

## **MEDLINE - PubMed**

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### **PubMed**

- Search interface from the U.S. National Library of Medicine (NLM).
- Covers the fields of medicine, nursing, dentistry, pharmacy, and others areas of the life sciences.
- Provides access to over 18 million citations in MEDLINE, PreMEDLINE, and other related databases
- Citations from the 1950s to the present
- 120 million searches annually
- *<http://www.pubmed.com>*

### **Main search fields**

- **TI - title**
- **TO - original title**
- **AU - authors**
- **AD - address**
- **SO - source**
- **ISSN**
- **PY - publication year**
- **AB - abstract**
- **MH - MeSH**
- **PT - publication type**
- **UI - unique identifier**

### **Search strategy**

- Your question topic
- a. Age group, sex, ethnical group
- b. Diagnosis, therapy, prognosis, etiology, economics
- Aim of your search (volume)
- Depth of search (dates of publications)
- Types of publications

### **Search options**

- all fields
- author
- journal title
- phrase
- “clinical queries”
- mapping
- saving search strategy
- Journals Database

- MeSH Database

### **Search box - main screen**

- AND by default
- search in all fields
- use Boolean operators
  
- Details
- Limits

### **Limits**

#### **MeSH -Medical Subject Headings**

- efficient searching- controlled vocabulary
- 10-12 assigned to each record
- MeSH tree, a hierarchical structure of broader and narrower terms
- 14000 terms, 18000 synonyms
- added/edited annually

Explode

Major Term

#### **MeSH Database (1)**

- Click on the MeSH Database link under
- PubMed Services in the left sidebar
- To look up the correct MeSH term, enter your first term in the search box.
- PubMed will check your term against the MeSH mappings and display the associated MeSH term(s)

#### **MeSH Database (2)**

##### **Detailed Display Screen (1)**

- Click on the appropriate MeSH term for your topic
- From Detailed Display Screen you can attach subheadings and/or restrict terms to a MeSH Major Topic
- PubMed will automatically explode your MeSH
- term (i.e. pick up all related narrower terms)

##### **Detailed Display Screen (2)**

##### **Search MeSH DB (1)**

- To locate citations to articles on your topic,
- select Search box with AND
- The MeSH term for your topic will appear in the search box.
- Then click on Search PubMed

## **Therapy, Prevention and Control**

- **Substance/Therapeutic use**
- **Disease/Drug Therapy, Prevention and Control, Therapy**
- **1 and 2**
- **Limit**

*Language*

*Human*

*Age group*

## **Therapy Question**

**Is naprosin used to treat rheumatoid arthritis?**

1. **NAPROSIN/TU**
2. **ARTHRITIS, RHEUMATOID/DT,PC,TH**
3. **1 AND 2**
4. *Limit to language and Human*

## **Diagnosis, Screening Question**

- **Test/ Diagnostic use**
- **Disease/ Diagnosis**
- **1 and 2**
- *limit to language and Human*

## **Diagnosis Question**

**Is PPD test still reliable in diagnosing pulmonary tuberculosis?**

- **PPD** - textword (title or abstract)
- **PPD** - MeSH heading/subheading -Tuberculin

## **Search strategy**

1. **ppd**
2. **Tuberculin/DU**
3. **1 OR 2**
4. **PULMONARY TUBERCULOSIS/DI**
5. **3 AND 4**
6. *Limits to Human and language*

## **Etiology Question**

**What is the harm for you from a co-worker smoking?**

1. **OCCUPATIONAL EXPOSURE**
2. **ENVIRONMENTAL EXPOSURE**
3. **1 OR 2**
4. **3 AND TOBACCO SMOKE POLLUTION**
5. **4 AND EXP EPIDEMIOLOGIC STUDY CHARACTERISTICS**
6. *Limit to language*

## Prognosis Question

Prognosis for patient with Lou Gehrig's Disease

1. **Lou Gehrig OR ALS OR AMYOTROPHIC LATERAL SCLEROSIS/MO,EP**
2. **PROGNOSIS OR MORBIDITY OR MORTALITY**
3. **1 AND 2**
4. *Limit to language and Human*

## Search by author

- Enter name and initials
- To turn off the truncation, use double quotes around the author's name "larsson l"
- automatically searching in all fields

## Journals Database

- By full journal title
- *journal of nutrition*
- or by standard abbreviation
- *j nutr*
- or by ISSN 0022-3166

## Citation Matcher

- fill-in-the-blank form for searching for a citation when you have some bibliographic information, e.g., journal name, volume, page number.
- Single Citation Matcher
- Batch Citation Matcher

## Mapping

Untagged terms that are entered in the search box are matched against :

- *MeSH Translation Table*
- *Journals Translation Table*
- *Full Author translation table*
- *Author Index*

When a match is found for a term or phrase in a translation table the mapping process is complete PubMed breaks apart the phrase and repeats the above automatic term mapping process until a match is found

If there is no match, the individual terms will be combined (ANDed) together and searched in all fields

## Additional options

- **Preview/Index** - to preview results and browse search terms
- **Details** - to verify how your terms were translated and to edit your search strategy.
- **History** - to display your previous searches
- **Clipboard - temporary storage**

- **My NCBI (Cubby)** - saving your search strategies

### **History - combining searches**

- After performing your searches, click on History
- To combine searches, use # before the set number (e.g. #1 and #2).
- Use AND , OR, NOT

### **My NCBI (Cubby)**

#### **My NCBI**

- To store a new search, see a list of your stored searches, update and/or delete a stored search, and customize search results.
- First time users must create a user name and password. To create an account, click on My NCBI on the left sidebar, and then click on the link, “register for an account.”
- You can save up to 100 searches in a single My NCBI account

#### **Saving Search Strategy**

- Once you run a search, click on the “Save Search” link beside the Clear button at the top
- Enter your user name and password.
- Rename your search with a unique, meaningful name. Then click on OK.
- If you’d like to receive updates via email, click on the Yes radio button and select the frequency and format of updates.

#### **Saving Search Strategy**

after running a search - choose Save Search

#### **Updating Search**

- To update a previously stored search, click in the box beside the name of the search and then click on “What’s new for selected.”
- To delete a search, click on the box beside the name of the search and then click on “Delete selected.”

#### **Search results display**

- **Summary**
- **Brief**
- **Abstract**
- **Citation** (+ MeSH)
- **MEDLINE** (full record with field tags) - use this format to export citations into reference management programs

#### **Clipboard - temporary storage**

- To place item(s) on the clipboard, click on the check box(es) to the left of the citations.
- Click on the Send To drop-down menu, and choose Clipboard (up to 500 items/8 hours)
- Once you have added a citation to the clipboard, the record number color will change to green
- To view the contents of your clipboard, click on the Clipboard tab

- **Printing/saving/emailing (1)**
- You can print, save, or email items from either the clipboard or from the current search set
- Format the clipboard items or current search set using the Display and Show drop-down menus.
- If printing/saving/emailing from the current search set, select desired records by using the check boxes to the left of the citations.

### **Printing/saving/emailing (2)**

- For printing, first click on the Send To dropdown menu and choose the Text option. Then, use the print function of your web browser.
- For saving, choose the File option.
- For emailing, choose the E-mail option. The display options available are HTML or Text.

### **Emailing**

- choose the E-mail option from Send to menu
- you can add text to your message
- enter e-mail
- click **Mail**

### **Searching for EBM resources for clinical practice**

- **Search filters**
- Publication types - **Randomized Controlled Trial, Clinical Trial, Multicenter Study, Meta-analysis, Systematic Review**

### **Clinical Queries**

Clinical Queries page provides specialized PubMed searches for clinicians:

- Search by **Clinical Study Category** (therapy, diagnosis, etiology, prognosis, clinical prediction guides )
- Select a **Scope**: “narrow, specific search or broad, sensitive search “
- Finding **Systematic Reviews**
- **Medical Genetics** Searches

### **askMEDLINE**

*free-text, natural language (English only) query for MEDLINE/PubMed  
(with GSpell spelling checker)*

***<http://askmedline.nlm.nih.gov/ask/ask.php>***

### **Search MEDLINE/PubMed via PICO**

***<http://askmedline.nlm.nih.gov/ask/pico.php>***

### **Health Services Research Filters**

*<http://www.nlm.nih.gov/nichsr/hedges/search.html>*