



National Collaborating Centre  
for Methods and Tools

Centre de collaboration nationale  
des méthodes et outils

# Rapid Reviews: Synthesizing Evidence to Inform Public Health Practice

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# The NCCMT

## Mission

- Enhance *evidence-informed public health* in practice, programs and policy in Canada
- Provide leadership and expertise in supporting the uptake of *what works* in public health



# A Model for Evidence-Informed Decision-Making



# The Rapid Review Guidebook

Step 1: Define a Practice Question

Step 2: Search for Research Evidence

Step 3: Critically Appraise the Information Sources

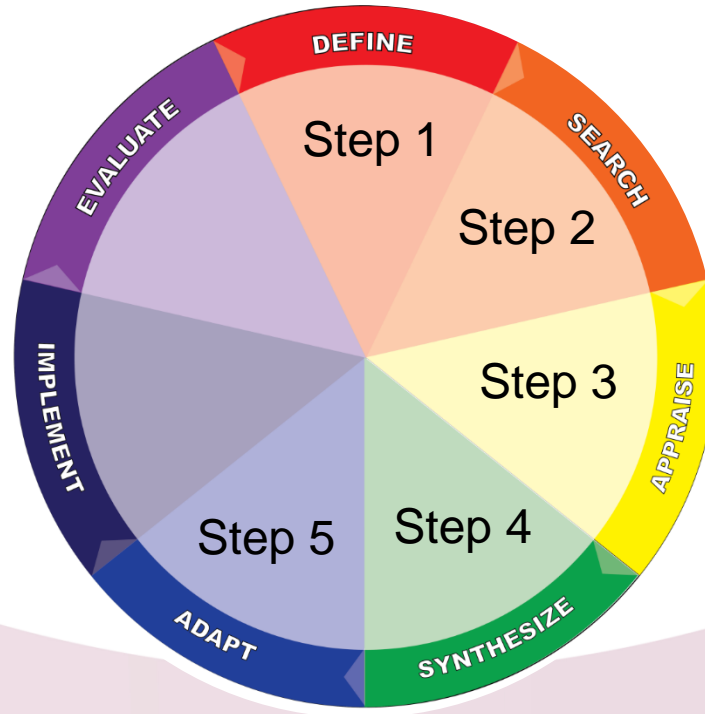
Step 4: Synthesize the Evidence

Step 5: Identifying Applicability and Transferability Issues for Further Consideration

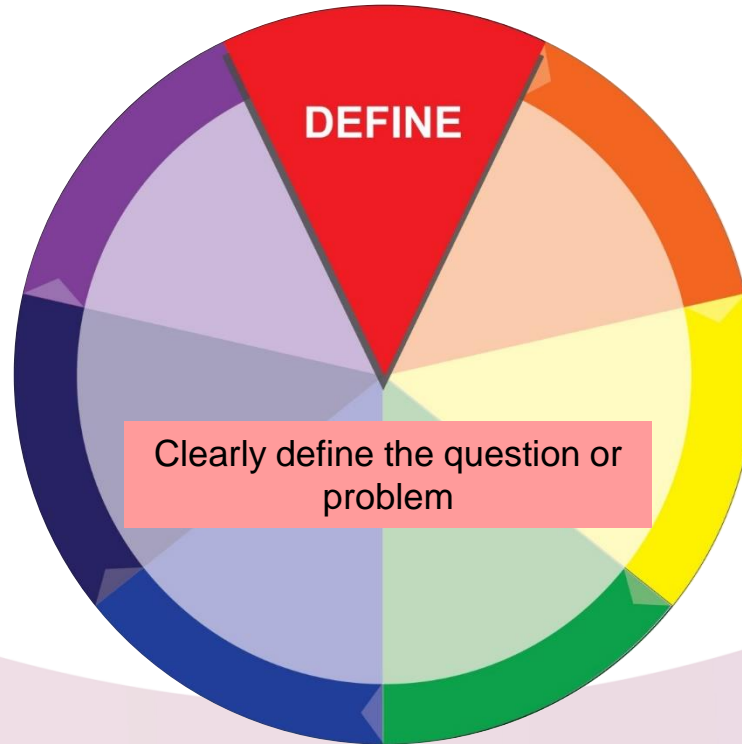


Stages in the process of

# Evidence-Informed Decision Making



# Step 1: Define a Practice Question



# Step 1: Define a Practice Question

<b>PICO</b>	<b>PECO</b>	<b>PS</b>
Population	Population	Population
Intervention	Exposure	Situation
Comparison	Comparison	
Outcome	Outcome	



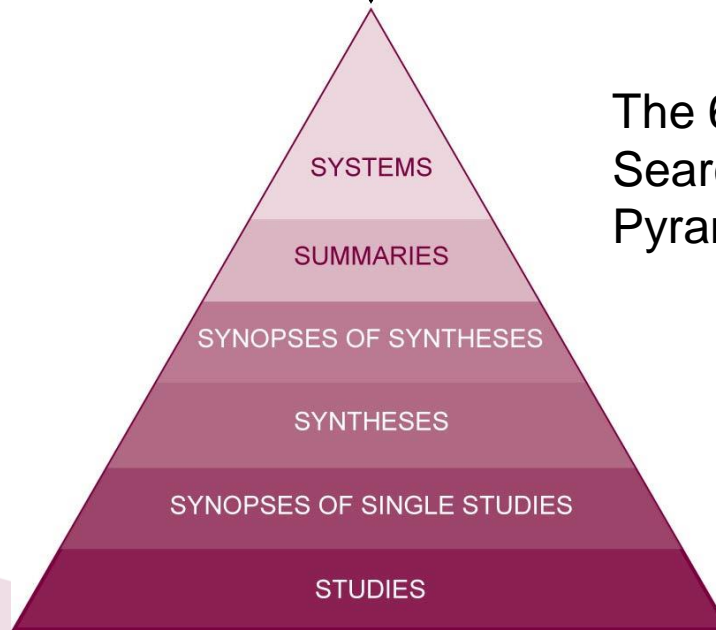
# Step 2: Search for Research Evidence





# Searching

Start here with a question



The 6S  
Search  
Pyramid

(DiCenso et al., 2009; Haynes et al. 2005; Robeson et al., 2010)



Health departments are welcome to adapt this tool. Requirements for adapting this tool include: Health Evidence™ and Peel Public Health are acknowledged for tool development; and adapted tool cannot be used for profit (not to be sold).

The Health Evidence™ team has reviewed the update for the evidence-based health care (EBHC) 5.0 pyramid for accessing pre-appraised evidence and guidance and concluded the 6S pyramid continues to be the most applicable model for a public health audience. Health Evidence™ acknowledges the value of differentiating between evidence-based online texts and guidelines as in the 5.0 pyramid. These differences are noted in the 'summaries' section below

**Question Searched:** \_\_\_\_\_ →

- Insert the question that you are conducting this search to answer.
- Remember **PICO**: Population, Intervention, Comparison, Outcome(s)  
 → See [Developing an Efficient Search Strategy Using PICO](#)

**Date Search Conducted:**

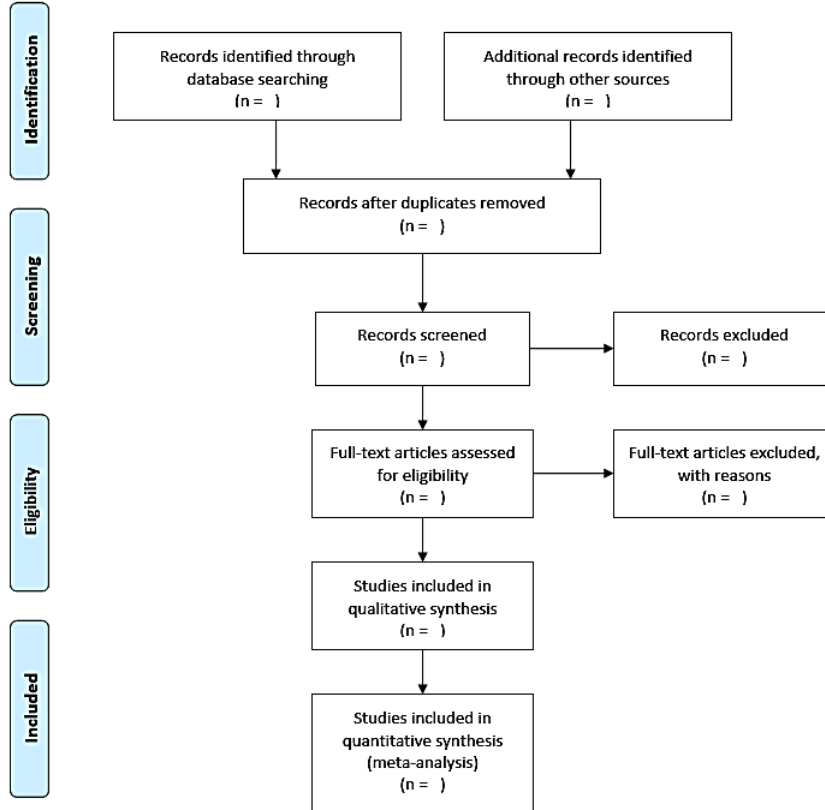
<b>P:</b>
<b>I:</b>
<b>C:</b>
<b>O:</b>

Level of the Pyramid	Publicly Available YES / NO	Critically Appraised Resources YES / NO	<i>Note: Access to full text limited</i>	Total No. Results (through search)	Links to Saved Search Strategy & to Results (insert here)
<b>SUMMARIES Evidence-Based Online Texts</b>	NO	YES	<b>Clinical Evidence</b> <a href="http://www.clinicalevidence.com">http://www.clinicalevidence.com</a>		
			<b>Dynamed</b> <a href="http://www.ebscohost.com/dynamed">http://www.ebscohost.com/dynamed</a>		
			<b>StatRef Pier</b> <a href="http://pier.acponline.org/index.html">http://pier.acponline.org/index.html</a>		
			<b>UpToDate</b> <a href="http://www.uptodate.com">http://www.uptodate.com</a>		
<b>SUMMARIES Guidelines</b>	YES	YES	<b>National Guidelines Clearinghouse (NGC)</b> <a href="http://guideline.gov">http://guideline.gov</a> <i>Note: for appraised guidelines only, check box in search tool on left side "Includes NEATS assessment"; may include guidelines from the following organizations, but not all will be captured</i> <ul style="list-style-type: none"> <li>• <b>Registered Nurses Association of Ontario (RNAO)</b> <a href="http://rmao.ca/bpg">http://rmao.ca/bpg</a></li> <li>• <b>Canadian Medical Association (CMA Infobase)</b> <a href="https://www.cma.ca/En/Pages/clinical-practice-guidelines.aspx">https://www.cma.ca/En/Pages/clinical-practice-guidelines.aspx</a></li> <li>• <b>Canadian Task Force on Preventive Health Care</b> <a href="https://canadiantaskforce.ca/guidelines/published-guidelines/">https://canadiantaskforce.ca/guidelines/published-guidelines/</a></li> <li>• <b>Centers for Disease Control and Prevention (CDC)</b> <a href="https://www.cdc.gov/">https://www.cdc.gov/</a></li> </ul>		
			<b>National Institute for Health and Clinical Excellence (NICE) Public Health Guidance</b> <a href="https://www.nice.org.uk/guidance">https://www.nice.org.uk/guidance</a>		
			<b>Turning Research into Practice (TRIP) Database</b> <a href="http://www.tripdatabase.com">http://www.tripdatabase.com</a> <i>Note: filter search by "Guidelines"</i>		
			<b>Canadian Best Practices Portal</b> <a href="http://cbpp-pcpe.phac-aspc.gc.ca/">http://cbpp-pcpe.phac-aspc.gc.ca/</a>		
	YES	NO	<b>Public Health Resources on NHS Evidence</b> <a href="https://www.evidence.nhs.uk/">https://www.evidence.nhs.uk/</a>		

# Documenting Your Process



## PRISMA 2009 Flow Diagram



# Study Selection

Inclusion/exclusion for title and abstract

Inclusion/exclusion for full text

**Software: Endnote, Reference Manager**

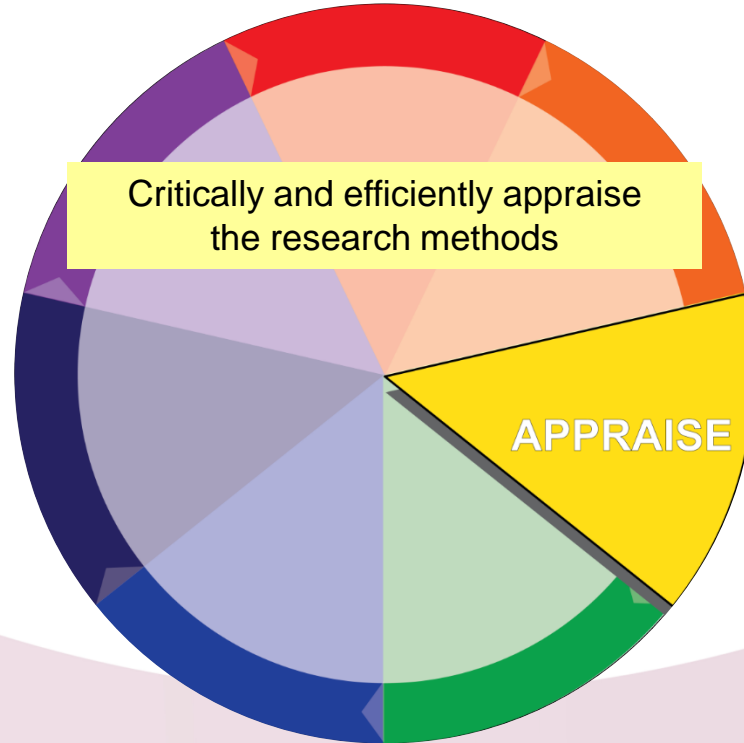
Piloting forms with team: ~10 articles

Keeping track for PRISMA flow diagram

Process - # of people, independent or checking?



# Step 3: Critically Appraise the Information Sources



# Recommended Tools

Guidelines: AGREE II

<http://www.agreetrust.org/resource-centre/agree-ii/>

Systematic reviews: AMSTAR [http://amstar.ca/Amstar\\_Checklist.php](http://amstar.ca/Amstar_Checklist.php)

Or Health Evidence - [http://thevidence.org/documents/our-appraisal-tools/QA\\_Tool&Dictionary\\_10Nov16.pdf](http://thevidence.org/documents/our-appraisal-tools/QA_Tool&Dictionary_10Nov16.pdf)

Critical Appraisal Skills Programme: Checklists

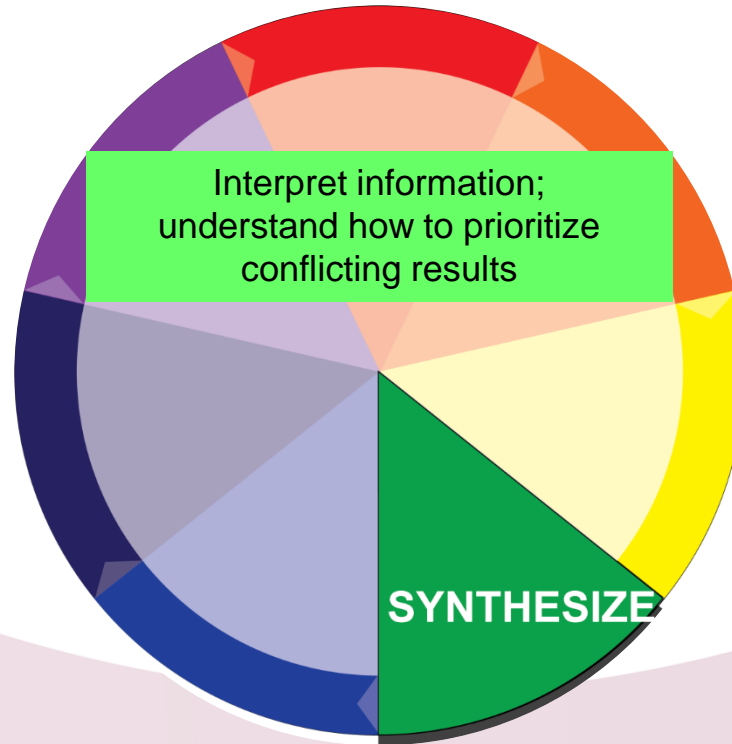
<http://www.casp-uk.net/>

CASP offers free, downloadable checklists for:

- Randomised Controlled Trials
- Systematic Reviews
- Cohort Studies
- Case-Control Studies
- Qualitative Studies
- Economic Evaluations
- Diagnostic Studies
- Clinical Prediction Rules



# Step 4: Synthesize the Evidence



# Data extraction

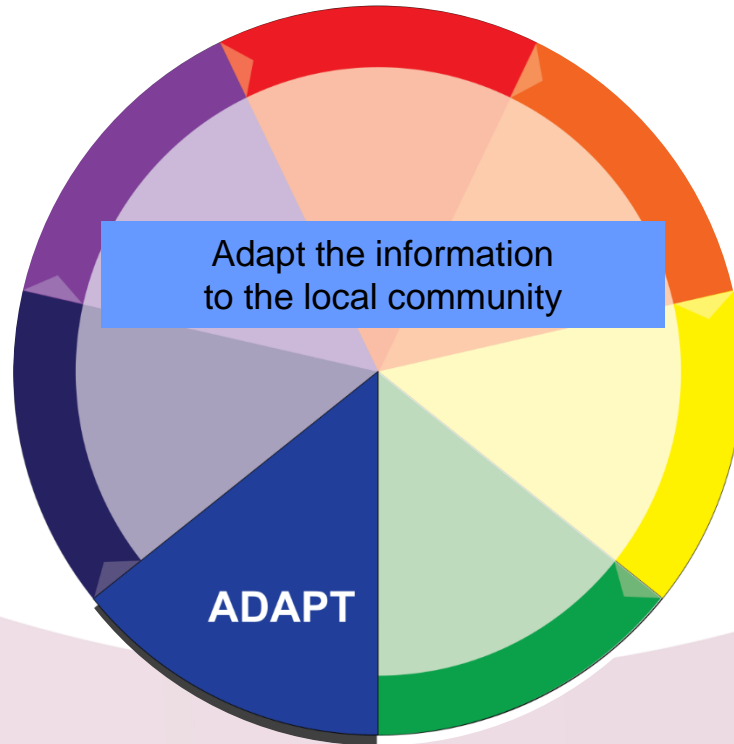
What data do you need to extract?

Characteristics of Included Studies																				
		Methods						Participants					Interventions					Outcomes	Notes	
RefID	Author (Year)	Reviewer	Design	Theoretical Framework	No. of intervention groups	No. of control groups	Follow up schedule / timeline	N (intervention)	N (control)	Age	Sex	Ethnicity	Country	Setting	Provider	Duration	Interventions			
	Author (Year) - 1st study	1st Reviewer																		
	Author (Year) - 2nd study	2nd Reviewer																		
	Author (Year) - 1st study	1st Reviewer																		
	Author (Year) - 2nd study	2nd Reviewer																		
	Author (Year) - 1st study	1st Reviewer																		
	Author (Year) - 2nd study	2nd Reviewer																		





# Step 5: Identifying Applicability and Transferability Issues for Further Consideration



# A Model for Evidence-Informed Decision-Making



**It worked there. Will it work here?**  
a tool for assessing Applicability and Transferability of Evidence

**A: When considering starting a new program**

Purpose and target audience

To help public health managers and planners use evidence to choose appropriate programs for their community.

Where does this fit?

This tool helps you with the fifth step in the evidence-informed public health process: **Adapt** the information to a local context.

**You may have found evidence about an intervention that worked, but can you apply that evidence to your situation? Do you need to adapt the intervention for your population? ... your community? ... your team?**

This tool gives you a process and criteria to assess the applicability (feasibility) and transferability (generalizability) of evidence to public health practice and policy.

How to use this tool

At this stage, you will have already completed the first four steps in the evidence-informed public health process. You have defined your question (step 1), found (step 2) and appraised (step 3) the research evidence relevant to your question. You have also formed some recommendations based on the evidence that you found (step 4). (See [www.nccmt.ca/eiph](http://www.nccmt.ca/eiph) for more information.) These are all necessary steps, but you are not yet ready to decide whether to introduce, continue, or end a program or intervention in your local community.

1. Decide who will be involved in the decision. Consider including partners from other sectors, disciplines and client groups. (*The remaining steps are done in collaboration with this entire group.*)
2. Orient group members to the process; establish time lines.
3. From the following list of criteria, choose the most important applicability and transferability assessment questions for the intervention of interest and the local context. Are these criteria equally important or should they be weighted differently? If so, choose what weights to assign. Not all criteria are relevant all the time. The group may decide that some criteria are more important than others at a particular time period and in a particular community.
4. Decide how final scoring will be done: Will you discuss each criterion to achieve consensus or add ratings from all group members? In that case, you would individually rate the importance/relevance of each question on a scale of 1 to 5, where 1 is low and 5 is high. Priority would then go to the highest scoring program.
5. Be sure to document the scoring process used.

How to cite this resource

Buffet, C., Ciliska, D., & Thomas, H. (2011). It worked there. Will it work here? Tool for Assessing Applicability and Transferability of Evidence (A: When considering starting a new program). Hamilton, ON: National Collaborating Centre for Methods and Tools.

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[www.nccmt.ca/registry/view/eng/24.html](http://www.nccmt.ca/registry/view/eng/24.html)

**Assessment of Applicability & Transferability**

Construct	Things to consider	Questions to Ask
<b>Applicability</b> (feasibility)  <i>Can the intervention we found work for us?</i>	Political acceptability or influence	<ul style="list-style-type: none"> <li>• Will the intervention be allowed or supported in the current political climate?</li> <li>• Is there a potential public relations benefit for local government?</li> <li>• Will the public and target groups accept and support the intervention in its current format?</li> <li>• Is this intervention allowed/expected or required by local or provincial legislation /bylaws?</li> </ul>
	Social acceptability	<ul style="list-style-type: none"> <li>• Will my target population be interested in the intervention?</li> <li>• Is the intervention ethical?</li> </ul>
	Available essential resources (human and financial)	<ul style="list-style-type: none"> <li>• Who / what is essential for the local implementation?</li> <li>• Who will do the work? Are these people available (or are they too busy with other projects)? Do they know how? If not, is training available (and affordable)?</li> <li>• How much will the intervention cost? Can we afford to deliver the program (or is our budget already committed to other projects)?</li> <li>• How do we need to change the intervention to suit our local situation?</li> <li>• What are the full costs (include supplies, systems, space requirements for staff, training, technology/administrative supports, etc.)? How much will this intervention cost per unit of expected outcome? (total cost divided by number of people we expect to help)</li> <li>• Are there any other incremental health benefits to consider that could offset the costs of the intervention?</li> </ul>
	Organizational expertise and capacity	<ul style="list-style-type: none"> <li>• Does the intervention fit into the organization's current strategic and operational plans?</li> <li>• Does the intervention fit with the organization's mission and local priorities?</li> <li>• Does the intervention overlap, or will it complement, existing programs?</li> <li>• Will this program enhance the reputation of the organization?</li> <li>• What barriers/structural issues or approval processes within the organization need to be addressed?</li> <li>• Is the organization motivated and open to new ideas? Is it a learning organization?</li> </ul>
<b>Transferability</b> (generalizability)  <i>Can we expect similar results?</i>	Magnitude of health issue in local setting	<ul style="list-style-type: none"> <li>• Does the need exist?</li> <li>• How many people in my local population does this issue affect now? (i.e., what is our baseline prevalence?) How does this compare to the prevalence of the issue (risk status) described in the intervention we are considering?</li> </ul>
	Magnitude of the "reach" and cost-effectiveness of the intervention	<ul style="list-style-type: none"> <li>• Will the intervention effectively reach a large proportion of the target population?</li> </ul>
	Characteristics of target population	<ul style="list-style-type: none"> <li>• Is the local population comparable to the study population?</li> <li>• Will any differences in characteristics (ethnically, socio-demographic variables, number of persons affected) influence the effectiveness of the intervention locally?</li> </ul>

The National Collaborating Centre for Methods and Tools is affiliated with McMaster University and funded by the Public Health Agency of Canada



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# User Feedback

- Downloaded more than 2,400 times
- Additional feedback from users indicate the guidebook was
  - Well written
  - Easy to follow
  - Informative



# We want to hear from you!

Have you used the Rapid Review Guidebook?

Please share your opinions with us in a brief survey.

<https://surveys.mcmaster.ca/limesurvey/index.php/799495?lang=en>



# Questions?

For more information about the  
National Collaborating Centre  
for Methods and Tools

NCCMT website: [www.nccmt.ca](http://www.nccmt.ca)

Contact: [nccmt@mcmaster.ca](mailto:nccmt@mcmaster.ca)

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