

## 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 citation. In PubMed, the major topic is represented by an asterisk.

### MeSH Terms

[Fentanyl](#)

[Neoplasms/therapy\\*](#)

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

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.

### Subheadings:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> analysis        | <input checked="" type="checkbox"/> epidemiology |
| <input type="checkbox"/> antagonists and inhibitors | <input type="checkbox"/> ethnology               |
|   | <input type="checkbox"/> etiology                |

In this example, the search would include: ("Neoplasms/analysis"[Mesh] OR "Neoplasms/epidemiology"[Mesh])

## Advanced Searches with Field Tags

Search **PubMed** directly by using specific MeSH headings, subheadings and other qualifier codes; case does not matter. For the complete list, visit PubMed **Help** and the **Search Field Descriptions and Tags** link.

- **MeSH Heading:** [mh] or [MeSH] may be added to a term to restrict a search to only MeSH terms (e.g. knee [mh])
- **Subheadings:** Two letters may be used for subheadings. Therapy is **th**; so cancer/therapy and cancer/th are equivalent searches  
A search may also "free float" headings [mh] and subheadings [sh] (e.g., hypertension [mh] AND toxicity [sh])
- **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 focusing on the broadest MeSH term

## Assistance and Training

**Help** and **Tutorials** links are available. Find additional information in the **MeSH Browser** at: <http://www.nlm.nih.gov/mesh/>.

Funded under Contract No. HHS-N-276-2011-00005-C with the University of Illinois at Chicago and awarded by the DHHS, NIH, National Library of Medicine. This resource is freely available at: <http://nmlm.gov/training/resources/meshtri.pdf>  
Reviewed: November 2013

# Searching PubMed<sup>®</sup> with MeSH<sup>®</sup>

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.

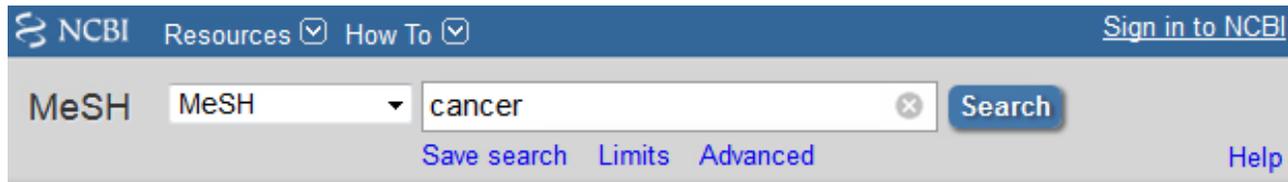
## MeSH Features

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://nmlm.gov/members/>



Display Settings:  Summary, 20 per page

Send to:  PubMed Search Builder

## 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).

### Neoplasms

1. **New abnormal growth of tissue.**  
Year introduced: /diagnosis was NEO

Note: Always verify that the definition of the term matches the expected definition.

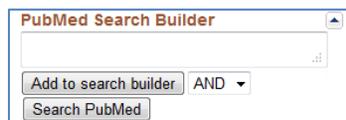
## Refine a Search

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.

[All MeSH Categories](#)

[Diseases Category](#)

Neoplasms

[Cysts](#)

[Arachnoid Cysts](#)

[Bone Cysts +](#)

• • •

[Urachal Cyst](#)

[Hamartoma](#)

[Hamartoma Syndrome, Multiple +](#)

• • •

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.

[Related information](#)

[PubMed](#)

[PubMed - Major Topic](#)

[Clinical Queries](#)

[NLM MeSH Browser](#)

## 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)