

# Subject Headings

## What are Subject Headings & how do they differ from keyword searching?

Subject Headings, also be referred to as “index terms,” are controlled vocabulary terms used in database records to make searching easier and more successful. By standardizing the words or phrases used to represent concepts, you don't need to try and figure out all the ways different authors could refer to the same concept.

### Keywords

- Natural language that describes your topic
- What you think of as you think of words to search
- Searched throughout the document, or the search can be focused on title, author, etc.
- Everyone uses different keywords or spellings.

### Subject Headings (SH)

- Also called "controlled vocabulary"
- Words and phrases that are used to "tag" articles in a consistent way
- One SH can be used to cover multiple keywords in the form of narrower terms
- Only searches the SH field, not in the full text or title or anywhere else
- Can be slow to change/update
- Not flexible

## Why use Subject Headings?

With the wide variety of vocabulary used to represent concepts in research literature, finding articles about specific concepts can be difficult without the controlled vocabulary of a thesaurus. Controlled vocabulary provides a way of searching for information to ensure that you are seeing all of the relevant literature on your topic, despite the different vocabulary used to describe the same concept.

Using subject headings can give you more control in your search while ensuring you don't miss anything relevant.

# MeSH = Medical Subject Headings

Medical Subject Headings – MeSH – are the controlled vocabulary used in the National Library of Medicine database Medline, which can be searched through PubMed. This guide covers how to use MeSH in the PubMed interface.

## 1. MeSH is located at the bottom of PubMed's main page.

(Remember to access PubMed through the Libraries to get more access to full-text!)

PubMed.gov

Search PubMed Search

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About PubMed Advanced Search E-utilities API MeSH Database  
FAQs & User Guide Clinical Queries FTP Journals  
Finding Full Text Single Citation Matcher Batch Citation Matcher

## 2. Once on the MeSH search page, enter the term you are interested in into the box and hit search. In this example, we'll use 'cancer.'

NCBI Resources How To Sign in to NCBI

MeSH MeSH cancer Search

Limits Advanced Help

## 3. Most searches will result in a results list of multiple Subject Headings (SH). There are a few different ways to proceed from this page.

Summary 20 per page

Search results  
Items: 1 to 20 of 396

**Neoplasms**  
1. New abnormal growth of tissue. Malignant **neoplasms** show a greater degree of anaplasia and have the properties of invasion and metastasis, compared to benign **neoplasms**.  
Year introduced: /diagnosis was NEOPLASM DIAGNOSIS 1964 1965

**Hereditary Breast and Ovarian C**  
2. Autosomal dominant HEREDITAR... with a significantly increased risk  
Year introduced: 2012

**Early Detection of Cancer**  
3. Methods to identify and character...  
Year introduced: 2009

**National Cancer Institut**  
4. Component of the NATIC... supports research with tl...  
Year introduced: 2008

You can select a SH of interest for more information and options. (See step 4 of this tutorial.)

Or, you can select the box next to the SH you want and then either add it to a builder to continue building a search, or select "search PubMed" to immediately search for just that SH.

Or, if the first SH is the one you want, you can immediately search for it AND the keyword you entered to search.

PubMed Search Builder

Add to search builder AND Search PubMed

Find related data  
Database: Select Find items

Search details  
"neoplasms"[MeSH Terms] OR cancer[Text word]

Search See more...

# 4. For more information and/or options click on the Subject Heading (SH) of interest.

Items: 1 to 20 of 396



## Neoplasms

1. New abnormal growth of tissue. Malignant **neoplasms** show a greater degree of anaplasia and have the properties of invasion and metastasis, compared to benign **neoplasms**.  
Year introduced: /diagnosis was NEOPLASM DIAGNOSIS 1964-1965

## Hereditary Breast and Ovarian Cancer Syndrome

2. Autosomal dominant HEREDITARY **CANCER** SYNDROME in which a mutation most often in either BRCA1 or BRCA2 is associated

# 4a. Each SH has subheadings you can select. Usually you don't need to select any.

## Neoplasms

New abnormal growth of tissue. Malignant **neoplasms** show a greater degree of anaplasia and have the properties of invasion compared to benign **neoplasms**.  
Year introduced: /diagnosis was NEOPLASM DIAGNOSIS 1964-1965

PubMed search builder options

Subheadings:

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> abnormalities              | <input type="checkbox"/> education                                     | <input type="checkbox"/> pathology              |
| <input type="checkbox"/> administration and dosage  | <input type="checkbox"/> embryology                                    | <input type="checkbox"/> pharmacology           |
| <input type="checkbox"/> analysis                   | <input type="checkbox"/> enzymology                                    | <input type="checkbox"/> physiology             |
| <input type="checkbox"/> anatomy and histology      | <input type="checkbox"/> epidemiology                                  | <input type="checkbox"/> physiopathology        |
| <input type="checkbox"/> antagonists and inhibitors | <input type="checkbox"/> ethnology                                     | <input type="checkbox"/> prevention and control |
| <input type="checkbox"/> biosynthesis               | <input type="checkbox"/> etiology                                      | <input type="checkbox"/> psychology             |
| <input type="checkbox"/> blood                      | <input type="checkbox"/> genetics                                      | <input type="checkbox"/> radiation effects      |
| <input type="checkbox"/> breast cancer              | <input type="checkbox"/> hereditary breast and ovarian cancer syndrome | <input type="checkbox"/> metastasis             |

# Below the subheadings are the terms that all result in the SH of interest.

(These may be of use as additional keywords!)

Tree Number(s): C04

MeSH Unique ID: D009369

Entry Terms:

- Neoplasia
- Neoplasias
- Neoplasm
- Tumors
- Tumor
- **Cancer**
- Cancers
- Malignancy
- Malignancies
- Malignant **Neoplasms**
- Malignant Neoplasm
- Neoplasm, Malignant
- **Neoplasms**, Malignant
- Benign **Neoplasms**
- **Neoplasms**, Benign
- Benign Neoplasm
- Neoplasm, Benign

# After the Entry Terms is the MeSH tree which shows you how the Subject Heading is categorized with broader and narrower

## [All MeSH Categories](#)

### [Diseases Category](#)

#### **Neoplasms**

##### [Cysts](#)

[Arachnoid Cysts](#)  
[Bone Cysts](#) +  
[Branchioma](#)  
[Breast Cyst](#)  
[Bronchogenic Cyst](#)  
[Chalazion](#)  
[Choledochal Cyst](#)  
[Colloid Cysts](#)  
[Dermoid Cyst](#)  
[Epidermal Cyst](#)  
[Esophageal Cyst](#)  
[Follicular Cyst](#)  
[Ganglion Cysts](#)  
[Lymphocele](#)  
[Mediastinal Cyst](#)  
[Mesenteric Cyst](#)  
[Mucocele](#)  
[Ovarian Cysts](#) +  
[Pancreatic Cyst](#) +  
[Parovarian Cyst](#)  
[Pilonidal Sinus](#)  
[Ranula](#)  
[Synovial Cyst](#) +  
[Tarlov Cysts](#)  
[Thyroglossal Cyst](#)  
[Urachal Cyst](#)

##### [Hamartoma](#)

[Hamartoma Syndrome, Multiple](#)  
[Pallister-Hall Syndrome](#)  
[Tuberous Sclerosis](#)

**Click on any SH of interest for its information page and to add it to your search.**

##### [Tuberous Sclerosis](#)

#### [Neoplasms](#) by Histologic Type

[Histiocytic Disorders, Malignant](#) +  
[Leukemia](#) +  
[Lymphatic Vessel Tumors](#) +  
[Lymphoma](#) +  
[Neoplasms, Complex and Mixed](#) +  
[Neoplasms, Connective and Soft Tissue](#) +  
[Neoplasms, Germ Cell and Embryonal](#) +  
[Neoplasms, Glandular and Epithelial](#) +  
[Neoplasms, Gonadal Tissue](#) +  
[Neoplasms, Nerve Tissue](#) +  
[Neoplasms, Plasma Cell](#) +  
[Neoplasms, Vascular Tissue](#) +  
[Nevi and Melanomas](#) +  
[Odontogenic Tumors](#) +

#### [Neoplasms](#) by Site

[Abdominal Neoplasms](#) +  
[Anal Gland Neoplasms](#)  
[Bone Neoplasms](#) +  
[Breast Neoplasms](#) +  
[Digestive System Neoplasms](#) +  
[Endocrine Gland Neoplasms](#) +  
[Eye Neoplasms](#) +  
[Head and Neck Neoplasms](#) +  
[Hematologic Neoplasms](#) +  
[Mammary Neoplasms, Animal](#) +  
[Nervous System Neoplasms](#) +  
[Pelvic Neoplasms](#)  
[Skin Neoplasms](#) +  
[Soft Tissue Neoplasms](#) +  
[Splenic Neoplasms](#)  
[Thoracic Neoplasms](#) +  
[Urogenital Neoplasms](#) +



### 5. Searching!

You can build a search of Subject Headings (5a) or do a search of just one (5b).

#### Neoplasms

New abnormal growth of tissue. Malignant **neoplasms** show a greater degree of anaplasia and have the pro compared to benign **neoplasms**.  
Year introduced: /diagnosis was NEOPLASM DIAGNOSIS 1964-1965

PubMed search builder options  
[Subheadings:](#)

### 6. To build a search of Subject Headings, repeat steps 2-5a until all the SHs you want are entered.

**\*\*Be aware of selecting AND or OR depending on your needs\*\***  
In this example, we're interested in research on comorbidity of cancer and Parkinson's. After "neoplasms" is in the Search Builder, search for Parkinson's and then add it to the search builder with AND.

### 7. Once all the desired Subject Headings are in the Search Builder with the proper connector – click on "Search PubMed!"