What are systematic and scoping reviews?
Learning objectives

- Know key differences between literature reviews, systematic reviews, and scoping reviews
- Describe the steps of a systematic or scoping review
- Be aware of guidelines for writing a systematic or scoping review
Systematic review definition

"A systematic review attempts to identify, appraise and synthesize all the empirical evidence that meets pre-specified eligibility criteria to answer a given research question.

Researchers conducting Systematic Reviews use explicit methods aimed at minimizing bias, in order to produce more reliable findings that can be used to inform decision making."

From the Cochrane Handbook for Systematic Reviews of Interventions: handbook.cochrane.org
Scoping review definition

**Scoping reviews** map the literature on a research question. They often have a broader research question than systematic reviews, and usually do not appraise the quality of included studies.

Conducting a scoping review uses many of the same methods as a systematic review, such as a comprehensive, replicable search and a systematic screening process.
## Systematic and literature review comparison

More details at: [https://guides.library.ubc.ca/SystematicReviews/types](https://guides.library.ubc.ca/SystematicReviews/types)

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<tr>
<th></th>
<th>Systematic Review</th>
<th>Literature Review</th>
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<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>To find the answer to a specific research question</td>
<td>Need not answer a question, e.g. synthesis of theories</td>
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<tr>
<td><strong>Methodology</strong></td>
<td>As prescribed precisely by PRISMA*</td>
<td>Varies by discipline and topic</td>
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<tr>
<td><strong>Criteria for evidence</strong></td>
<td>Pre-defined and confirmed by 2+ raters</td>
<td>May not be explicitly defined</td>
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<tr>
<td><strong>Type of publications retrieved from search</strong></td>
<td>Primary research</td>
<td>Varies, may draw on all types of research and primary sources</td>
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<tr>
<td><strong>Database(s) search terms and strategies</strong></td>
<td>Explicit search, documentation required</td>
<td>Explicit search, documentation not generally required</td>
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Other synthesis methods

A systematic review might include a *meta-analysis*, which pools and analyzes data from included studies. Some meta-analyses do not include a systematic review of literature.

There are many other types of reviews, such as:

- Realist reviews
- Rapid reviews
- Integrative reviews

Optional: if you’d like to learn more about types of reviews, please see:
Steps of a systematic or scoping review
(adapted from Cochrane Handbook)

Stage 1: Plan the Review
1. Form a review team
2. Do exploratory searches and develop research question
3. Write and register a protocol

Stage 2: Identify and evaluate studies
4. Conduct a systematic search
5. Screen studies

Stage 3: Extract and synthesize data

Stage 4: Report findings
PRISMA reporting requirements

Checklists from PRISMA have been adopted as best practices for reporting by many journals:

• **PRISMA-P** for protocols
• **PRISMA** for systematic reviews
• **PRISMA-ScR** for scoping reviews

Most journals also expect your search and screening process to be described visually in a **PRISMA flow diagram**.
Other guidelines for performing a review

Guidelines for systematic and scoping reviews include:

- **Cochrane Handbook** (health systematic reviews)
- **Campbell Collaboration** (social sciences systematic reviews)
- **Joanna Briggs Institute** (health scoping and systematic reviews)
- **Collaboration for Environmental Evidence** (systematic reviews and maps)

Optional: to see more guidelines, see the Further Reading section of our guide: guides.library.ubc.ca/SystematicReviews/readings