

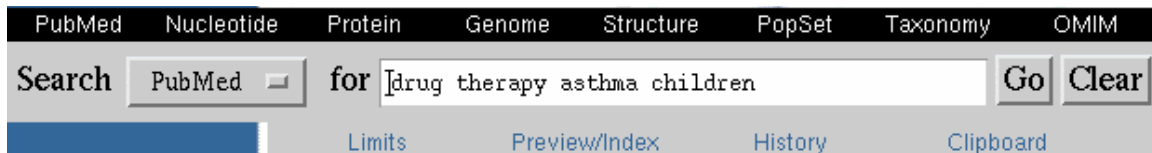


Adapted and condensed from *PubMed Help*: <http://www.ncbi.nlm.nih.gov:80/entrez/query/static/help/pmhelp.html>

PubMed was developed by the National Center for Biotechnology Information (NCBI) at the National Library of Medicine (NLM).

[Databases](#) on the black menu bar are links to PubMed and the other NCBI resources.

PubMed searching is easy, just enter search terms in the query box, and press Go. The [Features](#) bar directly beneath the query box provides access to additional search options.



You may enter one or more terms (e.g., vitamin c common cold) in the query box and PubMed automatically combines (ANDs) significant terms together using. The terms are searched in various fields of the citation. If you search includes [Boolean](#) operators AND, OR, NOT, they must be in **upper case**, e.g., vitamin c **OR** zinc.

PubMed uses [Automatic Term Mapping](#). This means that unqualified terms that are entered in the query box are matched (in this order) against a MeSH (Medical Subject Headings) Translation Table, a Journals Translation Table, a Phrase List, and an Author Index. PubMed ignores stopwords from search queries.

Author Names

To search by an author's name enter the name in the format of last name plus initials (no punctuation).

e.g., smith ja, jones k

PubMed automatically truncates the author's name to account for varying initials and designations such as Jr. or 2nd. A name entered using this format will search in the author field. If only the author's last name is entered, PubMed searches the name in All Fields

Note: Use double quotes around the author's name with the author search field tag [au] to turn off the automatic truncation, e.g., "smith j" [au].

Journal Browser

Use the Journal Browser to search for journals by journal title, title abbreviation, or the International Standard Serial Number (ISSN). The list of journals with links to full-text is also included in the browser.

Journal Titles

You may search by the full journal title, e.g., molecular biology of the cell; the MEDLINE abbreviation, e.g., mol biol cell; or the ISSN number (standardized international code), e.g., 1059-1524. See the Journal Browser for the full journal titles.

Note: If a journal name is also a MeSH term (e.g., *Gene Therapy*, *Science*, or *Cell*), PubMed will search the unqualified term as MeSH. Qualify the journal title with the Journal Title search field tag, e.g., gene therapy [ta], to search for the journal name. Qualify single word journal titles using the Journal Title search field tag, e.g., scanning [ta], as PubMed will search unqualified single journal titles in All Fields.

MeSH Browser

MeSH (Medical Subject Headings) is NLM's controlled vocabulary. It is used to index citations primarily to reflect subject content. PubMed's MeSH Browser is available on PubMed's sidebar menu. This Browser helps you find MeSH terms that you may want to select and use in your searches. The Browser provides information about each term and displays them in a hierarchical structure. In addition, users can directly attach subheadings and limit terms to a MeSH Major Term. When you enter a term that is not a valid MeSH term, the MeSH Browser will check against the MeSH Mappings and display the associated MeSH term.

MeSH Translation Table

If a match is found in this translation table, the term will be searched as MeSH and as a Text Word. For example, if you enter vitamin h in the query box, PubMed will translate this search to: ("Biotin"[MeSH Terms] OR vitamin h[Text Word]) - vitamin h is an entry term for the MeSH term Biotin.

Truncation

Asterisk *: bacter* will find all terms that begin with the letters bacter, e.g., bacteria, bacterium, bacteriophage, etc. PubMed searches for only the first 150 variations of a truncated term. If a truncated term, e.g., staph*, produces more than 150 variations, PubMed displays the warning message shown below.

Wildcard search for 'term*' used only the first 150 variations. Lengthen the root word to search for all endings.

Note: Truncation turns off automatic term mapping and the automatic explosion of a MeSH term. For example, heart attack* will not map to the MeSH term, Myocardial Infarction or include any of the more specific terms, e.g., Myocardial Stunning; Shock, Cardiogenic.

Phrase Searching

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. For example, if you enter, single cell, it is not in the Phrase List and PubMed searches for "single" and "cell" separately. To force PubMed to search for a specific phrase enter double quotes (" ") around the phrase, e.g., "single cell". PubMed does not actually perform adjacency searching, but uses a list of recognized phrases against which search terms are matched.

Note: If your search phrase is not on the list of recognized phrases, then the double quotes are ignored and the phrase is processed using automatic term mapping. Your phrase may

actually appear in the citation and abstract data, yet not be on the phrase list. When you enclose a phrase in double quotes, PubMed will not perform automatic term mapping. For example, "health planning" will include citations that are indexed to the MeSH term, Health Planning, but will not include the more specific terms, e.g., Health Care Rationing, Health Care Reform, Health Plan Implementation and so on, that are included with the automatic MeSH mapping.

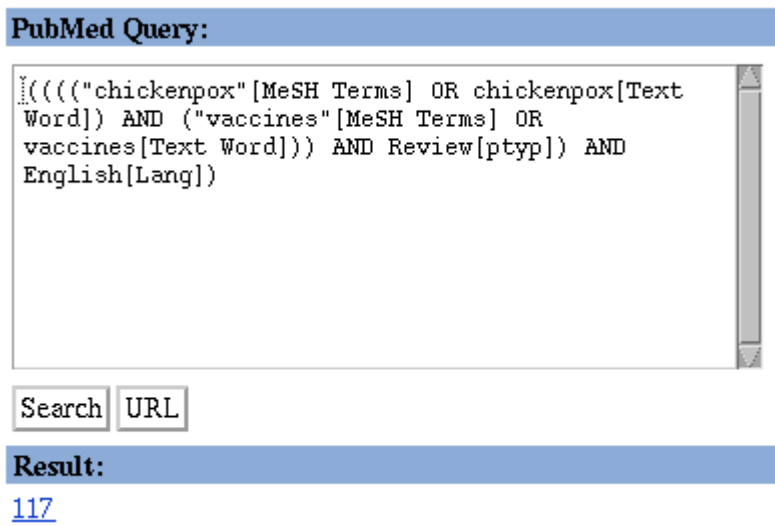
Details

Details lets you view your search strategy as it was translated using PubMed's automatic term mapping and search rules and syntax. From Details, you can save a search strategy or edit the search strategy and resubmit it. The Details window also contains error messages and notes.

Editing Your Search in Details

The PubMed Query box shows the actual search strategy and syntax used to run the search. Beneath this box, the Result number hyperlink displays the total number of matches for the current search. To return to the current search results screen, click this link or use the "Back" function of your Web browser. The Translations area details how each term was translated using PubMed's search rules and syntax, and the User Query area shows the search terms as you entered them in the query box.

To edit the search strategy in the PubMed Query box, click in the box to add or delete terms and then click Search.



The screenshot shows a web interface for PubMed. At the top, there is a blue header bar with the text "PubMed Query:". Below this is a text area containing the following search strategy: `((("chickenpox"[MeSH Terms] OR chickenpox[Text Word]) AND ("vaccines"[MeSH Terms] OR vaccines[Text Word])) AND Review[ptyp]) AND English[Lang])`. Below the text area are two buttons: "Search" and "URL". At the bottom, there is another blue header bar with the text "Result:", followed by a blue hyperlink "117".

Saving a Search Strategy from Details

From the Details window, use the URL button to display the current search strategy as a URL and then bookmark the URL for future use.

To save a search strategy:

1. From the Details window, click on URL. PubMed will return to the search results screen. The translated search strategy will be displayed in the query box and this search strategy will also be embedded as part of the URL
2. Next, use your Web browser's bookmark function to save the URL as a bookmark. After saving the bookmark, you may want to use your Web browser's edit functions to rename

the bookmark.

Note: Searches that were created using a search statement number in History (e.g., (#1 or #2 AND human[mh])) should not be saved using the URL feature as the search statements represented by these numbers are lost when History is deleted.

Features Bar



Limits

Click Limits from the Features bar to limit your search to specific age group, gender, or human or animal studies. Limits also allows you to restrict to articles published in a specific language, and to specific types of articles such as review articles. You can limit by either Entrez (date entered in PubMed) or Publication Date.

Limited to:

only items with abstracts

From To

Use the format YYYY/MM/DD; month and day are optional.

Note: If you select a limit and either run a search or move to another screen, a check will appear in a box next to Limits on the Features bar to indicate that limits have been selected. If you then run a search, the limits in effect will appear in the yellow bar above the Display button. To turn off the limits before you run your next search, click on the box to remove the check.

for

Limits

Limits: **English, Review**

Show: Page 1 of 6 Select page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#)

Field Selection

You may limit your search terms to a specific search field. All Fields is the default for searching. To select a specific field, click the All Fields pull-down menu and select a search field.

Publication Types

All citations in PubMed are for journal articles. However, you may limit your retrieval based on the type of material the article represents (e.g., Clinical Trials or Review articles). The Publication Types pull-down menu contains a list of frequently searched publication types. If you do not make a selection, PubMed will not restrict to any particular publication type. The available selections are:

- Clinical Trial
- Editorial
- Letter
- Meta-Analysis
- Practice Guideline
- Randomized Controlled Trial
- Review

Languages

To select a language, click on the Languages pull-down menu and select one of the following languages:

- English
- French
- German
- Italian
- Japanese
- Russian
- Spanish

Ages

To select a specific age group for human studies, click on the Ages pull-down menu and select from one of the age groups listed below. If you do not make a selection, PubMed will not limit your retrieval by age groups.

- All Infant: birth-23 month
- All Child: 0-18 years
- All Adult: 19+ years
- Newborn: birth-1month
- Infant: 1-23 months
- Preschool Child: 2-5 years
- Child: 6-12 years
- Adolescent: 13-18 years
- Adult: 19-44 years
- Middle Aged: 45-64 years
- Aged: 65+ years
- 80 and over: 80+ years

Gender

To select a specific gender for a human study, click on the Gender pull-down menu and select either Female or Male. If you do not make a selection, PubMed will not limit your retrieval by gender.

Human or Animal

To select a specific study group, click on the Human or Animal pull-down menu and select either, Human or Animal. If you do not make a selection, PubMed will not limit your retrieval by Human and Animal studies.

Date

Use the Entrez Date pull-down menu to limit your search back in time from 30 days to 10 years. The Publication Date pull-down menu toggles between Publication Date and Entrez Date. Use the From and To boxes to specify a range of dates. Enter the dates in the format of

YYYY/MM/DD; the month and day are optional, e.g., 1999/03/06, or 1999/07, or 2000.

History

PubMed holds all your search strategies and results in History. You can see your search History by clicking on History from the Features bar. History is only available after you run your first search. History lists and numbers your searches in the order in which they were run. History displays the search number, your search query, the time of search, and the number of citations in your results. To view the results from a search, click on the number of results.

for #4 AND child

Preview Go Clear

Limits Preview/Index **History** Clipboard

- Search History will be lost after one hour of inactivity.
- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.

Search	Most Recent Queries	Time	Result
#4	Search "chickenpox vaccine"[MeSH Terms]Limits: English, Review	15:17:57	43
#3	Search "chickenpox"[MeSH Terms]Limits: English, Review	15:17:48	374
#2	Search chicken pox vaccineLimits: English, Review	15:16:57	107
#1	Search chicken pox vaccine	15:16:45	612

Clear History

You can combine searches or add additional terms to an existing search by using the pound sign (#) before the search number, e.g., #2 AND #6, or #3 AND (drug therapy OR diet therapy). Once you have entered a revised search strategy in the query box, click Go to view the search results.

Saving

The PubMed Save function creates a text file of your PubMed citations on your computer. The Save button is available on screens with search results. You can save entire search results or selected citations. If you don't select specific citations before clicking on the Save button, you will create a file on your computer that will contain the entire search results up to a maximum of 10,000 items.

You can also save citations collected from multiple searches by using the Add to Clipboard feature. The Clipboard holds a maximum of 500 items. When you save a file, your browser will prompt you where this file should be placed on your computer, and also give you the opportunity to rename the file.