Use 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 MeSH Tips

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


Features in MeSH

- Contains over 28,000 descriptors.
- Over 90,000 entry terms.
- 240,000 Supplementary Concept Records to specific chemicals, diseases, and drug protocols.
- MeSH terms can be used to improve your searches and help broaden or narrow your results.

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Getting Started

Access MeSH in PubMed from the drop-down menu OR click on the MeSH Database link 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.

Publication Types, MeSH Terms, Substances

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.