencies for Public Health Professionals: Improving Health Teaching and Practice | Downing, D., Place, J., Bialek, R., & Saungweme, P. | 2010 | USA |
| 20 | Public Health Solutions Through Changes in Policies, Systems, and the Built Environment: Specialized Competencies for the Public Health Workforce | Emery, J., & Crump, C. | 2006 | USA |
| 21 | The public health practitioner of the future | Ervin, P. C., & Browson, R. C. | 2017 | USA |
| 22 | MPH in health policy and management competency model | Graduate School of Public Health, University of Pittsburgh | n.d. | USA |
| 23 | Review of core competencies for public health: An aboriginal public health perspective | Hunt, S. | 2015 | Canada |
| 24 | Towards the Development of Competencies for Health Promoters in Canada: A Discussion Paper | Hyndman, B. | 2007 | Canada |
| 25 | Core competencies for public health epidemiologists in Ontario | Cole, D, Johnson, I., & Bondy, S. | 2005 | Canada |
| 26 | A Competency-Based Approach to Public Health Nursing Performance Appraisal | Kalb, K.B., Cherry, N.M., Kauzloric, J., Brender, A., Green, K., Miyagawa, L.A., et al. | 2006 | USA |
| 27 | Référentiel de compétences en santé environnementale pour la santé publique du Québec | Laliberté, C., & Brahimi, C. | 2012 | Canada |

**Table 5          Numbered list of documents analyzed (cont'd)**

| Number | Title | Authors | Year | Country |
|---|---|---|---|---|
| 28 | Mapping student response team activities to public health competencies: Are we adequately preparing the next generation of public health practitioners? | Montgomery, J. P., Durbeck, H., Thomas, D., et al. | 2010 | USA |
| 29 | Policy help needed, experience required: Preparing practitioners to effectively engage in policy | Moreland-Russell, S., Zwald, M., & Golden, S. D. | 2016 | USA |
| 30 | Core Competencies and knowledge, skills, and abilities: Essentials for public health physical activity practitioners | National Physical Activity Society | n.d. | USA |
| 31 | NSW public health training program competency framework | Government of New South Wales (Australia) | 2014 | Australia |
| 32 | Public Health Competency Based Employee Performance Management: A guidebook for managers and employees | Ontario Public Health Association & Partners | 2010 | Canada |
| 33 | Overarching MPH degree competencies | SUNY Downstate Health Sciences University | 2014 | USA |
| 34[7] | PH Program goals | Temple University, Philadelphia | n.d. | USA |
| 35 | The Pan-Canadian Health Promoter Competencies and Glossary 2015 | Health Promotion Canada | 2015 | Canada |
| 36 | Public health skills and career framework | Public Health Resource Unit | 2008 | UK |
| 37 | Favoriser les interventions sur les saines habitudes de vie en milieu municipal : Besoins des professionnels de la santé publique : rapport (INSPQ) | Sasseville, N. | 2016 | Canada |
| 38 | A Review of Global Health Competencies for Postgraduate Public Health Education | Sawleshwarkar, S., & Negin, J. | 2017 | Australia |
| 39 | Designing competencies for chronic disease practice | Slonim, A., Wheeler, F.C., Quinlan, M., et al. | 2010 | USA |
| 40 | Le manuel CompHP des références professionnelles pour la promotion de la santé: version abrégée 2011 | Speller, V., Parish, R., Davison, H., & Zilnyk, A. | 2011 | Europe |

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[7]    At the time of writing, this document is no longer available online.

**Table 5          Numbered list of documents analyzed (cont'd)**

| 41 | MPH foundational competencies | The Dartmouth Institute for Health Policy and Clinical Practice | n.d. | USA |
|---|---|---|---|---|
| 42 | UCLA MPH Program in Health Policy and Management Competency Model | UCLA Fieldings-School of Public Health | 2013 | USA |
| 43 | MHA degree competency model | UNC Gillings School of Global Public Health | 2019 | USA |

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