

## Fact Sheet

### MEDLINE, PubMed, and PMC (PubMed Central): How are they different?

[MEDLINE](#)<sup>®</sup> is the National Library of Medicine<sup>®</sup> (NLM<sup>®</sup>) journal citation database. Started in the 1960s, it now provides over 20 million references to biomedical and life sciences journal articles back to 1946. MEDLINE includes citations from approximately 5,600 scholarly journals published around the world. Publishers submit journals to an NIH-chartered advisory committee, the Literature Selection Technical Review Committee (LSTRC), which reviews and recommends journals for MEDLINE. The LSTRC considers the quality of the scientific content of a journal, including originality and the importance of the content for the MEDLINE global audience, using the guidelines found on the NLM Fact Sheet [MEDLINE Journal Selection](#). The MEDLINE database is directly searchable from NLM as a subset of the PubMed<sup>®</sup> database as well as through other numerous search services that license the data. In addition to the comprehensive journal selection process, what sets MEDLINE apart from the rest of PubMed is the added value of using the NLM controlled vocabulary, [Medical Subject Headings \(MeSH\)](#)<sup>®</sup>, to index citations.

[PubMed](#) has been available since 1996. Its over 22 million references include the MEDLINE database plus the following types of citations:

- In-process citations, which provide records for articles before they go through quality control and are indexed with MeSH or converted to out-of-scope status.
- Citations to articles that are out-of-scope (e.g., covering plate tectonics or astrophysics) from certain MEDLINE journals, primarily general science and general chemistry journals, for which only the life sciences articles are indexed with MeSH.
- "Ahead of Print" citations that precede the article's final publication in a MEDLINE indexed journal.
- Citations that precede the date that a journal was selected for MEDLINE indexing (when supplied electronically by the publisher).
- [Pre-1966](#) citations that have not yet been updated with current MeSH and converted to MEDLINE status.
- Citations to some additional life sciences journals that submit full text to PMC<sup>®</sup> (PubMed Central<sup>®</sup>) and receive a qualitative review by NLM.
- Citations to [author manuscripts](#) of articles published by NIH-funded researchers.
- Citations for the majority of books available on the [NCBI Bookshelf](#) (a citation for the book and in some cases each chapter of the book).

PubMed citations often include links to the full-text article on the publishers' Web sites and/or in PMC and the Bookshelf. MEDLINE is the largest subset of PubMed. You may limit your PubMed search retrieval to MEDLINE citations by restricting your search to the MeSH controlled vocabulary or by using the Journal Categories filter called MEDLINE.

[PMC](#) (PubMed Central) launched in 2000 as a free archive for full-text biomedical and life sciences journal articles. PMC serves as a digital counterpart to the NLM extensive print journal collection; it is a repository for journal literature deposited by participating publishers, as well as for author manuscripts that have been submitted in compliance with the [NIH Public Access Policy](#) and similar policies of other research funding agencies. Some PMC journals are also MEDLINE journals. For publishers, there are a number of ways to participate and deposit their content in this archive, explained on the NLM Web pages [Add a Journal to PMC](#) and [PMC Deposit and Access Policies](#). Journals must be in scope according to the [NLM Collection Development Manual](#). Although free access is a requirement for PMC deposit,

publishers and individual authors may continue to hold copyright on the material in PMC and publishers can delay the release of their material in PMC for a short period after publication. There are reciprocal links between the full text in PMC and corresponding citations in PubMed. PubMed citations are created for content not already in the MEDLINE database. Some PMC content, such as book reviews, is not cited in PubMed.

In conclusion, PubMed citations come from 1) MEDLINE indexed journals, 2) journals/manuscripts deposited in PMC, and 3) NCBI Bookshelf. Both MEDLINE and other PubMed citations may have links to full-text articles or manuscripts in PMC, NCBI Bookshelf, and publishers' Web sites. If you limit your PubMed search to MeSH controlled vocabulary or the MEDLINE subset, you will see only MEDLINE citations in your results.

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