

# Critical appraisal tools to make sense of evidence

## A summary of

Public Health Resource Unit (2006). The Critical Skills Appraisal Programme: making sense of evidence. Public Health Resource Unit, England. Retrieved from: <http://www.casp-uk.net/>



## How to cite this NCCMT summary:

National Collaborating Centre for Methods and Tools (2011). *Critical appraisal tools to make sense of evidence*. Hamilton, ON: McMaster University. (Updated 18 September, 2017) Retrieved from <http://www.nccmt.ca/resources/search/87>.

National Collaborating Centre  
for Methods and Tools  
Centre de collaboration nationale  
des méthodes et outils

**Categories:**  
Tool, Appraise

**Date posted:**  
March 31, 2011

**Date updated:**  
September 18, 2017

## Tool

---

### Relevance For Public Health

The Critical Appraisal Skills Programme (CASP) tools can be used to teach critical appraisal skills in a wide variety of settings, including public health. To learn more about using the CASP tools to improve public health practice, see the NCCMT's [Online Learning Modules](#). For example, the Critical Appraisal Skills Programme (CASP) tools can be used to appraise and summarize the evidence on bullying prevention among children and youth to inform local programming.

### Description

The [Critical Appraisal Skills Programme](#) (CASP) helped to develop an evidence-based approach in health and social care, working with local, national and international groups. CASP aims to help individuals develop skills to find and make sense of research evidence, helping them to apply evidence in practice.

The Critical Appraisal Skills Programme (CASP) tools were developed to teach people how to critically appraise different types of evidence. There are seven checklists specifically designed to appraise:

1. Systematic Reviews
2. Randomized Controlled Trials (RCTs)
3. Qualitative Research
4. Economic Evaluation Studies
5. Cohort Studies
6. Case Control Studies
7. Diagnostic Test Studies

All critical appraisal tools consist of three sections to assess internal validity, the results and the relevance to practice.

The CASP appraisal tools were developed from guides produced by the Evidence Based Medicine Working Group published in the *Journal of the American Medical Association*.

### Implementing the Tool

#### Who is Involved?

Any individual interested in learning how to critically appraise research evidence could use the CASP tools.

#### Steps for Using Tool

Each Critical Appraisal Skills Programme (CASP) appraisal tool asks three broad questions:

- Is the study valid?
- What are the results?
- Will the results help locally?

Each of the seven appraisal tools includes 10–12 questions. The first two questions are screening questions; if the answer is yes to both, it is worth proceeding with the remaining questions to assess the

---

These summaries are written by the [NCCMT](#) to condense and to provide an overview of the resources listed in the [Registry of Methods and Tools](#) and to give suggestions for their use in a public health context. For more information on individual methods and tools included in the review, please consult the authors/developers of the original resources.

study. Prompts are given with each question to remind the user why the question is important.

There are seven critical appraisal tools to assess:

1. Systematic Reviews
2. Randomized Controlled Trials (RCTs)
3. Qualitative Research
4. Economic Evaluation Studies
5. Cohort Studies
6. Case Control Studies
7. Diagnostic Test Studies

## Evaluation and Measurement Characteristics

### Evaluation



Has been evaluated.

The tools were pilot tested in workshops, including feedback and review of materials, using successively broader audiences. Thus the CASP tools are suitable for a wide target audience in service administration and health care delivery.

### Validity

Not applicable

### Reliability

Not applicable

### Methodological Rating



Not applicable

## Tool Development

### Developers

The Critical Appraisal Skills Programme  
Website: <http://www.casp-uk.net/>

### Method of Development

The CASP checklists were developed using a four-stage process:

- A multidisciplinary working group and CASP secretariat drafted written materials.
- The working group tested the critical appraisal tool and modified it as needed.
- The tool was piloted with a knowledgeable audience and further modified.
- Non-expert health professionals used the tool.

The members of the multidisciplinary working groups had backgrounds in public health, epidemiology or evidence-based practice.

### Release Date

2006

### Contact Person

Amanda Burls  
Critical Appraisal Skills Programme (CASP)  
Email: [amanda.burls@dphpc.ox.ac.uk](mailto:amanda.burls@dphpc.ox.ac.uk)

## Resources

<b>Title of Primary Resource</b>	The Critical Skills Appraisal Programme: making sense of evidence
<b>File Attachment</b>	None
<b>Web-link</b>	<a href="http://www.casp-uk.net/">http://www.casp-uk.net/</a>
<b>Reference</b>	Public Health Resource Unit (2006). <i>The Critical Skills Appraisal Programme: making sense of evidence</i> . Public Health Resource Unit, England. Retrieved from: <a href="http://www.casp-uk.net/">http://www.casp-uk.net/</a>
<b>Type of Material</b>	Website
<b>Format</b>	On-line Access
<b>Cost to Access</b>	None.
<b>Language</b>	English
<b>Conditions for Use</b>	Copyright © 2006 Public Health Resource Unit, England

---

These summaries are written by the [NCCMT](#) to condense and to provide an overview of the resources listed in the [Registry of Methods and Tools](#) and to give suggestions for their use in a public health context. For more information on individual methods and tools included in the review, please consult the authors/developers of the original resources.