Medical Subject Headings and Subheadings

Medical Subject Heading/MeSH
The controlled vocabulary used by the National Library of Medicine to describe biomedical knowledge. Expert indexers assign approximately 10-12 MeSH terms from the list to describe the content of each article. MeSH terms eliminate the need to use synonyms and almost always result in a greater number of relevant articles. [EX: hypertension, naproxen, breast neoplasms]

Key Word
Search term found in the title or abstract of an article. A key word is a less structured way of searching for articles. [EX: High blood pressure, Aleve, breast cancer]

Mapping
Mapping is a MEDLINE feature that automatically matches or maps the key word to the correct MeSH term. [EX: breast cancer (key word) = breast neoplasm (MeSH), Aleve (key word) = naproxen (MeSH), high blood pressure (key word) = hypertension]

Broader and Narrower Terms
MeSH terms are automatically “exploded” to include narrower related terms.
Example:
- Hand
  - Finger
  - Metacarpus
  - Wrist

Focus
Not all MeSH terms are of equal weight. Indexers us an asterisk (*) in front of a MeSH term to indicate the term is a main topic of the article.

Subheading
Use to limit to a specific aspect of a MeSH term.
[EX: Congestive Heart Failure/di (diagnosis)]
**Scope Note**
A note that describes how the MeSH term should be used within the context of MEDLINE and it provides descriptive information about the concept. It often provides “used for” and “see related terms.”

Example: Kidney Calculi

MeSH Heading: KIDNEY CALCULI

Scope: Stones in the KIDNEY, usually formed in the urine-collecting area of the kidney (KIDNEY PELVIS). Their sizes vary and most contains CALCIUM OXALATE.

Note: chemical composition of calculi = KIDNEY CALCULI/ch

Search Note: to search for chemical composition of kidney calculi, use KIDNEY CALCULI/anal 1987-1990 & KIDNEY CALCULI/metab 1966-86

MeSH Heading KIDNEY CALCULI will also search for:
calculi, kidney
calculus, kidney
kidney calculus
kidney stones
Kidney stone
stone, kidney
stones, kidney
renal calculi
calculi, renal
calculus, renal
renal calculus
Subheading Abbreviations

Abnormalities = AB
Administration and Dosage = AD
Adverse Effects = AE
Agonists = AG
Analogs and Derivatives = AA
Analysis = AN
Anatomy and Histology = AH
Antagonists and Inhibitors = AI
Biosynthesis = BI
Blood Supply = BS
Blood = BL
Cerebrospinal Fluid = CF
Chemical Synthesis = CS
Chemically Induced = CI
Chemistry = CH
Classification = CL
Complications = CO
Congenital = CN
Contraindications = CT
Cytology = CY
Deficiency = DF
Diagnosis = DI
Diagnostic Use = DU
Diet Therapy = DH
Drug Effects = DE
Drug Therapy = DT
Economics = EC
Education = ED
Embryology = EM
Enzymology = EN
Epidemiology = EP
Ethics = ES
Ethnology = EH
Etiology = ET
Genetics = GE
Growth and Development = GD
History = HI
Immunology = IM
Injuries = IN
Innervation = IR
Instrumentation = IS
Isolation and Purification = IP
Legislation and Jurisprudence = LJ
Manpower = MA
Metabolism = ME
Methods = MT
Microbiology = MI
Mortality = MO
Nursing = NU
Organization and Administration = OG
Parasitology = PS
Pathogenicity = PY
Pathology = PA
Pharmacokinetics = PK
Pharmacology = PD
Physiology = PH
Physiopathology = PP
Poisoning = PO
Prevention and Control = PC
Psychology = PX
Radiation Effects = RE
Radiography = RA
Radionuclide Imaging = RI
Radiotherapy = RT
Rehabilitation = RH
Secondary = SC
Secretion = SE
Standards = ST
Statistics and Numerical Data = SN
Supply and Distribution = SD
Surgery = SU
Therapeutic Use = TU
Therapy = TH
Toxicity = TO
Transmission = TM
Transplantation = TR
Trends = TD
Ultrasonography = US
Ultrastructure = UL
Urine = UR
Utilization = UT
Veterinary = VE
Virology = VI
Quick Reference Card

Becker Medical Library: http://becker.wustl.edu

PubMed (MEDLINE)

**Basic Searching** – Enter one or more words into the query box and press Enter or Search

- Search terms can be single words or phrases (Do NOT use quotations.)
- PubMed will automatically search for terms as both MeSH (Medical Subject Headings) and as words in title and/or abstract
- MeSH terms are automatically exploded to include narrower related terms
- Search terms automatically combined using AND

**Advanced Searching**
Click on “Advanced” under search box.

- Search each term separately using fields other than keyword search
- Search sets are listed under HISTORY
- Combine sets with AND or OR or NOT using drop down option
- To combine search sets in your history, click on search set # and select “AND in builder”, “OR in builder”, or “NOT in builder” in drop down menu.

**Truncation** – Use the asterisk (*) to look for multiple endings of a work. Ex: Myocard* will retrieve myocardium, myocardial, myocarditis, etc. Note: Truncation prevents automatic mapping and explosion of MeSH terms.

**MeSH Database** – Under drop down box next to search box – use to find proper MeSH subject headings and subheadings for search builder options

**Filters** – Publication Type, Full text, Age, Gender, Language, etc.
Located on the left sidebar. Click on “Show additional filters” to see all available filters. To turn off filters, click on filter to uncheck unwanted filters, or click “Clear all”.

**Search Details** – Displays how PubMed translated your search statements in a box on right sidebar, use to verify that you searched for correct MeSH terms and keywords

**Clipboard** – Stores selected citations for viewing, printing, or saving
Check the box beside a selected citation and click on the Sent To [Clipboard] button.
PubMed tools on homepage

Single Citation Matcher – to verify or find a specific article
Enter information in one or more fields

- Journal – Full Title or MEDLINE Abbreviation [EX: Lancet]
- Date – Year (yyyy) [EX: 2001]
- Volume, Issue, or First Page – [EX: 356 or 9247 or 2052]
- Author – Last Name, or Last Name and Initial(s) [EX: Kober L]
- Title Words – Full Title, Partial Title, or Significant Word(s) [EX: Effect dofetilide]

Clinical Queries (EBM filters) – research methodology filters designed to retrieve quality studies; Select either:

- Type of question and sensitive (comprehensive) or specific (relevant) search strategy
- Systematic review

Then enter search terms in the query box.

My NCBI – Use to store and update searches; requires simple registration

Full Text Articles

- Must use PubMed (PubMed@Becker) link from Becker website for access to subscription
- Access is based on the library’s subscription to a journal
- Links to most, but not all of Becker’s electronic journals
- Check E-Journal list: Open in a second browser window and toggle between PubMed and the E-journal list for electronic availability

HELP! – Call 362-7085 or email askbecker@wustl.edu
To locate subheadings to use with specific terms in PubMed:

- Go to the MeSH Database (drop-down menu on the left of search box)
- Enter the medical subject heading that you want to add a subheading to
- Click on the MeSH term of interest from the suggested results
- From the Full display screen (shown below) select the subheading(s)
- Click on “Add to search builder” (right sidebar)
- Click on “Search PubMed”