Combine MeSH Terms to Search PubMed

Use the PubMed Search Builder to combine multiple MeSH terms and Subheadings.

1. Check the boxes of the desired MeSH terms, subheadings, and/or restrictions.
2. Select either AND, OR, or NOT from the drop-down menu, then click the Add to Search Builder button.
3. Continue to search for other MeSH and add terms.
4. NOTE: Make any necessary changes to the parentheses and terms in the search box to clarify the search.
5. When finished, click Search PubMed

Alternatively: do complex searches in pieces. Send groups of terms separately to PubMed and combine terms in PubMed’s Advanced Search Builder utilizing your Search History to add items to your search builder.

Advanced PubMed Searches with Field Tags

Search PubMed directly by using specific MeSH headings, subheadings, and other qualifier codes (not case sensitive). For the complete list, visit PubMed Help and the Search Field Descriptions and Tags link.

- **MeSH Headings**: [mh] or [MeSH] may be added to a term to restrict your PubMed search to only MeSH terms (e.g. knee [mh]).
- **Subheadings**: Two letters may be used for subheadings. Therapy is th; to search for articles on cancer therapies, you can use "Neoplasms/therapy"[Mesh] or Neoplasms/th as equivalent searches.
- Do not include MeSH terms found below this term in the MeSH hierarchy: use [mh:noexp], [majr:noexp], or [sh:noexp] to restrict searches to articles focused on the broadest MeSH term.

**Assistance and Training**


Adapted from the National Network of Libraries of Medicine (NN/LM), National Library of Medicine MeSH brochure at http://nnlm.gov/training/resources/meshtri.pdf. Revised by the University of California, Berkeley, Sheldon Margen Public Health Library staff. Revision date: May 1, 2017

Searching PubMed® with MeSH®

The National Library of Medicine’s Medical Subject Headings (MeSH) are the subject terms used to index articles in PubMed.

MeSH provides a consistent way to retrieve citations where authors use different terms for the same concept. MeSH terms apply to citations labeled “PubMed - Indexed for MEDLINE.”

A custom version of PubMed has been created for CDPH. Access from the Library Services home page: www.lib.berkeley.edu/PUBL/cdph/ or the Web Portal: publ.lib.berkeley.edu.

**Features in MeSH**

MeSH contains over 27,000 descriptors. It is updated weekly and reviewed annually.

- Use MeSH terms to search citations Indexed for MEDLINE. (Nearly 90% of PubMed.)
- Limit searches to citations where the MeSH term is the focus of the article.
- Broaden/Narrow a search using the MeSH hierarchy.
- Use subheadings to build complex and focused search strategies.
- Focus searches using other types of MeSH terms including publication types [pt], pharmacologic actions [pa], or substance names [nm].
Getting Started
Access MeSH in PubMed from the drop-down menu OR click on the MeSH Database from the PubMed homepage.

Enter a topic in the search bar and click the Search button. Results will vary from: a single term (prognosis), multiple terms (measles), or related terms (cancer).

Note: Verify that the definition of the term matches the expected definition.

Refine a Search
The MeSH Database offers options to clarify and focus searches. Click the selected MeSH term (Neoplasms in this example) to view:
- Definition, often with the year introduced.
- Check boxes including:
  - Subheadings
  - Restrict Search to MeSH Major Topic
  - Do not include MeSH terms found below this term in the MeSH hierarchy.
- Entry Terms (similar terms used by authors)
- See Also related and linked terms
- MeSH hierarchy of linked terms.

The MeSH Hierarchy
MeSH terms are arranged hierarchically by subject categories with more specific (narrower) terms arranged beneath broader terms. PubMed automatically searches to include all narrower terms.

An unrestricted search for neoplasms will include articles which focus on the main term (neoplasms), but also include the narrower terms (e.g. urachal cyst).

Check Do not include MeSH terms found below this term in the MeSH hierarchy for articles focused only on the main term and eliminate the narrower terms.

NOTE: Focus a search by using the MeSH hierarchy to identify appropriate broader or narrower terms or to find additional search terms. Click on terms to access them.

Related Information
Search MeSH and select one specific term. Use Related Information to search with the term.
- PubMed
- PubMed – Major Topic
- Clinical Queries
- NLM MeSH Browser

Major Topic Headings
Subject analysts examine each article and assign the most specific MeSH terms applicable, with a related subheading; typically ten to twelve headings per citations. In PubMed, the major topic is represented by an asterisk.

To view MeSH terms for a selected article in PubMed, click on the link to MeSH Terms below the citation in the Abstract Format.

In the MeSH Database, use Restrict to MeSH Major Topic to limit a search to citations where that term is the major focus of the article. The term is added to the search builder will be followed by [MAJR] (e.g. “Neoplasms” [MAJR])

Subheadings (Qualifiers)
Subheadings help describe more completely a particular aspect of a topic. In the MeSH database, subheadings logically paired with the main heading are presented. Check the appropriate box(es), then use the Add to Search Builder button with OR to build a search.

In this example, the search would include: (“Neoplasms/analysis”[MeSH] OR “Neoplasms/epidemiology”[MeSH])