

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 (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.

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/>.

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Searching PubMed[®] with MeSH[®]

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

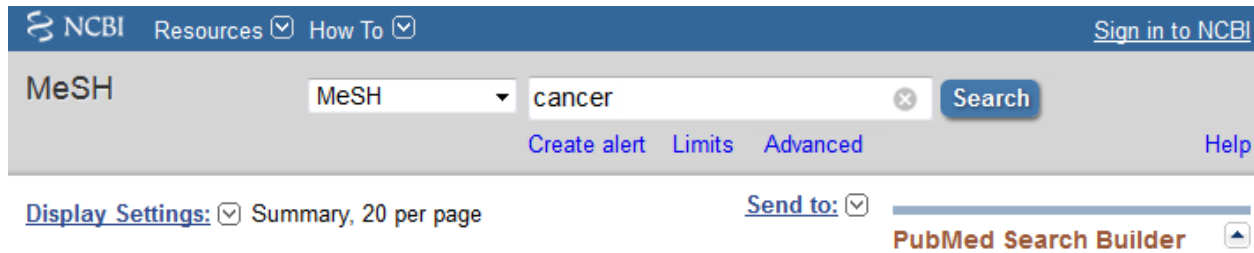
MeSH provides a consistent way to retrieve information where different terms are used by authors for the same concept. MeSH terms apply only to *Indexed for MEDLINE* citations.

MeSH Features

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

- Use MeSH terms to search **Indexed for MEDLINE** citations (nearly 90% of the PubMed database)
- Limit searches to citations where the MeSH term is the major 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], pharmaceutical actions [pa], or substance names [nm]

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/>



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.

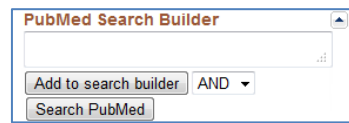
Refine a Search

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.

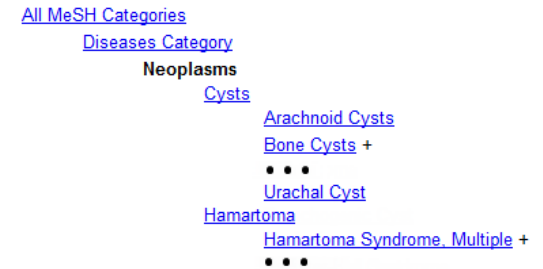


1. Check the boxes of the desired MeSH terms, subheadings and/or restrictions
2. Select either AND, OR or NOT from the drop-down menu, then click the **Add to search builder** button
3. Continue to search for and add terms
4. **NOTE:** Make any necessary changes to the parentheses and terms in the search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

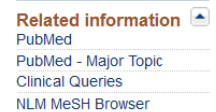
MeSH terms are arranged hierarchically by subject categories with more specific (narrower) terms arranged beneath broader terms. PubMed automatically explodes searches to include *all* narrower terms.



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)