

The Cochrane Library is a unique collection of databases providing reliable information to guide effective healthcare decisions. It is listed in the Core Databases and Evidence Based Medicine sections of the Library's Databases page. Connect to <http://ar.utmb.edu/library> and click on the Databases link for access.

The Cochrane Library includes:

- The Cochrane Database of Systematic Reviews
- Database of Abstracts of Reviews of Effectiveness
- The Cochrane Controlled Trials Register
- The Cochrane Database of Methodology Reviews
- Health Technology and Assessment Database (HTA)
- NHS Economic Evaluation Database (NHS EED)
- About the Cochrane Collaboration

Unlike MEDLINE, *The Cochrane Library* includes:

- The full-text, including graphs of the original systematic reviews produced by the Cochrane Collaboration
- Reviews which are regularly updated as new information becomes available and in response to comments and criticisms
- Quality, assessed information
- Critical appraisals of high-quality reviews published elsewhere
- Selections from previously unpublished material, including conference proceedings and publications in languages other than English

Searching

- **Basic Search:** The basic Search box at top right allows you to enter search terms in a single text box. The search box includes the option to select a field restrictor.
- **Advanced Search:** This option allows you to access the full search feature page for Cochrane.
- **MeSH Search:** This option allows you to access a thesaurus-based search of medical search terms.
- **Search History:** Searches that you have entered during your current session can be accessed from this feature. Use the # in front of the set numbers to combine (e.g. #1 or #2; #3 and #4)
- **Saved Searches:** This option allows you to display and manage previously saved searches and search strategies created with the Advanced Search and MeSH Search.
- **Tip:** Searching the **Title, Abstract, or Keywords** often the best search choice and gives fewer "false hits".

Viewing Search Results

- Search results are automatically displayed in every search mode, *except* when combining terms from the Search History.
- To get to results from the Search History, click the search statement (e.g. shower or bath* or #1 and #2)
- The **Show Results** section shows the number of hits per section of the Cochrane Library.

Printing/Saving

- The full-text of the Cochrane Reviews/Protocols must be printed one at a time. Open the PDF view for a printer-friendly layout.
- Bibliographic information from any section of the Cochrane Library may be printed or saved.
 1. Click checkmarks next to desired records. You may select citations from across the different sections of Cochrane Library.
 2. Click Export Selected Citations button.
 3. Choose Export Type: Citation or Abstract and Citation; Choose File Type: PC; Mac; Linux or Unix
 4. Click Go.
 5. A dialog box will appear asking you to Open or Save the file. If you choose Open (on a PC), a Notepad file will open and you can print from the program.

Advanced Search Tips:

Type	Description	Example
Boolean operators	Use AND, OR to combine search terms. AND is restrictive and forces concepts to overlap (both/all). OR is expansive and is good for synonym building/putting like concepts together (either/any).	magnesium sulfate AND (eclampsia OR perinatal asphyxia)
Proximity search using NEAR	Use NEAR/ with a number to indicate proximity of terms either before or after each other. The default proximity value for the operator when no number is entered is 6.	antidepressant NEAR/10 narcolepsy
Proximity search using NEXT	Use NEXT with a number to match terms that appear next to each other. Note that the apostrophe within a term is treated as a space, thus to search for adjacent words in a term such as Down's Syndrome , the best search parameter to use is: down* NEAR/2 syndrome	cholera NEXT treat*
Wildcard truncation	Use an asterisk (*) to search for multiple characters before, within, or after a search string. A question mark can be used to search for a single character.	abdom* *eclampsia
Exact phrase search	Insert a term within quotation marks to create an exact match. Note that no search method is case sensitive, thus "PH" matches the same results as "pH", "Ph", or "ph".	"mental health treatment" matches the phrase in exactly that word sequence
Stemming	The stemming feature within the search allows words with small spelling variants to be matched. The term tumor will also match tumour .	tumor cell
Pluralization and singularization matches	Pluralized forms of words also match singular versions, and vice versa. The term drugs will find both drug and drugs . To match either just the singular or plural form of a terms, use an exact match search and include the word in quotation marks.	"vaccine"
Diphthong characters	Terms with spelling variations that include diphthongs should be searched with a wildcard character to ensure that all forms of a term are matched. Some more common terms with diphthongs such as "haemorrhage" are automatically matched to their variant spellings through stemming.	isch*mic stroke
Stop words	Words such as "in," "the" and "of" are matched in the search. The Boolean search operators AND, OR, NOT, NEAR, and NEXT are the only terms treated as stop words.	
Hyphenated terms	Hyphens are treated as a space with an associated NEXT operator. The term <i>heart-related</i> will match the same results as <i>heart NEXT related</i> .	evidence-based NEXT medicine

Definitions:

- **The Cochrane Database of Systematic Reviews:** regularly updated systematic reviews of the effects of healthcare interventions prepared and maintained by the Cochrane Collaboration. It provides access to full reviews and protocols (outlines of reviews in preparation).
- **The Database of Abstracts of Reviews of Effectiveness (DARE):** includes structured abstracts of systematic reviews from around the world, which have been evaluated by reviewers at the National Health Service Centre for Reviews and Dissemination in the UK. Only reviews that meet minimum quality criteria are included. These reviews cover topics that have yet to be addressed in Cochrane Reviews.
- **The Cochrane Controlled Trials Register (CENTRAL):** includes published articles taken from bibliographic databases, and other published and non-published sources. Trials are identified from multiple sources, including database searches, hand searches of many hundreds of journals and conference proceedings, and searches of other trial registers.
- **The Cochrane Database of Methodology Reviews** - contains Cochrane methodology reviews and protocols. It provides full-text systematic reviews of methodological studies. Highly structured and systematic, evidence from methodological research is included or excluded on the basis of explicit criteria, thus minimizing bias. Each review covers a specific, well-defined area of methodology. Protocols are reviews in preparation and summarize the background and rationale for the review.
- **Health Technology and Assessment Database (HTA)** - contains details of ongoing projects and completed publications from health technology assessment organizations. Records do not contain the full-text of the report. Available from Cochrane Library.
- **NHS Economic Evaluation Database (NHS EED)** - contains structured abstracts of articles describing economic evaluations of health care interventions. The database also includes bibliographic details of articles examining relevant topics, short abstracts of studies originally included in the Department of Health Register of Cost-Effective Studies. Records do not contain the full-text of the original articles. Available from Cochrane Library.
- **About the Cochrane Collaboration** - Presents a list of articles that provide more information about the Cochrane Collaboration, including details on the Steering Group, Fields, Methods Group, Networks, and Centres.
- **Systematic Review:** a *review* of results from similarly conducted randomized controlled trials to answer a clearly formulated question. Systematic, explicit, and predefined methods are used to identify, select, and critically appraise relevant research, and to collect and analyze data from the studies that are included in the review. The methods used include steps to minimize bias in all parts of the process: identifying relevant studies, selecting them for inclusion, and collecting and combining their data. Studies should be sought regardless of their results. The authors of a systematic review identify an intervention for a specific disease or other problem in health care, and then ask whether or not this intervention works. In order to do this they locate, appraise and synthesise evidence from as many relevant scientific studies as possible. They summarize conclusions about effectiveness, and provide a unique collation of the known evidence on a given topic, so that others can easily review the primary studies for intervention. Statistical methods (*meta-analysis*) may or may not be used to analyze and summarize the results included in the studies.
- **Meta-analysis** - a statistical technique for quantitatively combining the results of multiple studies, that measure the same outcome, into a single pooled or summary estimate. A systematic review that uses quantitative methods to analyze the results.
- **Evidence-based healthcare (EBHC)** is the conscientious use of current best evidence in making decisions about the care of individual patients or the delivery of health services. Current best evidence is up-to-date information from relevant, valid research about the effects of different forms of health care, the potential for harm from exposure to particular agents, the accuracy of diagnostic tests, and the predictive power of prognostic factors. (First Annual Nordic Workshop on how to critically appraise and use evidence in decisions about healthcare, National Institute of Public Health, Oslo, Norway, 1996.)

- ***Evidence-based clinical practice*** is an approach to decision making in which the clinician uses the best evidence available, in consultation with the patient, to decide upon the option which suits that patient best. (Muir Gray JA. (1997) Evidence-based healthcare: how to make health policy and management decisions. London: Churchill Livingstone.)
- ***Evidence-Based Medicine (EBM)*** is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research. (Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson S. Evidence based medicine: what it is and what it isn't. BMJ 1996;312:71-2.)
- ***Archie Cochrane***: a British epidemiologist (1909-1988). In his book, *Effectiveness and Efficiency: Random Reflections on Health Services* (1979), he argued that limited healthcare resources could be fairly and efficiently allocated only if we knew which treatments were effective and which were not. The Cochrane Collaboration evolved in response to his challenge that we need to organize critical summaries of high-quality research.
- ***Cochrane Collaboration***: an international network of individuals and institutions committed to preparing, maintaining, and promoting the accessibility of systematic reviews of the effects of healthcare. The Collaboration is a non-profit organization, registered as a charity in the UK.
- ***Collaborative Review Group (CRG)***: The primary organizational unit of the Cochrane Collaboration. CRG's are made up of individuals sharing an interest in a particular healthcare problem or type of problem. The main purpose of a CRG is to prepare and maintain systematic reviews within the scope of the group. Members participate by not only preparing *Cochrane Reviews* but also by *hand-searching* journals or other activities that help the group fulfill its aim.
- ***Cochrane Centre***: An entity in the Cochrane Collaboration with responsibility for helping to coordinate and support the Collaboration. Responsibilities include: maintaining a directory of people contributing to the Cochrane Collaboration, helping to establish Collaborative Review Groups, organizing workshops, seminars, and annual colloquia to support and guide the development of the Cochrane Collaboration. Each center is responsible for providing support within a specified geographic area.