# Subject Headings, CINAHL, & PubMed

## What Are Subject Headings?

Many databases provide the option of searching using *subject headings*. A subject heading is a word or phrase that is assigned to an article or other resource and describes the topic of the resource. It is a bit like a social media hashtag, but without the # symbol.

Subject headings use a *controlled vocabulary*, meaning that there is a list of possible headings that everyone who assigns them must agree upon. A single article might have multiple subject headings, especially if it covers a range of topics. [Watch the video](https://youtu.be/SwWCjDPtXGE) or read the information below to learn more about subject headings.

### Why Use Subject Headings

Searching by subject heading is more powerful than searching by natural language or even by keyword. When you search by keyword, that word might show up in a number of places in relation to the article, such as the abstract, the author’s name or the journal title, even if it’s not specifically what the article is about.

This means your search results may include many articles that are not relevant to you. Conversely, when you search by subject heading, you are limiting your results to articles that are actually about that topic.

Not every concept has a subject heading, so in some cases you won’t be able to find a subject heading that means exactly what you’re looking for. Rather than trying to convert every keyword into a subject heading, it’s often best to use a combination of keywords and subject headings.

Subject headings are also useful because they are arranged in a hierarchy of broader and narrower terms, sometimes called a *tree structure*. Exploring the tree may give you ideas for search terms you hadn’t considered.

### Example

If you search *Nurse-Patient Ratio* as a subject heading and don’t find many results, you could look at the tree structure, find the broader term *Personnel Staffing and Scheduling*, and try that one instead. Here is what a portion of this tree looks like in CINAHL:

* Health Services Administration
  + Management
  + Personnel Management
  + Personnel Staffing and Scheduling
    - Flexible Scheduling
    - Nurse-Patient Ratio
    - Personnel Staffing and Scheduling Information Systems
    - Shiftwork
    - Skill Mix
    - Understaffing
    - Work Assignments

### Subject Heading Systems (MeSH, etc.)

Different databases use different subject heading systems, which means you will need to look up your subject headings in each database you use. Here are two common systems:

* Medical Subject Headings (MeSH): This is one of the most common systems. It is used by PubMed, Medline, Cochrane Library, and others.
* CINAHL Subject Headings: This is the system of subject headings used by CINAHL.

## How to Search with CINAHL

[Watch the video](https://youtu.be/YYHGXPsoG8c) or read the instructions below to find out how to conduct a search in the CINAHL database. Visit your library website to access CINAHL.

**To search in CINAHL:**

1. Once you have opened CINAHL, click **Advanced Search**.
2. Make sure “Suggest Subject Terms” is checked, type in your search term (e.g. privacy) and click **Search**.
3. Click on a relevant subject heading in the list, e.g. “Privacy and Confidentiality.”
4. The tree view will appear; this view shows the broader and more specific terms for the subject. Select an additional term if it would be more appropriate for your search.
5. Click the icon under the Scope column and read the Scope Note to make sure the subject heading means exactly what you think it means.
6. Click the checkbox beside the term you want to use, e.g. “Privacy and Confidentiality”
7. To the right of the Scope column, you’ll see a list of subheadings. If you see one or more that are particularly relevant to your search, you can select them now.  Note: This will limit your search results. We suggest starting by leaving the “Include All Subheadings” box checked.
8. Below the Search Database button, you can select either of the following two options:
   1. **Explode:** This option will give you more search results by including all narrower terms below your subject heading in the tree (in this example, Duty to Warn and Genetic Privacy).
   2. **Major Concept:** This option will give you fewer (but potentially more relevant) search results by limiting your search to articles where your subject heading has been flagged as a major concept, meaning it is especially important to the article.
9. Click **Search Database**. You will see a list of results.

## How to Conduct a Search using PubMed

[Watch the video](https://youtu.be/HTY1iViopXY) or read the instructions below to find out how to conduct a search in the PubMed database.

**To search in PubMed:**

1. Open [PubMed](https://pubmed.ncbi.nlm.nih.gov/) and click **MeSH Database**.
2. Type your search terms into the search box and click **Search**. Your search results will show a list of MeSH headings related to your search term. Each comes with a brief definition to help you know which term you want to use.
3. Select a MeSH heading from the list. This could be the same term that you originally searched, or you could see one that is a better option. This will display the MeSH record for that heading.
4. Modify your search using any of the following options included in the MeSH record
   1. **Subheadings**: Select any subheadings that would be relevant to your search. Be aware that this would limit your search results.
   2. **Restrict to MeSH Major Topic:** Check this box to see fewer (but potentially more relevant) search results by limiting your search to articles where your MeSH heading has been flagged as a major topic.
   3. **Subject headings in the “tree view”:** You can see broader and narrower terms related to your MeSH heading and select one of them if they would be more appropriate for your search.
5. To run your search, in the “PubMed Search Builder” in the top right of the page, click **Add to search builder**. Your search term will appear in the box.
6. Click **Search PubMed** to run the search. Your search results will show all the articles that have the term you chose as a major MeSH heading. Note: by default, in addition to the MeSH heading you’ve selected, PubMed also searches more specific terms beneath that heading in the tree structure.
7. Refine your search as needed by adding additional terms, either as subject headings or as keywords. You can also try adding filters to your search; learn more about how to use filters in the module Filter Your Search Results.