Access to Medline and Academic Search Complete are free from your public library as part of the TexShare program.

Medline is the premier biomedical research database for the journal literature. It is a subset of the PubMed database. The difference between the two are:
1. Medline from Ebsco uses a difference search interface than the PubMed interface;
2. PubMed covers more years as it goes back to 1950, Ebsco Medline goes back to 1966;
3. PubMed is updated daily and includes just article citations without abstracts (in-process citations);
4. Ebsco Medline has some links to articles that you can access; PubMed has links but you will not necessarily be able to access the articles.

Academic Search Complete is a full text database that covers health sciences journals as well as journals in the behavioral sciences, sociology, anthropology, religion, environment, biological sciences, and much more. It indexes more than 10,100 titles with full text to over 5,100 peer-reviewed journals. Select titles include:

Note: Many of the above titles have an embargo on the most current 3, 6, 9, or 12 months.

<table>
<thead>
<tr>
<th>Adolescence</th>
<th>Behavioral Medicine</th>
<th>Health &amp; Social Work</th>
<th>Journal of Nutrition Education &amp; Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS Education &amp; Prevention</td>
<td>British Journal of Health Psychology</td>
<td>Health Psychology Review</td>
<td>Journal of the American Academy of Nurse Practitioners</td>
</tr>
<tr>
<td>AIDS Patient Care &amp; STDs</td>
<td>Cancer Investigation</td>
<td>Immigrants &amp; Minorities</td>
<td>Journal of the Society for Integrative Oncology</td>
</tr>
<tr>
<td>Annals of Family Medicine</td>
<td>Environmental Health Perspectives</td>
<td>Journal of Community Health Nursing</td>
<td>Nutrition &amp; Cancer</td>
</tr>
<tr>
<td>Behavioral Interventions</td>
<td>Family &amp; Community Health</td>
<td>Journal of Infectious Diseases</td>
<td>Psycho-Oncology</td>
</tr>
</tbody>
</table>

You may be able to access additional articles through your public library even if the journal is not available in FT from Academic Search Complete. Each library is different—don’t be afraid to ask!

If an article is not available... 3 options
You might be able to get it by contacting the Department of State Health Services Medical and Research Library: http://www.dshs.state.tx.us/library/default.shtm. They will provide document delivery for some agencies.

If they can’t help you, check with your public library about their interlibrary loan policy.

Lastly, you can also contact a cooperating health science library to order the document through Lonesome Doc and PubMed: http://www.pubmed.gov. Search PubMed to find the article you need, check the box next to it, and click on the box marked “Send to”. Change that to order which will take you to a page where you will need to set up an account before requesting the item.

Note: There may be a cost associated with this service.
Developing a Search Strategy

Google has spoiled all of us. It has taught us to just jump on the Web, type in a search, and be happy with 25,000 hits. We may look through the first 20 or so, but usually stop after that. What happens if a really good article is on the third page but we stop at the second???

This handout is going to demonstrate a more systematic approach to doing searches in online databases. The goal is to reduce the number of non-relevant hits while increasing the number of relevant hits by following the strategy outlined on the next few pages.

**Topic:** Recent statistics show that African American women and Hispanic women tend to present with advanced stages breast cancer more often than White women. As a result, mortality rates are higher. To reduce their mortality rates, they need to come in for regular mammograms and to come in at the first sign of a lump. How can they be encouraged to do so?

**Search Strategy #1: Use at least three concepts when searching and search each concept separately.**

Let’s take the topic apart and come up with the 3 concepts:

- **Hispanics or African Americans**
  - **AND**
  - **Mammography**
  - **AND**
  - **Health promotion**

Notice that **AND** is used to combine the terms. That way, all articles found will have all 3 concepts in them.

To the right is how you might conceptualize the search.

But wait— are these all of the terms needed for the search?

- **Hispanics or African Americans or Latinas**
  - **AND**
  - **Mammography or breast cancer screening or mammograms**
  - **AND**
  - **Health promotion or health education or health attitudes or health knowledge or health behavior**

This is a far cry from what you do on Google but your results will be much better.

**Testing Your Search Strategy**

Let’s see how this search looks in *Academic Search Complete*. You’ll need to go to your public library and select the database to search it. If you are off-site, you’ll also need to log in using the information they gave you for remote access.

If the search screen looks like this, click on the **Advanced Search** link to change to a 3-line screen.
Enter the concepts, one concept per line.

hispanic* or “african American*” or latina*
and mammogra* or “breast cancer screening”
and “health promotion” or “health education” or “health attitudes” or “health knowledge” or “health behavior”

The asterisk (*) is used to truncate search terms. By using it, the search engine will look for any word beginning with those letters (hispanic, hispanics) including mammography, mammographies, mammogram, and mammographies. “Quotation marks” are used to search for the terms as phrases. If you have a term that has more than one word, use the “quotation marks” to ensure the word stay together in the search.

One the terms are entered, click on Search.

Sixty articles were returned from this search. The first few articles are available from this database.

Some libraries have a service that will let you check for full text availability through other sources. In the example below, there is a link to something called ArticleLinker. Other libraries (Houston Public, for example) have a link that looks like this:
To view only the full text journals, click on the button on the right under **Limit your results** and then clicking on **Update Results**.

This reduces the number of articles found to 33.

Of course, this will vary depending on your library. That’s because it is possible for a library to link their electronic holdings to the Ebsco database so the number of full text items includes both those that are full text within the database as well as what can be accessed from other sources.

You will know for certain that it is available when you see the PDF icon or a link to HTML text.

If you click on an article title from the results list, you will be taken to the abstract to the title. You can retrieve the full text (if it's available) from either the citation screen or while viewing the abstract.

### Expanding Your Search

In this next example, **Medline** is added to the search.

Above the search box, click on **Choose Databases**.

Each library creates a list of the Ebsco databases that they can access in order based on their own preferences. In this example, **Medline** is just below **Academic Search Complete**. Your library will probably be different.

Find **Medline** and check the box next to it. Don’t un-check the box next to **Academic Search Complete**. Click on **Continue**.
You will need to select search options such as **Scholarly (Peer Reviewed) Journals** if that is important to you.

381 records were returned in this search.

To the left are terms that the two databases use. The first set of terms are from **Academic Search Complete**. Other terms can be found by clicking on **Subject: Major Heading**.

This bring us to:

**Search Strategy #2: Revise your vocabulary to be as comprehensive as possible**

The search was revised to incorporate some of the other terms suggested by the databases we’re searching.

- hispanic* or “african american*” or latina*
- mammogra* or “breast cancer screening” or (“breast neoplasms” and screening)
- “health promotion” or “health education” or “health attitudes” or “health knowledge” or “health behavior”

In the new search strategy, (breast neoplasms and screening) are in parentheses to keep those two concepts grouped. You don’t want just any kind of screening, only screening for breast neoplasms. 440 results were returned.

**Search Strategy #3: Refine your search.**

Since there are so many results returned, you might want to refine your search. This search is being done in two databases, both of which have non-English journals. Click on the **Search Options** link on the right and select English language only articles.

Not many articles are removed since the first set of terms are very “American” in nature. But it’s always worth a try!
The number of articles found is now down to 435—whew! That is still quite a few.

To see only those articles that review the literature, click on **Add Row** (to the right of the 3rd row) and include the term “review” in your search. This reduces the number of items found to 19 records.

Maybe you would like to see articles that discuss the development or evaluation of programs. In that case, instead of searching for review articles, add to the 4th row:

**evaluation or development or effective**

This reduces the original 438 articles found down to 144.

Changing the search to look for articles on Hispanics or Latinas only (and not African Americans) reduces the number of records found down to 66.

Notice that the strategy, though, is to input similar or like terms on a single line. The race/ethnic groups we wanted went on the first line, the disease/prevention method on the second line, and the intervention-type terms on the third line.

**Conclusion**

Now—isn’t this better than Google? You can find full text current research articles from authoritative journals right at your fingertips.

To help you even more, search strategies will be posted on the Web site developed for this workshop: http://www.sph.uth.tmc.edu/library/default.aspx?id=9450

The strategies will eventually incorporate:
+ Patient navigation/case management for diagnosis and treatment
+ Screening (Education and Screening Programs) to increase: Mammogram utilization, Diagnostic mammograms or other follow up tests, Participation in clinical trials, Seeking or finishing treatment
+ Management of side effects
+ Survivorship issues
+ Support groups and other support programs
+ Coping with a diagnosis: depression, high degrees of stress, inability with returning to work, inability to perform household chores, dealing general quality of life issues, financial stress and burden, fertility issues

**Need help?**

If you need assistance in developing a search, please—contact either Helena VonVille (Helena.M.VonVille@uth.tmc.edu or 713-500-9131) or Paige O’Neal (Courtney.P.ONeal@uth.tmc.edu or 713-500-9129). We will help you map out a strategy to find the best possible articles that meet your needs.