

T H O M S O N H E A L T H C A R E

HEALTHCARE SERIES

Training Guide

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THOMSON
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Introduction

This training guide is presented in the format of an instructional script; providing the trainer with instructions and examples for the most effective use of Thomson Healthcare's clinical reference content and software tools.

Because subscriptions to Healthcare Series vary based on the content and software tools selected, you might find information in this training guide that does not pertain to your specific subscription. Please feel free to modify the guide accordingly.

As you use this guide, you will note that information intended for you to verbalize to trainees will be enclosed in a box. Instructions intended as direction for you, the trainer, to demonstrate will be marked with a 'Demonstrate' icon with text in **bold** type.

Section 1: Overview and Main Keyword Search

20 Mins



Approximate time needed for this section.

Upon completion of this section the participants will be able to do the following:

- Understand the basic components and the navigational tools available on the Main Keyword Search Page
- Perform a Search from the Main Keyword Search Page
- Access and utilize summary level Drug Information and detailed Drug Monographs
- Access available Calculators

Log in



Log in to Micromedex[®] Healthcare Series

Main Page and the Operational Options

The first page you see after you sign on to Micromedex Healthcare Series is the Main Keyword Search page, also known as the Home page. Basic navigation in Healthcare Series is via the tabs that are located across the top.

Demonstrate



Point out the 'Main' tab and each additional tab across the top of the screen.

Each of these tabs, and the options that are listed below them will be explained later.

Patient Education

Demonstrate



Point out the 'Patient Education' tab (if visible).

When you click on the 'Patient Education' tab, and then the CareNotes option, a new window opens displaying the Thomson Healthcare CareNotes System. More information on the use of CareNotes for patient education will be provided in a separate training session.

Formulary

Demonstrate



Point out the 'Formulary' tab (if visible).

This tab allows you to jump from Healthcare Series directly to Formulary Advisor® for real-time, point-of-care access to our hospital's online formulary. The details of this section will be presented in a separate training session.

Handheld PDA

Demonstrate



Point out the Handheld PDA tab.

You can click the 'Handheld PDA' tab to register and download summarized evidence-based drug, disease, lab, and toxicology content for your mobile PDA (Personal Digital Assistant) on Palm OS® and Pocket PC devices.

Calculators

Demonstrate



Point out the 'Calculators' link.

The 'Calculators' link opens to the same calculators available from the 'Main' tab. Use this shortcut to access commonly used calculators, dosing tools, nomograms, and clinical references. (Calculators will be demonstrated later in this section.)

Page Help

Demonstrate



Point out the 'Page Help' link.

The 'Page Help' link opens the online help files specific to the page or the topic you are viewing.

Footer Links

Demonstrate



Point out the 'Footer' links at the bottom of the page.

In addition to the basic search and software tool tabs, Healthcare Series offers several links at the bottom of almost every page. Click these links to find out what's new in this release, to learn about training opportunities, to find out about Thomson Healthcare, and more.

Contact Us

Demonstrate

Point out the 'Contact Us' link.



If you wish to telephone or e-mail Thomson Healthcare with questions, suggestions, or requests for editorial content changes or additions, click the 'Contact Us' link and follow the options.

Content Updates

Demonstrate

Point out the 'Content Updates' link.



The 'Content Updates' link provides a report of the new content included in the latest release of Healthcare Series. You can check this link often to stay abreast of the new data, features, or information available in Healthcare Series.

Training Center

Demonstrate

Point out the 'Training Center' link.



The Training Center link provides information about training services and educational materials that are available.

Using the Main Keyword Search

Demonstrate



Point out the Main Keyword Search.

Keywords are terms which describe the information you are seeking. You may enter one or more keywords in the search box. A compound keyword search automatically performs a 'near' search operation eliminating the need for special symbols. In general, the broader the term or phrase, the more results you will find. For example, if you were to search 'codeine,' you would see many more results than you would if you entered 'codeine sulfate.'

The Basic Keyword Search is the fastest and most effective way to perform a search. There are additional options here which can narrow the search results by changing to an 'Exactly Match' search, search for Summary documents only, and select specific databases to search. But in most cases, this time and effort is not necessary because you can select the results that you want from the results of the basic keyword search.

To begin a keyword search from the main page, enter the relevant search term or keyword(s) and click the search button.

Demonstrate



Enter 'Protonix' and click 'Search.'

Occasionally you may not get the results you were expecting. If so, you may modify your search by one of the following strategies:

- *Use multiple keywords*
- *Use a synonym*
- *Expand your search keywords*
- *Limit your search keywords*

If you are unsure of the correct spelling, type the first few letters of the word and then choose from the 'or did you mean' drop-down box on the results page.

Initial Results

A search can produce matches in many documents in multiple databases. When matches are found in more than one database, the Initial Results page is displayed. Databases are organized into general information categories (e.g., Summary Documents, Drug Information, Disease Information, etc.) with the associated database names listed below (on the left) and hypertext links to the right of each.

Demonstrate



Point out Summary Documents, Drug Information, Disease Information, Toxicology Information, and Reproductive Risk (if visible).

When only one document within a database is found as a match, the document title name is displayed as a link. Clicking the link will open the document.

Demonstrate



Point out the 'Drug Summary Information' result and the 'Pantoprazole Sodium' link.

*When multiple documents within a database contain a match to the keyword either in the title, the synonym, the index, or as a related term (i.e., 'Use in,' 'Comparison with,' 'Adult Dose,' etc.), the total number of matches found is listed beside the Results link. You would click this link to open the Narrow Results page showing where the results were found.
Note: Only databases containing a match on the search term are displayed on the Initial Results page.*

Drug Summary

To get quick access to drug information (or other clinical content), click the link next to the appropriate listing under 'Summary Information.'

Demonstrate

Click the 'Pantoprazole Sodium' link on the 'Drug Summary Information' line.

Here are your drug summary results for Pantoprazole (Protonix). The drug summary contains clinical information about the drug (such as adverse effects and interactions) as well as product information (such as dosage forms, strengths, and regulatory status).

The document outline found on the left hand margin of the screen allows for fast information retrieval and divides a document into smaller sections covering specific topics or information. To access specific information, click the outline title of the relevant topic or information to go to that location in the document.

Demonstrate

Click the 'Contraindications/Warnings' link in the Outline.

The program quickly displays the contraindications. After reviewing the information, you might wish to review the 'Indications' section.

Demonstrate

Click the 'Indications' link in the Outline, pointing out that doing so displays that section of the summary drug information.

Click the 'see details in DRUGDEX' link beside the 'Non-FDA Labeled Indications' header in the body of the drug summary, pointing out that you are doing so.

Detail Drug Monograph

Clicking the 'See details in DRUGDEX' link will take you directly to the detailed evidence-based monograph for 'Protonix' in the 'Therapeutic Uses (i.e., Indications)' section.

Demonstrate

Point out the outline along the left margin of the screen and that users can easily navigate their way around this large detailed monograph by simply clicking on the appropriate sections within the outline.

If you want to obtain further detail related to one of the categories of 'Therapeutic Uses', such as 'Duodenal Ulcer Disease,' you can do so by clicking on that link.

Demonstrate

Click 'Duodenal Ulcer Disease.'

In addition to detailed medical evidence, case studies, and other reports, you will notice that all of this content is fully referenced. In addition, information on the Therapeutic Uses is further supported by 'Strength of Recommendations' and 'Strength of Evidence' ratings.

Recommendations and Evidence Ratings

Demonstrate

Click the link to view the 'Recommendations and Evidence Ratings' table.

Point out that the table also contains a section on Efficacy.

Return to the previous drug monograph page by clicking the 'Back' button on your browser.

Printing Documents

Several options are available for hard-copy printouts of complete documents or a portion of a document.

Print from the Browser

You can use the Print function on your Internet Browser (File>Print), or click the printer icon to print the open document. However, tabs, headers, buttons, and links (Search Path (breadcrumbs), Help button, etc.) will be included in the printout using this method. Beware that this option will print the entire document, not just the portion displaying on the screen.

Print Selected Text

To print a section of text (such as the information currently displaying here in the Duodenal Ulcer Disease section), click and drag to highlight the text, then click the File > Print menu option on your Internet browser toolbar, then click Selection (under 'Page Range'), and finally, click 'Print.'

Print Ready

To quickly print a document in its entirety, you can click the 'back to top' link in the Outline, then select the Print Ready link at the top of the document.

Demonstrate



Click the 'back to top' link and then point out the 'print ready' link.

A new window would open with your document formatted for print. All extraneous navigation items (buttons, tabs, links, etc.) will be removed from the document. You would then print by selecting your Internet browser's print function (e.g., File > Print) from this new window or click the printer icon. Then you would close the window after completing the print dialog to return to the Healthcare Series application.

Print Setup

The best option for printing a section of text (or multiple non-contiguous sections), is to click the 'Print Setup' link at the top center of the document. On the 'Print Setup' page, select the document sections you wish to print.

Demonstrate



Click 'Print Setup.'

Scroll down to 'Clinical Applications' and then click the box next to 'Therapeutic Uses.'

Scroll further and then click the box next to 'References.'

Then you can view the selected sections by selecting the 'Display' button at the top center or bottom center of the screen.

Demonstrate

Click 'Display.'

You will now have a 'custom' display of the information you are interested in printing, which includes the drug name as well as the appropriate headers and margins.

You can print the assembled document by clicking the File > Print menu or the print icon from your Internet browser.

Demonstrate

Close the 'Print Ready' screen, then scroll to the top of the page to display the tabs used for the navigation of the Micromedex Healthcare Series application once again.

Using Calculators

A broad selection of calculators, dosing tools, references, and nomograms can be accessed from the Calculators menu option on the Main tab or the Calculators link at the top right side of the page.

Demonstrate

Point out links from the Main tab or at the top right side of page, then click one of the calculator links.

To select a Calculator

To select the calculator you want, move the mouse over the desired section and then select the calculator or tool by moving your mouse over the list of calculators to the right. For example, select 'ACLS/PALS Guidelines' from the Dosing Tools list.

Demonstrate

Move the cursor over 'Dosing Tools,' then move the cursor over the ACLS/PALS guidelines, and click to open the calculator.

Leaving the 'Pediatric' button selected, type the number '12,' change the unit of measure to 'lb,' and then click 'Submit.'

In this example, you can generate a list of all drugs that might be used in a cardiac emergency for this specific patient, including proper doses and delivery instructions.

Demonstrate



Scroll down through the results to point out the volume of the information provided.

Point out the 'print' option at the top of the window and then click the 'close' link.

Review the list of available calculators by moving the mouse over each category. It is not necessary to mention every option listed. Rather, suggest that attendees review the lists at a later time to find out which of them will be most helpful.

Switch to Point-of-Care Interface

The point-of-care interface is available to users of the online (Internet) version of Micromedex. The operation of this new interface will be covered in a separate section of this guide.

Ask if there are any questions before proceeding.

Section 2: Drug Information

15 Mins



Approximate time to complete this section.

Upon completion of this section participants will be able to:

- View and compare drugs side by side
- Change the number of drugs to compare
- Access the Trade/Generic Drug Lists
- Search for drug identification by drug imprint
- Search for drug identification by drug description
- Perform a specific content set search
- Perform a specific topic search
- Utilize the Therapeutic Class list

Log in



Log in to Micromedex[®] Healthcare Series

What tools are available for Drug Information?

You can utilize the tools under the Drugs tab to gain access to current, accurate drug information. DrugPoints summaries, and the more extensive DRUGDEX Evaluation monographs, contain information on dosage, indications, adverse effects, contraindications, product information, and much more. These databases are accessed through the 'Keyword Search,' as previously discussed, or through the 'Specific Database Search' or the 'Specific Topic Search' tools found on the 'Drugs' tab.

Additional tools are available on the 'Drugs' tab that allow you to compare drugs side by side, identify drugs, and look up drugs by therapeutic class.

Compare Drug Summaries

You can view and compare drugs side by side with the 'Compare Drug Summaries' option.

Demonstrate



Show the 'Drugs' tab and then, select Compare Drug Summaries.

You can search for as many drugs (by trade or generic name) as you wish to compare. Only two drugs are displayed at a time to allow for easy comparison and review, and you can switch either or both of the two drugs in the pair with other drugs previously searched to make additional comparisons.

If you wish to compare more than two drugs (for now, we'll only compare two drugs), change the number in the 'Show' box and click the 'Entry Fields' button.

Demonstrate



Type in Lexapro and Zoloft.

Click Search, and then click 'Display Comparisons.'

Two Drugs Lexapro and Zoloft will be displayed side by side on the 'Document Comparison' page.

You can scan the two side-by-side summary documents quickly using the scrollbar. For more in-depth information about a drug, click the blue 'see details in DRUGDEX' hyperlink in the appropriate section to open the corresponding DRUGDEX[®] Drug Evaluation to that specified area.

Demonstrate



Point out links to detail.

Scroll to the top of the 'Drug Comparison' screen and point out the 'Print Ready' link.

You can print your drug comparison by utilizing the 'Print Ready' link and then print using your browser's 'print' option.

Trade/Generic Lists

Demonstrate



Return to Drugs Tab and Select Trade/Generic Drug Lists.

The Trade/Generic Drug Lists can provide you with fast access to basic drug product information such as:

- *Ingredients*
- *Availability and Manufacturer Information*
- *Physical Description including drug images (where available)*

You can search on a drug and view all of the generic and tradenames currently available for that drug. For more detail you can click the link to the detailed Drug Evaluation monograph document for the drug searched. Additional links to POISONDEX (Toxicology) information are sometimes displayed as well.

You can type all or part of the trade or generic drug name in the 'Search for Drug Name' box.

The more specific your search term, the more focused your search results. In other words, if you know the strength and/or route, include it in the search to eliminate extraneous search results.

Demonstrate



Type 'valium' and click 'Search.' Point out the long list of strengths and dosage forms (including products from other countries). Click the Drug tab Trade/Generic search again.

Then type 'Valium 2' and click 'Search.' You will see fewer items—only those containing a '2' in the strengths or concentration. Point this out.

Return to the 'Search' screen again, then type 'Valium 2 Tablet' and click 'Search' and point out that they will see even fewer results.

Click the last item on the list to display 'product information.'

Product Information Page

The product information page displays links to the Related Documents, Ingredients, Availability & Manufacturer contact information, and Physical Description.

Demonstrate

Scroll down the page, showing the information provided.

Drug Identification

Demonstrate

Return to the 'Drugs Tab' and select 'Drug Identification.' Mention that you are doing so.

The Drug Identification tool is used to help you identify pharmaceutical tablets, caplets, and capsules by any of their characteristics such as imprint code, shape, color and/or pattern.

Two search options are available; the IDENTIDEX System and the Drug Images database.

Search Drug Identification - IDENTIDEX System

Demonstrate

To search for a drug by imprint code, type 'p20.' Mention that it is sometimes necessary to include a space between letters and numbers if a space appears on the drug product.

Click 'Search,' and then click the TradeName 'Protonix.'

The default database searched under Drug Identification is the IDENTIDEX System, providing detailed product information including Imprint, Trade Name, Manufacturer, Country, AAPCC code (used by U.S. Poison centers for documentation and reporting purposes), and links to the POISINDEX[®] Toxicologic Management for the drug.

Demonstrate

Scroll down through the IDENTIDEX page and point out the information provided, including an image in this case.

Use the search path (breadcrumbs) link near the top of the page to return to Drug Identification.

Search Drug Identification - Drug Images Database

*To search for Drug Images, enter the same imprint code, 'p20.'
Alternatively, you can select color, shape, and pattern to limit your search results.*

Demonstrate



Type 'p20' and then point out that you are changing the default database selection from IDENTIDEX to Drug Images and then click 'Search.'

The results will display all products containing the characters 'p20' in their imprint codes.

Demonstrate



Select the first 'Protonix' in the list and click the hyperlink.

Now you see a color image of the drug along with a physical description.

Specific Database Search

Demonstrate



Return to the Drug Tab and select 'Specific Database Search,' describing what you are doing while doing so.

When you know that the answer you are looking for is in a specific drug database, you can refine your search results by using the Specific Database Search option. The Specific Database Search page lists the databases available for inclusion/exclusion in your search for drug information.

All databases are selected by default. For an overview of what is contained in each of the databases, click the 'i' information icon to pop up a database definition.

Demonstrate

Demonstrate the selection or the de-selection of different databases, and then click ('i') information icon to display a database definition.

To perform a specific drug database search, you will select the database(s) you wish to include in your search as shown. Then you will type in the drug you wish to search for and click 'Search.'

Demonstrate

Type Atropine.

Select 'DRUGDEX' and 'Summary Documents' and then click Search.

You can see the results displayed are more concise than they would have been if you had entered 'Atropine' in the Main Keyword Search field from the Main page.

Specific Topic Search

Demonstrate

Return to the 'Drugs Tab' and select 'Specific Topic Search.'

Use the Specific Topic Search to perform a full text search within specific outline sections of drug information documents. The search covers all documents within the database selected. Only one content set can be searched at a time when using the 'Topic Search' option. Drug databases available for a Specific Topic Search (if included in your subscription) are:

- *DRUGDEX Drug Evaluations*
- *Physicians Desk Reference*
- *Martindale: The Complete Drug Reference*
- *AltMedDex Evaluations*

To perform a Specific Topic Search, you would select the drug database you wish to search. The available outline sections change as the database is selected.

Demonstrate

Demonstrate by selecting PDR (if included in your subscription) and then back to DRUGDEX.

Then, type the exact term to search. Point out that it will typically be a drug, indication, adverse reaction, contraindication, therapeutic indication, and so on. But it can also be any word or combination of words.

Type 'peanut.'

To narrow your results, you can select the type of information you want from the available topic check boxes. The application searches only the selected (checked) topics for information related to your keyword(s).

Demonstrate

Demonstrate by clicking on the 'Uncheck All' link, and then select 'Contraindications' and 'Adverse Reactions.'

Click 'Search.'

The search results show the document title, the section, and a snapshot of the text where 'peanut' was found. You have the option of opening the document at the beginning by clicking on the title link, or opening the document directly at the specified outline section by clicking the section name link.

Therapeutic Class

Demonstrate

Return to the 'Drugs Tab' and Select Therapeutic Classes, explaining what you are doing while doing so.

You can use the Therapeutic Classes search to search for drugs within a particular therapeutic class. This can be an especially useful search method when you aren't sure of an exact drug name, but you do know the therapeutic class it belongs to.

Demonstrate

Scroll down to 'Blood Modifier Agent.'

*A closed file folder means subclasses exist within that folder.
A dashed line (---) means there are no further subclasses.*

Demonstrate

Select the Anticoagulant hyperlink (not the folder).

The results for Anticoagulants are displayed. You can view the drug summary information for each drug by utilizing the blue hyperlink or you can select any or all of the drugs on this page (up to a maximum of 50) to view side-by-side comparisons. To do so, select the check boxes to the left of the drug names you wish to compare, and then click the 'Compare Selected Drugs' link.

Demonstrate

Select Lovenox (Enoxaparin Sodium) and Heparin Sodium.

Click Compare Selected Drugs.

You now have a side-by-side comparison of Lovenox and Heparin to assist in drug selection.

Ask if there are any questions before you proceed.

Section 3: Toxicology

12 Mins



Approximate time needed for section.

Upon completion of this section you will be able to:

- Search the Toxic Substance List
- Identify ingredients and management for hundreds of thousands of commercial, biological, and pharmaceutical products
- Readily access POISINDEX Management information

Log in



Log in to Micromedex[®] Healthcare Series

What is POISINDEX/Toxicology?

The POISINDEX[®] system is relied upon in 100% of U.S. poison control centers. It provides access to product information including active ingredients, availability, and contact information, as well as toxicology management documents that include data on clinical effects, life support, range of toxicity, treatment protocols for exposure, and more.

To Search toxicology information in Micromedex Healthcare Series, you will access the Toxicology tab from the Main search screen.

Demonstrate



Go to the Toxicology Tab, and then select 'Toxic Substance Lists.'

Your 'Search Substance' entry can be a substance name, imprint code, product name, ingredient, product code, active ingredient, or product ID (as appropriate).

Demonstrate

Type 'dog away' leaving the default search option as 'Exact Name,' and then click 'Search.'

The exact name option in the POISINDEX® System will produce the smallest set of results. As you can see here, there are six commercial products containing the words 'dog away' or 'away dog' in the product name.

Demonstrate

Return to the previous 'Search Toxicology Lists' screen and point out each of the following additional options.

The 'name contains in POISINDEX®' option should be used for an expanded search. This option finds products and substances where the search terms are contained anywhere in the product or substance name in any order.

Demonstrate

Demonstrate this by clicking 'Name Contains in POISONDEX' and searching for 'dog away' once again. Point out that you now have ten results rather than the initial six.

Click once again on the search path (breadcrumbs) to return to the 'Search Toxicology Lists' screen.

The 'Product Names,' 'Active Ingredients,' and 'Codes' option searches product names (e.g., clorox bleach, dust off, etc.) active ingredients (e.g., fluorinated hydrocarbons, hydrogen peroxide, etc.), or by NDC (U.S.) or DIN (Canadian) codes.

Although this search acts as a 'contains' search, codes must be typed exactly as they appear. All hyphens, spaces, letters/numbers must be entered if they exist in the product code.

The 'imprint codes in the IDENTIDEX' option is used to identify tablets, caplets, or capsules by their imprint code. This functionality can also be found on the drug and toxicology tab under the 'Drug Identification' option.

The 'product ID in POISINDEX' option and the 'Look up by AAPCC Codes' option are used almost exclusively by the Poison Centers for documentation purposes. Hospitals will seldom have a need to use these search options.

Demonstrate



Type 'dog away' once again (if it is not already there) and this time click the 'Product Names...' search option, and then click 'Search.' Point out the list of results.

Toxic Substance List Search Results

The search results are displayed in a table format allowing for easy review, including the Name of the product, Manufacturer name, Country of manufacture, AAPCC code number, and links to the corresponding POISINDEX® Management(s) for each of the active ingredients in this product.

You can select the 'Trade Name' link to view the product ingredient information, availability and manufacturing information, and a physical description with images (if available).

Demonstrate



Click on 'Dog-Away Dog Repellent Outdoor Use' and point out the content just described.

The 'Related Documents' links you to the POISINDEX Managements information for each ingredient/substance.

Demonstrate



Point out the Related Documents links to POISINDEX Managements.

Scroll down through the information, pointing out the lists of active ingredients, availability and manufacturing information, notes, and physical description, if available.

You can also use the 'Next' and 'Previous' buttons to go to the next (or previous) product in the original Product results list.

Demonstrate

Go to the 'Toxicology' tab and select 'Drug Identification.'

Drug Identification

This feature is identical to 'Drug Identification' in the 'Drug' tab.

Drug identification tools were placed on both the 'Drug' and 'Toxicology' tab so it would be available and convenient to individuals using either database set.

Demonstrate

Go to the 'Toxicology' tab and select 'Specific Database Search.'


Specific Database Search

When you know that the answer you are looking for is in a specific toxicology database, you can refine your search by using the 'Specific Database Search' option.

The Specific Database Search lists the databases available for inclusion/exclusion in your search for toxicology information. All databases are selected by default. You can uncheck any databases you do not wish to include in your search.

Demonstrate

Demonstrate de-selecting all databases by clicking the 'Uncheck All' link, then check any individual databases as an example of a more narrow search.

For an overview of what is contained in each of the databases, you can place your cursor over the 'i'  information icon to pop up a database definition.

Demonstrate

Demonstrate the 'i'  information by placing the cursor over the 'i' button next to POISINDEX Managements.

Go to the 'Toxicology' tab and select 'Specific Topic Search.'

Specific Topic Search

You can use the Specific Topic Search to perform a full text search within specific outline sections of toxicological information databases.

Databases available from this option are (if available in your subscription):

- *POISINDEX[®] Toxicologic Managements*
- *MEDITEXT[®] Medical Managements*
- *HAZARDTEXT[®] Hazard Managements*

The search features of this tool are identical to the "Specific Topic Search" under the 'Drugs' tab. This is a way to find the occurrence of a specific word or phrase anywhere within the database selected.

Demonstrate



Type the word 'paint,' and then click 'Search' to show an example of a topic search and related results.

Ask if there are any questions before proceeding.

Section 4: Disease Information

12 Mins



Upon completion of this section you will be able to:

- Search for disease information
- Find drug information and dosing for a specific disease
- Identify treatment decisions for a disease
- Identify Clinical Checklist information

Log in



Log in to Micromedex[®] Healthcare Series.

What is DISEASEDEX?

Using DISEASEDEX, you can access information for chronic or acute conditions depending upon the your facilities subscription. The most critical knowledge is presented at the summary level, with links to more detailed information.

DISEASEDEX Searching

You may search for Disease Titles from the 'Main Keyword Search' page or you may choose a more specific search from the 'Disease' tab.

Demonstrate



Move the cursor over the 'Disease' tab.

You may choose either a Specific Database Search or Specific Topic Search.

Performing a Specific Database Search

Demonstrate**Click 'Specific Database Search.'**

In the 'Search for:' field you can select from: Keyword, Signs and Symptoms, LOINC code or ICD9 codes. The default is the 'Keyword' search.

Demonstrate**Show drop-down box options for 'Search for.' Point out that a 'Begins With' search will be performed by default unless you change it to an 'Exact Match.'**

You can enter the disease, condition, symptom or substance you wish to search in the text box.

You also have a choice of searching all or selected databases related to: DISEASEDEX General Medicine or DISEASEDEX Emergency Medicine, depending on your subscription.

Demonstrate**Point out the various options under each general choice.**

Summaries give high level information for quick searching; Clinical Reviews give more in-depth information.

Studies and Alerts, Emergency Medicinal abstracts, and Pre-Hospital Care Protocols may be included in your search as well.

To select all databases, click the 'Check All' link.

Clinical Checklist

Demonstrate**Click 'Check all.'****Type 'pneumonia' in the Search field and then click 'Search' to see the results.**

The search results are divided into Clinical Checklist Information, if available, Summary Documents, and the more in-depth Disease Information. If Clinical Checklist information is available, it will always appear at the top.

Demonstrate

Point out the green check mark, followed by 'Clinical Checklist.'

The blue hyperlink to the right of the database name provides further information related to the search term entered.

Demonstrate

Click the Clinical Checklist hyperlink, titled 'Results.'

Click the 'Community acquired pneumonia - Acute' link.

Clinical Checklist information is a collection of ALWAYS DO/NEVER DO clinical guidelines found in medical literature, current clinical practice, and in some cases, a recommendation from organizations such as JCAHO and CMS. They are action items intended to improve patient outcomes. The recommendations can maximize reimbursement by ensuring clinical decisions are made in compliance with National Quality Standards.

Each action item is referenced and followed by a rating code for Strength of Recommendation and Strength of Evidence. Performance Measures established by recognized national organizations are also noted where applicable.

Demonstrate

Click the green 'I' to show the definition of all the 'Strength of Recommendation' ratings and scroll through the class rankings, read them if you wish, and then close the window.

Click the light blue 'C' to show the definitions of all the 'Strength of Evidence' ratings, read them if you wish, scroll through the category rankings, and then close the window.

Point out the JCAHO and CMS notations under Performance Measures.

Scroll through the Clinical Checklist.

Scroll down to the bottom of the screen.

Additional information and links are provided at the bottom of the Clinical Checklist, including definitions of the abbreviations found in the Performance Measures column, links to other clinical data and references. Some references include URL links to the abstract or guideline.

Demonstrate

Point out the URL link, included with references. Scroll up and point out Studies and Alerts, Drugs, Related Information and Performance Measure definitions.

Scroll back up to the top.

Click the 'Initial Results' search path (breadcrumbs) which returns you to the initial results of your search for 'pneumonia.'

Now let's review the general medicine summary document for Community acquired pneumonia.

Disease Information

Demonstrate

Click the General Medicine Summary hyperlink, titled 'Results' and then click the 'Community acquired pneumonia - Acute' link.

The General Medicine Summary for 'Community acquired pneumonia - Acute' is displayed including an outline on the left with links to different sections. You can utilize the links to access a certain section of the summary document from the outline or you can scroll through the document with your scrollbar.

Demonstrate

Click 'Tests' in the outline.

This displays all 'Summary' level test information related to this diagnosis.

Demonstrate

Click the 'Tests' link (section header) in the body of the Summary.

Now you see more detailed information regarding the tests recommended for this diagnosis. The detailed evidence-based information includes the Strength of Recommendation/Strength of Evidence ratings for the recommended tests, as well as the links that will access even more detailed evidence-based information about these tests (if the laboratory test database is available in your subscription).

Demonstrate

Point out that the outline information has increased as we are now in the detailed information level of disease content vs. the summary information.

Next, click 'Differential Diagnosis' in the Diagnosis section of the outline.

Then point out the option to link to other disease and condition documents within DISEASEDEX using the hyperlinks.

Detailed Disease Information

To see more detailed information on Community Acquired Pneumonia and a differential diagnosis, you can utilize the 'show details' link.

Demonstrate

Click 'show details' link just below 'Differential Diagnosis.'

You now have access to more in-depth information on incidence, discussion, presentation, and testing.

Demonstrate

Scroll down to show the document.

Point out the blue hyperlinks to references.

Scroll back up to the top of the document.

Click the 'Disease Database Search' search path (breadcrumbs).

Searching by Disease Category**Demonstrate**

Scroll down to the second box titled 'Disease Categories Browse.'

You have another option for locating disease information. The program provides a category search.

Demonstrate

Click the down arrow on the right of the 'Browse Under' box to view the available disease categories.

You can click the category drop-down menu to see the options. Select 'Orthopedics,' for example.

Demonstrate

Click 'Orthopedics' and then click 'Select.'

You will now see a list of diseases and conditions related to Orthopedics. You can scroll down and select the title you wish to review, or you may use the 'Jump to' box on the left.

Demonstrate

Demonstrate scrolling and then place the cursor under 'Jump to' and type 'sh.'

With 'Shoulder dislocation - Acute' highlighted, click 'Select.'

This will take you to the summary information for 'Shoulder dislocation-Acute,' demonstrating another way to quickly locate information about diseases and conditions. As before, additional detail is accessed by clicking hyperlinks.

Demonstrate

Return to the 'Disease' tab and choose 'Specific Topic Search.'

Performing a Specific Topic Search

The 'Specific Topic Search' tool is utilized to narrow your search to one specific database or to a particular section in all matching documents within that database. You can type any specific term or phrase.

The search term can be a symptom, for example.

Demonstrate

Type 'headache,' and then click 'Uncheck All.'

Next, check 'Medical History' and 'Findings,' and then click Search.

Here are the results for documents that have evidence-based information related to the term 'headache' in the Findings or Medical History sections of the DISEASEDEX Emergency Medicine content set.

The results are displayed by document titles and by the section within the document where your search term was found. The document title link opens the document at the top (beginning) of the document. The document section link will open the document to the sections where matches to the search terms were found.

Point out the hyperlinks to the document title and the document section.

Click 'Cluster headache - acute.'

This demonstrates one more way to access specific disease information.

Ask if there are any questions before proceeding

Section 5: Lab Information

8 Mins



Approximate time to complete this section.

Upon completion of this section you will be able to search:

- For lab information by test name, indication, condition, common panel name, or LOINC
- Within key sections of the document for information needed
- A specific database
- By a specific topic

Log in



Log in to Micromedex[®] Healthcare Series.

What is Lab Advisor[™]?

Lab Advisor provides you with answers when you need evidence-based laboratory test information. Lab Advisor is a clinical laboratory database that contains critical information relevant to physicians, nurses, lab personnel, and pharmacy personnel.

Lab Advisor Searching

You may search for Lab Titles from the Main Keyword Search or you may choose a more specific search from the 'Labs' tab.

Demonstrate



Move your cursor over the 'Labs' tab.

You may choose either a Specific Database Search or Specific Topic Search.

Performing a Specific Database Search

Demonstrate



Click 'Specific Database Search.'

In the 'Search for' field you can select from 'Keyword' (default) or 'LOINC Code.' You can enter a test name (or synonym), a drug name (brand or generic), an indication, condition or common panel name, or a LOINC code.

Point out



Show the drop-down box options. Point out that a 'Begin With' search will be performed by default unless you change it to 'Exact Match.'

You can enter the lab test name you wish to search in the text box. You may enter the entire name or part of the name.

Demonstrate



Type 'folic acid,' and then click 'Search.'

If only one test name matches your search term, the applicable lab test information document will display.

If more than one document includes the search term in the title or related results, the Narrow Results page appears with a list of all results found.

Demonstrate



Click 'Folic acid measurement, RBC' in title results.

The Lab Advisor Document

All information in Lab Advisor documents is organized in a standard outline structure. The outline is shown in a box on the left side of the document and can be used to jump to a different section within the document.

Common top-level outline sections include synonyms, indications, common panels that include this test, collection and storage information, references, and more.

If no data or information is available for a section, the outline title is not displayed.

Demonstrate



Click 'Synonyms' in the outline to point out the information displayed. Then click the 'Collection/Storage Information' in the outline.

As you see the Collection/Storage link includes specific information on the type of collection tube to use and how to store the sample prior to retrieval by the lab. Hyperlinks within the document will link you to related documents—which can be disease or drug information documents, as well as other lab test information documents.

Lab Advisor documents are fully referenced, and include links within the text to the cited references. Links are displayed with the reference number.

Demonstrate



Click 'back to top,' and then click 'Lab Database Search' search path (breadcrumbs).

Search by Drug Name

Searching the lab database by a drug (brand or generic) name can help a clinician determine if a drug is causing or could cause a drug-lab interaction. For example: let's search 'cortisone' using this method.

Demonstrate



Type 'cortisone,' and then click 'Search.'

Lab Advisor finds only one possible drug-lab interaction match: Digoxin Measurement. Since only one match was found, the Digoxin Measurement document is opened. Accessing the Drug/Lab Interaction section, you can see additional information.

Demonstrate



Click the 'Drug/Lab Interactions' link in the outline.

Point out that Cortisone and all the cortisone containing medications listed cause false increases or false readings in the Digoxin levels.

Click back to top, and then click 'Lab Database Search' search path (breadcrumbs) once again.

Other Search Options

You can also search lab tests by disease or condition to assist in determining which tests are recommended to diagnose the condition. For example: 'diabetes' would return a result of 'Hemoglobin A1C.'

If you know a common lab panel name ('renal panel,' 'parathyroid panel,' or 'transplant panel,' for example) but need to find information on any of the individual tests included, search by the panel name. For example: 'transplant panel' would return results containing the names of 26 different lab tests normally run as a part of that 'panel' of tests.

Finally, one can search by LOINC Code. This might be done by the clinical lab personnel.

Browse the List of Tests

Using the 'Browse Lab Advisor' feature, you are able to simply view a list of tests available in Lab Advisor. The list is displayed in alphabetical order, and shows test names as well as applicable synonyms and some, but not all, common abbreviations.

Demonstrate



Show the list by scrolling down through the list.

You may also search the list by utilizing the 'Jump to' box.

Demonstrate

Type 'fol' in the 'Jump to' box.

This will display the 'Folic acid measurement, RBC' test name demonstrating another option for searching the lab test database.

Demonstrate

Return to the 'Labs' tab and select 'Specific Topic Search.'

Search by Specific Topic

Searching specific Lab Advisor topics performs a full text search on the search term within specified sections of all lab documents. For example, if you would like to know what lab tests require a purple top tube, you can search with this tool.

Demonstrate

Type 'purple top,' and then click 'Uncheck All.'

Check 'Collection/Storage Information,' and then click 'Search.'

If only one document contains the search term in the specified section, the lab document opens. If multiple matches are found, the Search Results page displays the lab test name as a link, followed by a link on each section name where the search term was found.

Ask if there are any questions before moving on.

Section 6: Drug Interactions

8 Mins



Approximate time needed for section.

Upon completion of this section, you will be able to search interactions for the following:

- Single interactions
- Multiple interactions

Log in



Log in to Micromedex[®] Healthcare Series.

What is Drug Interactions?

The drug interactions tool assists you in checking for interacting drug ingredients, the effects of the interacting drugs on one another, and the clinical significance of the drug interaction. The interactions tool also provides access to drug-food, drug-ethanol, drug-tobacco, drug-lab test, drug-pregnancy, drug-lactation, drug-alternative medicines, ingredient duplication, and drug-allergy reactions.

Searching for Drug Interactions

Use the Drug Interactions page to check for all known interactions for a single drug or to check all interactions between multiple drugs if two or more items are entered.

The program will also check for potential allergic reactions to drugs selected if known allergies are also entered. Results are grouped by interaction type: drug-drug, drug-food, drug-lab, etc. Interactions found within each type are sorted by level of severity.

To search drug interactions, you will select the 'Interactions' tab.

Demonstrate

Click the 'Interactions' tab.

As you begin to type the name of a drug, you will see an alphabetical list begin to display. The more letters you enter, the more accurate the display appears. You can search for a tradename, generic name, or alternative medicine.

Demonstrate

Type 'Levaq,' and then click the right arrow (or press Enter), explaining that you are adding 'Levaquin' to the 'Drugs to Check' list.

Single Drug Interactions

If you are interested in knowing about all of the interactions associated with Levaquin (i.e., Single Drug Interaction Check), simply click the 'Check Interactions' button at this point.

Demonstrate

Click the 'Check Interactions' button.

The Single Interactions table displays all of the drug interactions for Levaquin.

Demonstrate

Show the 'Jump To' links just below the blue header.

Each of the interaction types found for this drug or alternative medicine are displayed. Clicking the link for a particular interaction type will take you directly to that section in the results.

Demonstrate

Click the 'Drug-Pregnancy' link.

This takes you to the 'Drug Pregnancy' section. You may access more detailed information by utilizing the blue hyperlink, 'Pregnancy-Levofloxacin (Systemic).' We'll look at an example of this in a few minutes.

Demonstrate



Point out the blue 'Pregnancy-Levofloxacin' hyperlink.

Now scroll back up to the top of the screen and explain what you are doing as you click the 'Modify Your Search' button to return to the 'Drug Interactions' page.

Multiple Interactions

You can add additional drugs to your list to convert your interaction check into a multiple drug interaction search. There is no practical limit on how many drugs you can check at a time.

Demonstrate



Point out that the 'Levaquin' selection is still in your 'Drug to Check' list.

Type 'War' in the 'Enter Search' field and with 'Warfarin' highlighted, click the right arrow (or press Enter) to move it to the 'Drugs to Check' pane.

Type 'Ginse' and with 'Ginseng' highlighted click the right arrow (or press Enter).

If you wish to check for any potential allergies for a specific patient with known allergies, you can click the 'Add Allergies' button, search for drug allergies, and add them to the check list just as you did the drugs.

Demonstrate



Click the 'Add Allergies' button, type 'Penicillin' and with 'Penicillin' highlighted in the list, click the right arrow to add it to the 'Drugs to Check' pane, and then click the 'Update Allergies' button.

As you see, the 'Drugs to Check' box now includes 3 drugs and an allergy (designated by all caps and an asterisk). If you have no more items to check, click the 'Check Interactions' button.

Demonstrate

Click the 'Check Interactions' button.

Interactions Table

You now see the 'Interaction Table' displayed. By default, all Interactions, all Severities and all Documentation Types are displayed in the search results. To modify your results for selected Interactions, Severities, and/or Documentation Types, select the levels desired from the corresponding drop-down box, and then click 'Update.' This will re-display your results based on the new criteria.

Demonstrate

Point out the 'Severity' drop-down box.

Click on the drop-down box. You may choose to cover this subject in less detail than is provided here.

Interaction Severities

Severities and their Ranking:

- **Contraindicated** - the drugs are contraindicated for concurrent use.
- **Major** - the interaction may be life-threatening and/or require medical intervention to minimize or prevent serious adverse effects.
- **Moderate** - the interaction may result in an exacerbation of the patient's condition and/or require an alteration in therapy.
- **Minor** - the interaction would have limited clinical effects. Manifestations may include an increase in the frequency or severity of side effects but generally would not require a major alteration in therapy.
- **Unknown** - unknown.

Demonstrate

Click 'Cancel' to close the severity list.

Point out the 'Documentation' drop-down box.

Click the drop-down box. You may choose to cover this subject in less detail than is provided here.

Documentation Types

Documentation Types:

- **Excellent** - controlled studies have clearly established the existence of the interaction.
- **Good** - documentation strongly suggests the interaction exists, but well-controlled studies are lacking.
- **Fair** - available documentation is poor, but pharmacologic considerations lead clinicians to suspect the interaction exists; or, documentation is good for a pharmacologically similar drug.
- **Poor** - documentation is poor, such as limited case reports; but, the clinical conflict is theoretically possible.
- **Unlikely** - documentation is poor and lacks a sound pharmacologic basis.
- **Unknown** - unknown.

Demonstrate



Click 'Cancel' to close the documentation list.

Displaying Interaction Results

The Interactions Table page displays all drugs searched on the 'Interactions For' drop-down list.

Demonstrate



Click the 'Interactions For' drop-down box to display the list.

Point out that all drugs and allergies included in the interaction check are listed.

Interaction Results

You can remove items from the list of drugs and allergies to search by unchecking the appropriate box and then clicking update.

If you were to click on a drug name displayed as a hypertext link, it would convert the display to a single drug interaction search as we saw earlier.

Demonstrate



Click 'Cancel' to close the 'Interactions for' list.

The 'Jump To' list displays each possible interaction type. If the type is displayed as a hyperlink and contains a quantity greater than zero, results were found for that interaction type. You can quickly move to a section by clicking on the link.

Demonstrate



Click the 'Drug-Lab' hyperlink on the 'Jump to' list, point out what you did, and then click 'Back to the Top.'

Interactions are grouped by interaction type. Within each interaction type, results are shown ranked by severity. The summary column displays brief, high-level interaction information. For more detailed interaction information, click the link on the drug name in the left hand column to open interactions details.

Demonstrate



Click the 'Ginseng-Warfarin' link and scroll through the Interaction Detail.

Point out the 'Print' option and then close.

Point out that this returns you to the 'Drug Interactions' table.

Ask if there are any questions.

Section 7: IV Compatibility

8 Mins



Approximate time needed for section.

Upon completion of this section you will be able to search IV compatibility for the following:

- A Multiple Drug Search
- A Single Drug Search

Log in



Log in to Micromedex[®] Healthcare Series.

What is IV Compatibility?

IV Compatibility is a tool used to answer intravenous (IV) medication compatibility questions.

The IV INDEX system utilizes proven data from the leading IV Compatibility expert, Lawrence Trissel, MS, FASHP.

To search IV Compatibility in Micromedex[®] Healthcare Series, select the 'IV Compatibility' tab at the top of any page.

Demonstrate



Click the 'IV Compatibility' tab.

You can search on multiple drug compatibility or for all known IV compatibilities to a single drug.

Searching on Multiple Drugs (Default Screen)

You can get compatibility answers fast by entering a variety of drugs on a single screen.

Performing a Multiple Drug Search will yield Y-Site, Admixture, and Syringe compatibility results for two or more drugs. Such as heparin, gentamicin, vancomycin, and lasix.

Demonstrate



Type 'hep' and point out that the item that you are looking for will be highlighted at the bottom of the 'Jump to drugs' box as soon as the letters you have typed match the first few letters of the drug name.

Simply click 'Add' to include the drug in your search.

Demonstrate



With 'Heparin sodium' highlighted, click 'Add.'

Now let's add the remaining drugs that we want to test for compatibility, and then click the 'Check Compatibility' button.

Demonstrate



**Type 'gent,' and then click Add (or press Enter).
Type, 'vancomy', and then click Add (or press Enter).
Type, 'lasix,' and then click Add (or press Enter).
Click 'Check Compatibility' (or press Enter).**

The initial compatibility overview page displays summarized results for Y-Site compatibility using color-coded icons. Results are displayed in pairs of two components covering all the possible combinations of the drugs selected.

Similar results will display for Admixture and Syringe compatibility (i.e., compatibility of these drugs within an IV solution, or within a syringe) with a Compatibility Key at the bottom of each screen.

Point out

Click the 'Admixture' tab and the 'Syringe' tab to show results. Then click back on the 'Y-site' tab.

Point out the keys at the bottom of the page. Position the mouse over each of the icons to display the hover help and explain the icons.

You can see that study results vary for 'Furosemide' and 'Gentamicin Sulfate' at a Y-site. To view study results for this combination, you can click the hyperlink representing the drug combination.

Demonstrate

Click the blue hyperlink.

The study details include the concentration levels and manufacturers for each drug. You will also see the study components, including physical compatibility, storage, study period, study method, and container.

Let's return to our initial results.

Demonstrate

Click the 'Back to Y-Site Overview' link.

Searching on a Single Drug

You may access Single Drug Compatibility information from the multiple drug results page by clicking the drug name in the list under 'Checking Compatibility For.'

Let's look for all at Heparin compatibility information.

Demonstrate

Click the 'Heparin sodium' hyperlink under the 'Checking Compatibility For' heading.

A Single Drug Search first displays the compatibility of that drug in each of the seven common solutions (always listed in the left-hand column), and in any other solution that has been tested or reported in the Medical Literature (listed in the right-hand column). As before, you can display specific study results by clicking the solution name hyperlink.

Additional results include Y-Site, Admixture, Syringe, and TPN/TNA results. Each set of results can be accessed by clicking on the appropriate tab.

Demonstrate



Click the 'TPN/TNA' tab.

TPN results display the concentration levels, compatibility results, and the TPN Admixture compositions of several of the most common TPN combinations.

To view Trade Names, Other Names, or pH ranges, click the '(more details)' link next to the drug name 'Heparin Sodium.'

You may modify your search at any time by utilizing the 'Modify Your Search' tab at the top of the screen. This returns you to the Single Drug Search page.

Demonstrate



Click 'more details' and point out the information at the bottom, scroll back to the top, and then click the 'Modify Your Search' button.

We are now in the single drug search option for IV compatibility. If you type the first few letters of a drug name in the 'Search term' text box, the alpha browser feature will help you locate drugs with similar spelling or difficult spellings.

Demonstrate



Type 'phenyt' and point out that Phenytoin Sodium is highlighted. Click the 'Check Compatibility' button (or press Enter) to begin the search.

This demonstrates how to perform a 'Single Drug Search' from the 'IV Compatibility' tab without first doing a 'Multiple Drug Search.'

Ask if there are any questions before you proceed.
