

Medical Subject Headings (MeSH) versus Text Words

What are the advantages of using the MeSH Thesaurus?

- **Ease.** Many terms, especially drug names, are “mapped” to the MeSH term when you use the PubMed MeSH Database or the basic search. You type in the word(s) and automatically the system takes you to the preferred term.
 - e.g. **prozac** maps you to **fluoxetine** or **allergy** maps you to **hypersensitivity**
- **Explode capability.** MeSH terms are arranged hierarchically by subject categories with more specific terms arranged beneath broader terms. MeSH terms in PubMed automatically include the more specific MeSH terms in a search. To turn the automatic explode off, qualify the MeSH term with [mh:noexp]
 - e.g. **hypertension [mh:noexp]** or **hypertension [majr:noexp]** or **hypertension/therapy [mh:noexp]**
- **Subheadings.** Subheadings are selected and retrieved through use of the MeSH Database when viewing the term in full display. To directly attach subheadings use the format MeSH Term/Subheading.
 - e.g., **neoplasms/diet therapy** or **neoplasms/dt [mh]**
- **Limit to major focus of the article.** Use of MeSH allows the concept to be limited to the major focus of the article.
 - e.g. **labor, premature [MAJR]**
- **To broaden your search.** If you are not getting as many citations as you’d like, check your term in the PubMed [MeSH Database](#) for broader terms that you might use. Also check the MeSH headings in your most relevant citations for other possibilities. The [Related Articles](#) feature of PubMed is helpful for retrieving similar citations.
- **Age groups.** MEDLINE uses specific terms for various age groups. **Limits** tab allows for easy selection of more than one age group. Note: these age groups are ORed together.
 - Non-MeSH age terms can be entered directly into the search box. For example: **elderly** maps to the MeSH term **aged** and explodes to include **aged, 80 and over**
 - **child** retrieves citations about persons 6 to 12 years, and explodes to broaden the age group (child-preschool, infant(+6), etc.)
 - using **pediatric** to specify a pediatric population will instead retrieve articles about the medical specialty dealing with children

When and how to use text words:

- Use when there is no apparent MeSH term
- Limit your search to a word in the title, then check those citations to locate the appropriate MeSH term(s).
 - e.g. **barium enema [ti]** leads you to the MeSH term **barium sulfate/diagnostic use**
- PubMed consults a phrase index and groups terms into logical phrases. For example, if you enter **poison ivy**, PubMed recognizes these two words as a phrase and searches it as one search term. However, it is possible that PubMed may fail to find a phrase that is essential to a search. To force PubMed to search for a specific phrase enter double quotes (" ") around the phrase. For example **"brca 1"** gives slightly different search results than **brca 1**.
- Use a truncation symbol (*) to find word variations
 - **chemotherap*** will retrieve chemotherapy, chemotherapies, chemotherapeutic, etc.
 - Truncation turns off automatic term mapping and, also the automatic explosion of a MeSH term for more specific terms indented under it.
 - PubMed uses the first 600 variations of a truncated term. If a truncated term, e.g., **trans***, produces more than 600 variations, PubMed displays a warning message that reads **“Wildcard search for 'trans*' used only the first 600 variations. Lengthen the root word to search for all endings.”**
- Use synonyms for the concept
 - e.g. **eradicate* OR cure OR cured OR cures OR curing OR eliminat* OR remove***