



What is Evidence-Informed Public Health?

This document was prepared by the National Collaborating Centre for Methods and Tools for the National Collaborating Centres for Public Health.

Evidence-informed public health (EIPH) is the process of distilling and disseminating the best available evidence from research, practice and experience and using that evidence to inform and improve public health policy and practice. Put simply, it means finding, using and sharing what works in public health. (Other commonly used terms for or related to EIPH include evidence-informed decision making, evidence-based practice or evidence-based health care applied to public health practice and policy.)

EIPH acknowledges the many factors, beyond research evidence, that influence decision making. EIPH is a complex, multidisciplinary process that occurs within dynamic and ever-changing communities and encompasses different sectors of society. Effective evaluation of evidence to support public health practices must address these multidimensional issues and adequately incorporate community perspectives and values.



Why Implement Evidence-Informed Public Health?

1. To create programs and actions that are both effective and appropriate for our communities and target populations.
2. To effectively transfer knowledge from both quantitative and qualitative research and other sources into practice and policy.
3. To strengthen public health in Canada.

Stages of Evidence-Informed Public Health


STAGE 1. DEFINE

Clearly define the issue or problem.

"Who is my target group? What is the issue we are dealing with? What interventions are we considering? What specifically are we trying to change or understand?"

The more specific you are in framing the question, the easier it will be to search for relevant information.

Quantitative questions about the effectiveness of a possible intervention should include four elements: **P**opulation, **I**ntervention, **C**omparison and **O**utcome (PICO). Quantitative questions about exposure should include : **P**opulation, **E**xposure, **C**omparison and **O**utcome (PECO). Qualitative questions should identify **P**opulation and **S**ituation (PS).



STAGE 2. SEARCH

Efficiently search for research evidence.

“Where should I look to find the best available research evidence to address the issue?”

Your search strategy should first aim to locate the strongest quality and most relevant evidence. When searching for quantitative evidence (e.g., effectiveness of an intervention, health effects, cost effectiveness, etc.) some study designs (such as randomized trials or cohort studies) are considered stronger than others. It is important that the research design is the most appropriate to answer the question being asked.



STAGE 3. APPRAISE

Critically and efficiently appraise the research sources.

“Were the methods used in this study good enough for me to be confident in the findings?”

Different types of public health questions will require distinct research designs. Critical appraisal tools can be applied to assess quality and relevance of each type of research question.



STAGE 4. SYNTHESIZE

Interpret information and/or form recommendations for practice based on the relevant literature found.

“What does the research evidence tell me about the issue?”

Decipher the ‘actionable messages’ (i.e., clear recommendations or actions for practice) from the research evidence that you have reviewed. Base recommendations on the highest quality and most synthesized research evidence available.



STAGE 5. ADAPT

Adapt the information to a local context.

“Can I use this research with my client, community or population?”

Having developed ‘actionable messages’, you can now tailor those messages to ensure their relevance and suitability for the local community.



STAGE 6. IMPLEMENT

Decide whether (and plan how) to implement the adapted evidence in practice or policy.

“How will I use the research evidence in my practice?”

The implementation plan uses the adapted research evidence to create a tangible plan of action to create a change in practice, policy, or to deliver a new program. This step focuses on figuring out how to use the adapted evidence in your local setting.



STAGE 7. EVALUATE

Assess the effectiveness of the implementation efforts.

“Did we do what we planned to do? Did we achieve what we expected?”

Evaluate the intervention (program evaluation) if applicable and the implementation strategies (the knowledge translation strategy).

General Reference:

For more information on evidence-informed public health, please consult the website of the National Collaborating Centre for Methods and Tools: <http://www.nccmt.ca/eiph/index-eng.html>.

See also:

Ciliska, D., Thomas, H., & Buffet, C. (2010). *An Introduction to Evidence-Informed Public Health and A Compendium of Critical Appraisal Tools for Public Health Practice* (Revised). Hamilton, ON: National Collaborating Centre for Methods and Tools. Retrieved from http://www.nccmt.ca/pubs/2008_07_IntroEIPH_compendiumENG.pdf.

National Collaborating Centre for Methods and Tools. (2009). *A Model for Evidence-Informed Decision-Making in Public Health*. [fact sheet]. Retrieved from: http://www.nccmt.ca/pubs/FactSheet_EIDM_EN_WEB.pdf.

For more information, please visit

www.nccph.ca