



# Searching the Cochrane Library & PRIMSA 2020 updates

CURTIN LIBRARY



# This presentation will enable you to:

- search the **Cochrane Library** with confidence to find systematic reviews in your research area.
- learn about the **2020 updates to PRISMA** (Preferred Reporting Items for Systematic reviews and Meta-Analyses).



**Cochrane**  
**Library**

# **Searching the Cochrane Library**



# What we will cover

- What's in the Cochrane Library
- Site navigation
- Search options
- Training hub and resources

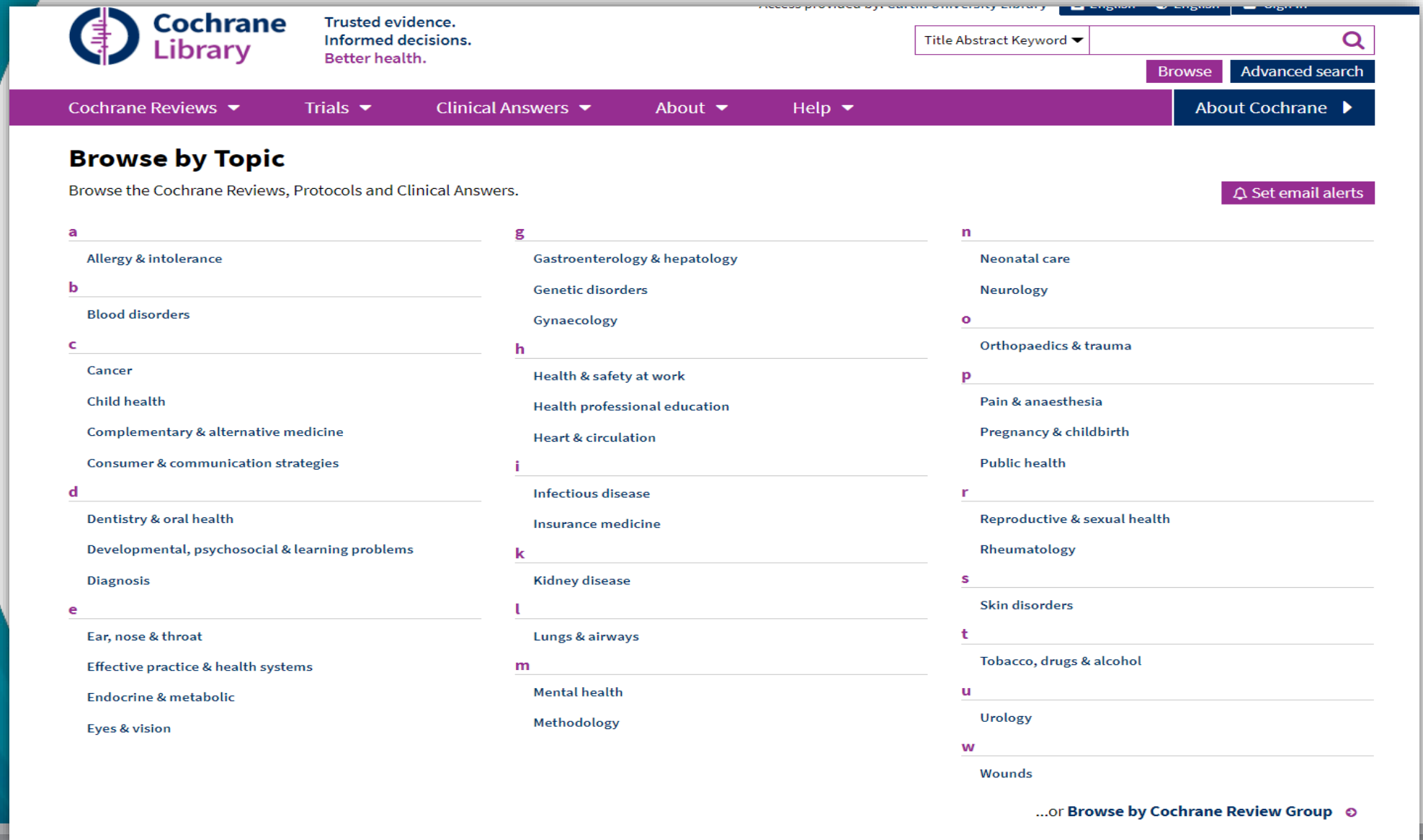
# What is the Cochrane Library?

- Cochrane is a global network of health and social care practitioners, researchers, patient advocates and others, with a mission to promote evidence-informed decision making by producing high quality, relevant, accessible systematic reviews and other synthesized research evidence
- The group conducts [systematic reviews](#) of health-care interventions and diagnostic tests and publishes them in the [Cochrane Library](#)

# What's in the Cochrane Library

- Cochrane Database of Systematic Reviews
  - + 8500 Reviews
  - + 2400 Protocols
- Central Register of Controlled Trials (CENTRAL)
  - + 1.6 million articles
- Cochrane Clinical Answers (+2200)
- Systematic Reviews from Epistemonikos (+300000)
- Editorials (+130)
- Special Collections (+30)
- Health Systems Evidence (HSE) and Social Systems Evidence (SSE) created by McMaster's Health Forum (+14000 and 4000)

# Search options – browse by topic



**Cochrane Library** Trusted evidence. Informed decisions. Better health.

Access provided by Pearson University Library | English | English | English

Title Abstract Keyword

[Cochrane Reviews](#) [Trials](#) [Clinical Answers](#) [About](#) [Help](#) [About Cochrane](#)

## Browse by Topic

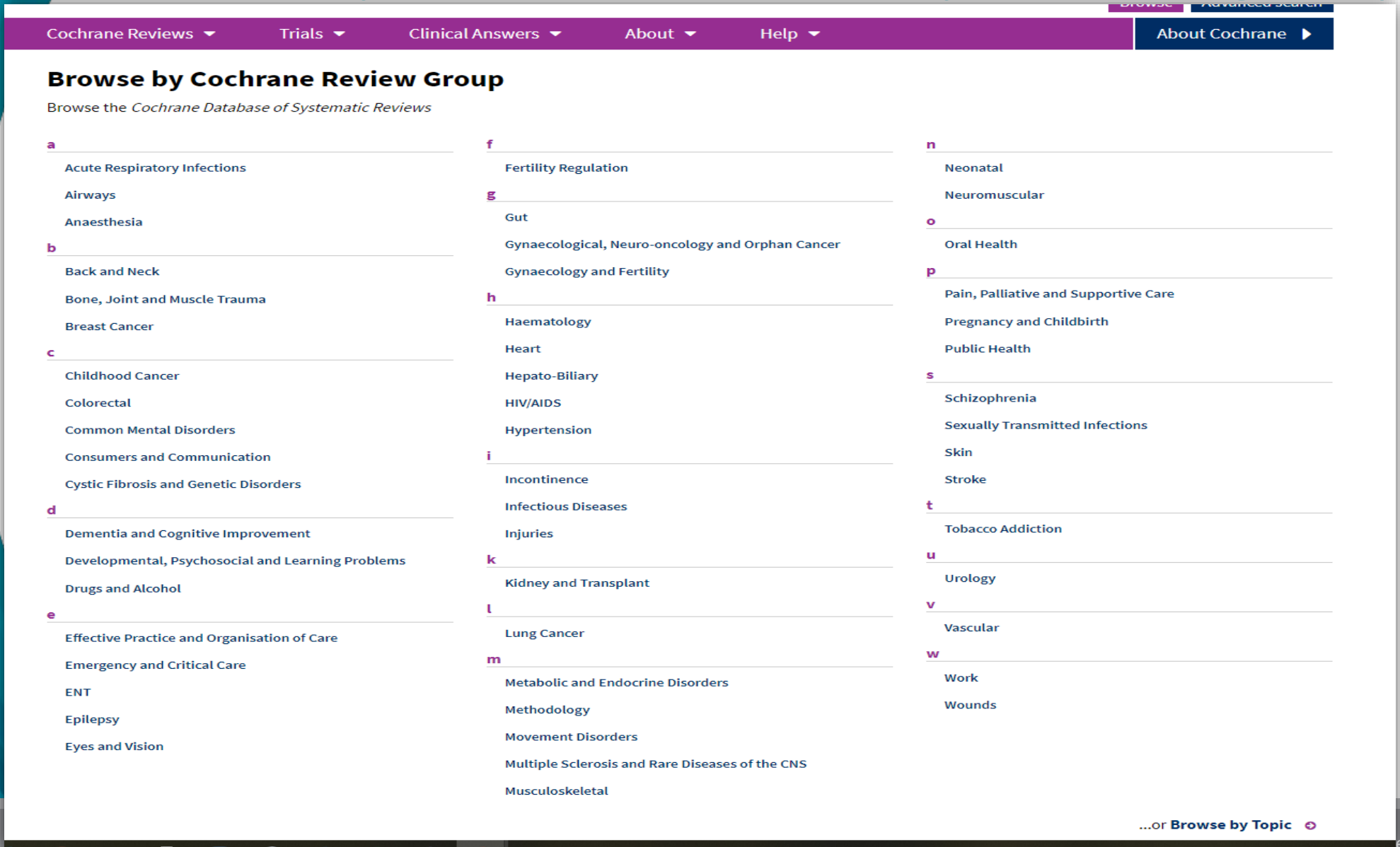
Browse the Cochrane Reviews, Protocols and Clinical Answers.

<b>a</b>	<b>g</b>	<b>n</b>
Allergy & intolerance	Gastroenterology & hepatology	Neonatal care
<b>b</b>	Genetic disorders	Neurology
Blood disorders	Gynaecology	<b>o</b>
<b>c</b>	<b>h</b>	Orthopaedics & trauma
Cancer	Health & safety at work	<b>p</b>
Child health	Health professional education	Pain & anaesthesia
Complementary & alternative medicine	Heart & circulation	Pregnancy & childbirth
Consumer & communication strategies	<b>i</b>	Public health
<b>d</b>	Infectious disease	<b>r</b>
Dentistry & oral health	Insurance medicine	Reproductive & sexual health
Developmental, psychosocial & learning problems	<b>k</b>	Rheumatology
Diagnosis	Kidney disease	<b>s</b>
<b>e</b>	<b>l</b>	Skin disorders
Ear, nose & throat	Lungs & airways	<b>t</b>
Effective practice & health systems	<b>m</b>	Tobacco, drugs & alcohol
Endocrine & metabolic	Mental health	<b>u</b>
Eyes & vision	Methodology	Urology
		<b>w</b>
		Wounds

...or [Browse by Cochrane Review Group](#)



# Search options – browse by review group



**Browse by Cochrane Review Group**  
Browse the *Cochrane Database of Systematic Reviews*

**a**

- Acute Respiratory Infections
- Airways
- Anaesthesia

**b**

- Back and Neck
- Bone, Joint and Muscle Trauma
- Breast Cancer

**c**

- Childhood Cancer
- Colorectal
- Common Mental Disorders
- Consumers and Communication
- Cystic Fibrosis and Genetic Disorders

**d**

- Dementia and Cognitive Improvement
- Developmental, Psychosocial and Learning Problems
- Drugs and Alcohol

**e**

- Effective Practice and Organisation of Care
- Emergency and Critical Care
- ENT
- Epilepsy
- Eyes and Vision

**f**

- Fertility Regulation

**g**

- Gut
- Gynaecological, Neuro-oncology and Orphan Cancer
- Gynaecology and Fertility

**h**

- Haematology
- Heart
- Hepato-Biliary
- HIV/AIDS
- Hypertension

**i**

- Incontinence
- Infectious Diseases
- Injuries

**k**

- Kidney and Transplant

**l**

- Lung Cancer

**m**

- Metabolic and Endocrine Disorders
- Methodology
- Movement Disorders
- Multiple Sclerosis and Rare Diseases of the CNS
- Musculoskeletal

**n**

- Neonatal
- Neuromuscular

**o**

- Oral Health

**p**

- Pain, Palliative and Supportive Care
- Pregnancy and Childbirth
- Public Health

**s**

- Schizophrenia
- Sexually Transmitted Infections
- Skin
- Stroke

**t**

- Tobacco Addiction

**u**

- Urology

**v**

- Vascular

**w**

- Work
- Wounds

...or **Browse by Topic**



# Search options – search

- Search options
  - Basic search
  - Advanced search
  - MeSH
  - Search manager
  - PICO Searchbeta

## Advanced Search

Search

Search manager

Medical terms (MeSH)

PICO search<sup>BETA</sup>

Save search

View saved searches

Search help

Did you know you can now select fields from Search manager using the **S** button (next to the search box)?

Search manager lets you add unlimited search lines, view results per line and access the MeSH browser using the new **MeSH** button.

—

Title Abstract Keyword ▾

"diabetes mellitus"

—

AND ▾

Title Abstract Ke

diabetes mellitus ketoacidosis

diabetes mellitus type 1

diabetes mellitus type I

diabetes mellitus type-I

+

✕ Clear all

Search limits

Send to search manager

Run search

Use the search  
tab for quick and  
easy searching  
of the Cochrane  
Library

# MeSH view

Look up

Clear

## Definition

**Diabetes Mellitus** - A heterogeneous group of disorders characterized by HYPERGLYCEMIA and GLUCOSE INTOLERANCE.

## Thesaurus Matches

### Exact Term Match

#### Diabetes Mellitus

Synonyms:

### Phrase Matches

#### Diabetes Mellitus

Synonyms:

#### Diabetes Mellitus, Type 2

Synonyms: Maturity-Onset Diabetes Mellitus; Diabetes Mellitus, Maturity Onset; Diabetes Mellitus, Slow Onset; Diabetes Mellitus, Maturity-Onset; Slow-Onset Diabetes Mellitus; Diabetes Mellitus, Ketosis Resistant; Type 2 Diabetes Mellitus; Ketosis-Resistant Diabetes Mellitus; Stable Diabetes Mellitus; Diabetes Mellitus, Adult Onset; Diabetes Mellitus, Noninsulin Dependent; Diabetes

## MeSH Trees

### MeSH term - Diabetes Mellitus

- ☒ Explode all trees  
☐ Single MeSH term (unexploded)  
☐ Explode selected trees

Select

### ☒ Tree number 1

**Nutritional and Metabolic Diseases [+2]**  
**Metabolic Diseases [+19]**  
**Glucose Metabolism Disorders [+5]**  
**Diabetes Mellitus [+8]**  
**Diabetes Mellitus, Experimental**  
**Diabetes Mellitus, Type 1 [+1]**  
**Diabetes Mellitus, Type 2 [+1]**  
**Diabetes, Gestational**  
**Diabetic Ketoacidosis**  
**Donohue Syndrome**  
**Latent Autoimmune Diabetes in Adults**  
**Prediabetic State**

## Search Results

There are **25903** results for your search on

- MeSH descriptor: Diabetes Mellitus
- Explode all trees

Add to search manager

Trials	25719
Cochrane Reviews	184

Save search

View results

Search in all trees  
or specific trees  
with or without  
term explosion

# Search Manager: Syntax

Continued support for all existing search syntax:

- Boolean and proximity operators
- Nesting
- Stemming
- Field Labels
- Combined searches

Interventions for mydriasis in cataract surgery copy 2

Last saved on: 30/08/2018 07:34:02

451 hits, 391 trials

</

Click on the line count to view the results for that search line

# Results: Limit by database

Filter your results

**Date**

Publication date

The last 3 months ..... 4

The last 6 months ..... 5

The last 9 months ..... 11

The last year ..... 19

The last 2 years ..... 43

Custom Range:

dd/mm/yyyy to dd/mm/yyyy

Apply Clear

**Status**

New search ..... 33

Conclusions changed ..... 9

**Language**

Español ..... 110

Show 12 more

Cochrane Reviews 170
Cochrane Protocols 32
Trials 44788
Editorials 1
Special collections 0
Clinical Answers 25
More

170 Cochrane Reviews matching on 'diabetes mellitus in Title Abstract Keyword - (Word variations have been searched)'

Cochrane Database of Systematic Reviews

Issue 8 of 12, August 2018

☐ Select all (170) Export selected citation(s) Show all previews

Order by Relevancy Results per page 25

- ☐ **Ayurvedic treatments for diabetes mellitus**  
Kalpana Sridharan, Roshni Mohan, Sridharan Ramaratnam, Deepak Panneerselvam  
Show Preview Intervention Review 7 December 2011
- ☐ **Cinnamon for diabetes mellitus**  
Matthew J Leach, Saravana Kumar  
Show Preview Intervention Review 12 September 2012
- ☐ **Sweet potato for type 2 diabetes mellitus**  
Cheow Peng Ooi, Seng Cheong Loke  
Show Preview Intervention Review 3 September 2013 Free access
- ☐ **Specialist nurses in diabetes mellitus**  
Emma Loveman, Pamela Royle, Norman Waugh  
Show Preview Intervention Review 22 April 2003

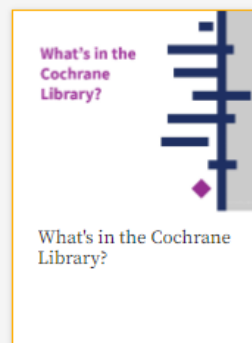
View results by product by clicking on different tabs to see reviews, protocols, trials. Clinical answers etc.

# Search syntax

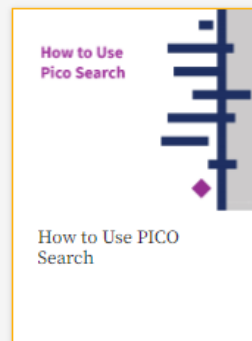
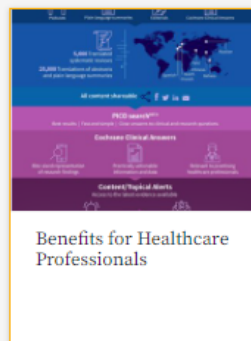
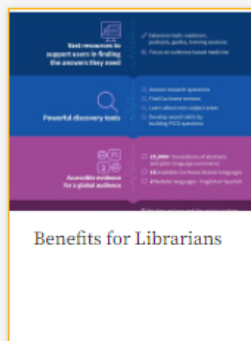
How to search for	Example	Use
Automatic stemming and term variations	<i>Treat</i> finds <i>treat</i> , <i>treats</i> , <i>treated</i> and <i>treating</i> but not <i>treatment</i>	The search system performs automatic stemming of the term(s) by searching all common variants of a term based on its part of speech, eliminating the need for users to manually type these common variants. Automatic stemming can be turned on and off using the limits selection box.
Single term	Cloning	Searches for a specific term in the article or selected fields.
Multiple words	Diabetes mellitus	If no quotes are used, search will 'AND' terms and find articles or selected fields with both terms.
Phrase searching	"Diabetes mellitus"	Use double quotation marks to find exact phrases. This search finds <i>diabetes mellitus</i> in the article or selected fields.
Wildcard (or truncation; word root must be at least 3 characters)	transplant*	Use an asterisk (*) to match all terms beginning with a word root. <i>transplant*</i> finds <i>transplant</i> , <i>transplants</i> , <i>transplanting</i> , <i>transplantation</i> , and <i>transplantable</i> .
	*glycemia	Use an asterisk (*) at the beginning of a word to match terms with the same suffix. <i>*glycemia</i> matches <i>hyperglycemia</i> or <i>hypoglycemia</i> .
	leuk*mia	Use an asterisk to match multiple characters within a word. <i>leuk*mia</i> finds <i>leukemia</i> and <i>leukaemia</i> .
	wom?n	Use a question mark (?) to match a single character within a word. <i>wom?n</i> finds <i>women</i> or <i>woman</i> .
	system?	Use a question mark (?) to match all terms with that word root and EXACTLY 1 character. <i>System?</i> finds <i>systems</i> but not <i>system</i> , <i>systematic</i> or <i>systemic</i> .
Searching with field labels	"lung cancer":ti (hearing next aid*) :kw smith:au (cancer near lung) :ti,ab,kw	In the 'Search manager' tab, limit to specific fields using the following field labels: :ti (title)                :ab (abstract)                :kw (Keywords) :au (author)                :so (source)                :pt (Publication Type) :tb (tables)                :doi (digital object identifier [DOI]) :an (accession number) If NO field label is used, 'All text' will be searched. To search multiple fields, separate field labels using commas (:ti,ab,kw).
Logical operators in phrases	breastfeeding AND pre-term; smoking	To find phrases which contain a logical operator (AND, OR, NOT).



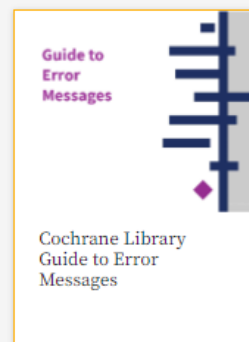
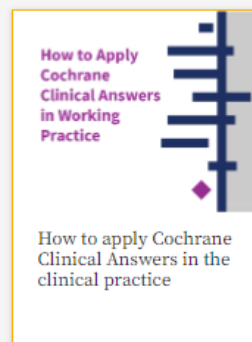
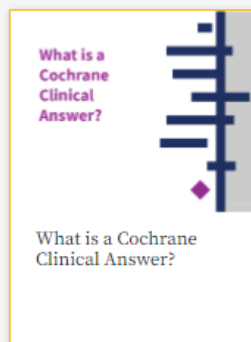
## Getting Started



## Becoming an Expert



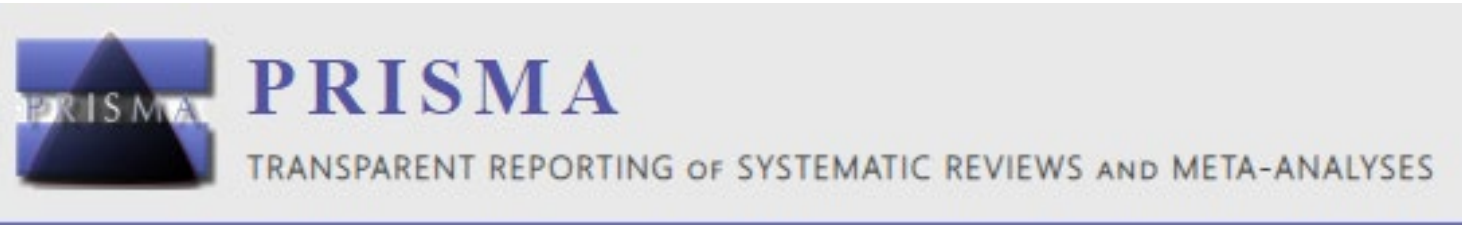
## Other Resources



Search guides, live webinars, training videos and more are available from the “Help” menu on the Cochrane Library homepage

# Training links

- <https://www.wiley.com/customer-success/cochrane-library-training-hub>
  - Live training <https://secure.wiley.com/wiley-research-training-cochrane>
  - User guides e.g.
    - How to search the Cochrane Library (flipbook)
    - How to use PICO search
  - Video resources
  - Cochrane training - <https://training.cochrane.org/>



# **The PRISMA 2020 statement: an updated guideline for reporting systematic reviews**

<http://www.prisma-statement.org/>

# PRISMA - what

*“an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses.”*

HOME	PRISMA STATEMENT	EXTENSIONS	TRANSLATIONS
PRISMA Statement	PRISMA E&E	Checklist	Flow Diagram

<http://www.prisma-statement.org/>

# PRISMA - why

- Clear reporting of systematic reviews enables:
  - replication of SR methods
  - assessment of the trustworthiness of SR findings
  - assessment of the applicability of findings
- PRISMA endorsement



# Development of PRISMA 2020

- Replaces PRISMA 2009
- Includes new reporting guidance reflecting advances in methods to identify, select, appraise and synthesise studies



# PRISMA 2020 papers

**The PRISMA 2020 statement: an updated guideline for reporting systematic reviews**

*MetaArXiv* 2020; doi: <https://doi.org/10.31222/osf.io/v7gm2> (Published 14 Sept 2020)

**The PRISMA 2020 statement: An updated guideline for reporting systematic reviews**

*JCE* 2021; 134 doi: <https://doi.org/10.1016/j.jclinepi.2021.03.001> (Published 28 Mar 2021)

**PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews** *BMJ* 2021; 372 doi: <https://doi.org/10.1136/bmj.n160> (Published 29 Mar 2021)

**The PRISMA 2020 statement: an updated guideline for reporting systematic reviews**

*BMJ* 2021; 372 doi: <https://doi.org/10.1136/bmj.n71> (Published 29 Mar 2021)

**The PRISMA 2020 statement: an updated guideline for reporting systematic reviews**

*Systematic Reviews* 2021; 10 doi: <https://doi.org/10.1186/s13643-021-01626-4> (Published 29 Mar 2021)

**The PRISMA 2020 statement: An updated guideline for reporting systematic reviews**

*International Journal of Surgery* 2021; 88 doi: <https://doi.org/10.1016/j.ijsu.2021.105906> (Published 29 Mar 2021)

# Key changes in PRISMA 2020

- **Elaboration & Explanation** document extensively revised (with new examples)
- All **Checklist** items revised, and several new items and sub-items introduced
- New **Flow Diagram** templates

# Key changes in PRISMA 2020

More explicit request to report:

- full search strategies for **all** databases, registers, websites
- automation tools used (eg. for study selection)
- how outcomes were defined and which results were sought
- characteristics and risk of bias among studies **contributing to each synthesis**
- protocol amendments
- conflict of interest of review authors

# PRISMA Elaboration and Explanation

- Intended to enhance the use, understanding and dissemination of the PRISMA 2020 Statement
- Presents the meaning and rationale for each checklist item, and thorough examples and explanations

PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. *BMJ* 2021;372:n160. [doi: 10.1136/bmj.n160](https://doi.org/10.1136/bmj.n160)

# PRISMA 2020 Checklist

- A seven section, **27-item checklist** - addressing the introduction, methods, results and discussion sections of a SR
- Also an **expanded checklist** that details reporting recommendations for each item
- PRISMA 2020 **abstract checklist**, an update of the 2013 PRISMA for Abstracts statement

<http://www.prisma-statement.org/PRISMAStatement/Checklist>

# PRISMA 2020 items

## Item 6 – Information sources

Specify **all databases, registers, websites, organisations, reference lists, and other sources** searched or consulted to identify studies. Specify the **date** when each source was last searched or consulted.

***Explanation:*** Authors should provide a detailed description of the information sources that were searched or consulted, including the dates when each source was last searched. Authors should fully report the “what, when, and how” of the sources searched.



# PRISMA 2020 items

## Item 7 – Search strategy

Present the **full search strategies** for all databases, registers, and websites, including any **filters** and **limits** used.

**Explanation:** *Reporting full details of all search strategies (such as the full, line by line search strategy as run in each database) should enhance transparency, improve replicability, and enable a review to be more easily updated. A description of the search strategy development process can help readers judge how far the strategy is likely to have identified all studies relevant to the inclusion criteria. The might include approaches used to identify keywords, synonyms, or subject indexing terms, or any processes used to validate or peer review the search strategies.*

# PRISMA 2020 items

## Item 8 – Selection process

Specify the methods used to decide whether a study met the inclusion criteria of the review, including **how many reviewers screened each record** and each report retrieved, whether they worked **independently**, and, if applicable, details of **automation tools** used in the process

***Explanation:** Study selection is typically a multi-stage process in which potentially eligible studies are first identified from screening titles and abstracts, then assessed through full text review and, where necessary, contact with study investigators. A mix of screening approaches might be applied (automation, crowdsourcing, etc). Authors should describe the process for deciding how records retrieved were considered for inclusion, to enable readers to assess potential for errors in selection.*

# PRISMA 2020 items

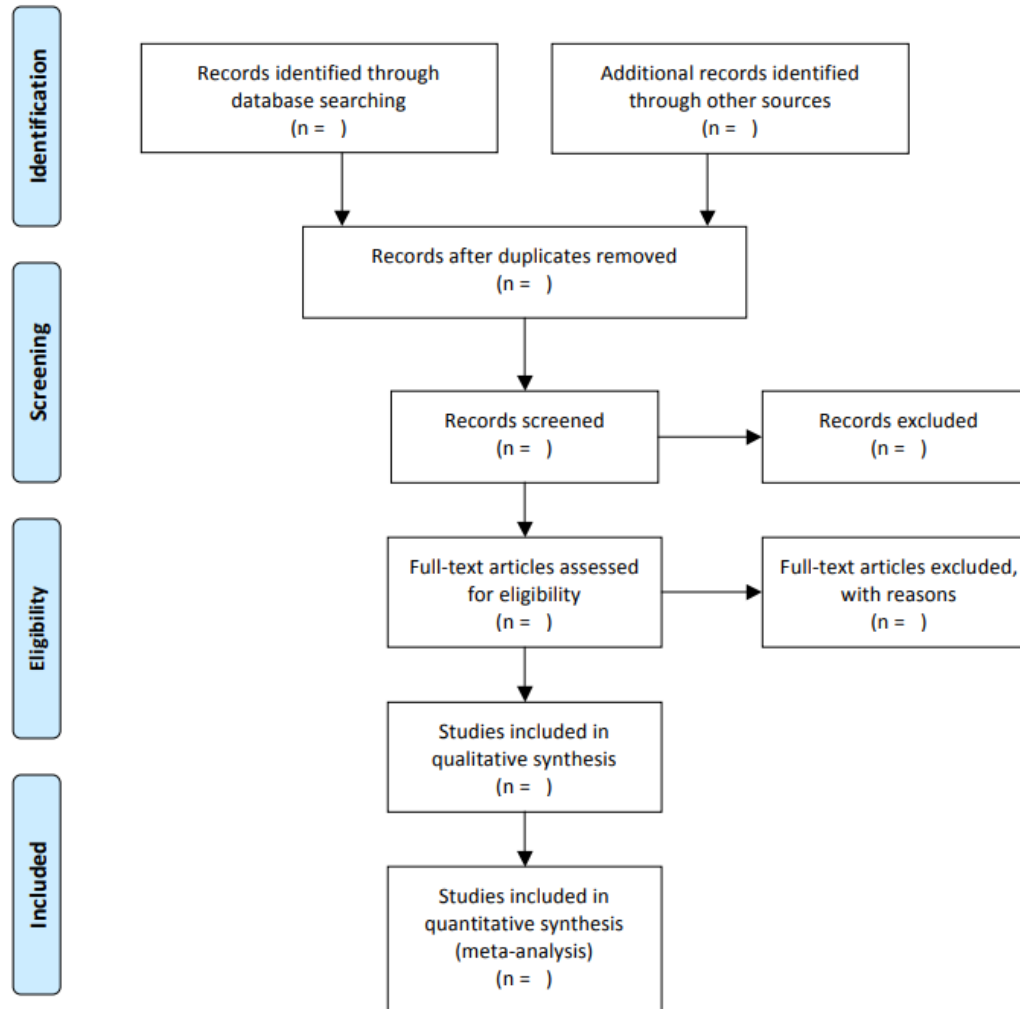
## Item 16a – Flow diagram

Describe the **results of the search and selection process**, from the number of records identified in the search to the number of studies included in the review, ideally **using a flow diagram**

***Explanation:*** Identifying the excluded records allows readers to make an assessment of the validity and applicability of the systematic review. At a minimum, a list of studies that might appear to meet the inclusion criteria but which were excluded, with citation and a reason for exclusion, should be reported. It is also useful to list studies that were potentially relevant but for which the full text or data essential to inform eligibility were not accessible.



## PRISMA 2009 Flow Diagram



# PRISMA 2020 Flow Diagram

What's new:

- specify number of records yielded per database
- exclusion before screening (duplicates, machine classifiers)
- reports that were not retrievable
- separation of databases/registers from other sources
- ongoing studies
- separate box to handle SR updates

<http://www.prisma-statement.org/PRISMAStatement/FlowDiagram>



# PRISMA-Search extension

- An extension to the PRISMA Statement for **Reporting Literature Searches in Systematic Reviews**
- Published in 2021
- **Checklist** includes 16 reporting items, each of which is detailed with exemplar reporting and rationale
- Does not address study selection process

<http://www.prisma-statement.org/Extensions/Searching>



# And Lastly

- **ShinyApps**
  - [Checklist](#) can be completed electronically and downloaded as Word or pdf doc
  - Allows [flow diagrams](#) to be produced and customised
- Purpose of guidelines is to **ensure transparency and optimal reproducibility**, and not as a tool to guide conduct or assess the quality of a search

## Further help

- **Health Science Guides**  
<https://libguides.library.curtin.edu.au/health-hub>
- **Diana Blackwood & Vanessa Varis,**  
**Faculty Librarians Health Sciences:**  
[HS-FacultyLibrarian@curtin.edu.au](mailto:HS-FacultyLibrarian@curtin.edu.au)
- **Library Help:**  
<https://library.curtin.edu.au/help/>