Searching PubMed® with MeSH®

The National Library of Medicine's (NLM) Medical Subject Headings (MeSH) is the controlled vocabulary used for indexing PubMed (PubMed.gov) citations.

MeSH provides a consistent way to retrieve information where different terms are used by authors for the same concept.

**MeSH Features**

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

- Search Indexed for MEDLINE citations (90% of the PubMed database) using MeSH terms
- Limit searches to citations where the MeSH term is the major focus of the article
- Broaden/Narrow a search using the MeSH hierarchy tree
- Use subheadings to build complex and focused search strategies
- Focus searches using other types of MeSH terms including publication types [pt], pharmaceutical actions [pa], or substance names [nm]

**NOTE:** MeSH terms apply only to Indexed for MEDLINE citations.

The National Network of Libraries of Medicine (NN/LM), an outreach program of NLM, provides assistance and training nationwide. To find a local library, please call 800-338-7657 or go to http://nnlm.gov/members/
Start in the MeSH Database

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

Enter a topic into the Search bar and click the Search button. Possible results include: a single fully displayed term (e.g. prognosis), several terms (e.g. measles) or a related term (e.g. cancer in this example).

Note: Always 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) 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

Combine MeSH Terms, 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 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 Search History under the Advanced search link to combine terms.

The MeSH Hierarchy

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

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

Check Do not include MeSH terms found below this term in the MeSH hierarchy for articles focusing only on the main term and eliminating those focusing on 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.

Use Related Information

Search MeSH and select one specific term. Use Related information to search with the term.
- PubMed: Search PubMed with the term
- PubMed – Major Topic: Search PubMed, retrieving citations where the selected term is a major focus of the article
- Clinical Queries: Put the MeSH term into the Clinical Queries search box where the search may be further refined
- NLM MeSH Browser: Show the MeSH browser Descriptor Data for this term including Scope Note and Allowable Qualifiers (subheadings)