The Cochrane Library

The Cochrane Library is a collection of six separate databases:

- Cochrane Database of Systematic Reviews (CDSR)
- Database of Abstracts of Reviews of Effects (DARE)
- Cochrane Central Register of Controlled Trials (CENTRAL)
- Cochrane Methodology Register (CMR)
- Health Technology Assessment Database (HTA)
- NHS Economic Evaluation Database (NHS EED)

The Cochrane Database of Systematic Reviews is the main resource, it contains the full text of all the Cochrane reviews. The other databases contain bibliographic details or structured abstracts for supporting material published elsewhere.

Accessing the Cochrane Library

Open an internet browser and go to: http://www.thecochranelibrary.com

You should always be able to access the Cochrane Library that way (though you can also link to it from the Library’s database webpages). You don’t need to be on the University network or log in - it’s freely accessible.

For information about the different databases available in the Cochrane Library, select About > About the Cochrane Library, then scroll down and have a look at the information and descriptions.

Searching

Suppose you wanted to find what information the Cochrane Library has specifically about asthma.

In the Search box, type: asthma and press enter.

Useful Tip - CASE & PUNCTUATION SENSITIVITY:

Searching is not case sensitive (so for example, you’d get the same results if you searched for "PH", "ph", "pH" or "Ph"). However, hyphens and inverted commas are important and must be included in the search term for the search to find results with them in. For example "parkinson's" finds many more results than "parkinsons".

The results information on the left lists the total number of search results in each database, e.g. ‘Cochrane Reviews (282)’

The database selected will have its results shown to the right - e.g. There are 282 results from 10007 records for your search on ‘asthma in Record Title, Abstract, Keywords in Cochrane Reviews’ – 10,007 being the total number of records in that database.

You can click on other database names to view their results, but for now ensure Cochrane Reviews results are selected.
The results found in the Cochrane Database can be either ‘reviews’ (completed) or ‘protocols’ (still in progress) and are marked Review or Protocol to indicate this.

From the results options on the left, select Review to view only the results that are completed reviews.

**Question 1**
How many complete Cochrane reviews have the word ‘asthma’ in the title, abstract or keywords?

**Useful Tip - SORTING RESULTS:**
By clicking the drop-down in the upper right of the results, results can be sorted alphabetically (by record title) or by relevance (how closely the results match the search term) or by date.

**Viewing Records**
Change the ‘Sort By’ option (on the right, above the results) to Alphabetical.

Have a look at one of the reviews by clicking on the title. Try ’Acupuncture for chronic asthma’.

Each Cochrane review includes details of how you might cite it appropriately if you use in your work. Click View/save citation (beside the DOI) - basically there’s author, year, title, then ‘Cochrane Database of Systematic Reviews’ functions like a journal title, there may be an ‘issue number’, and there’s an article number that could be used instead of a pages numbers.

**Question 2**
What is the surname of the second listed author of the review?

Close the citation information box. To read the review just scroll down or use the links on the right to navigate to particular sections.

View the Methods section.

**Question 3**
What age were the patients who participated in the studies included in the review?

From the links in the upper left, click the PDF link Click Summary, Standard or Full from the PDF options. This will open either the abstract, the main elements of the review or the complete review as a PDF – it can be downloaded via the ‘Download’ link at the top of the page (and you can click ‘back’ on your browser to return to the review record).

Close the internet browser tab for this review and return to your search results.
Combining Searches

Suppose you needed to find information on the most effective implants for use in the treatment of hip fractures. Begin by searching for your first subject.

Type **implant** into the search box and search.

(Typing ‘implant’ or ‘implants’ should return the same results since Cochrane automatically searches for singular/plural forms of search terms).

Click ‘Add to Search Manager’ on the right hand side of the screen.

Next, you need to search for the second subject.

Click to return to the Search tab

Search for the next subject (title, abstract, keyword); **hip next fracture**. (Using ‘next’ means Cochrane will find results where ‘hip’ (or ‘hips’) is followed immediately by ‘fracture’ (or ‘fractures’)).

Again click Add to Search Manager

You will see the searches you have carried out so far. In the third Search box type the numbers of the searches you wish to combine and how you want them combined - You can use ‘AND’ ‘OR’ and ‘NOT’ to combine searches in different ways (in this case, use AND). For example #1 and #2

**Useful Tip - COMBINING:**

Usual rules apply:

‘#4 OR #6’ will retrieve documents found in EITHER of the searches

‘#4 AND #6’ will retrieve documents which are specifically found in BOTH of the searches

‘#4 NOT #6’ will retrieve documents found by search #4 but will remove documents which were also found in search #6

The results of the combined search will appear in a grey box to the right, **click the number of results found** to view the results of the combination.

Within the [eleven] Cochrane Reviews results have a look at the complete review entitled 'Extramedullary fixation implants and external fixators for extracapsular hip fractures'.

**Question 4**

From the ‘Authors’ Conclusions – Implications for practice’, is there enough evidence to determine if the Pugh nail produces comparable or superior results to that of the sliding hip screw (SHS)?

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**Expanding your search**

Suppose you wanted to know if there are any reviews concerning which type of mattresses are best at preventing pressure sores.

Close the review tab and return to the search manager (you should just be able to scroll up but more generally, you can always get to this from the Cochrane Library homepage by clicking ‘Advanced Search’).
Let’s use MeSH terms (the same as used in Medline) this time.

Click the **Medical Terms** (MeSH) tab.

Type: **pressure sore** and click **Lookup**.

The term is matched to ‘Pressure Ulcer’. A definition is shown, along with three additional columns: ‘Thesaurus matches’ will show any other potential term matches, the second ‘MeSH trees’ provides options for exploding, and the third ‘Search results’ previews results.

Pressure Ulcer has no narrower terms, so exploding is irrelevant. Click **Add to Search Manager** on the right.

Click the **Medical Terms** (MeSH) tab again.

Type: **mattress** and click **Lookup**.

This matches to ‘Beds’. This seems relevant, but the narrower term ‘Stretcher’ is less so, so select **Single MeSH term (unexploded)** and click **Select**.

Then click **Add to Search Manager**

Combine with **AND**. E.g: **#5 and #6**

Click the results number to view results. From the **Cochrane Reviews**, look at ‘Support surfaces for pressure ulcer prevention’.

**Question 5**

What are the two primary outcome measures for the randomised controlled trials included in this review? (Hint: ‘Methods - Types of outcome measures’ section)

**Question 6**

Ideally, should patients at high risk of developing pressure sores be placed on standard foam mattresses? (Hint: ‘Authors’ Conclusions’ section)

Database of Abstracts of Reviews of Effects - DARE

Imagine you have found a review article about hypnosis and obesity in a journal and want to find out if it is reliable research with which to inform your decisions:


Close the browser tab with the review and return to your search.

Click the **Search** tab.

In the first search box type **hypnosis AND obesity**

Change the drop-down on the left to **Search All Text**
Click the ‘+’ symbol to get another box.

In the next search box (leave it as searching all text) type **kirsch**

Click Go

Select the **Other Reviews** results (on the left) and locate the record for the article you’re looking for.

Read through the brief structured abstract of the review, (which explains the content of the review and, usefully, assesses the validity of its conclusions).

Close the tab and go back to the search results.

You should find one additional review (in Other Reviews results) by Allison & Faith.

Read through the structured abstract for this later review too. The structured abstracts for these two articles highlight that research can come to different conclusions even when looking at the same topic. An indication of the reliability of each review is given in the CRD Commentary sections (near the end of each record).

**Question 7**
Looking at the CRD commentary for the Allison review, what needs to be done in order to judge the strength of evidence?

**More search techniques**

Suppose you were interested in investigating the effectiveness of hand-washing as a method of infection prevention. What search terms do you think would be effective?

Search (Title, Abstract, Keywords) for: **(handwash* OR (hand near/1 wash*))** and **infect***

**Useful Tip - WHAT THIS SEARCH IS DOING:**
Remember, singulars/plurals searching is automatic and with this use of * and next all possibilities should be covered:
- ‘handwash*’ will find ‘handwash’, ‘handwashes’, ‘handwashing’ etc
- Using ‘near/1’ will find ‘hand’ beside (either before or after) ‘wash*’ thus locating ‘hand washes’, ‘hand washing’, ‘washing hands’ etc. Combining both options with ‘OR’ should cover all variations.

Adding ‘infect*’ with AND means also the results need to mention ‘infect’, ‘infests’, ‘infection’ etc

Alternatively, you could have considered using MeSH terms.

**View** the results of the combination and see if it has located useful results.

**Question 8**
How many Cochrane reviews has this search located:

**Saving reviews and structured abstracts**
Although we are NOT going to do this now, you can print and save useful reviews. For Cochrane Reviews (which have a PDF options), then by opening the Summary, Standard or Full PDF, then you can print or save from Adobe Acrobat.

Alternatively, for documents from the other databases (which don't have PDFs) like the ‘Other Reviews’ structured abstracts, copy and paste the text into a Word document. Try opening one of the ‘other reviews’ and:

- Click in the frame containing the text of the review.
- Press ‘Ctrl’ and ‘A’ simultaneously to highlight the whole document.
- Right click on the highlighted text and select copy.
- Open a blank Word document, right click in the document and select paste.

From here you could save it or print it as normal.

Remember though, this isn't the article itself! If you want to track down an article that you've found an 'Other Reviews' structured abstract for, click the Links near the top of the record then Find @ Newcastle to open a window that'll check our holdings.

Useful Tip - COCHRANE AND ENDNOTE:

To export a Cochrane record to EndNote, click Export Citation for this article in the review (or select it and click Export Selected from the results display).

Choose Export type: PC (assuming you're on a PC) and File type: Citation and Abstract (assuming you want the abstract). Export Citation then Save the file that's created.

In EndNote, select File > Import > File, select your saved file and set 'Cochrane Library (Wiley)' as your Import Option (you may need to view 'Other Filters' to select this).

The reference should import. It’s worth noting it may be imported as an 'Electronic Article' reference, but it's advisable to change this to just 'Journal Article'.

Remember, Cochrane Reviews will be slightly different to a normal article reference. They will have: authors, title, year, Cochrane Database of Systematic Reviews as the 'journal title', 'issue number' and an 'article number' (which you could perhaps include in a reference instead of 'pages').

Searching by Collaborative Review Group

Suppose you wished to investigate reviews produced by the Cochrane Multiple Sclerosis Group.

Click the Browse tab on the right of the search tabs.

Choose to Browse Cochrane Reviews By Review group.

Click Cochrane Multiple Sclerosis and Rare Diseases of the Central Nervous System Group
Question 9
How many protocols are this group working on at present?

Return to the Advanced Search screen from the link in the top right.

Searching the NHS Economic Evaluation Database

Are there any comparative studies on the cost-effectiveness of treatment for hypertension? First search for any relevant term(s).

Searching ‘title, abstract, keyword’ perhaps would return a large number of results, so try finding a MeSH subject headings – and in the ‘subheading’ box select ‘DT - drug therapy’ (before clicking ‘lookup’).

There is no need to search for the concept of cost-effectiveness, as we will be looking at a database which specifically covers economic evaluations.

Once you have carried out the search, select the Economic Evaluations results.

Sorting results alphabetically, take a look at the structured abstract for an article titled Choice of angiotensin receptor blocker in moderate hypertension: a UK-based cost-benefit comparison of olmesartan- and candesartan-based regimens.

Question 10
According to the authors’ conclusions, is olmesartan or candesartan more cost-effective for the treatment of moderate hypertension?

Question 11
Taking into consideration the CRD commentary sections, would you use this study as a basis for a decision?

Try a search of your own

First, think of a problem... Form this into a clinical question:

- The patient/condition:
- Intervention:
- Comparator:
- Outcomes:

Consider your search terms (and any limits you want to use)...

Now do the search.
Was it successful - did you find useful guidance on the topic?

If not, consider if you can alter your search and try again!

However, remember there simply may not be a Cochrane Review available for the topic you’re interested in.

This concludes the tutorial

ANSWERS TO QUESTIONS

Question 1 - 262
Question 2 - Brinkhaus
Question 3 - any age
Question 4 - no
Question 5 - incidence of new pressure ulcers, grades of new pressure ulcers
Question 6 - no
Question 7 - other studies of related interest need to be assessed in conjunction with it
Question 8 - 8
Question 9 - 14
Question 10 - olmesartan
Question 11 - That’s your decision, you’re the doctor!

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