NLM Technical Bulletin

September-October 1997 No. 298

Year-End Processing

New MEDLINE® Backfile and MEDLINE Backfile Configuration - 1998

During 1997 Year-End Processing, all citations published in 1994 or earlier will be pulled from MEDLINE and placed in the appropriate Backfiles. MEDLINE Backfiles and their years of coverage will change again in 1998 with the introduction of a new Backfile called MED93. The primary dates of coverage for MEDLINE and its Backfiles for 1998 will be as shown in the box to the right:

File	Aliases	Coverage
MEDLINE	MED	1995-1998
MED93	M93, BACK93, B93	1993-1994
MED90	M90, BACK90, B90	1990-1992
MED85	M85, BACK85, B85	1985-1989
MED80	M80, BACK80, B80	1980-1984
MED75	M75, BACK75, B75	1975-1979
MED66	M66, BACK66, B66	1966-1974

Reminder to PubMed searchers: PubMed searches MEDLINE, PREMEDLINE™ and all Backfiles at one time.

Expansion of Dates in MEDLINE Files for Year 2000

During 1997 Year-End Processing, the following date fields (see Figure 1) in MEDLINE files on ELHILL will be expanded by two-digits to accommodate the new format required for the Year 2000. See Figure 1 below.

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Data Element	1997 Search Format	1998 Search Format	Search	1998 Display (PRINT)
YR Year of Publication	97 (YR)	1997 (YR)	97 (YR) or 1997 (YR)	N/A; YR does not display as a separate data element
EM Entry Month	9712 (EM)	199712 (EM)	9712 (EM) or 199712 (EM)	EM - 199712
DA Date of Entry	971201 (DA)	19971201 (DA)	971201 (DA) or 19971201 (DA)	DA - 19971201
LR Last Revision Date	961024 (LR)	19961024 (LR)	961024 (LR) or 19961024 (LR)	LR - 19961024
CU Class Update Date	97 (CU)	1997 (CU)	97 (CU) or 1997 (CU)	CU - 1997

Figure 1 - List of date fields to be expanded in 1998.

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Technical Notes

Abridged Indexed Medicus (*AIM*) Ceases Publication

The National Library of Medicine's monthly publication *Abridged Index Medicus* (*AIM*) will cease following the Volume 28, Number 12, (December 1997) issue.

The *Abridged Index Medicus* was initiated in 1970 to "afford rapid access to selected biomedical journal literature of immediate interest to the practicing physician" when online services were not readily available. A subset of citations from 119 English language clinical journals indexed for *Index Medicus* was selected for *AIM*. The publication was of value to the community over the years; at one point, over two thousand libraries, clinics, colleges, and individuals subscribed to the monthly issues and the annual cumulations. During the past 20 years, however, an increasing number of subscribers have been accessing the data from electronic resources, and subscriptions to the printed product have declined.

Online searchers will still be able to search using A (SB) to limit MEDLINE retrieval to the journals in the *AIM* subset. Even though the printed *AIM* is being discontinued, the *AIM* subset list will continue to exist online in ELHILL. To search the *AIM* subset in Internet Grateful Med type: /a (sb) in a search box. PubMed, a non-ELHILL search system, does not currently contain a Subset (SB) field or its equivalent; however, this enhancement will be added to PubMed in the near future.

Since there are many demands for Federal dollars, the National Library of Medicine must make some difficult choices concerning the support of existing products versus the improvement and development of new products. NLM Associate Director for Library Operations, Lois Ann Colaianni, realizes that some find the AIM particularly useful; and she will be happy to explore alternatives for this information with such individuals. She may be contacted via e-mail, loisann@nlm.nih.gov.

NLM Automatic SDI Service Moratorium

Effective immediately, no additional users will be added to the NLM Automatic SDI program, and existing users are advised to add no new searches. The Library is exploring ways that users may obtain the same data in a more timely and more individualized way, and at less expense to both the user and to NLM. Recognizing that transitioning to a new current awareness service may take time, NLM will continue the current Automatic SDI service for at least several months for users who are already receiving the service. See the article on pages 5-6 of this issue for instructions on how to make any necessary revisions to existing automatic SDI strategies to reflect changes in the 1998 MeSH vocabulary.

Codes and Billing Practices Update

Practice Time Credit Eliminated

The $20 MEDLARS practice time credit for new User ID codes was eliminated effective October 1, 1997. Few new users were registering for billed access and NLM wants to encourage use of the free Web-based search systems (PubMed and Internet Grateful Med). The discontinued practice time credit, which expired one year from the date a User ID code was issued, was formerly available to new (non-student) codeholders performing billed searches.

Student Codes Discontinued

Effective October 1, 1997, the Library stopped issuing new individual or institutional student codes. These codes were billed at a student-rate (discounted) for use of ELHILL or TOXNET files, or PDQ. The Library is encouraging both students and teachers to access NLM databases at our Web site. NLM will contact institutions with student codes to see if the students can be switched to using the free Web-based search systems, PubMed and IGM. All existing individual student codes will continue to be charged at student rates for a two year period.

Old Unused Codes Deactivated

Effective October 1, 1997, billed MEDLARS User ID codes issued before October 1994 and not used for the past three years, have been deactivated. Deactivated codes will not permit a user to login and search.

Database Update Information for 1998

The NLM database update schedules and update frequency chart for 1998 are published as Appendixes A, B, C, and D. You may wish to photocopy these pages and post them near your computer for reference during the 1998 year.

MeSH Corrections

Please note the following corrections to MeSH 1998 Tree Numbers. The Tree Numbers are correct in the ELHILL files and in the data from the NLM Web pages but the incorrect numbers appear in the printed MeSH publications for 1998.

MH	-	**Cognition Disorders**
Correct	-	**F3.087.250**
Incorrect	-	F3.126.185

MH	-	**Homosexuality**
Correct	-	**F1.145.792.975.500**
Incorrect	-	F1.145.792.320

MH	-	**Perceptual Disorders**
Correct	-	**C10.597.643**
Correct	-	**C23.888.592.646**
Incorrect	-	C10.597.244.600
Incorrect	-	C23.888.592.224.600

The notice of this correction may also be downloaded from the MeSH Web page at: http://www.nlm.nih.gov/mesh/whatsnew.html

OLDMEDLINE Now Available for Lease

The OLDMEDLINE database contains 307,366 citations that were published in the 1964 and 1965 *Cumulated Index Medicus* (*CIM*).

This file became available to searchers of the NLM MEDLARS system on December 18, 1996, and is expected to grow as citations from earlier volumes of *CIM* are converted to machine-readable format and added. The database is now available on tape for lease from the National Library of Medicine for an annual fee of $1,000. Please contact Jane L. Rosov at janer@nlm.nih.gov or 888-FINDNLM in regard to leasing the file.

In 1964, NLM began testing the computerized MEDLARS system as a mechanism for producing *Index Medicus*, and in 1966 began making this information available online in the MEDLINE database. However, the Library did not keep indexed citations for the 1964 and 1965 publications in electronic form, and until the creation of OLDMEDLINE this information was not available in any NLM database. NLM was assisted in its effort to provide online access to these citations by the Deutsches Institut fur Medizinische Dokumentation und Information (DIMDI), the International MEDLARS Center in Germany, which had tapes of the original data from the 1964 and 1965 *CIM*, and supplied them to NLM.

Data from the DIMDI tapes have not been maintained for over 30 years, and were loaded "as is" into OLDMEDLINE. NLM conducted limited review and maintenance of data prior to creating OLDMEDLINE, but the records have not undergone the stringent data entry and validation procedures now in place for MEDLINE and other MEDLARS files. In most instances, these records reflect the information as it appeared when created in 1964/65. Please see page 1 of the November-December 1996 *Technical Bulletin* for more details about OLDMEDLINE. In addition, the OLDMEDLINE chapter (chapter 23) of the *Online Services Reference Manual* may be downloaded from the NLM Web site.

It is expected that 1962 and 1963 *CIM* records will be added to OLDMEDLINE early in 1998, as will approximately 500 records in the area of tuberculosis. In addition, there will be some data clean-up to correct some errors that were introduced when the file was first built. Licensees who receive OLDMEDLINE tapes prior to the addition of the new records and maintenance activity will need to process a full file replacement after these actions are taken.

SI Field Changes for GENBANK Records

The Secondary Source Identifier field for GENBANK records in MEDLINE has been changed. Previously, the accession number following the GENBANK/ was six characters long and consisted of one alphabetic character followed by five numbers as shown in the example below.

SI - GENBANK/X98906

As of spring 1997, the accession number is 8 characters long and consists of two alphabetic characters followed by 6 numbers as shown in the example below:

SI - GENBANK/AA004407

New TOXNET DISPLAY Command

A new command, DISPLAY UNIQUE, gives users of TRI and other TOXNET files an easy way to display a list of unique data element values from a sorted retrieval set. A typical Toxic Release Inventory (TRI) database search might involve finding what chemicals were reported released by Aerocrop Corporation (fictitious example) facilities. First search for the corporation's facilities in the Facility Name (FNM) field by entering AEROCROP (FNM). This might retrieve 56 records with only 5 unique chemicals in those 56 records. Then perform a SORT on the chemical name field by giving the command SORT NAME. Now enter DISPLAY UNIQUE to see a list of these five chemicals along with the number of postings for each. Before this new command was implemented, searchers would have had to issue a PRINT command for all 56 records retrieved and scan through them to identify the five unique chemicals. To see the above example worked out in more detail, and for additional information about DISPLAY UNIQUE, connect to TOXNET and enter EXPLAIN DISPLAY UNIQUE at any USER: prompt.

Alternatives to the *Technical Bulletin* on the Web

As announced in the cover story of the July-August *Technical Bulletin*, the *Technical Bulletin* will be published exclusively on NLM's Web site (http://www.nlm.nih.gov) and cease paper copy beginning with the January-February 1998 issue. For those users who do not yet have Web access and wish to be alerted to the subjects being covered in the *Technical Bulletin*, the following alternative methods of disseminating information will be available.

1. The complete table of contents for each issue of the *Technical Bulletin* will be posted in the newsletters published by the Regional Medical Libraries (RMLs). The RMLs will also be selecting and adapting material from the *Technical Bulletin* that is relevant for their particular audiences and publishing this information in their regional newsletters. You may call 800-338-7657 to reach your RML and have yourself placed on the mailing list for the newsletter for your region.

2. The online NEWS in ELHILL will have a notice of each updated issue.

3. The complete table of contents for each issue will be posted in ELHILL and available with a $INFO command.

NLM recognizes that none of these alternatives may be a perfect solution nor as convenient as having a printed issue delivered to your desk. However, the benefits of more timely dissemination of information, having electronic links to related materials, and the cost savings in these budget conscious times make this the right time for this transition to a Web-based *Technical Bulletin*. The Library encourages you to make this transition with us.

A recent survey of network member libraries indicated that 73% of the responding hospital libraries (1807 institutions) indicated that they have an Internet connection. And 94% (1703 institutions) of those with Internet connections have Web access. If you do not have Web access contact your RML. This fall NLM and the RMLs will be developing plans to assist all NN/LM hospital library members to obtain Web access.

Revised *Basics of Searching MEDLINE on ELHILL* Available

The revised *Basics of Searching MEDLINE on ELHILL*, dated September 1997, is now available. This manual may be downloaded free of charge from the NLM Web site: http://www.nlm.nih.gov/pubs/osrm_nlm.html. Scroll down to the bottom of the screen, past the *Online Services Reference Manual* chapter list to Additional Search Tools to find the *Basics of Searching MEDLINE on ELHILL*. Note, however, that NLM is transitioning from ELHILL over the next year.

Or you may order the *Basics* from the National Technical Information Service (NTIS). The NTIS order number is PB97-199681. Paper copy is $41.00 (U.S./Canada/Mexico) and $82.00 (other countries). Microfiche is $19.50 (U.S./Canada/Mexico) and $39.00 (other countries).

Questions concerning orders may be directed to NTIS at 800-423-9255. Callers from outside the U.S. or Canada may reach NTIS at 703-487-4650. Orders may be placed in the following ways:

Phone:	800-423-9255 or 703-487-4650
TDD:	703-487-4639
Fax:	703-321-8547
Web site:	http://www.ntis.gov/ordernow
E-mail:	orders@ntis.fedworld.gov

If you are concerned about Internet security you may register your credit card with NTIS by calling 703-487-4682. If you need a paper form to place your order you may download a pdf file from http://www.ntis.gov/ordering.htm or you may call NTIS at 800-423-9255 to have a form mailed to you.

Revised *HSDB Reference Guide* Available

The revised *HSDB Reference Guide*, dated September 1997, is now available. Single copies may be requested at no charge by sending an e-mail to toxmail@toxnet.nlm.nih.gov or writing to:

HSDB/TOXNET Representative
Toxicology and Environmental Health Information Program
Specialized Information Services Division
National Library of Medicine
8600 Rockville Pike
Bethesda, MD 20894

Bibliography of Bioethics 1997 Available from Kennedy Institute of Ethics

Volume 23 (1997) of the annual *Bibliography of Bioethics* has just been published by the Kennedy Institute of Ethics, Georgetown University. It is produced under a contract with the National Library of Medicine and remains the world's most comprehensive resource to access English-language information on the ethical, legal, and public policy aspects of health care and biomedical research.

The 1997 *Bibliography of Bioethics* has 774 pages containing 3,600 new references to journal articles, bills or laws, court decisions, chapters from books, government documents, books, and news reports. Citations are arranged alphabetically by subject, providing ready access to such topics as AIDS, allowing to die, assisted suicide, confidentiality, ethics committees, euthanasia, fetal tissue donation, gene therapy, genetic screening, genome mapping, health resource allocation, human experimentation, informed consent, managed care programs, organ and tissue donation, resource allocation, and treatment refusal.

The new 1997 *Bibliography of Bioethics* (ISSN 0363-0161, ISBN 1-883913-03-9) is available for $60.00 (U.S., Canada, and Mexico; $70.00 elsewhere) from:

Kennedy Institute of Ethics
Georgetown University
Washington, DC 20057-1212
Phone: 800-MED-ETHX OR
202-687-6689
E-mail:
medethx@gunet.georgetown.edu

Cancer vs. *Cancer Cytopathology*

The journal *Cancer*, indexed for MEDLINE, contains a separately named section called *Cancer Cytopathology*. Beginning in 1997, the title, *Cancer Cytopathology,* appears on one volume per year. *Cancer Cytopathology* is not a separate serial and should not be cataloged or bound as one. The cataloging guideline which covers this situation is Library of Congress Rule Interpretation 21.2C for "Fluctuating Titles of Serials" which says that if a serial has two or more titles that are used on different issues according to a regular pattern, choose the earliest title as the title proper and give the other title in a note. NLM's cataloging record and the OCLC record for *Cancer* now say "Beginning 1997, one v. per year has section title: Cytopathology" and there is a variant title added entry for *Cancer. Cytopathology*.

Revised NLM Pricing Information

The 1998 NLM Online Pricing Algorithm is included as Appendix E of this issue. It is effective January 1, 1998.

An updated MEDLARS Pricing Schedule is included as Appendx F of this issue of the *Technical Bulletin*.

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Date of Publication (DP)

The year of publication is already stored and displayed in YYYY format in the first four characters of the DP, which requires no change for the Year 2000. The DP field must be searched with a four-digit value for the year. For example,

DP - 1997 Jan 1

is searchable as:

1997: (DP)
or
1997 Jan: (DP)
or
1997 Jan 1 (DP)

Ranging

Expanded date values **must** be used when ranging. In MEDLINE files, only the Date of Entry (DA) in the above table of date values is rangeable. For example, in 1998 search:

FROM 19971201 TO 19971231 (DA)
or
GREATER THAN 19971130 (DA)

Unique Identifiers Remain Unchanged

The Unique Identifier (UI) field, a sequential accession number, will not be changing. While the first two digits in this eight number field are date-related, the field value does not represent an actual date. And since the creation of the PREMEDLINE file, there is no longer a strict correspondence between the first two-digits of a Unique Identifier and the year in which the citation is indexed.

Other Databases

Databases containing MEDLINE-derived records (e.g., AIDSLINE®, HealthSTAR®, etc.) will reflect the changes described above. Other files and any fields that will have changed displays and search capabilities will be discussed nearer the time those files are class maintained and show the new format.

PubMed and Year 2000 Formats

PubMed contains a searchable Publication Date [DP] field (remember that PubMed search field qualifiers take square brackets) where the year of publication is searchable **only** as a four digit number, with or without the month and day values. If you choose MEDLINE report for the display format, the year displays as a four digit number in the Date of Publication (DP) field, exactly as it does in the ELHILL version of MEDLINE. For example,

DP - 1997 Jan 1

is searchable in PubMed as:

1997/01/01 [dp]
or
1997/01 [dp]
or
1997 [dp]

- **Note although the month displays as Jan, you must search for it as a two-digit value.**

Ranging on Date of Publication in PubMed may take the following formats:

1997/09/01:1997/09/30 [dp]
or
1997/09:1997/10 [dp]
or
1996/12:1997 [dp]
or
1996:1997 [dp]

Stay tuned for more information about how non-searchable date-related fields in PubMed will be displayed.

Internet Grateful Med

Searching by date in Internet Grateful Med (IGM) is unaffected by Year 2000 changes. Users will continue to search by selecting the range of years or the individual year from the Apply Limits section of the IGM search screen. Records will display the year in the four-digit format in any applicable date fields.

--prepared by Jan Willis
MEDLARS Management Section

Year-End Processing of Stored Searches, Automatic SDIs and Saved Searches

Introduction

Each year during the late summer and the fall, changes are made to records in MEDLINE, MEDLINE Backfiles, and in other MEDLARS databases. This work, called "Year-End Processing," includes annual changes to Medical Subject Headings (MeSH). While the work goes largely unnoticed as it proceeds, there are some important dates for searchers that are associated with the Year-End Processing.

All stored searches, including Automatic SDI stored searches and saved searches for the ELHILL databases, should be reviewed by searchers for the impact of any changed and new 1998 MeSH headings (MH). A Year-End Processing schedule which includes projected dates for processing Automatic SDIs is found in Appendixes A, B, C and D of this issue.

Please note that NLM will continue to provide Automatic SDI service to users currently participating in the program but no additional users will be added to the Automatic SDI program. Please revise your current stored searches, but do not add new searches. More information about this can be found in the Technical Notes in this issue, *NLM Automatic SDI Service Moratorium*, on page 2.

1998 MeSH

The 1998 MEDLINE and SDILINE® files will be available online with 1998 MeSH and updated with 9801 Entry Month (EM) data on Monday, December 15, 1997. The CANCERLIT® 9712 (EM) update and the updated CATLINE and AVLINE files will also be available on December 15, 1997 with 1998 MeSH. AIDSLINE and HealthSTAR are expected to be updated with 1998 MeSH in January 1998. Other files using the MeSH vocabulary including AIDSTRIALS, BIOETHICSLINE®, HISTLINE®, HSRPROJ, POPLINE®, SPACELINE, and TOXLINE®) will be maintained with 1998 MeSH at later dates. Watch the MEDLARS online NEWS and future issues of the *Technical Bulletin* for announcements.

Changes to the MeSH vocabulary for 1998 may be found in the introduction to the *Medical Subject Headings—Annotated Alphabetic List, 1998* and online in FILE NEW. The 1998 MeSH in ASCII format is available for downloading from: http://www.nlm.nih.gov/mesh/. Please note that this is not in the printed *Annotated MeSH* format; however, it does contain MeSH descriptors, qualifiers (subheadings) and Supplementary Chemical Records. See the article *MeSH on the Web* on page 11 for further information.

The *Medical Subject Headings—Annotated Alphabetic List, 1998* is also available in print from the National Technical Information Service (NTIS). NTIS ordering information was provided on page 3 of the July-August 1997 *Technical Bulletin*; online in ELHILL using the $INFO MESHTOOLS command; and from the NLM Web site at http://www.nlm.nih.gov/mesh/.

Special Dates for Reviewing Stored Searches

SDILINE Automatic SDI stored searches requiring revision must be deleted using the ELHILL PURGESEARCH command (see Step 6 on page 6) and restored by Thursday, December 4, 1997 in order to receive correct retrieval against 1998 monthly updates. The January 9801 (EM) SDILINE Automatic SDIs will be processed beginning on or about December 6, 1997. Searchers should execute their STORESEARCHes online to examine retrieval between November 17 and December 4, 1997. During this brief time, citations in the December 1997 SDILINE file will contain 1998 MeSH terms. It is during this period of time that searchers can run their STORESEARCHes against the revised SDILINE to check correct operation of stored strategies against the new vocabulary. Only SDILINE will have 1998 vocabulary terms on citations during this time period; MEDLINE and other databases will not.

To check correct operation of stored searches during this designated period, searchers should:

1. Between October 25 - November 14, searchers should record the number of postings retrieved for each SDILINE stored search as processed automatically by NLM for the December 1997 SDILINE (i.e., 9712 (EM), which is scheduled to be run October 25) with the 1997 vocabulary. The number of citations retrieved is listed on the front of each SDI search printout. The name of the stored search is the title of the printout.

For stored searches not processed automatically by NLM, run the stored search(es) by connecting to the ELHILL SDILINE file, and typing the exact stored search name qualified with (SN) for execution. Record the number of postings retrieved for each search.

2. Between November 17 - December 4, searchers should go online and run each SDILINE stored search online against the SDILINE file. Stored searches may be executed online by connecting to SDILINE and typing the stored search name qualified by (SN). The December SDILINE will contain the same citations, and the 1998 MeSH vocabulary. However, the citations are not reindexed with the new 1998 MeSH terms; only MeSH heading changes will appear in

this file; new MeSH headings will not retrieve any citations in December SDILINE.

3. Compare the number of postings recorded in Step 1 with those retrieved in Step 2. If the number of postings (i.e., records) retrieved is not equal to the number received in the December 1997 SDILINE (9712 (EM)) printouts that used 1997 vocabulary, searchers may assume the stored search has been affected by a 1998 MeSH vocabulary change.

4. If the search has been affected by a 1998 MeSH vocabulary change, searchers should display the strategy by using the command DISPLAY followed by the stored search name. Do not use the (SN) qualifier. For example: display s601 heart disease.

5. Check the terms in the strategy against the list of new and replaced MeSH headings. On the list titled "Replaced Medical Subject Headings with Their Replacements", terms designated as P (Print Entry Term) or N (Non-Print Entry Term) may still be used as search terms and remain in any stored or saved search. Also, check that terms are mapping to the correct concept; sometimes cross references are pointed to a different MeSH heading for the new year. For example, HEART SURGERY is now a cross reference to CARDIAC SURGERY in Category G, but it used to be its own heading in Category E. Terms designated as C (Supplementary Chemical Term) may remain but must be qualified with (NM). Terms designated as T (Publication Type) may remain but must be qualified with (PT). Terms with no status indicator may not be used as search terms, and must be deleted from all stored and/or saved searches for accurate results.

If a search contains MeSH Tree numbers, the numbers should be checked in the *1998 Medical Subject Headings*. CAS Registry Numbers and Names of Substances (NM) should be checked in the online NEW MESH database (type FILE NEW). If the strategies are not too long, searchers may want to enter them online line-by-line and evaluate any No Postings messages to isolate any problem areas. Remember that only one month's data is being searched, so some stored searches may not retrieve any citations. Also, brand new 1998 MeSH headings—those for new concepts—will retrieve no postings because the records were indexed using 1997 MeSH. (Changed headings and entry terms may retrieve postings, however, because they are mapped to previous headings).

6. Purge searches requiring changes using the ELHILL PURGESEARCH command. (For example, PURGESEARCH s601 heart disease).

7. Then store the revised strategy (STORESEARCH) the following day. Type EXPLAIN STORESEARCH for detailed instructions for storing a search. It is possible to purge and store a search on the same day if the name of the new search is different. Varying the name by one character from the old name is sufficient to make the new name unique.

All revised SDILINE search strategies for 9801 (EM) Automatic SDILINE processing should be stored by December 4, 1997.

Other Databases with Stored Searches

Other files which have Automatic SDI service are AIDSLINE, AVLINE, BIOETHICSLINE, CANCERLIT, CATLINE, HealthSTAR, POPLINE, and TOXLINE. These files do not have an equivalent of SDILINE; therefore it is not possible to follow the exact procedures described above for the SDILINE database. Searchers should carefully review any strategies that have been stored for execution by NLM against these databases for possible vocabulary revisions and restore them by the dates listed.

CANCERLIT SDIs

CANCERLIT is expected to be available with 1998 MeSH and the 9712 (EM) update on December 15, 1997. Review and restore any affected searches by December 12, 1997.

AIDSLINE SDIs

AIDSLINE is expected to be available with 1998 MeSH and the 9801 (EM) update on or after January 3, 1998. Changes for 9801 (EM) Automatic SDIs run against AIDSLINE should be made no later than that date.

HealthSTAR SDIs

HealthSTAR is expected to be available with 1998 MeSH and the 9801 (EM) update on or after January 9, 1998. Changes for 9801 (EM) Automatic SDIs run against HealthSTAR should be made by that date.

CATLINE and AVLINE SDIs

The CATLINE and AVLINE databases are expected to be updated with 1998 vocabulary on December 15, 1997. Changes for Automatic SDIs should be made by January 3, 1998.

POPLINE SDIs

POPLINE SDIs should not be changed yet. Please see future issues of the *Technical Bulletin* and the online NEWS for announcements about POPLINE and the 1998 vocabulary.

TOXLINE SDIs

TOXLINE contains MeSH vocabulary in the TOXBIB and BIOSIS subfiles. Stored search strategies for TOXLINE that contain MeSH headings should also be reviewed for 1998 MeSH vocabulary changes. Any changes to these strategies should be reviewed and restored by December 12, 1997. Beginning with the 9712 (EM) TOXLINE update in December, records added to both the TOXBIB and the BIOSIS subfiles will contain 1998 MeSH. 1997 MeSH terms will remain on TOXBIB and BIOSIS records from earlier entry months until the entire TOXLINE file is regenerated in early to mid-1998. Watch the online ELHILL news and the *Technical Bulletin* for the date of the regeneration.

--prepared by Marcia Zorn
MEDLARS Management Section

CHEMLINE® and TOXLIT® Retire

As part of NLM's efforts to simplify access to online information and reduce expenses to users, the CHEMLINE and TOXLIT/TOXLIT65 files will no longer be available from NLM after January 1, 1998. With the advent of free World Wide Web access to MEDLINE and other NLM files through PubMed and IGM, and upcoming changes in accessing the Toxicology and Environmental Information Health Program files as well, it will no longer be practical to support royalty files as part of MEDLARS.

Since they were first established in the early days of the Toxicology Information Program (now TEHIP, the Toxicology and Environmental Health Information Program), both the CHEMLINE and the TOXLIT files have provided an important resource to MEDLARS users. These files continue to offer excellent data; however, in recent years, their usage has decreased considerably at NLM, and the data they carry is now readily available to users on other online systems. Ms. Jan Williams of Chemical Abstracts Service (CAS), the producer of CHEMLINE and TOXLIT data, may be reached at 1-800-848-6538 ext. 3868 or at jan.williams@cas.org for information about alternative sources of the data.

As we make this transition in the resources and services offered to our users, TEHIP will concentrate on enhancements such as the restructuring of existing files, and improvements in interfaces for accessing and navigating the various components of the toxicology information resources. NLM's ChemID chemical dictionary file and the TOXLINE/TOXLINE65 citation files will still provide coverage of the toxicology and environmental health literature and data without royalties. ChemID already includes all the substances in CHEMLINE except those only cited in TOXLIT/TOXLIT65. TOXLINE already covers many of the citations available in TOXLIT, and efforts will be undertaken to explore options for expanding other resources to include additional citations. Look for news on the TEHIP Web site, accessible from the NLM Web site at http://www.nlm.nih.gov or at http://sis.nlm.nih.gov for new developments concerning the NLM's toxicology information resources.

--prepared by George M. Hazard, Jr.
Specialized Information Services

Rebuilding of CATLINE®/AVLINE® and Other Changes

Database Rebuilding

The rebuilding of the CATLINE and AVLINE databases in December 1997 is limited to the updating of MeSH headings. These changes should appear online on December 15, 1997.

Changes made to MeSH Headings (MH) in CATLINE and AVLINE correspond to the changes made in 1998 MeSH. Records which are modified by at least one of these heading changes contain "97" in the Class Update Date (CU) field.

Records affected by the MeSH update will be reissued to licensees of CATLINE and AVLINE records in USMARC format, according to the normal record distribution schedule.

Changes to USMARC Distribution to reflect revisions to USMARC Format for Bibliographic Data

NLM plans to use subfield $v to code form subheadings in CATLINE and AVLINE records distributed in USMARC format:
In conjunction with 1997 Year-End Processing in the CATLINE and AVLINE databases, NLM will begin using the $v subfield to output form subheadings in MeSH subject strings (USMARC 650, Subject Added Entry—Topical Term, denoted with second indicator = 2 for Medical Subject Headings). These form subheadings were previously distributed in the USMARC 650 field as general subdivisions, $x subfield, along with the topical subheadings. Topical subheadings will continue to be distributed in the $x subfield, as required by USMARC.

Both new and modified USMARC records should begin to show this change effective with the first records distributed in the 1998 Cataloging Production Year, e.g., December 11, 1997 for weekly record recipients and January 2, 1998 for those receiving a monthly distribution.

This change has no impact on the display of data in the MeSH Heading (MH) fields in CATLINE and AVLINE. Form subheadings continue to be searchable in the Subheadings Qualifier (SH) field in those databases.

USMARC 008/28 Coded for CONSER Serials Records
NLM has begun to code the USMARC fixed field 008/byte 28 (Government publication) to the level of detail designated by *USMARC Format for Bibliographic Data* in new serial records which are being submitted to CONSER. All other records, including those for serials not submitted to CONSER, continue to be coded in the 008/byte 28 with one of two values: "o" (government publication -level undetermined) or "blank" (not a government publication).

ELHILL users of CATLINE and AVLINE continue to see the Miscellaneous Attributes (MA) field coded as "A" when the material is a Government Publication of any type. The MA field is directly searchable.

Non-NLM Monograph Records Deleted from CATLINE

During August 1997, close to 2,350 bibliographic records for print monographs were deleted from CATLINE.

The records deleted were among approximately 20,000 records added to CATLINE in the early 1970's as part of a cooperative cataloging/union list effort with the following three major medical libraries:

Upstate Medical Center of the State University of New York, Syracuse
[CATLINE Library Symbol (LY): 01SSY]
Louise Darling Biomedical Library at the University of California, Los Angeles
[CATLINE Library Symbol (LY): 07CLA]
Countway Library of Medicine, Harvard University
[CATLINE Library Symbol (LY): 01HMS].

The deletions represent monograph titles held at one or more of the other three libraries but never acquired by NLM. NLM deleted these monograph records as a necessary preparation for the transition to the planned integrated library system.

For the present, the majority of the records from this project are being retained in CATLINE, with no changes made to the codes in the Library Symbols (LY) field. These approximately 18,000 records link to holdings at NLM **and** also at one or more of the other libraries. However, CATLINE users are advised that NLM has no recent information as to whether these titles have been retained or withdrawn by the other institutions.

For each CATLINE record deleted, a USMARC record with the LEADER/05 (record status) byte set to 'd' was issued as part of NLM's regular USMARC distribution to licensees of CATLINE in USMARC format.

--prepared by Marti Scheel
Cataloging Section

MeSH Coming Attractions

The following summarizes the additions and changes to the 1998 MeSH:

365 descriptors added, including one Publication Type and one geographical, representing concepts with no directly corresponding headings in 1997 MeSH (i.e., new concepts and records);

432 descriptors replaced with more up-to-date terminology;

45 descriptors deleted;

242 Non MeSH headings changed to *Index Medicus* full MeSH headings;

3 Non MeSH headings changed to geographical full MeSH headings;

2 geographical subheadings added for cataloging.

MeSH Headings - Changes and Additions

The following changes and additions to MeSH headings are particularly important.

Archaea
Creation of a new hierarchy: Archaea [B7]. This is one of the three fundamental domains of life along with Bacteria and Eucarya.

Food and Plants
Reorganization of the terminology for plants [B6]. Along with this, food and food industry-related descriptors were removed from the Technology, Industry and Agriculture [J1] tree. This hierarchy was reorganized and a new hierarchy, Food and Beverages [J2], was created.

Enzymology
Descriptors in the area of enzymology [D8] were extensively revised and updated to reflect Enzyme Nomenclature 1992: Recommendations of the Nomenclature Committee of the International Union of Biochemistry and Molecular Biology.

Non MeSH Headings

Descriptors previously restricted as Non MeSH (i.e., they could be searched online in ELHILL as explosions, but were not printed in *Index Medicus*) were either modified and made available as full MeSH headings or they were deleted. Most were modified and made *Index Medicus* descriptors, generally with some change in the form of the heading. They are generally very broad in nature. Some will not be used in indexing the journal literature but they will be useful in online searching to gather together more specific concepts. They will be used for cataloging of books and other materials.

The Non MeSH terms below were deleted, rather than modified. They either served no purpose in our drive toward specificity and clarity or they conflicted with main headings already in MeSH either in name or in use.

Diseases of Body Regions (Non MeSH)
General Patient Care (Non MeSH)
Health and Disease (Non MeSH)
Leukemia by Immunologic Marker (Non MeSH)
Metabolic Processes (Non MeSH) - made see reference to Metabolism
Miscellaneous Techniques (Non MeSH)
Mouth Physiology (Non MeSH)
Neuron Types (Non MeSH)
Patient Care Characteristics (Non MeSH)
Sexual Reproduction Periods (Non MeSH)
Specialties, Other (Non MeSH)
Study Design (Non MeSH)
Tooth Types (Non MeSH)
United States by Individual State (Non MeSH)
United States by Region (Non MeSH)

Mental Disorders

The terminology for mental disorders was reorganized and expanded in accordance with the American Psychiatric Association's Diagnostic and Statistical Manual, 4th edition. With this revision, both Behavior and Behavior Mechanisms [F1] and Mental Disorders [F3] (formerly Behavioral and Mental Disorders) hierarchies were extensively modified. Nearly all Tree Numbers were changed as a result of the MeSH heading changes.

MeSH Heading Note Changes

The form of MeSH heading notes is in the process of changing in order to make them easier to read and understand. While most notes still retain the old form, some headings that were edited for 1998 MeSH have the new form. Full implementation of the new form for all headings will take place for 1999 MeSH.

The new form combines the old history note and online note into one new (history) note. The new history note will no longer contain information about cross-references that are still part of the heading, because the MEDLARS searcher will retrieve the same citations by typing in those cross-references. Records with the new form of note no longer explicitly denote minors with the phrase "was see under". This phrase has been changed to "use" and the date of the oldest year of the minor is placed in parentheses. See references that are no longer in the system will not have notes.

History Notes

The history note begins with one or more dates unless the MeSH heading was in the system as a main heading (or major descriptor) in 1963 and has remained unchanged as a main heading to the present. A date that is not in parentheses is the year the current form of the MeSH heading entered the system as a major descriptor. A date in parentheses is the year the current form of the MeSH heading entered the system as a minor descriptor (1975-90), or provisional heading (before 1975), or when the concept (or its entry terms) first entered the system. A date in parentheses no longer indicates that the heading was a minor descriptor or had provisional status. **The parentheses now indicate the earliest year that the term is directly represented or can be used for online searches with the current form of the heading**.

The dates are chronological from right to left so that the left-most is the date of the latest change in status of the MeSH heading (e.g., a change from a minor descriptor to a major descriptor) or the date of re-entry of a MeSH heading after it had previously been deleted from the system. If the history is not continuous, a range of dates is given. Two examples follow.

Cardiac Volume

G9.330.612.330

STROKE VOLUME is also available

72(68) • History note.

This history note indicates that CARDIAC VOLUME, a major descriptor, or main heading, since 1972, was a provisional heading from 1968-71. For online searching, this heading will retrieve citations back through 1968. Online searchers may determine how this concept was indexed before 1968 from the PI (Previous Indexing) field in the online ELHILL MeSH record.

Sex Determination (Analysis)

E1.450.855 E5.393.830

validation of sex by exam of gonads or genet tests; do not confuse with SEX DETERMINATION (GENETICS) which is establishment of sex at fertilization; DF: SEX DETERMINATION ANAL

98(63) • History note

This history note indicates that SEX DETERMINATION (ANALYSIS) entered the system as a major descriptor in 1998, but the concept first came into the system in 1963 (as shown by the parentheses in the note). The online searcher can therefore use the term to search for citations back through 1966.

Chemical History Notes

Beginning in 1992, history notes for new chemical and drug headings that existed previously as Supplementary Chemical Records were added. The Supplementary Chemical Records in MeSH contain records for chemicals and drugs encountered in the literature and indexed for *Index Medicus* and MEDLINE but not seen frequently enough to warrant creation of a MeSH major descriptor. Should the volume of material on one of these chemicals increase, however, the concept may be elevated from Supplementary Chemical status to full descriptor MeSH heading status. All citations currently indexed with a chemical MeSH Heading, also contain a Registry Number (RN) field, in which the Name of Substance (the same chemical name used for the MH) is displayed. Reminder: Name of Substance (NM) is a searchable field, but to see the NM displayed, you must include RN in the elements to be printed.

Reminder: Supplementary Chemical names were implemented online with the 8006 (EM). While a History Note (HN) may refer to a date before 1980; be aware that online searching using the Name of Substance (NM) qualifier will retrieve postings only back through 8006 (EM). Any retrieval in apparently earlier files is a result of releveling citations by year of publication of the article, not indexing date. Also, using the Name of Substance (NM) qualifier will give the most comprehensive retrieval from 8006 (EM) forward. Even if the History Note has an ending date (e.g., 1991 for FLUVOXAMINE), the Name of Substance (NM) will continue to retrieve beyond that ending date. Searching by MeSH Heading for a chemical is necessary only when: limiting with a subheading(s), using the asterisk (*MH), or if the MeSH Heading existed before 8006 (EM).

The chemical history note alerts users to the fact that a chemical concept may have been in the system previously in another format even though it is new as a major descriptor and gives the dates of its earlier incarnation. Two examples follow.

Fluvoxamine

D2.92.570.665.250
a serotonin uptake inhib & antidepressant
92; was FLUVOXAMINE (NM) 1978-91

The history note (underlined) indicates that FLUVOXAMINE, a new major descriptor in 1992, was a Name of Substance (NM) in the Supplementary Chemical Records from 1978-91. Search on FLUVOXAMINE (NM) to retrieve citations from 8006 (EM) through the present.

Delavirdine

D3.383.606.350 D3.438.473.250
98; use DELAVIRDINE (NM) 1993-97

The history note (underlined) indicates that DELAVIRDINE, a new major descriptor in 1998, was a Name of Substance (NM) in the Supplementary Chemical Records from 1993-97. The new form of note has the word "use" in place of the word "see." After December 15, 1998, search on DELVIRIDINE (NM) to retrieve citations from 1993 to the present.

History Notes and Searching

The dates given in history notes are intended to help users in the preparation of search strategies, but rigid interpretation of these dates should be avoided because of the NLM practice of "Backfile leveling". At the end of each year, the bibliographic citation files associated with MEDLINE are re-apportioned to move older literature that may have been indexed in the current year into its appropriate Backfile according to the date of its publication. Therefore, a citation in a Backfile may have a MeSH heading whose entry into MeSH postdates that Backfile. Ongoing maintenance and correction activities may also cause MeSH headings to be added to citations that were published and indexed prior to the date that the MeSH heading was added to the system. Be aware that a MeSH heading may have citations in an older ELHILL MEDLINE backfile but that this may not represent comprehensive retrieval. The History Note (HN) will help guide you in preparing online search strategies.

When History Notes are Used

In addition to date information, the history note traces changes in form, status, and mapping for MeSH headings, as well as changes in status and referred-to MeSH headings for entry terms. History Notes are used with MeSH headings to trace the following types of changes:

When a MeSH heading existed previously as: an entry term; a "see" cross-reference; provisional heading; or a "see under" cross-reference, then under the new form of History Note, the wording will be "use" rather than "see".

When a MeSH heading had an entry term that existed previously as a descriptor itself or that referred to a different MeSH heading in a "see" or "see under" cross-reference, then under the new form of History Note, these will be denoted by "use."

When History Notes are Not Used

Previously, History Notes were not used when the differences between the new form of the MeSH heading and the old one involved only hyphens, commas, apostrophes, or upper/lower case distinctions. To this list, the following situations have been added: spelled differently, inverted, formerly singular, and formerly plural. In all these cases, there will rarely be a history note under the current MeSH heading for the old form of heading.

Online Notes to be Eliminated

When the History Note had implications for the online searcher, it was usually followed by an online note. Although dates in the History Note go back to 1963, dates in the online note go back only to 1966, the beginning of the searchable bibliographic file at NLM prior to the addition of OLDMEDLINE, which now goes back to 1964. Most online notes are still present, but they will go away with the 1999 MeSH. Under the new form of notes, there will rarely be the need for an online note and the history note will contain the instructions for online users.

Beginning in 1996, online notes were no longer provided when the replaced MeSH heading is maintained as a "see" cross-reference to the new MeSH heading since the MEDLARS searcher using the old MeSH heading will retrieve the same citations.

Look at these two examples:

1998 MeSH

Ambulatory Surgical Procedures
E4.30
outpatient surg performed in MD's office, surgicenter or hosp
98(80)

see related
Surgicenters
X Ambulatory Surgery
X Day Surgery
X Office Surgery
X Outpatient Surgery
X Surgery, Office
X Surgery, Outpatient

1997 MeSH

Ambulatory Surgery
E4.30
outpatient surg performed in MD's office, surgicenter or hosp
80

see related
Surgicenters
X Day Surgery
X Office Surgery
X Outpatient Surgery
X Surgery, Office
X Surgery, Outpatient

Notice that the new History Note for the new form of the heading succinctly informs the searcher that this form came into being with 1998 MeSH but the concept can be searched online back through 1980 using this new form of the heading. No online note along the lines of "use AMBULATORY SURGICAL PROCEDURES to search AMBULATORY SURGERY 1980-97" is needed.

1998 MeSH

Archaea
B7+
in taxonomy, one of the 3 domains of life along with BACTERIA & Eucarya
98(81); ARCHAEA was see ARCHAEOBACTERIA 1995-97
X Archaebacteria
X Archaeobacteria
XR Microbiology

1997 MeSH

Archaeobacteria
B3.107+
a kingdom of bacteria; DF; ARCHAEOBACT
92; was ARCHAEBACTERIA 1981-91 (see under BACTERIA 1981-90)
X Archaea
X Archaebacteria

Notice here a much simpler presentation of the History Note (HN) that tells a searcher the bottom line for retrieval - at a glance, the searcher knows this new form of the heading retrieves back to 1981. There is no bothering with the fact that the concept had two other forms because that's not relevant to online retrieval. The previous forms of the MeSH heading are pertinent to the user of the printed *Index Medicus* and this necessary information is contained in the Public MeSH Note (PM) in the "Black & White" MeSH included with the printed *Index Medicus*. An example of of a Public MeSH Note from the 1998 Black &White is as follows:

1998 "Black & White" MeSH

Archaea
B7+
in taxonomy, one of the 3 domains of life along with BACTERIA & Eucarya
98; see ARCHEOBACTERIA 1992-97, see ARCHAEBACTERIA 1991, see BACTERIA 1981-90; ARCHAEA was see ARCHAEOBACTERIA 1995-97

--prepared by Jacque-Lynne Schulman
MeSH Section

MeSH on the Web

1998 MeSH files are available for download from the MeSH Web site at http://www.nlm.nih.gov/mesh.

The following formatted versions of the entire 1998 MeSH vocabulary are currently available:

1998 MeSH Trees in ASCII Format
MeSH descriptors with the tree numbers that place the heading in a hierarchical arrangement. Sorted by tree number.

1998 MeSH in MARC Format
MeSH vocabulary in the USMARC authority format include MeSH descriptors, qualifiers (subheadings), and descriptor-qualifier combination records. Supplementary Chemical Records are not included. For best results, please use a graphical interface.

1998 MeSH in ASCII Format
MeSH descriptors, qualifiers (subheadings), and Supplementary Chemical Records (through September 1, 1997), in ASCII format. This is a new tagged format and is similar to the ELHILL Unit Record format but the data are encoded in ASCII, not EBCDIC. This format also includes Supplementary Chemical Records, with those data through September 1, 1997. See Figure 1 below.

```
*NEWRECORD
RECTYPE      =  D
MH           =  Gene Library
PRINT ENTRY  =  DNA Library:T028:ACX:EQV:NLM (1998):961031:abcdef
PRINT ENTRY  =  Gene Bank:T028:NON:EQV:NLM (1990):890221:abcdef
ENTRY        =  Bank, Gene
ENTRY        =  Banks, Gene
ENTRY        =  DNA Libraries
ENTRY        =  Gene Banks
ENTRY        =  Gene Libraries
ENTRY        =  Libraries, DNA
ENTRY        =  Libraries, Gene
ENTRY        =  Library, DNA
ENTRY        =  Library, Gene
MN           =  G05.275.195
MN           =  G05.331.599.110.410
FX           =  DNA, Recombinant
MH_TH        =  NLM (1990)
ST           =  T028
AN           =  do not confuse with GENOMIC LIBRARY; do not confuse X ref GENE BANK
                with BIOLOGICAL SPECIMEN BANKS; no qualif
PI           =  Base Sequence (78-89)
PI           =  Cloning, Molecular (80-89)
PI           =  Plasmids (78-85)
MS           =  A large collection of cloned DNA fragments from a given organism, tissue,
                organ, or cell type. It may contain complete genomic sequences (GENOMIC
                LIBRARY) or complementary DNA sequences, the latter being formed from
                messenger RNA and lacking intron sequences.
PM           =  90
HN           =  90
MED          =  2295
MED          =  *224
M90          =  3520
M90          =  *357
M85          =  253
M85          =  *33
M80          =  1
CATSH        =  CAT LIST
DA           =  890515
RO           =  O:PXP
RO           =  A:SJN
RO           =  M:AGS
MR           =  970620
DC           =  1
DX           =  900101
UI           =  D015723
```

Figure 1 - Sample ASCII MeSH Format Record:

ASCII MeSH contains all data that are present in ELHILL MeSH, including cross-references and scope notes. Online descriptions of the data elements in each file are available for each of the three record types: Descriptor Data Elements, Qualifier (subheadings) Data Elements, and Supplementary Chemical Record Data Elements. Publication Types (PT) are encoded as MeSH Descriptors even though they appear in the PT field and not the MH field in the MEDLINE citations.

Restrictions on Use

There is no charge for downloading MeSH data from the NLM Web site. However, use of the ASCII MeSH file data is subject to conditions which are detailed in the memorandum of understanding that must be completed before downloading data.

Availability

The data for Descriptors and Qualifiers are updated annually and users of the data are encouraged to obtain the new year's data.

Supplementary Chemical Records are updated in ELHILL MeSH on a daily basis and the current file in ASCII MeSH is complete through September 1, 1997. The Supplementary Chemical Records will be added to ASCII MeSH periodically. The data elements that require a descriptor MeSH heading value, such as the Heading Mapped-To (HM) element, have been updated to match a descriptor in 1998 MeSH.

MeSH Descriptors and Qualifiers are also published annually in print as *the Medical Subject Headings, Annotated Alphabetic List*. Some Descriptor data are also published in *Medical Subject Headings*, *Tree Structures* and *Permuted Medical Subject Headings*.

File Format

Each MeSH record is indicated by a separate line, preceding the record, consisting of the string: *NEWRECORD. (See Figure 1 on this page.) Each element or occurrence is contained on a single line. Each line contains an element name and value, for example, MH = Appendicitis. The same is true for longer, free-text fields such the Annotation and Scope Note. (The longest occurrence/line in the 1998 files is in the descriptor file and is 1160 characters.)

For data elements that are multiply-occurring, each element occurs on a separate line, for example, the MeSH Tree Number:

MN = E05.909.262.607.790
MN = E05.909.262.620.670.620

Generally, data in ASCII MeSH files are in 7-bit ASCII format. The only exception is that in 41 descriptor records, the Annotation element contains one or more diacritical characters. No attempt was made to translate these characters so they may appear differently in different displays.

The file extensions are .bin rather than .txt so that Web browsers will prompt to save rather than automatically trying to display the relatively large text files (up to 36MB). The binary download should have no adverse effects for most users. The lines will usually be transmitted with only a line feed character (decimal 10) and not also a carriage return (decimal 13). Please contact the MeSH Section at the address given in Questions and Assistance at the end of this article if you have questions.

Numbers of Records in the 1998 MeSH

The number of records in the file for the three record types are shown below.

Record Type	Total Records
Descriptors (MeSH headings, including Publication Types)	18,934
Qualifiers (subheadings)	787
Supplementary Chemical Records	*95,617

* through September 1, 1997

Additional 1998 MeSH Files Available

1998. Pharmacologic Actions of a given drug

1998. Drugs with a given Pharmacologic Action

1998 New Headings with Scope Notes
Main headings that are new in 1998 with scope notes (definitions), cross-references, and other information.

Sample Entry:

Amino Acid Substitution
The naturally occurring or experimentally induced replacement of one or more amino acids in a protein with another. If a functionally equivalent amino acid is substituted, the protein may retain wild-type activity. Substitution may also diminish or eliminate protein function. Experimentally induced substitution is often used to study enzyme activities and binding site properties.

Previous indexing:
Amino Acid Sequence (66-97)

1998 Replaced Headings
Main headings that have changed form for 1998 or have been deleted.

Questions and Assistance

For questions concerning the content of ASCII MeSH, contact:

Stuart Nelson, M.D.
Head, Medical Subject Headings
National Library of Medicine
8600 Rockville Pike
Bethesda, MD 20894
Phone: 301-496-1495
FAX: 301-402-2002
E-mail: nelson@nlm.nih.gov

For questions concerning distribution, format, etc., contact:

Jacque-Lynne Schulman
Medical Subject Headings
Phone: 301-496-1495
FAX: 301-402-2002
E-mail: schulman@nlm.nih.gov

For further information about leased databases from the National Library of Medicine contact:

Jane L. Rosov
MEDLARS Management Section
Phone: 301-496-7706 or 888-346-3656
FAX: 301-496-0822
E-mail: janer@nlm.nih.gov

--prepared by Jacque-Lynne Schulman MeSH Section

Gold Standard Search

Thank you to everyone who mailed in search strategies in response to the "Gold Standard Search" article in the May-June 1997 issue of the *Technical Bulletin*. This feature offers searchers a chance to match wits with NLM staff on a search strategy formulation. The Gold Standard search strategies are developed here at NLM. The search request published in the May-June 1997 issue was:

A physician is trying to decide whether or not to recommend yearly mammographies to her 40-49 year old patients and wants to get some information to help her make this decision.

The Winner

There was no winner for this search. However, there was one honorable mention, Katherine Alexander of the Northwest Medical Center in Springdale, Arkansas. Ms. Alexander received the honorable mention because of the extra efforts she made to find very relevant information from additional sources as discussed below in the Analysis of the Search Strategies.

Choosing a File

The first step in this Gold Standard Search was to choose the best database for the subject. For this search, CANCERLIT, would seem to be the obvious choice. However, since, MEDLINE and PREMEDLINE have a considerable overlap with CANCERLIT and are searchable free of charge on the Web, if cost savings were a concern, command language searchers might think of going to PubMed first to run their strategy and then going into CANCERLIT and running the same strategy, eliminating the MEDLINE overlap and printing out only the unique CANCERLIT citations there. The Gold Standard search was run in CANCERLIT and PREMEDLINE. However, the Gold Standard Search did not retrieve any unique citations that would not have been found in MEDLINE. Searchers should routinely consider searching by Text Word in PREMEDLINE, in addition to searching the primary file of interest, to get the latest information on their subject.

Introduction to the Search

The inspiration for this search was a recent controversy in the United States surrounding the adoption of new mammography guidelines by the National Cancer Institute. Two key citations describing this event are shown below:

UI - 97260518
AU - Eastman P
TI - NCI adopts new mammography screening guidelines for women [news]
SO - J Natl Cancer Inst 1997 Apr 16;89(8):538-9

2
UI - 97261753
AU - Taubes G
TI - NCI reverses one expert panel, sides with another [news]
SO - Science 1997 Apr 4;276(5309):27-8

While knowledge of this event was not completely necessary in structuring the terms required for a search, it does help limit the timeframe of the search. It is clearly not necessary to go back very far to find the current information. In fact, a search could be limited to 1997 for the purposes of clinical decision making.

Analysis of the Search Strategies

The selection of the appropriate MeSH headings was important and fairly straightforward. In this search, BREAST NEOPLASMS, MAMMOGRAPHY and MASS SCREENING were the key headings. Almost all entries contained these terms. Further refinement or narrowing, can be obtained by combining the above with PRACTICE GUIDELINES, GUIDELINES, PATIENT SELECTION and/or some of the age terms. Again, the choice about how many terms to add and how to limit the search will depend on your interpretation of how much information is enough for your client. The Gold Standard Search Strategy is shown in Figure 1.

In addition to searching the NLM databases, Ms. Alexander also accessed CancerFax at 301-402-5874. This service provides access to many types of cancer information, for the cost of a phone call to the CancerFax computer (you must have a fax machine to utilize this service). The CancerFax Contents list allows you to select from the listings and have any of the items faxed to you. Ms. Alexander obtained copies of the following publications and found the first one to be "the most on-target information" she found.

400181: Mammography screening recommendations, National Cancer Advisory Board Issues. NCAB: mammography recommendations for women ages 40-49. March 1997. 6 pages.

600528: Mammography screening, Questions and Answers

400183: Mammography, statement from NCI on NCAB recommendations.

With the electronic resources now available, it will become increasingly necessary to look beyond the boundaries of standard database searches in order to obtain the most current information available on a subject.

Search Strategy Suggestions

The most common error was the use of subheadings in a search that had a relatively small retrieval. If you find fewer than 10 citations in a file, it is generally unnecessary to restrict the retrieval further by including subheadings. Other strategy errors that appeared in this search included:

1. Not searching in CANCERLIT and PREMEDLINE. Several entries searched only in MEDLINE. CANCERLIT should be used for a cancer-related search; and for the most current information, a PREMEDLINE text word search is necessary.

2. Using ADULT (PX) AND NOT AGED to eliminate unwanted citations. Articles are frequently indexed for more than one age group, and eliminating AGED could remove relevant articles that discuss both the desired age group and the elderly. In this search it is better to use ADULT or MIDDLE AGE and not try to narrow it further.

3. Eliminating LETTER (PT). Eliminating letters on such a recent topic could miss relevant information because good discussions, which have not yet appeared in articles, may be contained in letters.

The Next Gold Standard Search

A change is afoot for this ongoing feature of the *Technical Bulletin*. The purpose of these searches will remain the same, that is, they will be designed to illustrate search features and vocabulary in the NLM databases. However, PubMed and Internet Grateful Med (IGM) will be the highlighted search engines. The July-August 1997 issue of the *Technical Bulletin* has a PubMed Search Hints article on page 4 to help you get started and more information will be published in the coming months.

The search request is:

Your user asks for information on "Jewish genetic diseases."

Results will be published in the January-February 1998 *Technical Bulletin*. Entries must be received by December 15, 1997 to be considered.

Search Hints

Choose either PubMed or Internet Grateful Med. If you choose IGM, please indicate which database(s) you searched. Limit your retrieval to English language citations.

Reminder

There are no exact answers or absolutely correct strategies, only best approximations, just like real life. Good luck!

If your strategy is selected for publication you could win an NLM T-shirt or mug. In cases of multiple submissions of identical winning strategies, the prize winner will be either the person who is a first time winner or the first winning strategy received.

Mail us a copy of your search strategy and include a printout of citations. Please note that in the interest of saving time and money we are no longer asking for abstracts.

IGM searchers can print their strategies by clicking on Details of Search and printing the page displayed there. With PubMed as your search engine, you may be unable to print the screen displaying your search strategy. Therefore, please type your strategy on paper for submission and mail it to:

Gold Standard Search
MEDLARS Management Section
National Library of Medicine
8600 Rockville Pike
Bethesda, MD 20894

--prepared by Toby Port
MEDLARS Management Section

SS 1 /C?
USER:
file cancer

PROG:
YOU ARE NOW CONNECTED TO THE CANCERLINE (CANCERLIT) FILE.

SS 1 /C?
USER:
*mammography and *breast neoplasms/pc

PROG:
SS (1) PSTG (739)

SS 2 /C?
USER:
mass screenings or practice guidelines or guidelines or patient selection

PROG:
SS (2) PSTG (9861)

SS 3 /C?
USER:
(pt) practice guideline or guideline

PROG:
SS (3) PSTG (675)

SS 4 /C?
USER:
2 or 3

PROG:
SS (4) PSTG (10474)

SS 5 /C?
USER:
1 and 4

PROG:
SS (5) PSTG (610)

- In this particular situation it is not necessary to EXPLODE breast neoplasm because the narrower terms are to male breast neoplasms and to mammory neoplasms which pertain to animals.
- As the text explained, if the retrieval in SS1 proved to be low you should drop the use of the subheading.

SS 6 /C?
USER:
5 and not for (la)

PROG:
SS (6) PSTG (544)

SS 7 /C?
USER:
6 and human

PROG:
SS (7) PSTG (542)

SS 8 /C?
USER:
7 and adult or 7 and middle age

PROG:
SS (8) PSTG (364)

SS 9 /C?
USER:
8 and 97 (yr)

PROG:
SS (9) PSTG (34)

SS 10 /C?
USER:
prt 10 ti

PROG:

1
TI - The great mammogram debate.

2
TI - NBSS: changes were made, suspicious changes were not [letter]

3
TI - NIH Consensus Statement. Breast cancer screening for women ages 40-49.

Figure 1 - Gold Standard Search

4
TI - The effect of spatial definition on the allocation of clients to screening clinics.

5
TI - Mammography controversies: time for informed consent? [letter]

6
TI - Mammography screening for women aged 40 through 49—a guidelines saga and a clarion call for informed decision making.

7
TI - Age-related differences in breast carcinoma knowledge, beliefs, and perceived risk among women visiting an academic general medicine practice.

8
TI - National Institutes of Health Consensus Development Conference Statement: Breast Cancer Screening for Women Ages 40-49, January 21-23, 1997. National Institutes of Health Consensus Development Panel.

9
TI - Assessment of lifetime gained as a result of mammographic breast cancer screening using a computer model.

10
TI - Report of the NMA panel on mammography.

Figure 1 - Gold Standard Search cont.

SS 10 /C?
USER:
file premedline

PROG:
YOU ARE NOW CONNECTED TO THE PREMEDLINE FILE.
NOTICE: THESE PRELIMINARY, UNINDEXED CITATIONS HAVE NOT GONE THROUGH NLM'S QUALITY CONTROL PROCESS.

SS 1 /C?
USER:
(tw) all mammogra:

PROG:
SS (1) PSTG (82)

SS 2 /C?
USER:
(tw) all guideline: or all screen: or all detect:

PROG:
SS (2) PSTG (5542)

SS 3 /C?
USER:
1 and 2

PROG:
SS (3) PSTG (51)

SS 4 /C?
USER:
3 and not for (la)

PROG:
SS (4) PSTG (37)

SS 5 /C?
USER:
prt 3 ti

PROG:

1
TI - Breast carcinoma stage in relation to time interval since last mammography: a registry-based study. The Romagna Cancer Registry and Collaborators [In Process Citation]

2
TI - Self-reported use of mammography among women aged > or = 40 years — United States, 1989 and 1995 [In Process Citation]

3
TI - Comparison of the diagnostic performance of high-frequency ultrasound as a first- or second-line diagnostic tool in non-palpable lesions of the breast [In Process Citation]

Figure 1 - Gold Standard Search cont.

1998 Weekly Update Schedule for MEDLINE

Entry Month	Updated MEDLINE Available	Date of Entry (DA) Ranges
9801 (EM)	Dec 15	971024-971125*
9802 (EM)	Dec 27	971126-971223*
9803 (EM)		
Part 1	Jan 3	971224-971230*
Part 2	Jan 10	971231-980108*
Part 3	Jan 17	980109-980115
Part 4	Jan 24	980116-980122
Part 5	Jan 31	980123-980129
9804 (EM)		
Part 1	Feb 7	980130-980205
Part 2	Feb 14	980206-980212
Part 3	Feb 21	980213-980219
Part 4	Feb 28	980220-980226
9805 (EM)		
Part 1	Mar 7	980227-980305
Part 2	Mar 14	980306-980312
Part 3	Mar 21	980313-980319
Part 4	Mar 28	980320-980326
9806 (EM)		
Part 1	Apr 4	980327-980402
Part 2	Apr 11	980403-980409
Part 3	Apr 18	980410-980416
Part 4	Apr 25	980417-980423
9807 (EM)		
Part 1	May 2	980424-980430
Part 2	May 9	980501-980507
Part 3	May 16	980508-980514
Part 4	May 23	980515-980521
Part 5	May 30	980522-980528
9808 (EM)		
Part 1	Jun 6	980529-980604
Part 2	Jun 13	980605-980611
Part 3	Jun 20	980612-980618
Part 4	Jun 27	980619-980625
9809 (EM)		
Part 1	Jul 4	980626-980702
Part 2	Jul 11	980703-980709
Part 3	Jul 18	980710-980716
Part 4	Jul 25	980717-980723
9810 (EM)		
Part 1	Aug 1	980724-980730
Part 2	Aug 8	980731-980806
Part 3	Aug 15	980807-980813
Part 4	Aug 22	980814-980820
Part 5	Aug 29	980821-980827

Entry Month	Updated MEDLINE Available	Date of Entry (DA) Ranges
9811 (EM)		
Part 1	Sep 5	980828-980903
Part 2	Sep 12	980904-980910
Part 3	Sep 19	980911-980917
Part 4	Sep 26	980918-980924
9812 (EM)		
Part 1	Oct 3	980925-981001
Part 2	Oct 10	981002-981008
Part 3	Oct 17	981009-981015
Part 4	Oct 24	981016-981022
9901 (EM)	Dec 14	981023-981125*

*Modified because of holiday

Search hint: To run weekly updates to a search, use the pattern shown below, where SS 1: represents your completed search strategy.

On September 5 - SS 1: AND 9811 (EM)
On September 12 - SS 1: AND 9811 (EM) AND FROM 19980904 TO 19980910 (DA)
On September 19 - SS 1: AND 9811 (EM) AND FROM 19980911 TO 19980917 (DA)
On September 26 - SS 1: AND 9811 (EM) AND FROM 19980918 TO 19980924 (DA)

1998 Weekly Update Schedule for AIDSLINE

Entry Month	Updated AIDSLINE Available
9801 (EM)	Jan 3**
9802 (EM)	Jan 3**
9803 (EM)	
Part 1	Jan 3
Part 2	Jan 10
Part 3	Jan 17
Part 4	Jan 24
Part 5	Jan 31
Part 6	Feb 10*
9804 (EM)	
Part 1	Feb 7
Part 2	Feb 14
Part 3	Feb 21
Part 4	Feb 28
Part 5	Mar 10*
9805 (EM)	
Part 1	Mar 7
Part 2	Mar 14
Part 3	Mar 21
Part 4	Mar 28
Part 5	Apr 7*
9806 (EM)	
Part 1	Apr 4
Part 2	Apr 11
Part 3	Apr 18
Part 4	Apr 25
Part 5	May 5*
9807 (EM)	
Part 1	May 2
Part 2	May 9
Part 3	May 16
Part 4	May 23
Part 5	May 30
Part 6	Jun 9*
9808 (EM)	
Part 1	Jun 6
Part 2	Jun 13
Part 3	Jun 20
Part 4	Jun 27
Part 5	Jul 7*

Entry Month	Updated AIDSLINE Available
9809 (EM)	
Part 1	Jul 4
Part 2	Jul 11
Part 3	Jul 18
Part 4	Jul 25
Part 5	Aug 4*
9810 (EM)	
Part 1	Aug 1
Part 2	Aug 8
Part 3	Aug 15
Part 4	Aug 22
Part 5	Aug 29
Part 6	Sep 8*
9811 (EM)	
Part 1	Sep 5
Part 2	Sep 12
Part 3	Sep 19
Part 4	Sep 26
Part 5	Oct 6*
9812 (EM)	
Part 1	Oct 3
Part 2	Oct 10
Part 3	Oct 17
Part 4	Oct 24
Part 5	Nov 10*

*The last update portion of AIDSLINE includes data derived from CANCERLIT, BIOETHICSLINE (bimonthly), CATLINE, AVLINE, and HealthSTAR. The other update portions are the MEDLINE-derived data. Other materials such as newsletters, meeting abstracts and special journal citations are added throughout the cycle. Please note that the last update portion to complete the Entry Month routinely occurs about 3 days after Part 1 of the next Entry Month is added, e.g., Part 5 of 9809 (EM) is added August 4 after Part 1 of 9810 (EM) which is added on August 1.

**Subject to change.

1998 Weekly Update Schedule for HealthSTAR

Entry Month	Updated HealthSTAR Available
9801 (EM)	Jan 10**
9802 (EM)	Jan 10**
9803 (EM)	
Part 1	Jan 10
Part 2	Jan 10
Part 3	Jan 17
Part 4	Jan 24
Part 5	Jan 31
Part 6	Feb 7*
9804 (EM)	
Part 1	Feb 7
Part 2	Feb 14
Part 3	Feb 21
Part 4	Feb 28
Part 5	Mar 7*
9805 (EM)	
Part 1	Mar 7
Part 2	Mar 14
Part 3	Mar 21
Part 4	Mar 28
Part 5	Apr 4*
9806 (EM)	
Part 1	Apr 4
Part 2	Apr 11
Part 3	Apr 18
Part 4	Apr 25
Part 5	May 9*
9807 (EM)	
Part 1	May 2
Part 2	May 9
Part 3	May 16
Part 4	May 23
Part 5	May 30
Part 6	Jun 6*
9808 (EM)	
Part 1	Jun 6
Part 2	Jun 13
Part 3	Jun 20
Part 4	Jun 27
Part 5	Jul 4*

Entry Month	Updated HealthSTAR Available
9809 (EM)	
Part 1	Jul 4
Part 2	Jul 11
Part 3	Jul 18
Part 4	Jul 25
Part 5	Aug 8*
9810 (EM)	
Part 1	Aug 1
Part 2	Aug 8
Part 3	Aug 15
Part 4	Aug 22
Part 5	Aug 29
Part 6	Sep 5*
9811 (EM)	
Part 1	Sep 5
Part 2	Sep 12
Part 3	Sep 19
Part 4	Sep 26
Part 5	Oct 3*
9812 (EM)	
Part 1	Oct 3
Part 2	Oct 10
Part 3	Oct 17
Part 4	Oct 24
Part 5	Oct 27*

*The last update portion of HealthSTAR includes data derived from CATLINE and specially indexed non-journal materials. All other update portions include MEDLINE-derived data, special list (H) journals indexed by the American Hospital Association (AHA), and special list journals (T) selected for indexing by NLM's National Information Center on Health Services Research and Health Care Technology (NICHSR).

**Subject to change.

1998 Monthly Update Schedule for NLM Databases

Entry Month	SDILINE Available	BIOETH-ICSLINE Available	CANCERLIT Available	POPLINE Available	TOXLINE /TOXLIT Available
9801	Dec 15	*	Jan 3	Jan 10	Jan 10
9802	Dec 27	Feb 7	Feb 7	Feb 14	Feb 14
9803	Jan 31	*	Mar 7	Mar 14	Mar 14
9804	Feb 28	Apr 5	Apr 4	Apr 4	Apr 11
9805	Mar 28	*	May 2	May 2	May 9
9806	Apr 25	Jun 6	Jun 6	Jun 6	Jun 13
9807	May 30	*	Jul 4	Jul 11	Jul 11
9808	Jun 27	Aug 1	Aug 1	Aug 8	Aug 8
9809	Jul 25	*	Sep 5	Sep 5	Sep 12
9810	Aug 29	Oct 3	Oct 3	Oct 3	Oct 10
9811	Sep 26	*	Nov 7	Nov 7	Nov 14
9812	Oct 24	Dec 5	Dec 14	Dec 5	Dec 21

For MEDLINE updates, see the "1998 Weekly Update Schedule for MEDLINE."

For AIDSLINE updates, see the "1998 Update Schedule for AIDSLINE " .

For HealthSTAR updates, see the "1998 Update Schedule for HealthSTAR " .

* BIOETHICSLINE is updated every two months.

See ELHILL and TOXNET Online News for confirmation of these updates and for updates to files not listed here.

Use $INFO UPDATES to retrieve a list of MEDLARS databases showing the date of last update and total number of records for each.

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File	Connect Charge (Per Hour)	Search Statement Charge	Online Citation Charge	Interaction Charge (Carriage Returns)	Computer Resources Disk Accesses (Per 100)	Online Character Charge (Per 1,000)
			ELHILL COMPUTER			
MEDLINE® & Backfiles	$2.40	$.06	$.01	—	$.04	$.05
AIDSLINE®, AIDSTRIALS, AIDSDRUGS & DIRLINE®	FREE	FREE	FREE	—	FREE	FREE
TOXLINE® & TOXLINE65	2.40	.06	.01	—	.04	.05
ALERT	2.40	.06	—	—	.04	—
All Others	2.40	.06	.01	—	.04	.05
PDQ®	18.00	—	—	—	—	—
DOCUSER® & LOAN STATUS	FREE	FREE	FREE	—	FREE	FREE
			TOXNET COMPUTER			
All Files	3.80	.08	—	.02	—	.08

- Depending largely upon the amount of information viewed/printed/downloaded, a MEDLINE search generally ranges from $1.25 - $5.00.
- The charge to ftp online search results via the Internet follows this algorithm. There are no additional charges.

NLM *OFFLINE* CHARGES

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Offsearches	Per File
MEDLINE & Other Databases	$1.00 (plus page charges)
AIDSLINE, AIDSTRIALS, AIDSDRUGS, DIRLINE & DOCUSER	FREE

Automatic SDI Searches	Per Search
SDILINE®, AVLINE®, BIOETHICSLINE®, CANCERLIT®, CATLINE®, HealthSTAR, POPLINE®, TOXLINE	$1.50 (plus page charges or ftp character charges)
AIDSLINE	FREE

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Effective October 1, 1997

The following is a listing of annual license fees for databases available for lease from NLM. There are no use charges. Effective October 1, 1997 there is no surcharge for non-U.S. use.

DATABASE		ANNUAL LICENSE FEE AND NOTES
AIDSDRUGS	-	No annual license fee. AIDSDRUGS and AIDSTRIALS are leased together.
AIDSLINE	-	No annual license fee.
AIDSTRIALS	-	No annual license fee. AIDSDRUGS and AIDSTRIALS are leased together.
AVLINE	-	$1,000 current year: updated monthly on tape or via ftp. $1,000 one time fee for base file (up to current year) on tape only. Available in MARC-compatible format only.
BIOETHICSLINE	-	$1,000
CANCERLIT	-	$3,000. NLM licenses CANCERLIT only to official International MEDLARS Centers. All other prospective licensees of CANCERLIT should contact NCI (National Cancer Institute): R.A. Bloch International Cancer Information Center 9030 Old Georgetown Road Bethesda, MD 20852 (301) 496-7406
CATLINE	-	$6,000 current year: updated weekly via ftp only. -or- $4,000 current year: updated monthly on tape or via ftp. $3,000 one-time fee for base file (1965 up to the current year) on tape only. $3,000 one time fee for retrospective file (pre-1965) on tape only. Available in MARC-compatible format only.
CHEMICAL CARCINOGENESIS WÂSEARCH INFORMATION SYSTEM (CCRIS)	-	$1,000
ChemID	-	$1,000. Licensees must make separate arrangements with two data suppliers in advance: U.S. Pharmacopeial Convention, Inc., and Cosmetic Toiletries and Fragrance Association.
DEVELOPMENTAL AND REPRODUCTIVE TOXICOLOGY (DART)	-	$1,000
DIRLINE	-	No annual license fee.
ENVIRONMENTAL TERATOLOGY INFORMATION CENTER BACKFILE (ETICBACK)	-	$1,000
GENE-TOX	-	$1,000
HAZARDOUS SUBSTANCES DATA BANK (HSDB)	-	$2,500. The Emergency Medical Treatment (EMT) field in HSDB is not distributed in the leased database.
HealthSTAR™	-	$3,000
HISTLINE	-	$1,000

MEDLINE - Current Year data (input during 1998 indexing year):
$9,000 weekly updates -OR-
$5,000 monthly updates

Older data: licensees requesting older data must select one of the 7 groupings of years as shown below.

Fees	Years of Publication
$1,750.00	1995 - 1997
$1,750.00	1993 - 1997
$1,750.00	1990 - 1997
$3,500.00	1985 - 1997
$5,250.00	1980 - 1997
$5,250.00	1975 - 1997
$7,000.00	1966 - 1997

MeSH VOCABULARY - $1,000 on tape in ELHILL Unit Record Format (no charge with MEDLINE). No license or fee applies if the data are used for translation purposes only. See FILE page 4 for additional information about the availability of MeSH data from NLM's Web site at no cost.

OLDMEDLINE - $1,000

PDQ - Available from NCI. Prospective domestic and non-U.S. licensees of PDQ should contact NCI (National Cancer Institute):
R.A. Bloch International Cancer Information Center
9030 Old Georgetown Road
Bethesda, MD 20852
(301) 496-7406

POPLINE - $2,000

REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) - Available from NTIS.

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5285 Port Royal Road
Springfield, VA 22161
(703) 487-4650

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SPACELINE - $1,000

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NTIS
5285 Port Royal Road
Springfield, VA 22161
(703) 487-4650

TOXLINE - $2,500 plus royalties for the current file (1981 through TOXLINE65 the current year).
$2,500 plus royalties for the backfile (1965-80).

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There are two leasing options ava ilable for TOXLINE and TOXLINE65:
1. all subfiles except NIOSHTIC;
2. all subfiles except NIOSHTIC, BIOSIS, and IPA. The charges are the same. Please specify which TOXLINE version is to be licensed.

TOXNET Databases & Databanks - See individual database names: CCRIS, DART, ETICBACK, GENE-TOX, HSDB, RTECS, TRI.

ADDITIONAL FEES

1. Sample data:
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2. GENER format:
   If Current Year MEDLINE (SDILINE) data are supplied in GENER format, there is an extra, annual flat-rate fee of $1,000.00.
3. Replacement tapes:
   Replacement tapes cost $75.00/tape.

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1. MeSH VOCABULARY DATA:
   The National Library of Medicine makes its annual Medical Subject Headings (MeSH) available for downloading in several formats from the MeSH page on the NLM World Wide Web site (http://www.nlm.nih.gov/mesh/filelist.html). There is no charge or license required for each Web-based version; however, completion of an online memorandum of understanding is required to obtain the complete file in each format. Sample data are available.
   a. MeSH TREES FILE: contains MeSH Headings with their associated hierarchical tree numbers (referred to as the "Trees file"). Subheadings and supplementary chemical records are not included. Updated annually.
   b. MeSH in MARC-COMPATIBLE FORMAT - contains MeSH Headings, subheadings and combination records in MARC-compatible format. Supplementary chemical records are not included. Updated annually.
   c. ASCII MeSH - contains MeSH Headings in ASCII format with all data elements contained in the online MeSH Vocabulary database at NLM included. Subheadings and supplementary chemical records are included. Updated annually.

2. SERLINE (Serials) DATA:
   Serials data are available at no cost from the NLM World Wide Web site http://www.nlm.nih.gov/tsd/serials/lsiou.html and http://www.nlm.nih.gov/tsd/serials/jnlupdate.html. For those without Web access, tagged SERLINE information, sorted alphabetically by the title of the journal, may be obtained by anonymous ftp from the host nlmpubs.nlm.nih.gov in the directory /online/journals. There are six files, each beginning with the name "List of Serials Indexed - Tagged Data:". A license agreement is not required to obtain these data.

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Chief, Bibliographic Services Division
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Telephone: 301-496-6217
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E-mail: kotzin@nlm.nih.gov

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DOCUSER® & LOAN STATUS	FREE	FREE	FREE	—	FREE	FREE
			TOXNET COMPUTER			
All Files	3.80	.08	—	.02	—	.08

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AIDSLINE	FREE

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The *Technical Bulletin* on the Web

The Technical Bulletin will be published exclusively on NLM's Web site (http://www.nlm.nih.gov) and cease paper copy beginning with the January-February 1998 issue.

Technical Bulletin

ftp via the NLM Web site:
Connect to the NLM Web site
(URL: http://www.nlm.nih.gov)
Click on More Publications;
click on NLM Technical Bulletin;
choose the desired format:
pdf or postscript.
Choose the desired issue.

ftp via NLM's anonymous ftp server:
PostScript and pdf files
anonymous ftp to nlmpubs.nlm.nih.gov
in the directory online/medlars/techbull
in the directories:
pdf_tb for pdf files
ps_tb for PostScript files

Online Services Reference Manual -- Updated Chapters

ftp via the NLM Web site:
WordPerfect, PostScript, and pdf files
Connect to the NLM Web site:
(URL: http://www.nlm.nih.gov)
Click on More Publications; click on Publications About Using NLM Programs and Services;
click on Online Services Reference Manuals; choose the desired format of the chapter you wish to retrieve.

ftp via NLM's anonymous ftp server:
WordPerfect, PostScript and pdf files
anonymous ftp to nlmpubs.nlm.nih.gov
in the directory online/medlars/manuals

NLM Serials Publications: LSIOU, LJI, and updates for indexed titles

ftp via the NLM Web site:
DOS Text and WordPerfect
Connect to the NLM Web site
(URL: http://www.nlm.nih.gov)
Click on More Publications;
click on Publications About Using NLM Programs and Services; click on desired publication; choose the format you wish to retrieve.

ftp via NLM's anonymous ftp server:
WordPerfect, PostScript and Text files
anonymous ftp to nlmpubs.nlm.nih.gov
in the directory online/journals

Questions?

ftp: ftpadmin@nlm.nih.gov
gopher: admin@gopher.nlm.nih.gov
e-mail: admin@mailserv.nlm.nih.gov

To retrieve a list of MEDLARS databases online, their file counts and update information, type:
FILE ALERT at a USER: prompt, then type $info updates
To retrieve the Serials updates online, type:
FILE ALERT at a USER: prompt, then type $info seryymm, e.g. $info ser9603

NLM Internet Directory

The following Internet addresses may be used for specific questions and comments to NLM:

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Anonymous ftp Service Assistance	ftpadmin@nlm.nih.gov
Fixed-Fee and Flat-Rate Special Agreements	hajarian@nlm.nih.gov
GenBank Molecular Sequence Database Information	info@ncbi.nlm.nih.gov
Grateful Med	gmhelp@nlm.nih.gov
History of Medicine Division	hmdref@nlm.nih.gov
Images from the History of Medicine	hmdref@nlm.nih.gov
Interlibrary Loan (ILL)/DOCLINE Assistance	ill@nlm.nih.gov
International Programs Office	ip@nlm.nih.gov
Internet Grateful Med Assistance	access@nlm.nih.gov
MEDLARS Management Section	mms@nlm.nih.gov
MeSH Heading Suggestions	meshsugg@lhc.nlm.nih.gov
National Center for Biotechnology Information (NCBI)	info@ncbi.nlm.nih.gov
National Information Center on Health Services Research and Health Care Technology (HealthSTAR/HSTAT):	nichsr@nlm.nih.gov
Office of Public Information	publicinfo@nlm.nih.gov
Planning and Evaluation Office	siegel@nlm.nih.gov
Preservation Information	pres@nlm.nih.gov
PubMed Assistance	info@ncbi.nlm.nih.gov
Reference Assistance	ref@nlm.nih.gov
Technical Services Division	tsd@nlm.nih.gov
Toxicology Information Program	toxmail@tox.nlm.nih.gov

NLM Internet Access

TELNET

MEDLARS, PDQ & TOXNET	medlars.nlm.nih.gov
Locator	locator.nlm.nih.gov
HSTAT	text.nlm.nih.gov

FTP

MEDLARS Server	medlars.nlm.nih.gov
NLM Anonymous Server	nlmpubs.nlm.nih.gov

TOOLS

Internet Grateful Med	http://igm.nlm.nih.gov
NLM Web site	http://www.nlm.nih.gov
NLM AIDS Web site	http://sis.nlm.nih.gov/aidswww.htm
PubMed	http://www.ncbi.nlm.nih.gov
e-mail-Based File Server	files@mailserv.nlm.nih.gov

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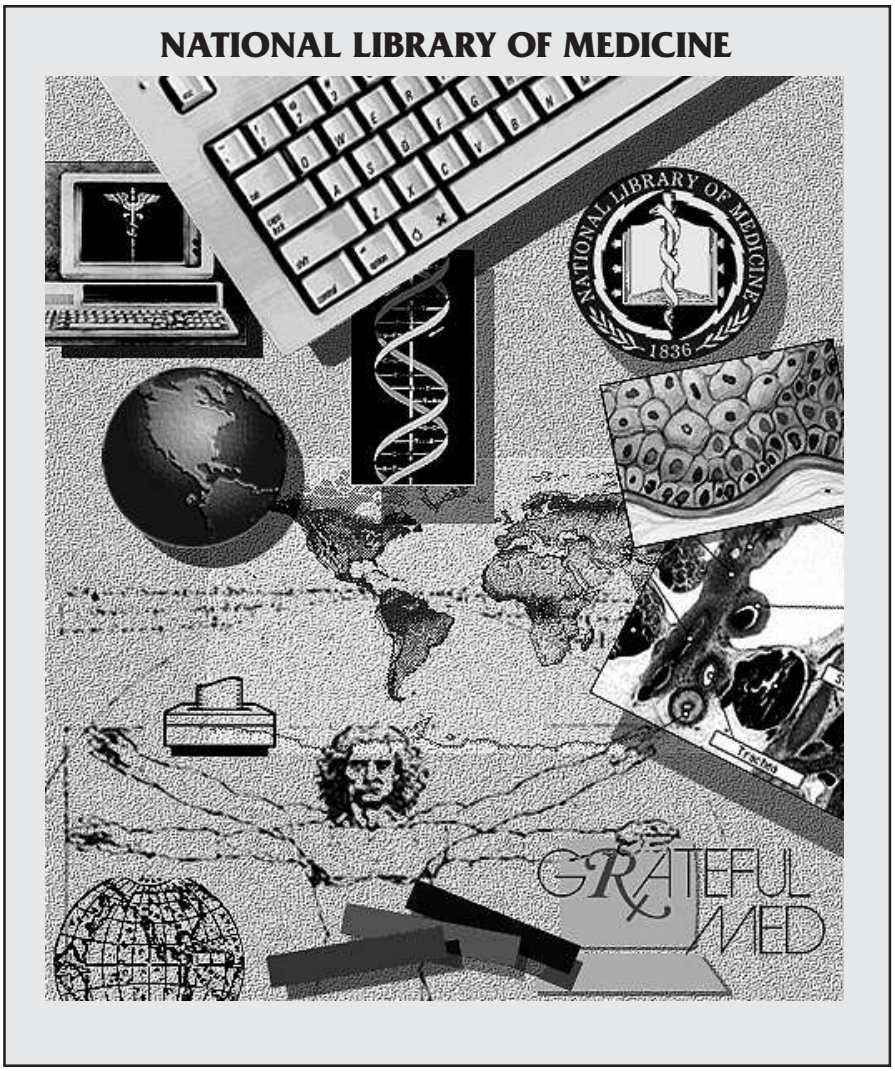

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