

Much information about disaster preparedness and bioterrorism is available through standard biomedical databases such as PubMed and the resources in OVID. In order to conduct a complete search for this material, it is also important to look in specialized databases.

This handout will describe searching strategies for three specialized databases and provide an overview of two products designed for wireless devices.

NOTE: Please be aware that each institution (hospital, school) has its own customized emergency response plan, and we ask that you make sure to check with your respective departmental manager to learn what you should do in the event of a disaster.

Specialized Databases

TOXNET

Go to: <http://toxnet.nlm.nih.gov>

Description: TOXNET is a collection of nine databases about toxicology, hazardous searching, and related areas, produced by the National Library of Medicine. You can search the databases in TOXNET individually or all at once. Another search option is the “Multi-Databases” search, which provides for searching any combination of five TOXNET databases.

In addition to the databases in TOXNET, this web page links to additional graphical resources—such as ToxTown and ToxMap—that are also available for searching.

Searching:

Before beginning a TOXNET search, you must decide which database/s to search. Click on the “i” icon to learn more about the contents of each database. This provides a brief description of the database, and links to fact sheets and sample search results.

The databases include:

- Hazardous Substances Data Bank (HSDB)
 - Integrated Risk Information System (IRIS)
 - International Toxicity Estimates for Risk (ITER)
 - Genetic Toxicology (GENE-TOX)
 - Chemical Carcinogenesis Research Information System (CCRIS)
 - “Multi-databases,” which provides for searching various combinations of HSDB, IRIS, ITER, GENE-TOX, and CCRIS
 - Toxicology Bibliographic Information (TOXLINE)
 - Development & Reproductive Technology (DART/ETIC)
 - Toxics Release Inventory (TRI)
 - Chemical Synonyms, Structures and more (CHEMID*plus*)
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- If you decide to search databases individually, they each have various limits as well as an index of search terms that you can browse. The individual search is the best way to conduct precise searches of specific databases.
 - For the “multi-database” search, you can select up to five databases—HSDB, IRIS, ITER, GENE-TOX, and CCRIS—to search simultaneously. This option provides an index but no further limits.

- If you search all databases at once from the home screen, you simply enter your search term. There is no index or limits. This is the quickest way to search, but also the least precise. Search results will indicate how many records come from each of the TOXNET databases. Depending on your search term, it is likely that many TOXNET databases will return no results.

In addition to the TOXNET databases, two graphical resources are available under “Other NLM Resources”: Tox Town and TOXMAP:

Tox Town (http://toxtown.nlm.nih.gov/index_content.html) is an interactive display of the chemicals that are common to towns and more densely populated urban areas. For example, you can click on “Brownfields” within Tox Town’s “city” module, and be guided to numerous sources of information about brownfields. The site is available in English or Spanish, and includes sound.

TOXMAP (<http://toxmap.nlm.nih.gov/toxmap/main/index.jsp>) is the visual counterpart to the data contained in the Toxic Release Inventory (TRI), which is one of the TOXNET databases. The Environmental Protection Agency manages the TRI, which contains information about toxic releases throughout the United States. TOXMAP is a map of the United States which allows you to determine at a glance the severity of releases for any given toxin. You can zoom in and out on the map, and also link to reference information about the toxin of interest. One way to benefit from TOXMAP is to do a search in the TRI, and then repeat it in TOXMAP to compare results.

HazLit Database

Go to: <http://ibs.colorado.edu/hazards/Library/Hazlit/NatHazSearch.php>

Description: This database is a product of the Natural Hazards Center Library at the University of Colorado. It contains citations to bound documents, serials, reports, journal articles, video tapes, and compact discs about how societies prepare for, respond to, and mitigate damage from natural disasters. If you are interested in obtaining material listed in HazLit, you may request it through the interlibrary loan form available on the Ehrman Library home page or through your home institution’s library.

Searching:

Search fields available are: Title, Author, Keyword, Call #, and Year published. You can conduct a “single-field” or “multi-field” search. Single-field searches one field, and multi-field searches two fields.

Single-field:

1. Use the radio buttons next to “Search Method,” to select how the database should search for your term(s) as follows:
 - All of your search terms (All Words)
 - Some of your search terms (Any Words)
 - Precise search terms (Exact Phrase)
 - Phrase at start of longer phrase (Begins With)
2. Select a search field -- Title, Author, Keyword, Call #, or Year published -- from the drop-down menu in the “Search Field” box.
 - If you search by keyword, database supplies numerous keyword options for you, from “acid rain” to “zoning”
 - If you search by any other search field, must type your search text in the “Search Text” box.

Multi-field: Go through steps described above to select a search strategy for up to two search fields. For example, you could search author and keyword simultaneously.

- Must use the radio buttons to select the Search Method, as with single-field searching
- Before completing the search term for the second field, need to select “OR” or “AND” under “Logical Operation.” “OR” will return results that match at least one of your search terms; “AND” will only return results that match both search terms.

Go to: <http://mceer.buffalo.edu/utilities/quakeline.asp>

Description: QUAKELINE contains approximately 40,000 citations to books, videos, journal articles, conference proceedings and reports about all aspects of preparation for and response to earthquakes. If you are interested in obtaining material listed in QUAKELINE, you may request it through the interlibrary loan form available on the Library home page or through your home institution's library.

Searching:

Unlike HazLit, there are numerous possibilities for search combinations in QUAKELINE. This allows for a great deal of precision, but also means that many searches will yield no results. This is similar to the "Advanced" searching option for the Resource Guide to Public Health Preparedness. However, with QUAKELINE you can also conduct a basic search on the same search screen. The level of sophistication in the search is up to you.

- First click on "Search the QUAKELINE database."
- Search fields available: Author; Title Word; Keyword; and Word Anywhere.
Note: "Keyword" is like a subject search in other databases. "Word anywhere" is like a keyword search in other databases.
- Type your search term(s) into the available search box for the field(s) that you wish to search.
- Choose the appropriate Boolean operator to combine your terms using the available drop-down menus. You can combine all search terms using "AND," "OR," or "NOT." "AND" and "OR" work as described previously. "NOT" ensures that records do not contain the specified search term.
- The **Select Additional Options** section of the search screen allows you to modify your search or results in several ways.
 - **Plurals:** you can specify whether or not database should look for plurals of search terms.
 - **Results Per Page:** You can specify the number of resulting records to display per screen, and whether these results should be in ascending or descending alphabetical order.
 - **Sort by/Sort Order:** You can arrange results by author, title, or accession #. (Accession # is the order in which QUAKELINE processed records; not advisable unless you have an intimate knowledge of the database.)

Resource Guide for Public Health Preparedness

Go to: <http://www.phppreparedness.info/rgdatabase.php>

Description: The Resource Guide contains over 1,000 records of web sites, fact sheets, guidelines, and articles about public health preparedness. These records are publicly available, and do not represent the entirety of information available for public health preparedness. Every record hyperlinks directly to a resource. The Resource Guide has both basic and advanced searching capabilities.

Searching:

Select **Basic Search**, **Advanced Search**, or **Browse** from the search bar at the top of the screen to begin.

Basic Search

Advanced Search

Browse

? Help

Basic Search:

This will give you a sense of the various types of resources available.

- Enter a word or phrase to perform a general search. You do not need to use quotes around your search terms.
- Search results default to a brief display. Change to a full display using the drop-down menu under the search bar.
- Search results are displayed in reverse chronological order. You can also sort results by the name of the organization responsible for the resource, by selecting "Sponsor" using the drop-down menu under the search bar.

Advanced Search: Once you are familiar with a topic, use the advanced search to pinpoint your results.

NOTE: Advanced search provides a great deal of precision, but there is a good chance that specific combinations will yield no results. You should be prepared to search many combinations.

- Enter a keyword(s) phrase in the search box.
- Specify whether the search should include or exclude your search terms using the available drop-down menu.
- Searches can be limited by Audience type, Resource types, and/or Event category.
 - **Audience types:** Public health officials; clinical staff; communicable diseases staff; environmental health; lab professionals; medical examiners; public information staff; technical staff; other
 - **Resource types:** Abstract; article; assessment tool; bibliography; resource list; commentary; dataset/database; editorial; executive summary; expert interview; fact sheet; FAQ; guidelines/protocols; data collection instrument; glossary; legislative document; conference/paper proceedings; press release; report (administrative); report (research); review article; speech or testimony; special journal issue; monograph (book); meeting program; survey/poll; training tool; transcript; webcast; website; white paper; dissertation/thesis; article (journalistic); image; ejournal
 - **Event category:** Biological; chemical; radiological; nuclear; mass casualty; infrastructure disturbance
- Once you have made all of your choices, click the Submit button to execute the search.

Browse: You can browse materials available by audience type, subject, and/or Centers for Disease Control and Prevention (CDC) focus area. **NOTE:** Browsing is the best way to obtain a detailed overview of what this database contains.

- Select a combination of Audience type, Subject, and/or CDC focus area.
 - Audience types same as above
 - Subject: Anthrax; biological warfare agent; bioterrorism; chemical warfare agents; emergency management; public health; smallpox; terrorism; tularemia
 - CDC Focus Area: Preparedness Planning and Readiness Assessment; Surveillance and Epidemiology Capacity; Laboratory Capacity Biologic Agents; Laboratory Capacity Chemical Agents; Health Alert Network/Communications and Information Technology; Communicating Health Risks and Health Information Dissemination; Education and Training

?Help: Directs you to a page of frequently asked questions (FAQs).

Resources for Wireless Devices

American College of Physicians Decision Support Tool for Wireless Devices

Go to: <http://www.acponline.org/pda/bioterrorism.htm#dst>

Description: This tool supports the diagnosis of smallpox, the diagnosis and treatment of both inhalational and cutaneous anthrax, and the detection and basic management of chemical terrorism. It is available for free at the Library's two Clarinet stations for PDA resource downloads. If you have already downloaded the tool, you can HotSync updated versions to your device.

It works best with Palm devices, although Pocket PC users can use PalmReader or ISilo software to read the documents.

National Library of Medicine's Wireless Information System for Emergency Responders (WISER)

Go to: <http://wiser.nlm.nih.gov/>

Description: This tool supports hazardous substance identification, and also provides information about containment and suppression of these substances. In addition, it provides information about ensuring health in the aftermath of spills. It is available for free for PDA download from the WISER Web site. WISER works with both Palm and Pocket PC devices.