



Mesh Searching in PubMed & NCBI

PubMed contains over 29 million citations for biomedical literature from MEDLINE, life science journals, and online books.

MeSH stands for Medical Subject Headings. MeSH terms are assigned by an Indexer employed by the National Library of Medicine and not the author. These terms are used to describe the content of the article in addition to the abstract and can be used to enhance your search in PubMed.

Accessing the Database

1. Go to the Hardin Library homepage at <http://www.lib.uiowa.edu/hardin/>
2. Click on the link that says “PubMed.” It is located under the heading “Popular Resources.” (NOTE: While PubMed is freely available, it is best to access it from the Hardin Library website so that you will have access to full text articles that you are only entitled to as an affiliate of the University of Iowa).
3. If you are off-campus, you will be prompted for your Hawk ID and password.

Finding the MeSH terms from an Article & Using them to Perform a New Search

1. After doing a search, go to the Abstract format (see “Finding Full Text Articles” section in the Basic Searching in PubMed handout).
2. Click on the + icon at the bottom of the citation (not every citation will have the MeSH terms available, this is because the citation is added into the PubMed database first and then the abstract and MeSH terms are added later)
3. Click on the MeSH term you want to search.
4. Click “PubMed” to do a completely new search using that MeSH term.

The screenshot shows a dropdown menu for 'Publication type, MeSH terms'. Under 'Publication type', 'Review' is listed. Under 'MeSH terms', a list of terms is shown, including 'Asymptomatic Diseases', 'Humans', 'Hypertension*/etiology', 'Hypertension*/physiopathology', 'Hypertension*/prevention & control', 'Hypertension*/psychology', 'Occupational Diseases*/complicatio', 'Occupational Diseases*/physiopatho', 'Occupational Diseases*/prevention', 'Occupational Diseases*/psychology', 'Occupational Stress/physiopathology*', 'Occupational Stress/prevention & control', 'Preventive Medicine', 'Risk Factors', and 'Workplace/standards*'. A context menu is open over 'Hypertension*/prevention & control', showing options: 'Actions', 'Search in PubMed', 'Search in MeSH', and 'Add to Search'. Two red arrows point to 'Search in PubMed' and 'Search in MeSH'.



5. Add filters and combine searches as necessary (see the “Combing Search Results (Search History) and the “Limiting Search Results” sections in the Basic Searching in PubMed handout).

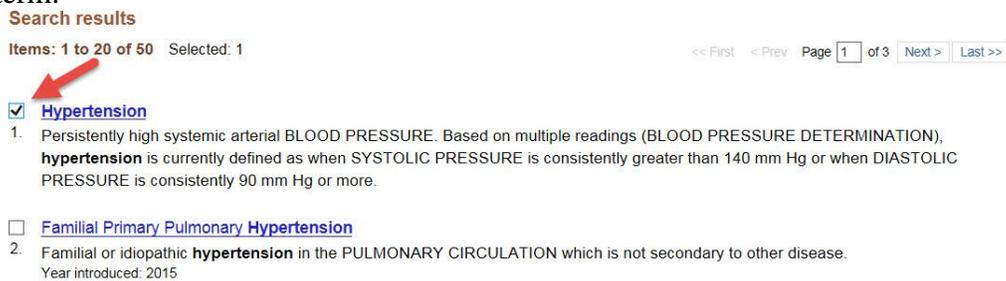
Note: MeSH terms with an * at the end, mean they are major MeSH topics. So, if you see Hypertension* listed, it means that the article is primarily about Hypertension. Any term after a / is a subheading. So, if you see Hypertension/prevention & control, it means that the article contains information about the prevention & control of Hypertension.

Searching the MeSH Database (More structured search meant to yield higher quality citations)

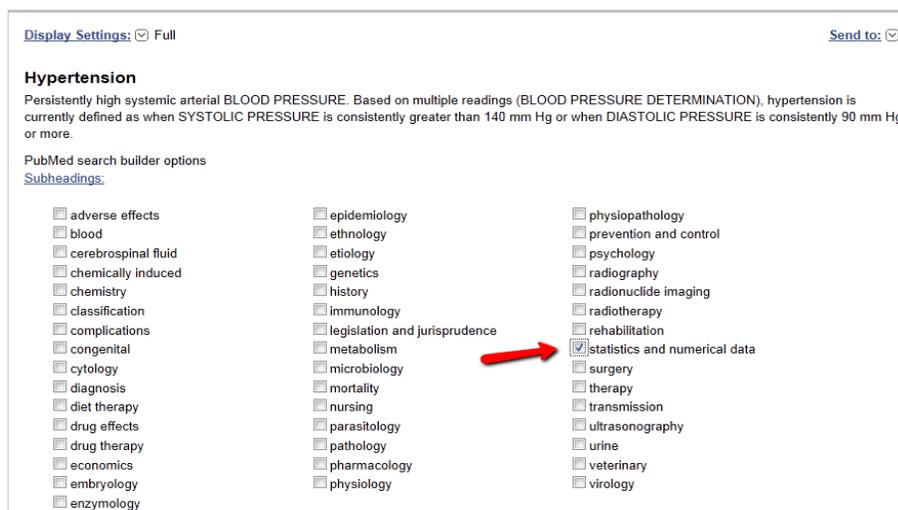
1. Break your search into concepts. For instance, a search on the effects of aspirin on hypertension has two concepts. “Aspirin” is one and “hypertension” is the other.
2. Change the drop box to “MeSH,” then enter one concept in to the search box at a time.



3. You will be given a list of MeSH terms. Use the descriptions beneath the terms to determine which is most appropriate and then check the box to the left of your chosen term.



(Note: if you want to use subheadings, click the link for the MeSH term, check the subheadings you want to use, and then follow steps 4-6).





4. Now, near the top right of the screen, click the “Add to Search Box” button.

Summary ▾ 20 per page ▾

Search results

Items: 1 to 20 of 50 Selected: 1

[Hypertension](#)

1. Persistently high systemic arterial BLOOD PRESSURE. Based on multiple readings (BLOOD PRESSURE DETERMINATION), **hypertension** is currently defined as when SYSTOLIC PRESSURE is consistently greater than 140 mm Hg or when DIASTOLIC PRESSURE is consistently 90 mm Hg or more.

PubMed Search Builder

"Hypertension" [Mesh]

<< First < Prev Page 1 of 3 Next > Last >>

Add to search builder AND ▾

Search PubMed

5. If you have another term to search, clear the top search box and repeat steps 3 and 4.

Search results

Items: 1 to 20 of 39 Selected: 1

[Aspirin](#)

1. The prototypical analgesic used in the treatment of mild to moderate pain. It has anti-inflammatory and antipyretic properties and acts as an inhibitor of cyclooxygenase which results in the inhibition of the biosynthesis of prostaglandins. **Aspirin** also inhibits platelet aggregation and is used in the prevention of arterial and venous thrombosis. (From Martindale, The Extra Pharmacopoeia, 30th ed, p5) Year introduced: 1965

PubMed Search Builder

("Hypertension" [Mesh])
AND "Aspirin" [Mesh]

<< First < Prev Page 1 of 2 Next > Last >>

Add to search builder AND ▾

Search PubMed

YouTube Tutorial

6. Once you have entered all of your terms, select “Search PubMed.”

PubMed search builder

("Hypertension" [Mesh])
AND "Aspirin" [Mesh]

Add to search builder AND ▾

Search PubMed

7. Combine searches and then limit your search as necessary (See “Combining Searches” and “Limiting Results” sections in the Basic Searching in PubMed handout).

NCBI – Saving Searches & Creating PubMed Alerts

To permanently save your search and get PubMed Alerts on new citations:

1. Sign up for a NCBI account (link is always on the upper right corner)
2. Click “Create alert” option below the PubMed Search box. This will either prompt you to log in to NCBI, or automatically take you there if you’re already logged in. You can rename your search if you like.
3. Click the “Save” button.
4. Making your search settings: Make your selection on when you want to get alerts. **ALWAYS CHANGE THE FORMAT TO ABSTRACT AND INCREASE YOUR NUMBER OF ITEMS TO MAXIMUM NUMBER.** This allows you to get all available links to articles and makes sure don’t miss out on all of the new citations have been added to PubMed.



5. Click the “Save” Button when you are finished.

Save Search successful.

Your PubMed search

Search: aspirin and hypertension

Filters: 5 years

Name of Search: aspirin and hypertension

E-mail: chris-childs@uiowa.edu

Would you like e-mail updates of new search results?

No thanks.

Yes, once a month.
Which day? the first Saturday

Yes, once a week.
Which day? Tuesday

Yes, every day.

Formats:

Report format: Abstract

Number of items: 200

Send at most: 200 items Send even when there aren't any new results

Any text you want to be added at the top of your e-mail (optional):

Save Cancel Delete

To permanently save individual citations:

1. Click on the checkbox next to each citation you want to save.
2. Click on the “Send to” drop down menu and select the “Collections” option.
3. Click the “Add to Collections” button.

Choose Destination

File

Clipboard

Collections

E-mail

Order

My Bibliography

Citation manager

Add 3 items.

Add to Collections

4. Select “Create a New Collection”, give your collection a name and click the “Save” button.

3 items from PubMed

What would you like to do?

Create new collection

Append to an existing collection

Enter a name for your collection: Aspirin AND Hypertension

Save

Or cancel and return to [your selections](#).

If you want to put more citations in this particular collection, follow the same steps, but when you get into your NCBI account, select “Append to an existing collection”, select your collection and click the “Save” button.



5 items from PubMed
What would you like to do?
 Create new collection
 Append to an existing collection
Choose a collection:

Or cancel and return to [your selections](#).

You can open up any search or collection that you save in your NCBI account by clicking the link to the title of the search or collection. You can also make changes to your saved search settings or make any of your collection public (by giving them a URL that you can share) by clicking on the cog icon next any of your saved searches or collections.

Saved Searches

Search Name	What's New	Last Searched
PubMed Searches		
aspirin and hypertension	0	today

[Manage Saved Searches >](#)

Collections

Collection Name	Items	Settings/Sharing	Type
Favorites	edit 0	Private	Standard
My Bibliography	edit 3	Private	Standard
Other Citations	edit 0	Private	Standard
Aspirin AND Hypertension	edit 1	Private	PubMed

[Manage Collections >](#)