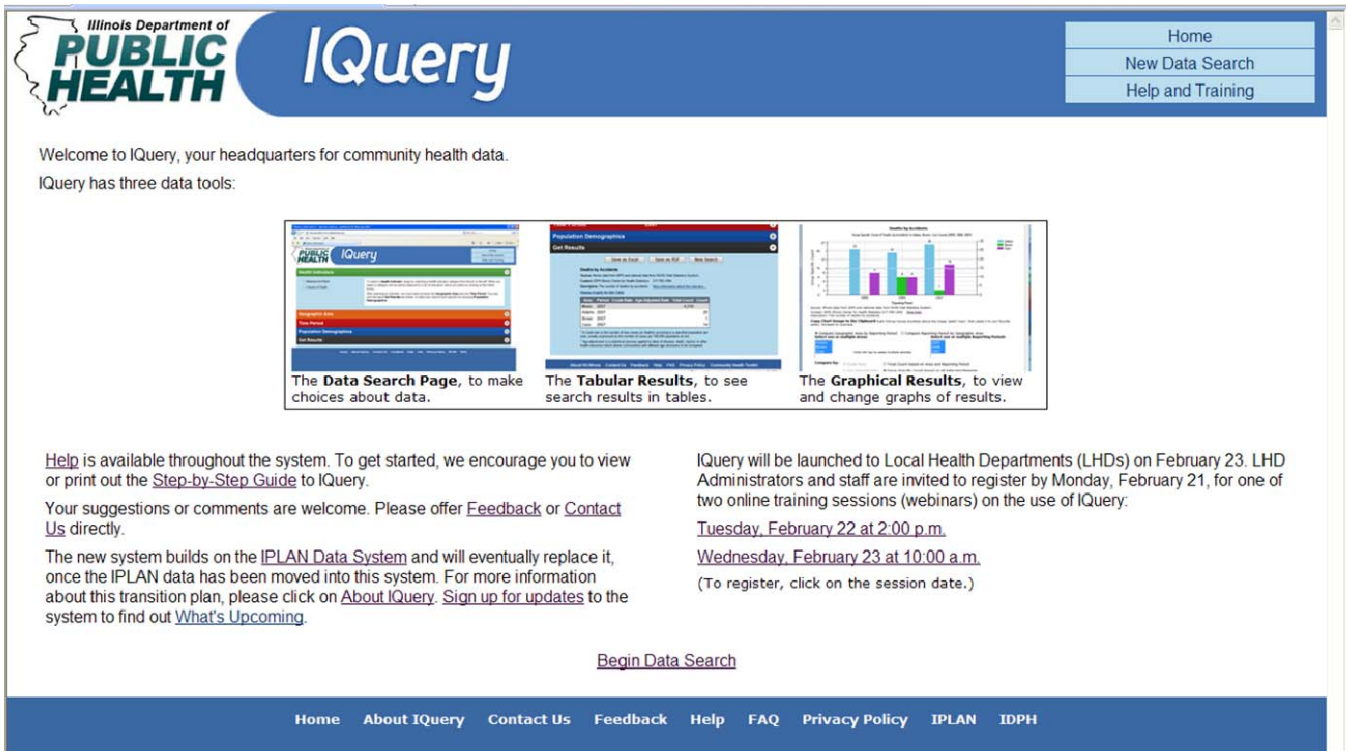
Step-by-Step Visual Guide to IQuery



Welcome to IQuery, your headquarters for public health data in Illinois.

This new Web site has been designed to be easy to use and easy to understand. This Step-by-Step Guide is divided into two sections. The first 13 pages illustrates the main sections of the system. The second section details three different examples of data searches.

IQuery is a new system, but will be growing quickly, with new reporting tools and new data sources. Feel free to experiment with data searches as you learn to use IQuery, and please leave your feedback to improve the system.

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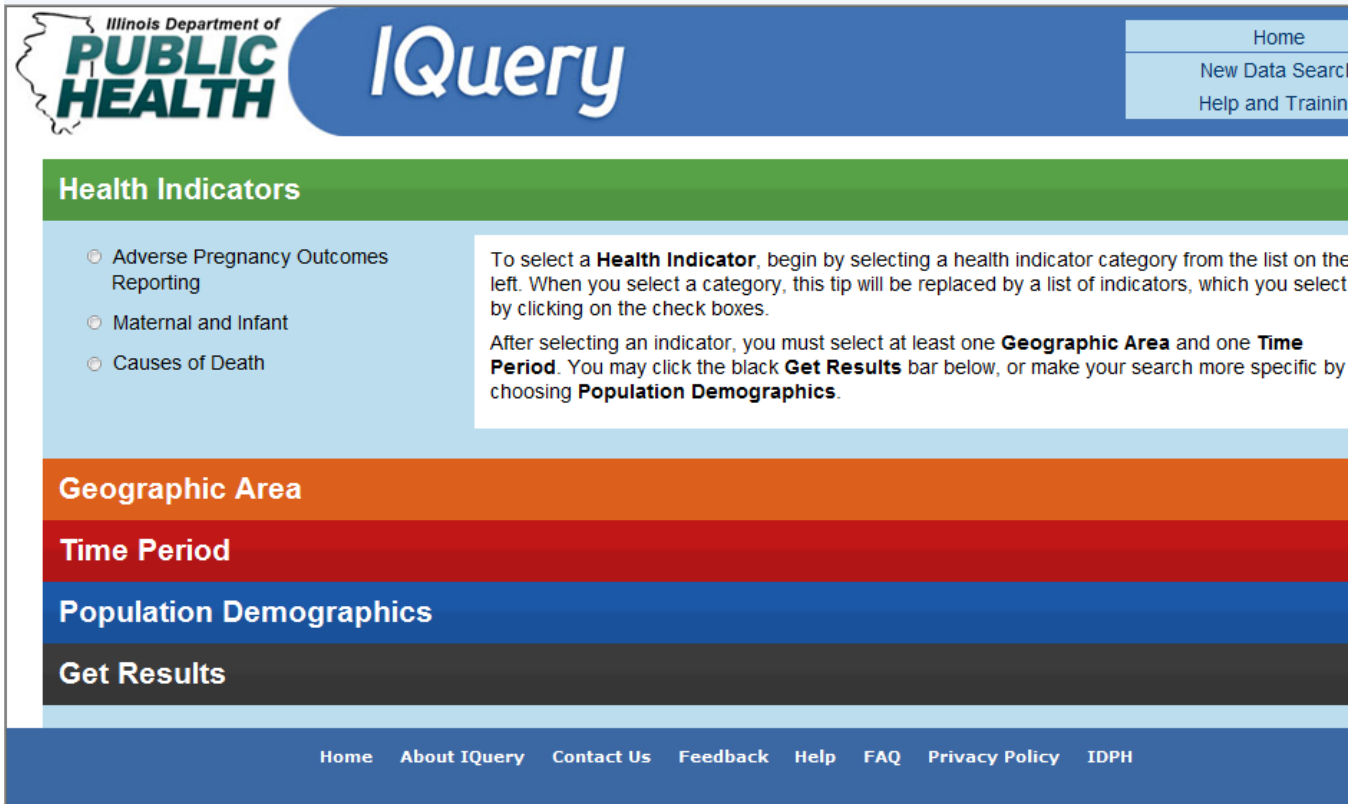
Updates to this document will be available at the IQuery Web site
iquery.illinois.gov



The main data search page has five "tabs" — the brightly-colored wide bands across the screen that define the choices you can make and have made. Each tab expands when you click it.

Tip: Move your mouse over headings on screen and additional information will appear.

To search the available public health data, select the data in which you are interested, and then what kind of details you want. For a simple data search, you may select one **Health Indicator**, one **Geographic Area**, and one **Time Period**, and then click on **Get Results**.

You also can make much more specific choices. Please note that the system is designed to present the data that is available. If you make a broad search (three different diseases in five metropolitan counties for the last 10 years), you will get a lot of data. If you make a very specific search (death by chronic liver disease in one small county in 2001), then you will get a small amount of data.

Clicking on **Get Results** will give you a table of information that you can print, export to a spreadsheet, save as a PDF, or display in graphs.

Tip: Click on the blue question mark for more information about the health indicator.

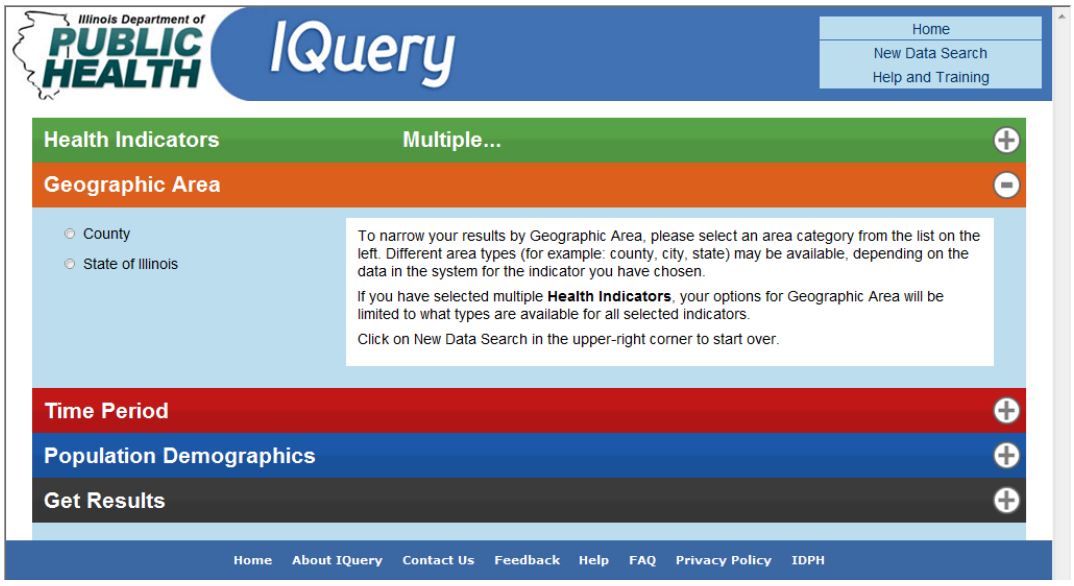
When you select one of the **Health Indicator** categories on the left, the available indicators appear on the right.

When you select a single **Health Indicator**, that indicator name appears on the green tab above the indicator list.

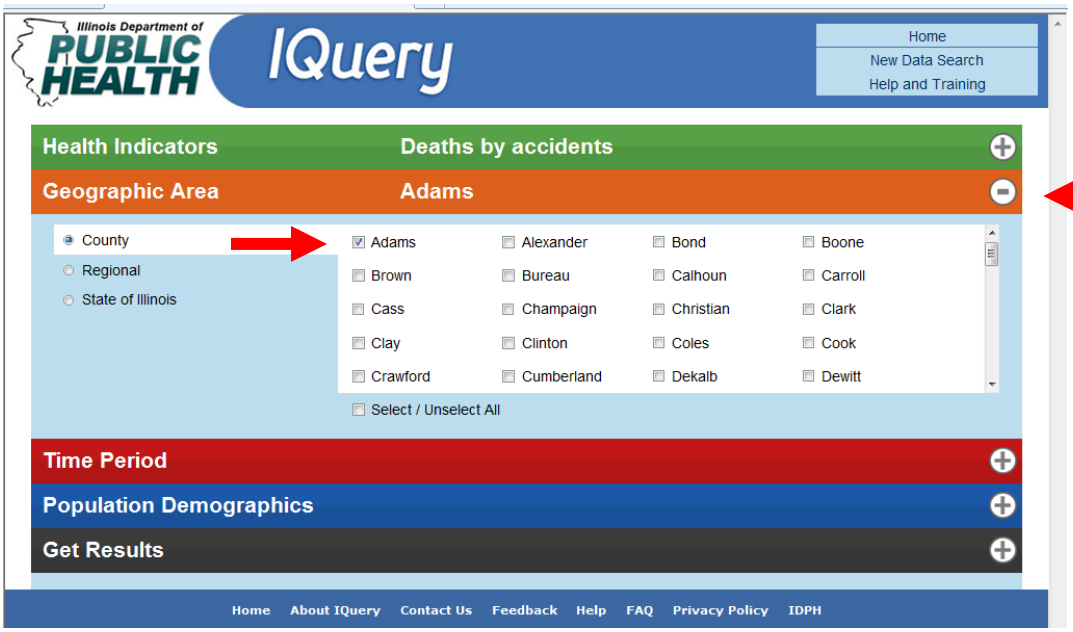
If you select more than one **Health Indicator**, "Multiple …" appears in the tab above the list.

Tip: Click on the "New Data Search" button at any time to reset or restart your search.

Click on the orange **Geographic Area** tab and different types of areas will appear (county, region, state of Illinois, etc.). Your area choices depend on what geographic areas are represented in the system. If the data are not available by a particular kind of geography, like city or state, then you will not see that choice on the left side.

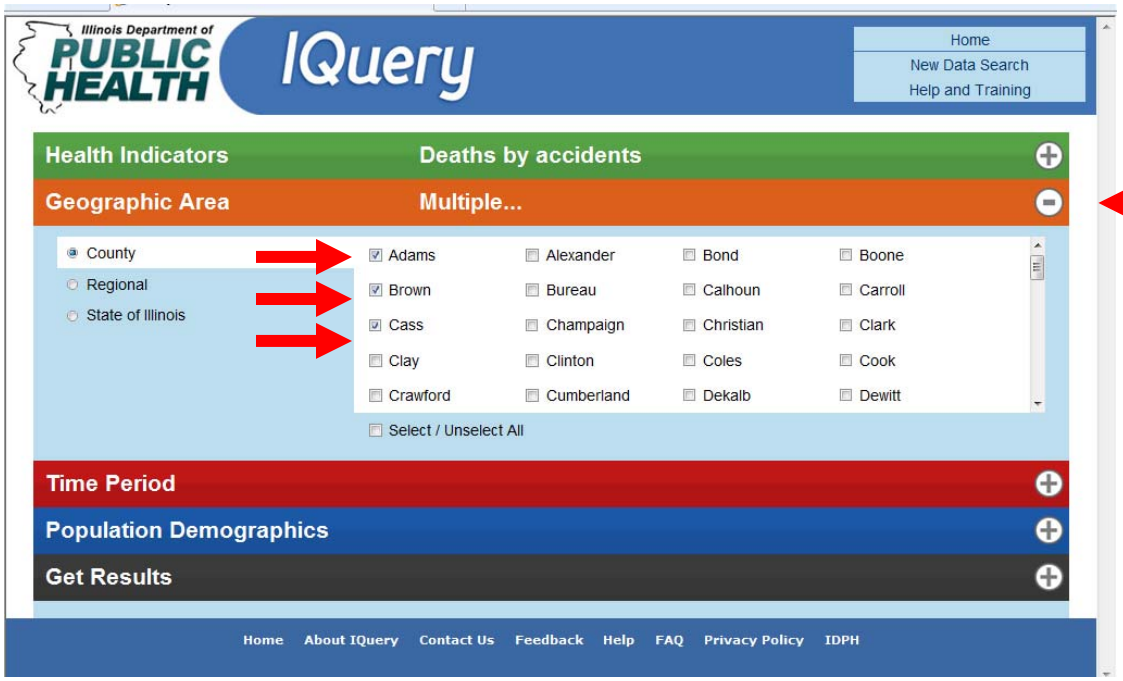


In this example, the user has selected more than one **Health Indicator**. IQuery will show all the possible types of **Geographic Area** that are available for ALL of the indicators chosen. The choice for "Regional" has disappeared, because data for "Regional" is not present for all of the indicators chosen.

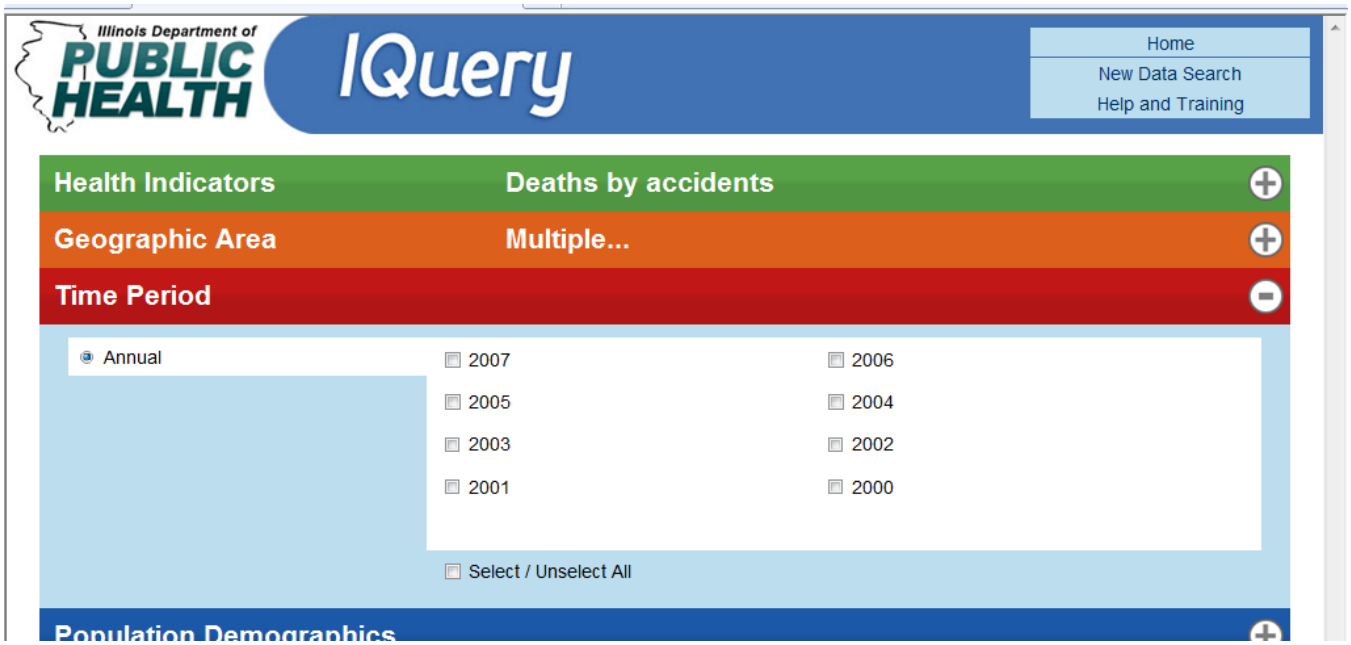


When you select a single **Geographic Area**, that indicator name appears on the green tab above the indicator list.

Tip: Click on the scroll bar to see the rest of your choices (in this case, counties listed after DeWitt).

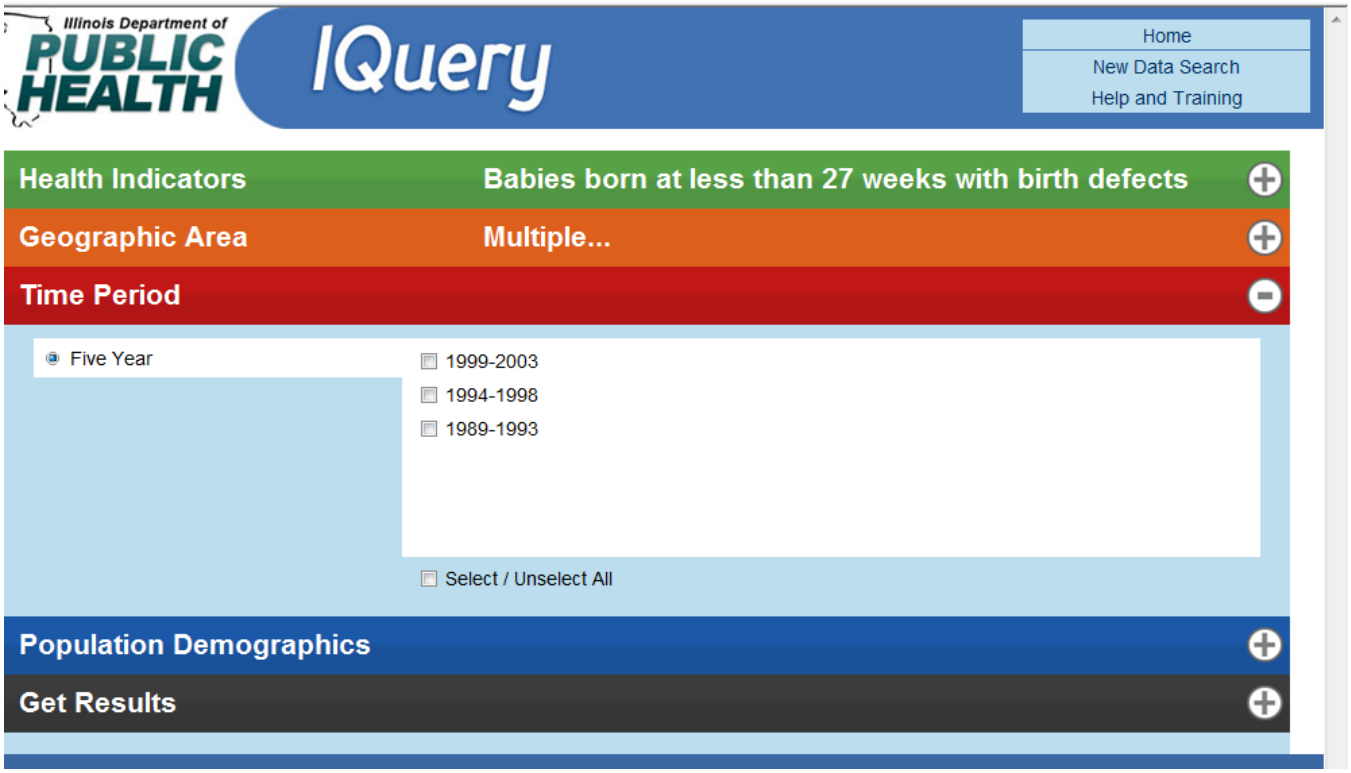


If you select more than one **Geographic Area**, "Multiple …" appears in the tab above the list.

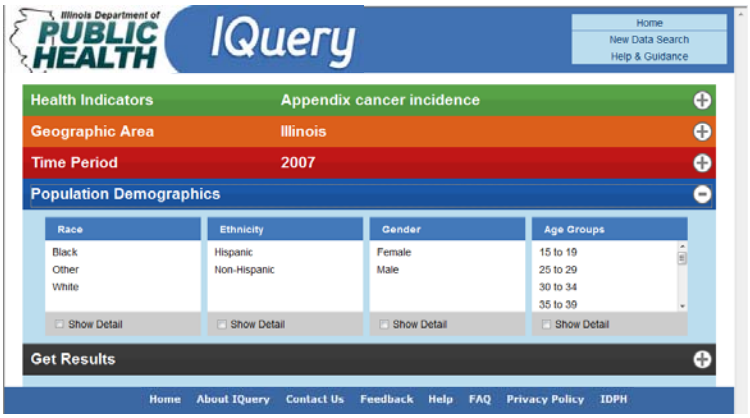


The choices for **Time Period** will vary with the other selections you have made. In this example, "Deaths by accidents" is available by individual years, beginning with the year 2000.

Note: Most data in IQuery is available from 2000. The most recent data is from 2008.



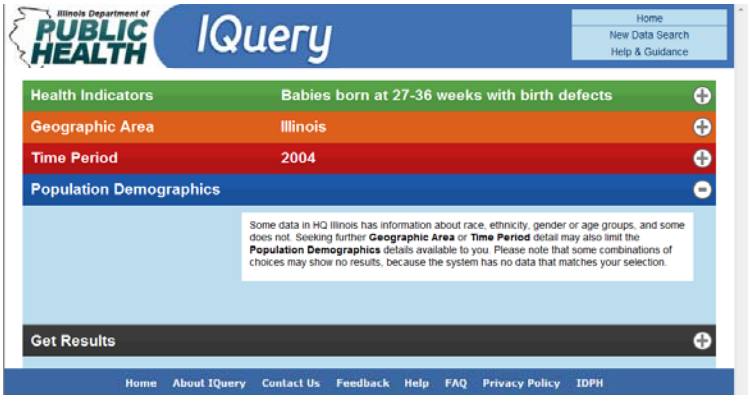
"Babies born at less than 27 weeks with birth defects" is stored and reported only in five-year ranges, beginning with 1989—1993.



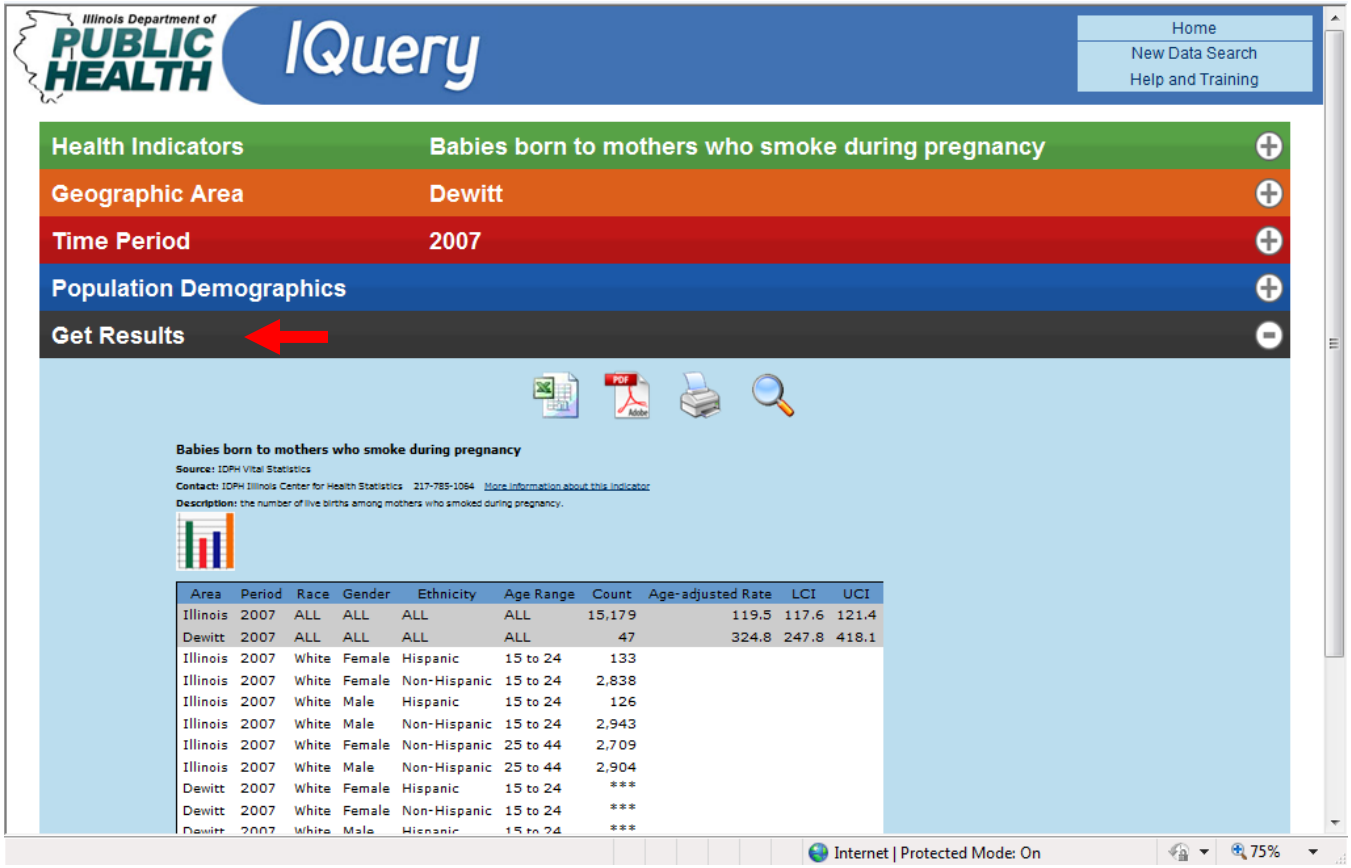
Health Indicators have different sets of demographic variables. For example, this indicator example has details for race, ethnicity, gender and 14 five-year age ranges.

Note: The data for IQuery indicators is collected in different ways by different offices, so the demographic details vary by indicator as well.

The demographic choices are reduced as your choices narrow. In this example, selecting a single county and year results in fewer demographic descriptors.



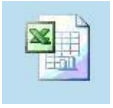
Some **Health Indicators** do not include demographic details, or the specificity of the data search returns results without demographic details.



After selecting **Health Indicators**, **Geographic Area**, **Time Period** and **Population Demographics**, you are ready to **Get Results**!

Results are presented as a table. Above the table is the name of the indicator, the source of the data, the contact office for the data, and a brief description of the data. You also can click on the link "More information about this indicator," which will give you a pop-up window with all of the information IQuery has about that indicator. Definitions of the rates are listed below the tables.

Below the **Get Results** are four icons that represent ways to use the results table:



Click on the "Export all tables to Excel" icon to open your spreadsheet program with data from all the tables in your results.

Click on the "Save all tables as PDF" icon to make a PDF file of the table data and open it in Adobe Acrobat Reader.

Click on the "Print Data Search Results" icon to open a new pop-up window with basic text formatting for printing.

Clicking on the "New Data Search" icon resets all your choices and starts a new data search (the same effect as clicking on the "New Data Search" button at the upper-right corner of the screen).

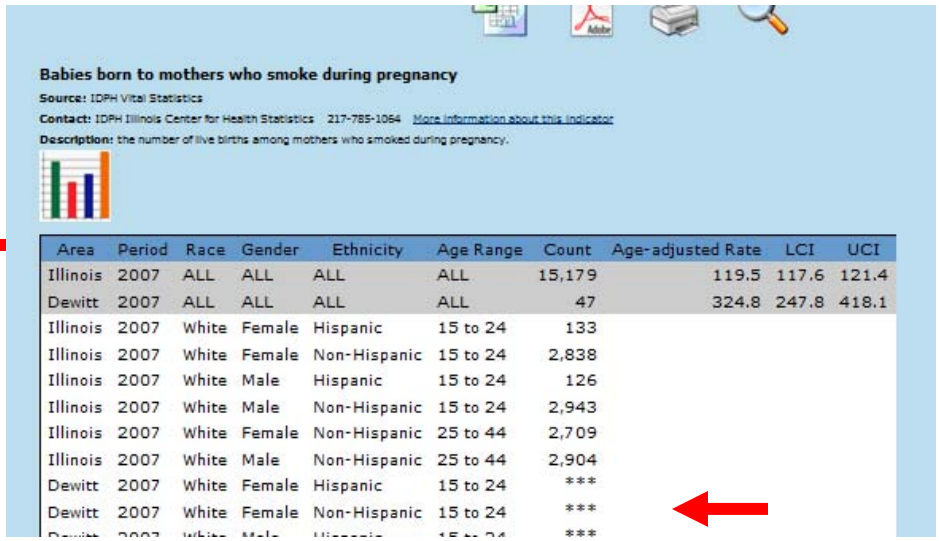
The Name of the Health Indicator appears in bold above each table

Source: *The name of the dataset that includes this indicator, or the state agency or department that is responsible for maintaining the data*

Contact: *The name of the office and its telephone number (Click on this link for More information about this indicator)*

Description: *A short description of the indicator. More information is available from the link above.*

Note: The results for each indicator are presented in individual tables.



Babies born to mothers who smoke during pregnancy

Source: IDPH Vital Statistics

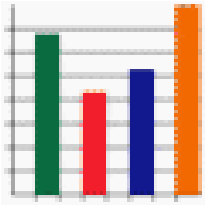
Contact: IDPH Illinois Center for Health Statistics 217-785-1064 More information about this indicator

Description: the number of live births among mothers who smoked during pregnancy.

Area	Period	Race	Gender	Ethnicity	Age Range	Count	Age-adjusted Rate	LCI	UCI
Illinois	2007	ALL	ALL	ALL	ALL	15,179	119.5	117.6	121.4
Dewitt	2007	ALL	ALL	ALL	ALL	47	324.8	247.8	418.1
Illinois	2007	White	Female	Hispanic	15 to 24	133			
Illinois	2007	White	Female	Non-Hispanic	15 to 24	2,838			
Illinois	2007	White	Male	Hispanic	15 to 24	126			
Illinois	2007	White	Male	Non-Hispanic	15 to 24	2,943			
Illinois	2007	White	Female	Non-Hispanic	25 to 44	2,709			
Illinois	2007	White	Male	Non-Hispanic	25 to 44	2,904			
Dewitt	2007	White	Female	Hispanic	15 to 24	***			
Dewitt	2007	White	Female	Non-Hispanic	15 to 24	***			

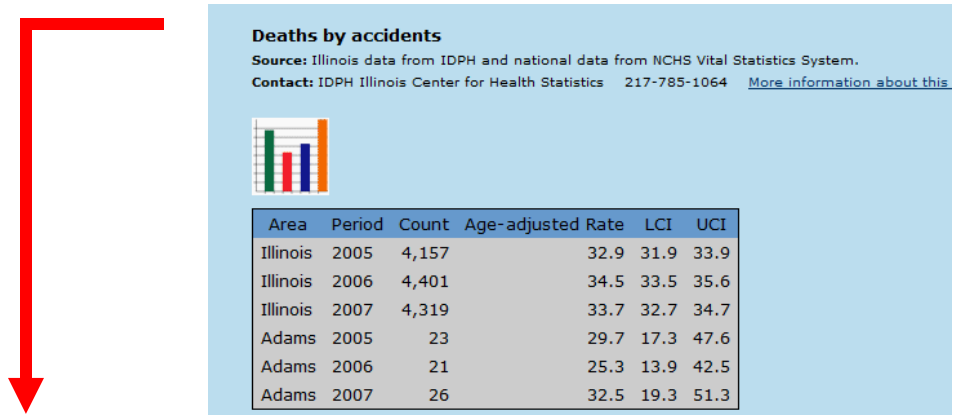
Note: If any of the rate or count columns have asterisks, then the rates are too small to be reported. If there are no cases (the count is equal to zero), the system will not present any data.

Area	Period	Count	Crude Rate	AAR (Age-adjusted Rate)	Rate Type	Lower and Upper Confidence Intervals
The areas and periods chosen in the data search. Illinois totals will be included automatically if available.		The number of events or occurrences of the indicator.	A crude rate is the number of new cases (or deaths) occurring in a specified population per year. Age-adjustment is a statistical process applied to rates of disease, death, injuries or other health outcomes which allows communities with different age structures to be compared. Rates are calculated and presented above if the data is available to calculate them. If the column for rates above is blank, then no rate data is available.			A confidence interval is a range around a measurement that conveys how precise the measurement is. See Glossary for more information.



Display Graphs for This Table: Clicking on the graph icon brings up a new window with a bar graph of the data for a single indicator. If your table has multiple indicators, you must return to the tabular results to graph each individual indicator.

A simple data search — one indicator, one county, three years — results in a simple table, like the one below.

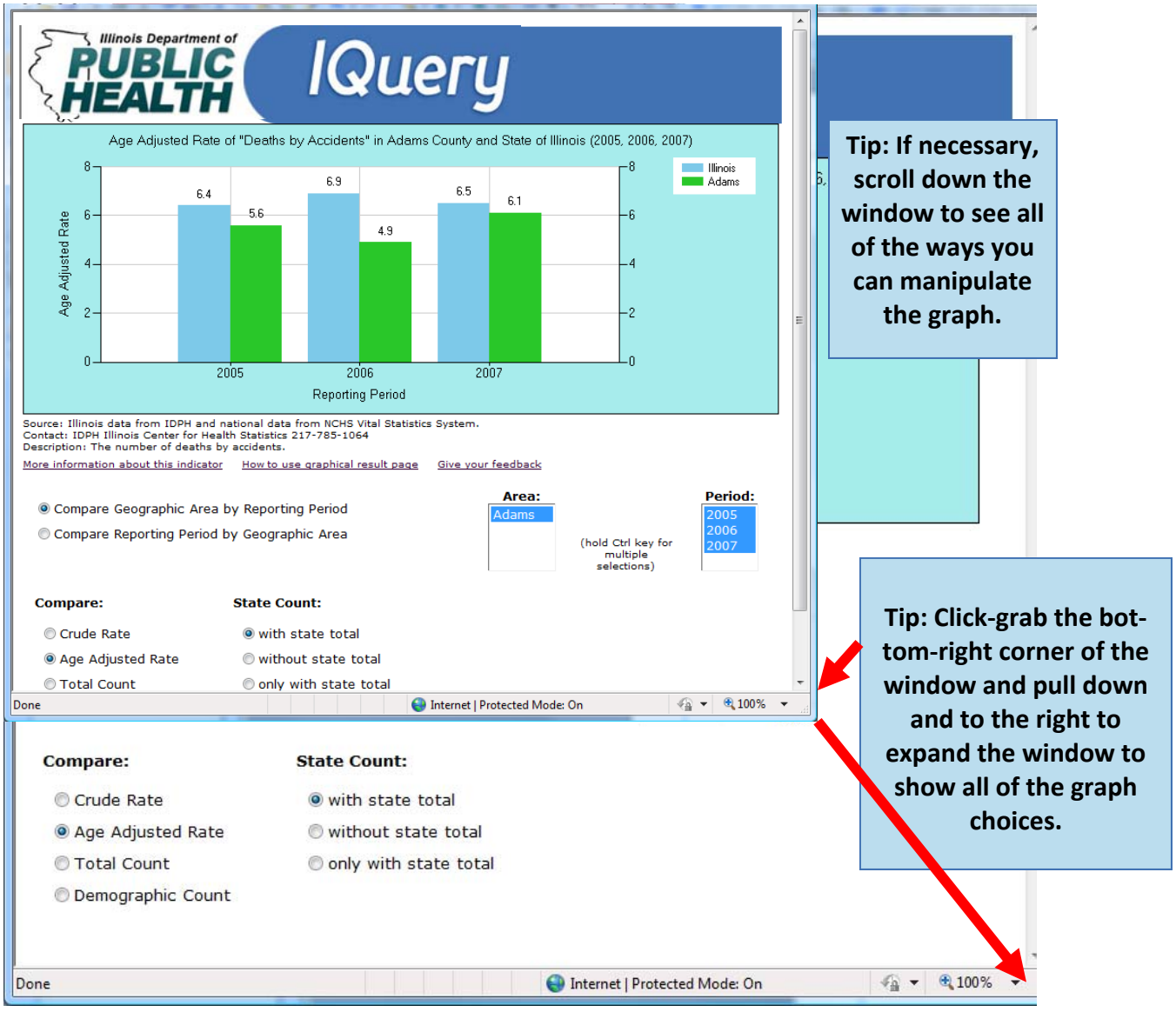


Deaths by accidents

Source: Illinois data from IDPH and national data from NCHS Vital Statistics System.
Contact: IDPH Illinois Center for Health Statistics 217-785-1064 More information about this

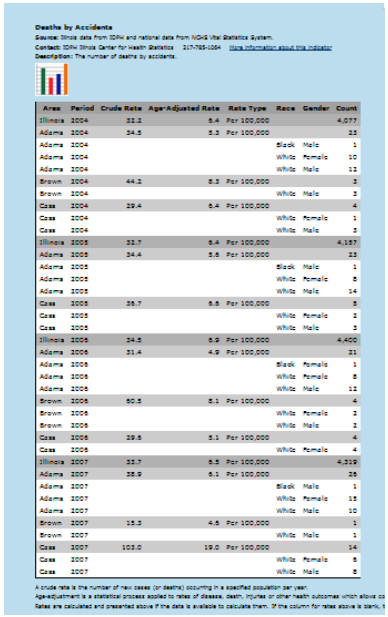
Area	Period	Count	Age-adjusted Rate	LCI	UCI
Illinois	2005	4,157	32.9	31.9	33.9
Illinois	2006	4,401	34.5	33.5	35.6
Illinois	2007	4,319	33.7	32.7	34.7
Adams	2005	23	29.7	17.3	47.6
Adams	2006	21	25.3	13.9	42.5
Adams	2007	26	32.5	19.3	51.3

The resulting graph gives you additional tools to look at the data results.

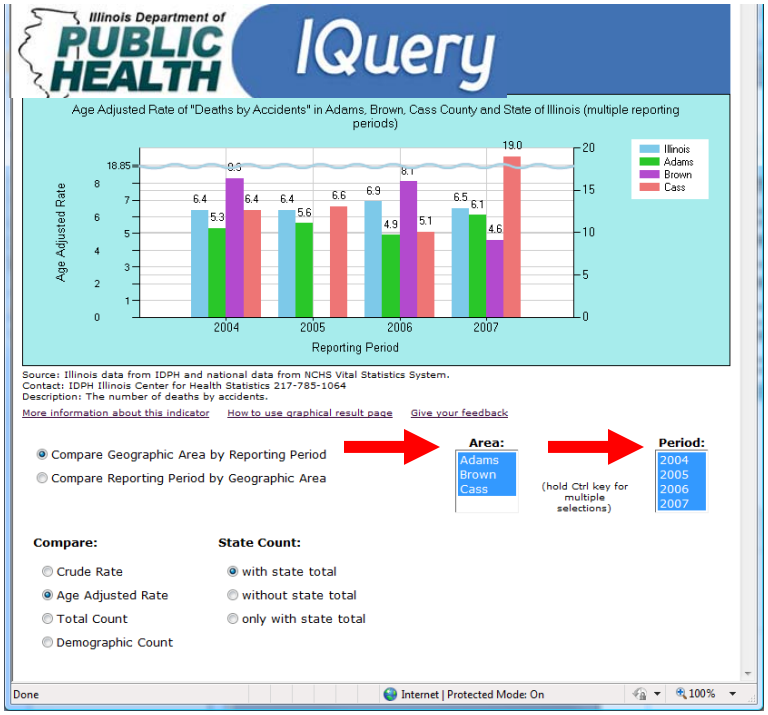


Tip: If necessary, scroll down the window to see all of the ways you can manipulate the graph.

Tip: Click-grab the bottom-right corner of the window and pull down and to the right to expand the window to show all of the graph choices.

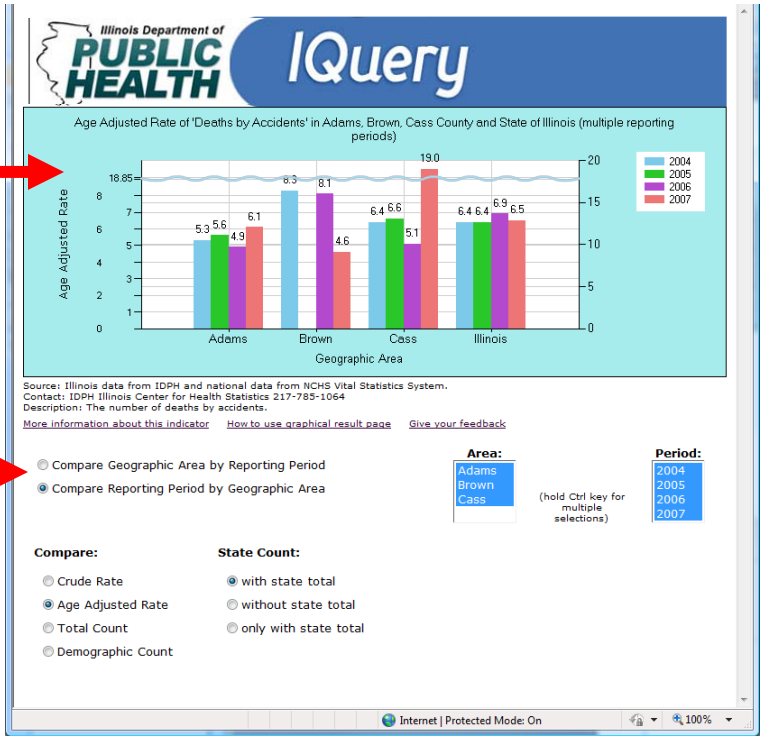


This data search example — one indicator, three counties, three years, race and gender — results in a large table that may be easier to understand as a graph.

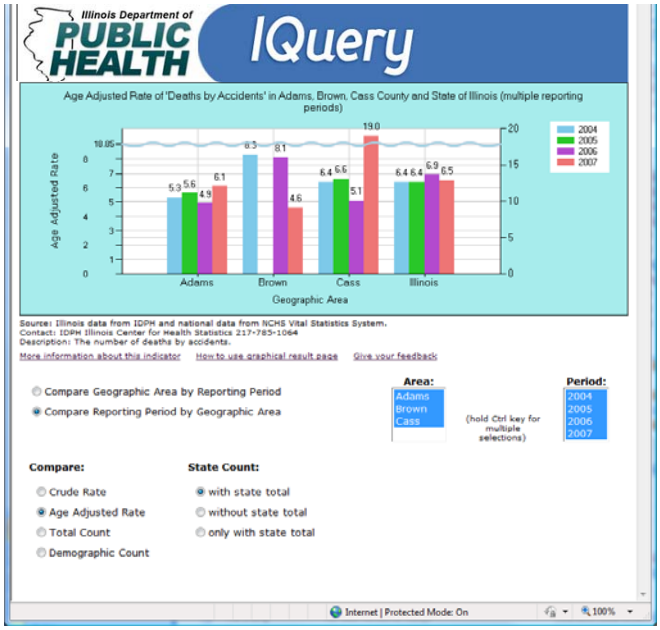


The default graph (the one usually shown at first) shows the age-adjusted rate for the selected **Health Indicator** over all of the selections for **Geographic Area** and **Time Period.**

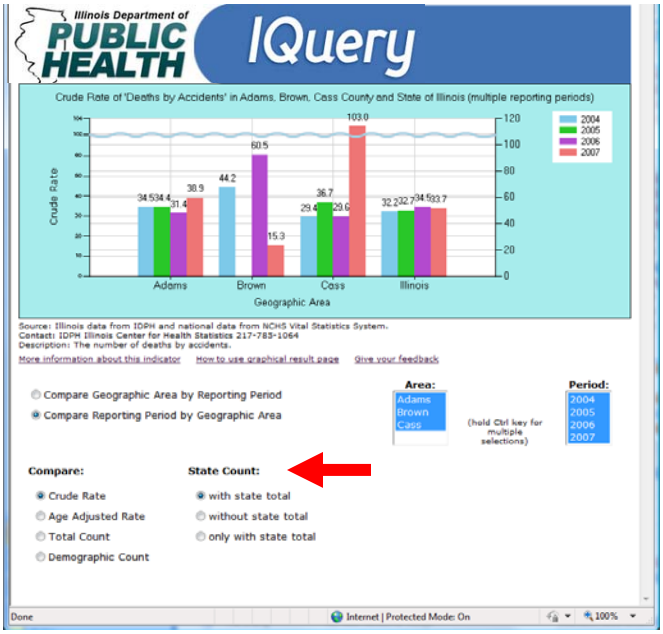
Note: The wavy blue line indicates a change in the vertical scale of the graph.



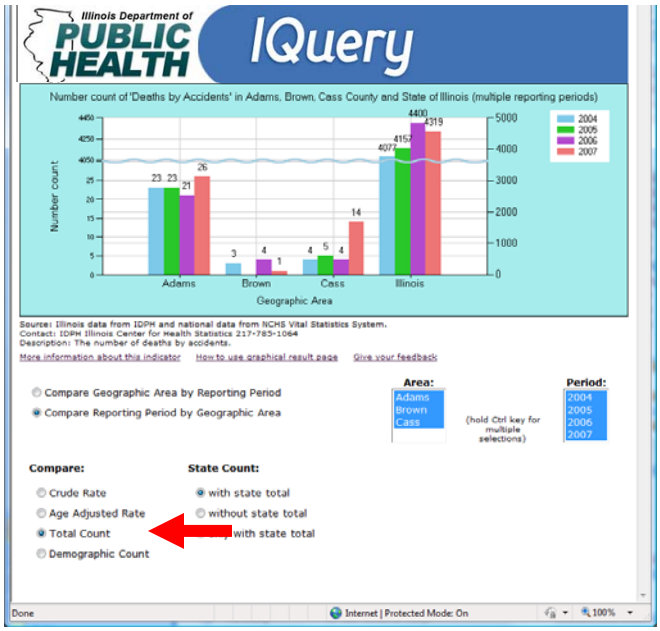
You can compare the areas by period, or compare the periods by area, by clicking on the radio buttons under the graph.



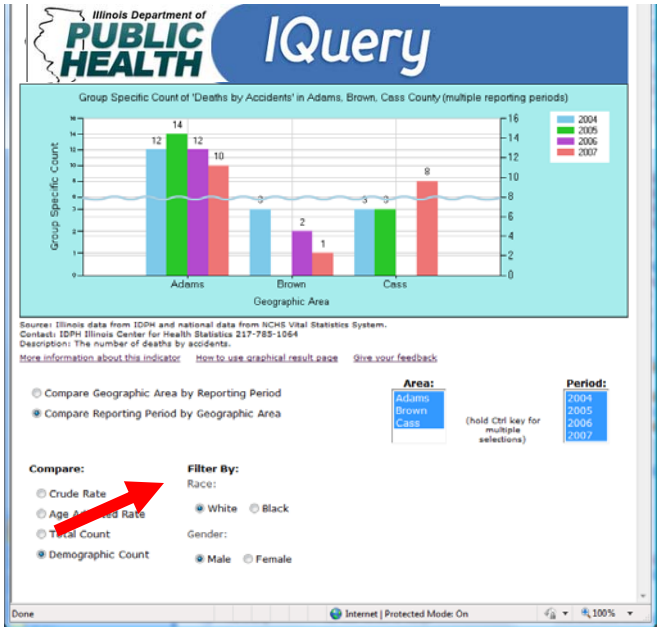
The default graph (the one usually shown at first) shows the age-adjusted rate for the selected **Health Indicator** over all of the selections for **Geographic Area** and **Time Period.**



You also can view the data as a crude rate by clicking on a radio button under **Compare.** If the data includes a state total, that is included in the graph by default; this can be de-selected under "State Count."

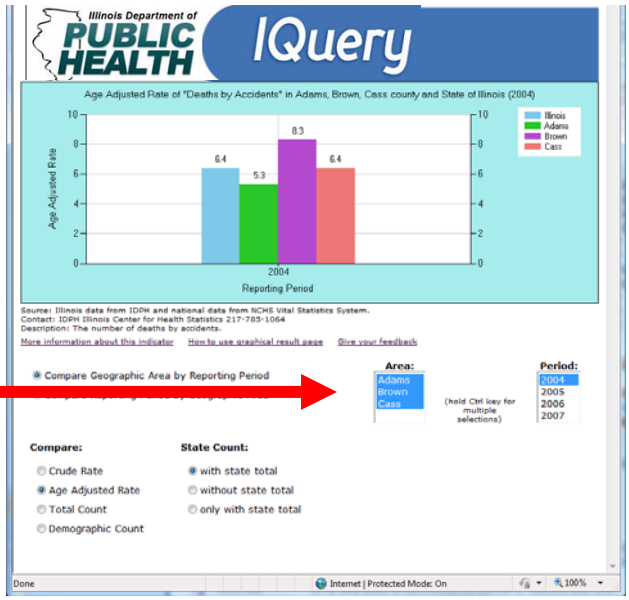


Counts are the actual number of cases for a particular **Health Indicator**.

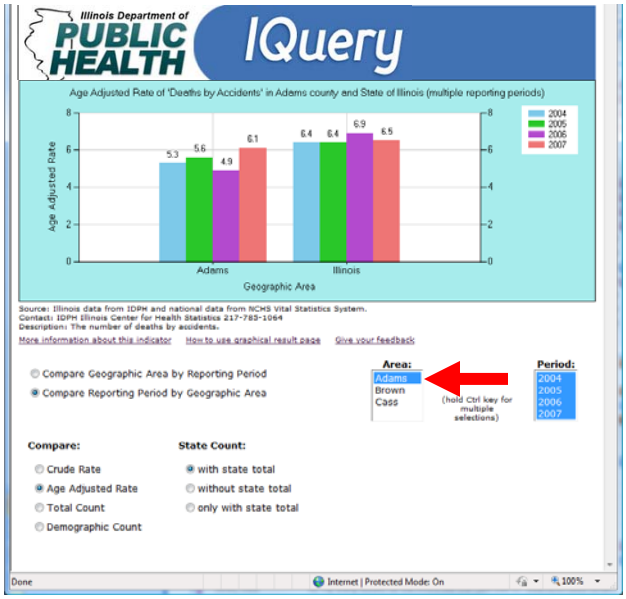


If you had selected "Show Detail" in any of the **Population Demographic** categories, you will have the option of viewing the different counts by your demographic choices.

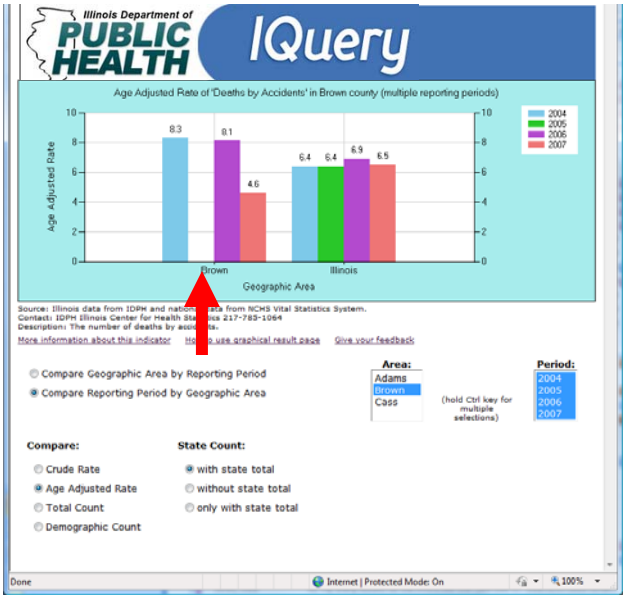
Very Important Tip: Select and de-select different choices under the Area and Period list boxes by holding down the "CTRL" key on your keyboard while clicking with the left button of your computer's mouse.



In this example, the user is viewing all three of the areas (counties) from the data search, but only one of the periods (years).



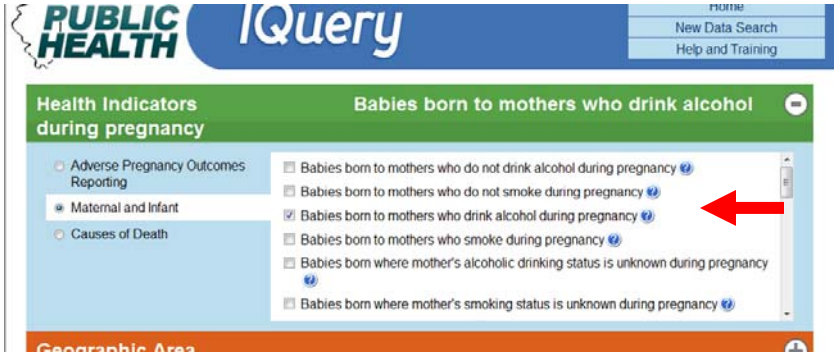
In this example, the user is viewing all four of the periods (years) from the data search, but only one of the areas (counties). You also have the option to show the data in comparison to a state total or not.



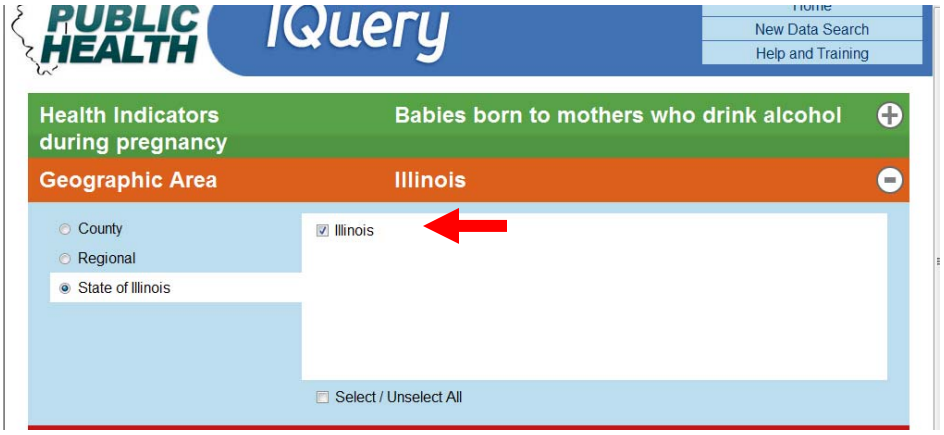
Note in the example above that there is a gap in the data for Brown County in 2005. If the data shows no counts for a particular combination of indicator/area/period, then a rate cannot be calculated and the space for that value is empty.

Step-by-Step Data Search Example #1

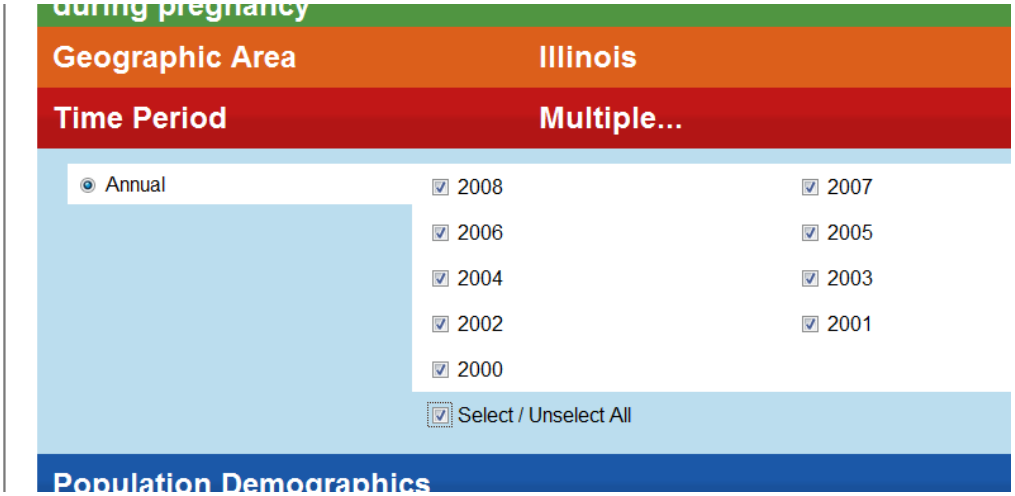
Click on “New Data Search” button to reset all the selections.



Scroll down to, and select, “Babies born to mothers who drink alcohol during pregnancy.”



Select “State of Illinois.”



Click on “Select/Unselect All” to select all years.

In this example, make no selections for **Population Demographic** detail.
Then click on **Get Results**.

Babies born to mothers who drink alcohol during pregnancy

Source: IDPH Vital Statistics

Contact: IDPH Illinois Center for Health Statistics 217-785-1064 More information about this indicator

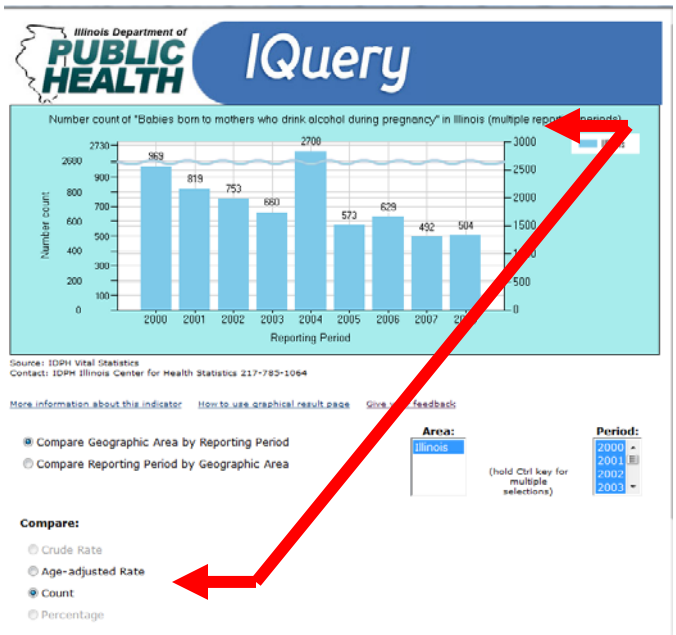
Area	Period	Count	Age-adjusted Rate	LCI	UCI
Illinois	2000	969	7.6	7.1	8.1
Illinois	2001	819	6.5	6.0	6.9
Illinois	2002	753	6.0	5.5	6.4
Illinois	2003	660	5.3	4.9	5.7
Illinois	2004	2,708	21.6	20.8	22.4
Illinois	2005	573	4.6	4.2	5.0
Illinois	2006	629	5.1	4.7	5.4
Illinois	2007	492	3.9	3.6	4.3
Illinois	2008	504	4.1	3.7	4.4

Age-adjustment is a statistical process applied to rates of disease, death, injuries or other health outcomes which allows communities with different age structures to be compared. Age-adjusted Rate is expressed as the number of cases Per 100,000 Population (US 2000 std) with 95% confidence level.

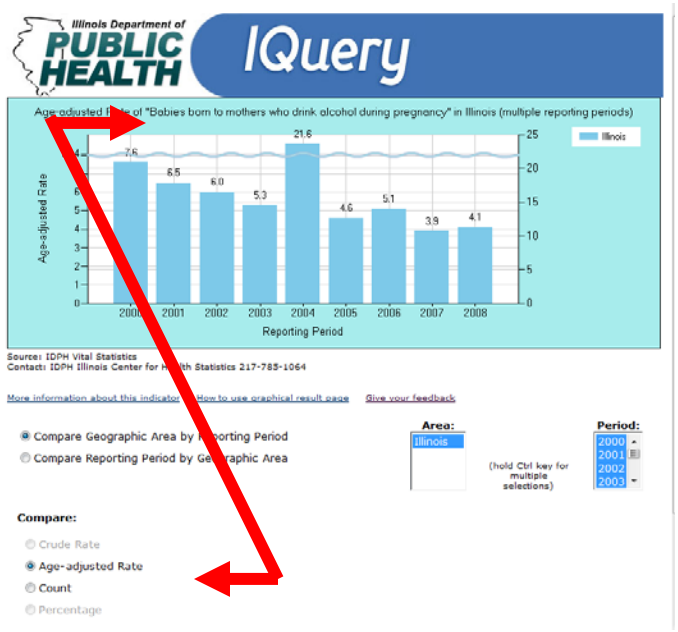
If a result is ***, it means that the value is small and is suppressed to ensure confidentiality and meaningful data.

The resulting table displays the counts and the age adjusted rate, along with an upper and lower confidence level. Above the table is information about your data search selections. Below the table are explanatory notes about the rate methodology and data display. More information is available about the health indicator itself at the underlined link above.

Note: The title of the graph changes according to the selections you make below.



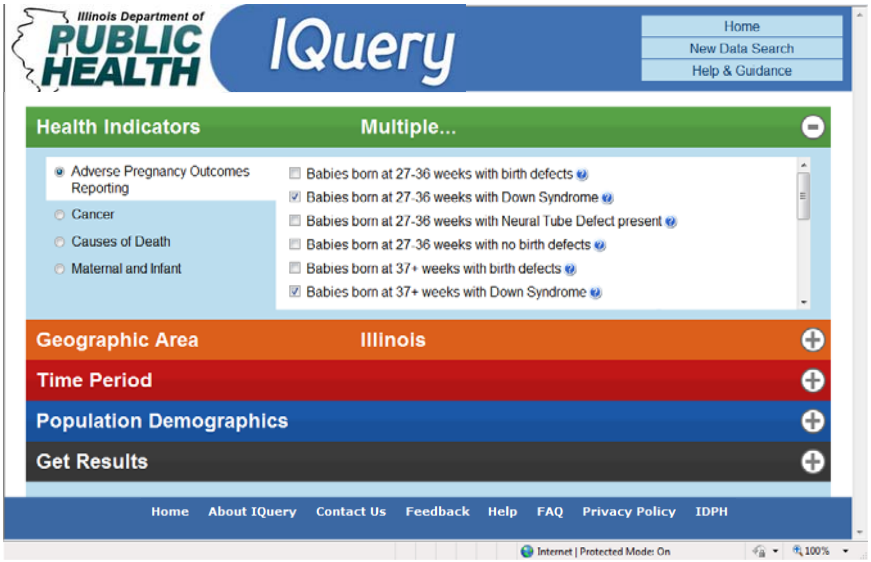
This bar graph displays counts for the data indicator you selected, by years.



This bar graph displays age-adjusted rates for the years and geographic area you selected.

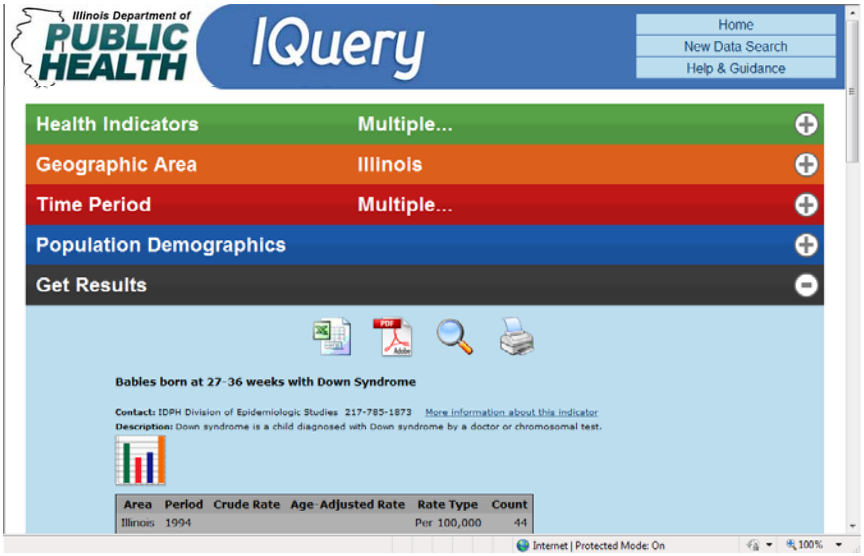
Step-by-Step Data Search Example #2

Click on “New Data Search” button to reset all the choices.



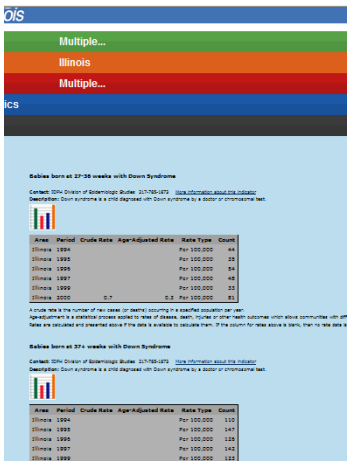
Health Indicators: Select “Adverse Pregnancy Outcomes Reporting.” Scroll down the list to select the four Health Indicators related to Down Syndrome.

Geographic Area: Select “State of Illinois” (the only choice).



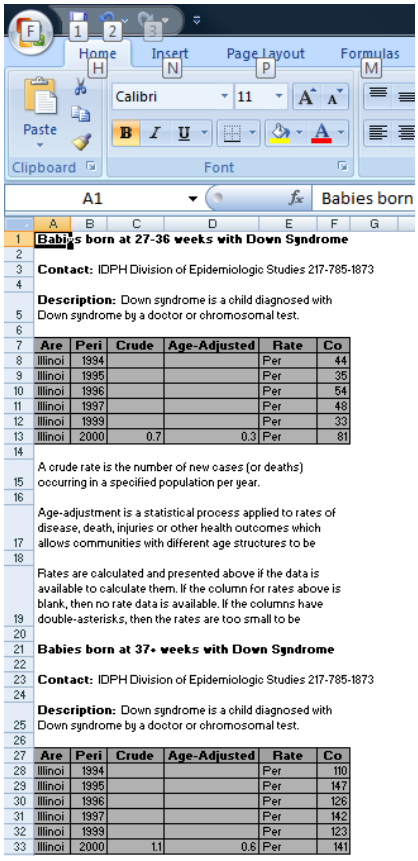
Time Period: Click on “Select/Unselect All” to select all years.

There are no **Population Demographics** details at the ”State of Illinois” level for this indicator because these details are not present in the data. Therefore, continue by clicking on **Get Results**.

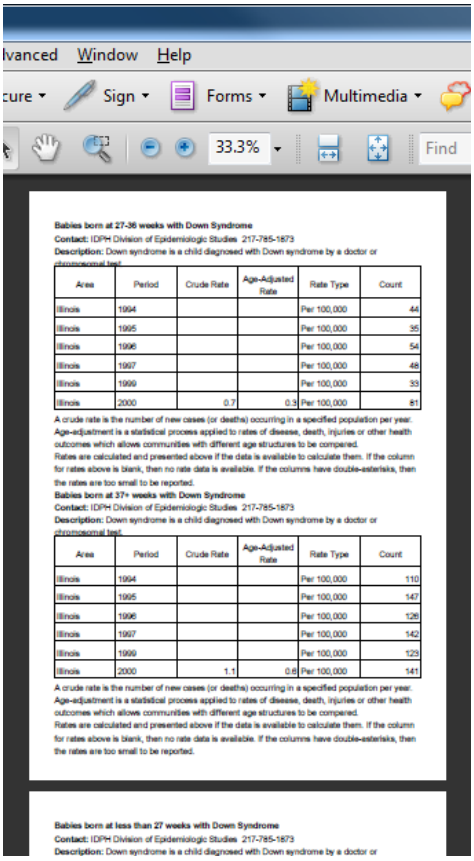


After you have clicked on Get Results, you have the choice to export all tables to Excel, save the tables as a PDF, or print the tables. The information is the same in each case, but the formatting is slightly different.

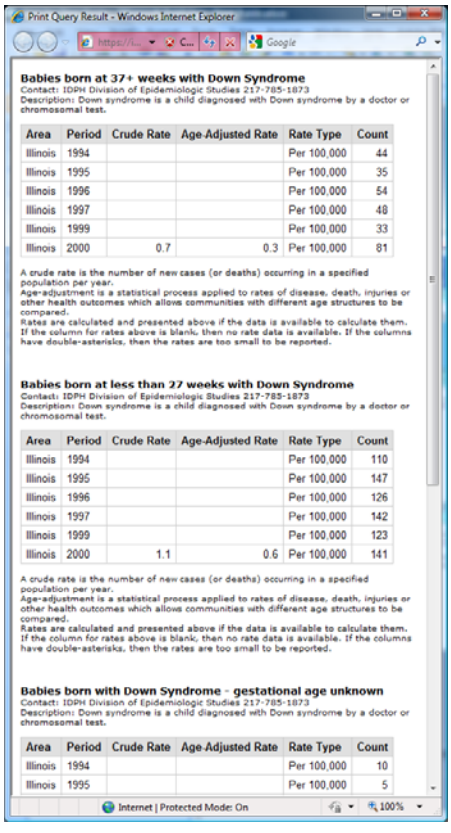
Export all tables to Excel



Save all tables as PDF



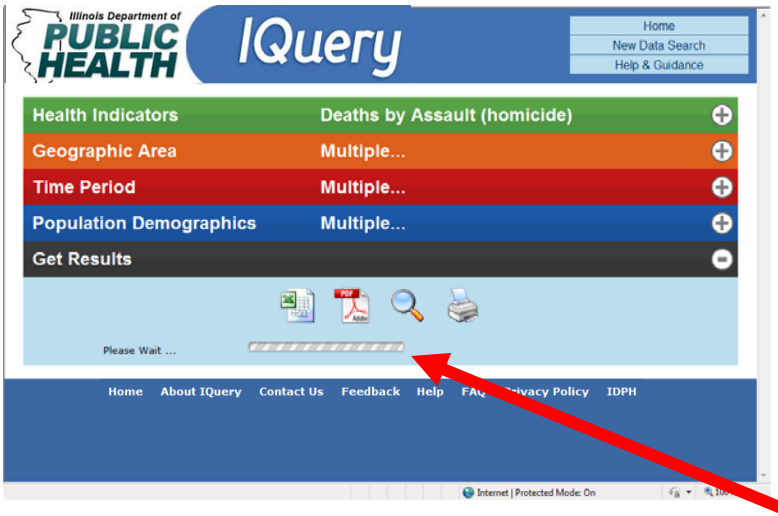
Print all tables



Tip: When you click on "Export all tables to Excel," your computer will ask if you want to open or save this file. You can choose either, and answer "yes" to the follow-up question if you choose to save.

Step-by-Step Data Search Example #3

Click on "New Data Search" button to reset all the choices.



Health Indicator: Select "Causes of death," then "Death by Assault (homicide)."

Geographic Area: Select "County," then Adams, Bureau, Cook and Dekalb.

Time Period: Select "Annual," then 2004, 2005, 2006, 2007.

Population Demographics: Select all choices in all Population Demographics categories.

Get Results: Click it!

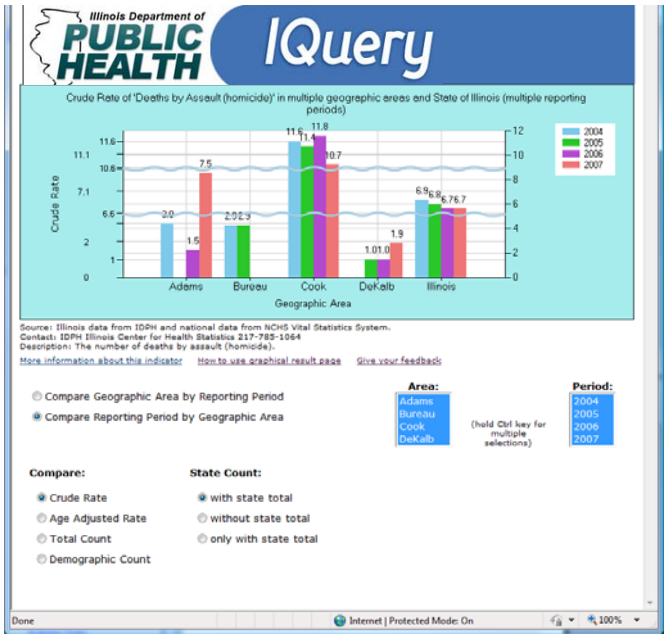
Note: More selections in the Data search choices require more time for the system to return the results. You may see a horizontal indicator which means that the data search is running. Please wait.

Deaths by accidents

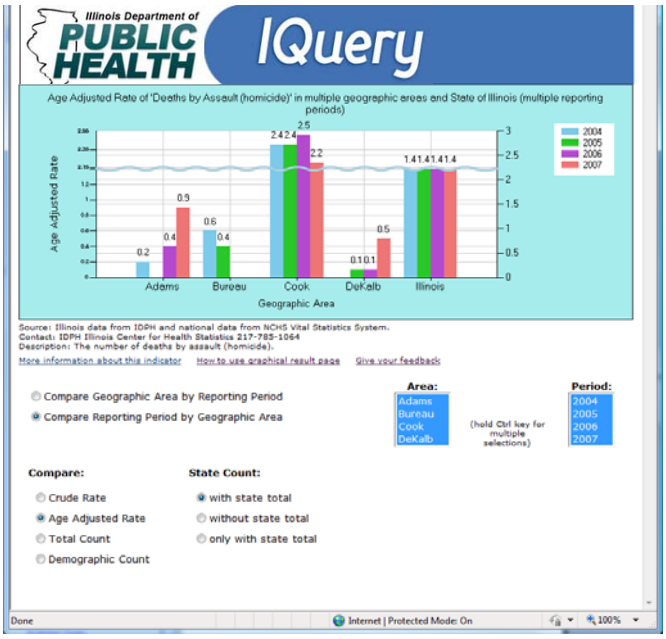
Source: Illinois data from IDPH and national data from NCHS Vital Statistics System.
Contact: IDPH Illinois Center for Health Statistics 217-785-1064 More information about this indicator
Description: The number of deaths by accidents.

Area	Period	Race	Gender	Ethnicity	Age Range	Count	Age-adjusted Rate	LCI	UCI
Illinois	2004	ALL	ALL	ALL	ALL	4,078	32.4	31.5	33.4
Illinois	2005	ALL	ALL	ALL	ALL	4,157	32.9	31.9	33.9
Illinois	2006	ALL	ALL	ALL	ALL	4,401	34.5	33.5	35.6
Illinois	2007	ALL	ALL	ALL	ALL	4,319	33.7	32.7	34.7
Adams	2004	ALL	ALL	ALL	ALL	23	28.0	15.6	46.1
Bureau	2004	ALL	ALL	ALL	ALL	13	34.0	17.0	60.8
Cook	2004	ALL	ALL	ALL	ALL	1,474	28.0	26.5	29.4
Dekalb	2004	ALL	ALL	ALL	ALL	21	23.5	15.2	34.6
Adams	2005	ALL	ALL	ALL	ALL	23	29.7	17.3	47.6
Bureau	2005	ALL	ALL	ALL	ALL	16	39.0	19.4	69.7
Cook	2005	ALL	ALL	ALL	ALL	1,542	29.3	27.9	30.8
Dekalb	2005	ALL	ALL	ALL	ALL	33	35.9	25.5	49.0
Adams	2006	ALL	ALL	ALL	ALL	21	25.3	13.9	42.5
Bureau	2006	ALL	ALL	ALL	ALL	28	77.7	50.7	113.8
Cook	2006	ALL	ALL	ALL	ALL	1,790	34.0	32.4	35.5
Dekalb	2006	ALL	ALL	ALL	ALL	34	34.0	23.8	47.0
Adams	2007	ALL	ALL	ALL	ALL	26	32.5	19.3	51.3
Bureau	2007	ALL	ALL	ALL	ALL	14	33.7	16.2	62.0
Cook	2007	ALL	ALL	ALL	ALL	1,488	28.3	26.8	29.7
Dekalb	2007	ALL	ALL	ALL	ALL	36	37.7	27.4	50.6
Illinois	2004	Black	Female	Non-Hispanic	0 year old	***			
Illinois	2004	Black	Male	Hispanic	0 year old	***			
Illinois	2004	Black	Male	Non-Hispanic	0 year old	***			
Illinois	2004	White	Female	Hispanic	0 year old	***			
Illinois	2004	White	Male	Hispanic	0 year old	***			
Illinois	2004	White	Male	Non-Hispanic	0 year old	17			
Illinois	2004	Black	Female	Non-Hispanic	1 to 4	***			
Illinois	2004	Black	Male	Non-Hispanic	1 to 4	***			
Illinois	2004	White	Female	Hispanic	1 to 4	***			

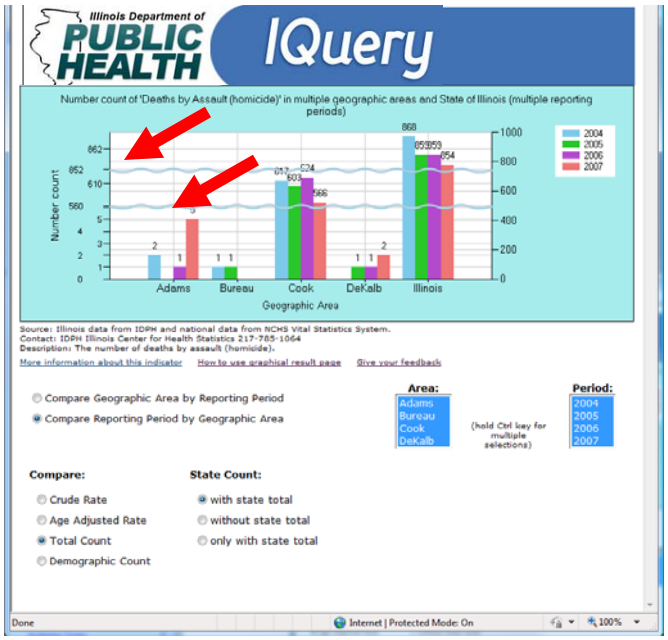
IQuery only displays selections that have data. In this example, Adams and Bureau counties have a small number of results, because they have a small number of counts (homicides). Crude and age-adjusted rates are calculated for the state and for counties, but not for the demographic counts.



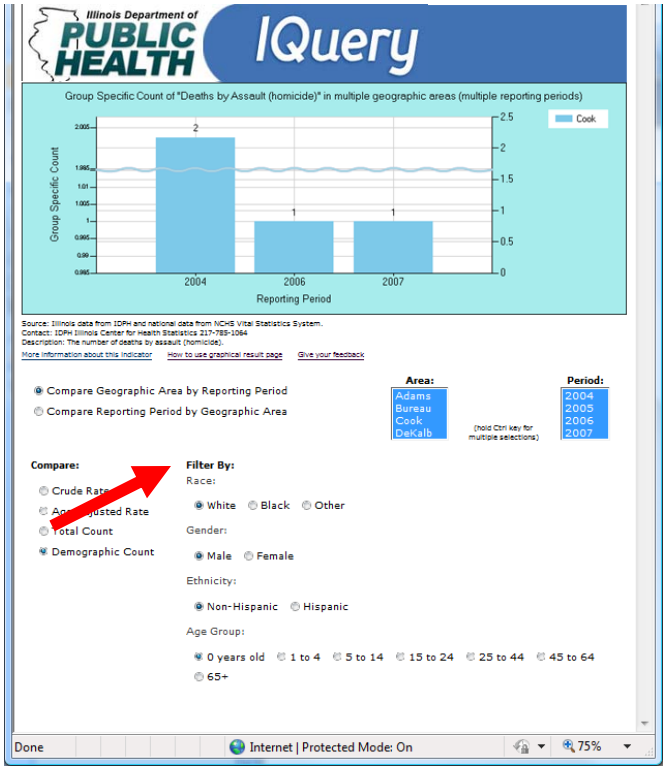
This bar graph displays the crude rates for four counties by **Geographic Area** (counties and the state of Illinois).



This bar graph displays the age-adjusted rate for four counties by **Geographic Area** (counties and the state of Illinois).



This graph has two wavy lines because the counts for the state of Illinois and one county are at a different numerical scales.



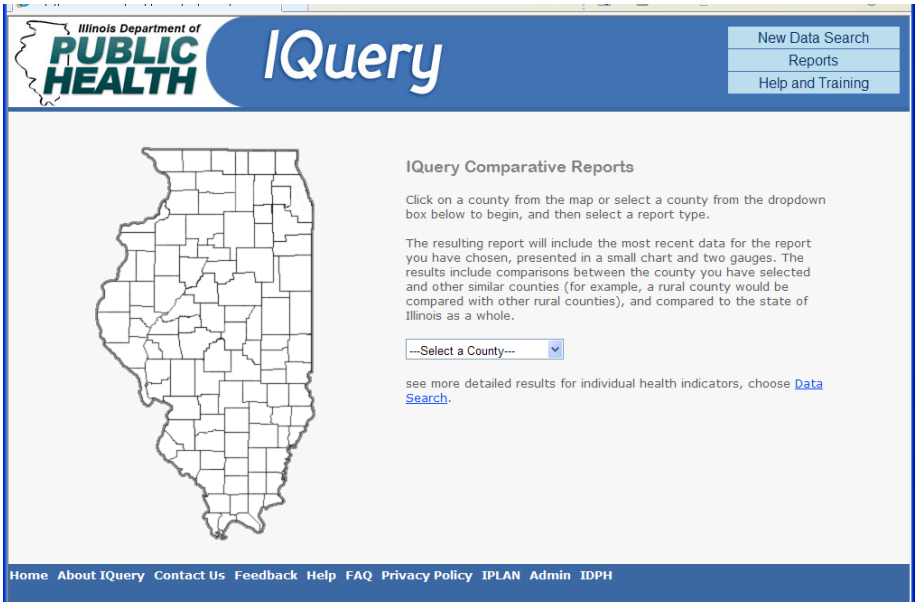
Selecting **Population Demographics** in the data search page provides additional choices on the graph page to display demographic details.

IQuery Reports Module
Visual Step-by-Step Guide

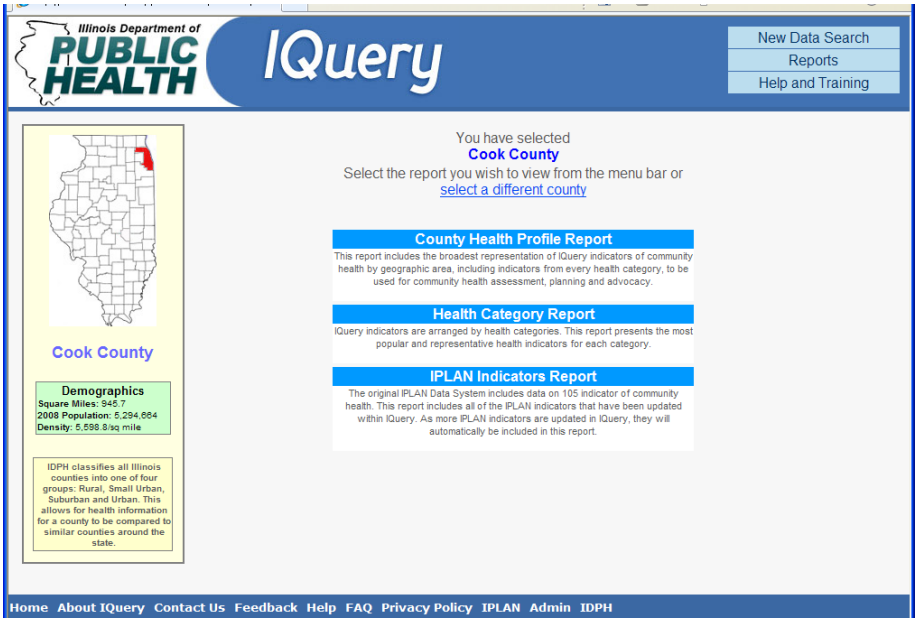
IQuery now offers you the ability to run reports based on the indicators that are available within IQuery. IQuery Reports are created by data managers within the Illinois Department of Public Health, representing the data determined to be most useful to the regular user.

Tip: For more detailed control of the indicators and the way the data is presented , please use the IQuery data search function.

To begin using IQuery Reports, select an Illinois county by choosing from the drop-down menu or by clicking on the county map.



After selecting a county, you will have the option of choosing between three Reports. Each one has a short description of the report beneath it.



Tip: Basic demographics for the selected county are presented next to the reports selection page.

Understanding the IQuery Report Layout

For this example, choose “Cook County” and then “County Health Profile Report’” These selections will display the “Cook County Health Profile Report.”

Tip: For every indicator in any report, IQuery presents the most recent data available. If the data is reported in a rrange of multiple years, it will be the most recent range of years.

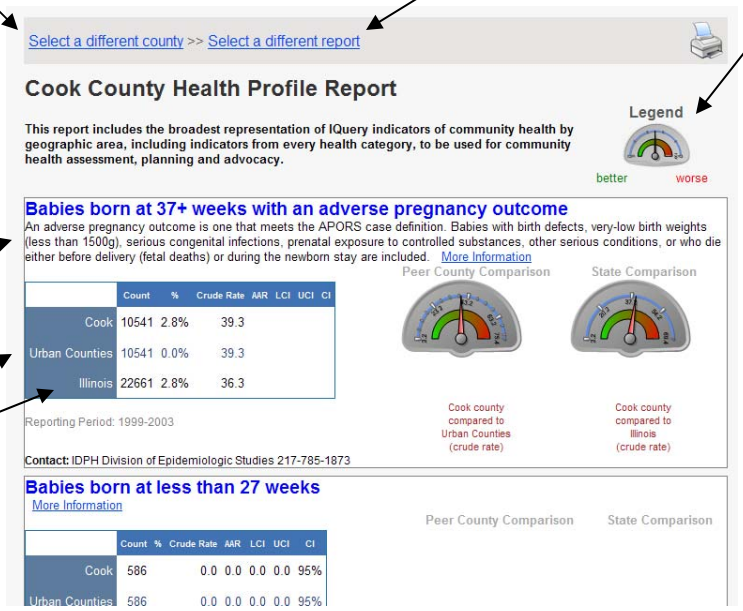
You may select a different county using the same report

You may select a different report using the same county

The title of the report and a brief description

The name of each indicator and a brief description

The graph presents two comparisons: to similar counties, and to the state of Illinois as a whole. In this example, the county is Cook, so the comparison is to other urban counties.



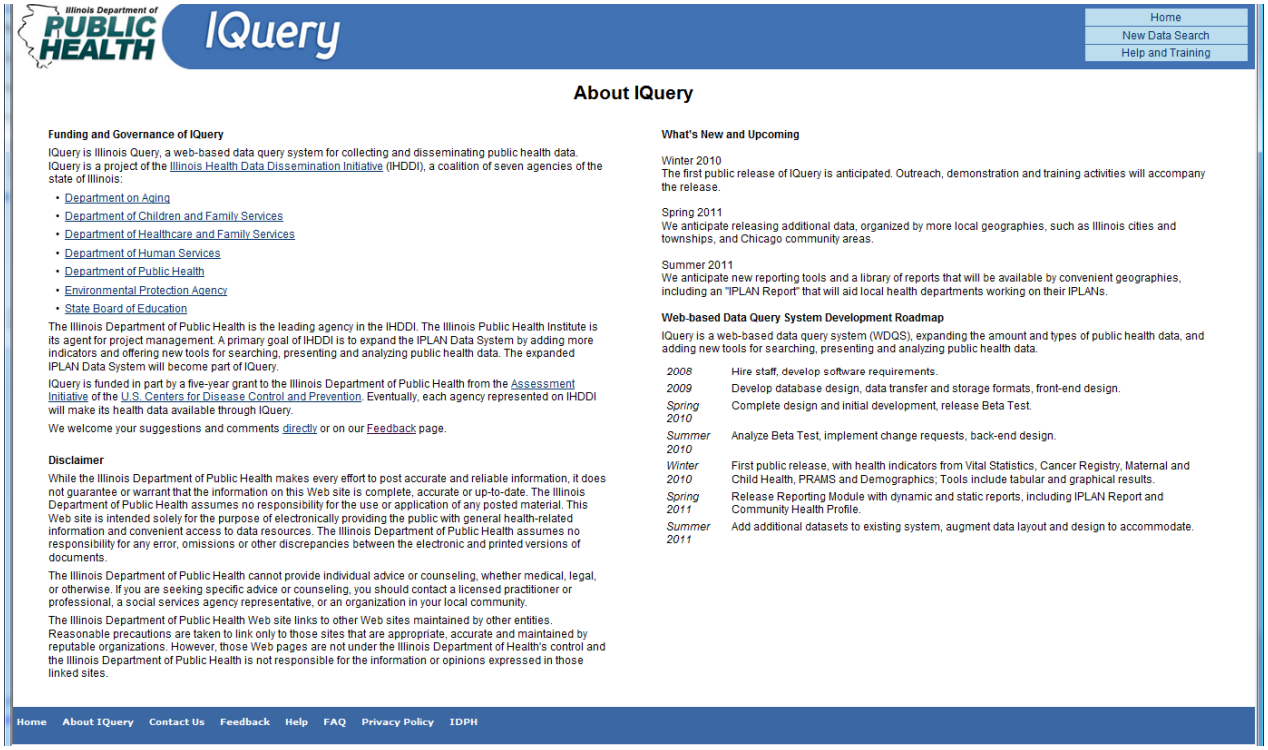
The legend is a visual representation of the health status of the county for this indicator compared to the peer counties and to the state as a whole. If the county results are better than the peer counties or than the state results, then the result is positive, and is graphed into the green. If the county results are worse than the peer counties or the state average, then the result is in the red. If the needle is in the middle, then the selected county is about equal to the peer counties or the state results.

The graph presents as much data is as available within IQuery. Please see the Visual Step-by-Step Guide to IQuery for explanations of the various data elements, but some or all of these data items may be displayed within the IQuery Reporting Module: unduplicated count, percentage, crude rate, age-adjusted rate, and confidence intervals.

IQuery reports are subject to the same data suppression standards as the IQuery data search. For the purposes of maintaining confidentiality or data quality standards, the presentation of data may be suppressed. If that occurs within the reporting module, the legend (and possibly the graph) may be blank.

Tip: As more data becomes available within IQuery itself, the reports will become richer and more detailed as well.

About IQuery / Contact Us

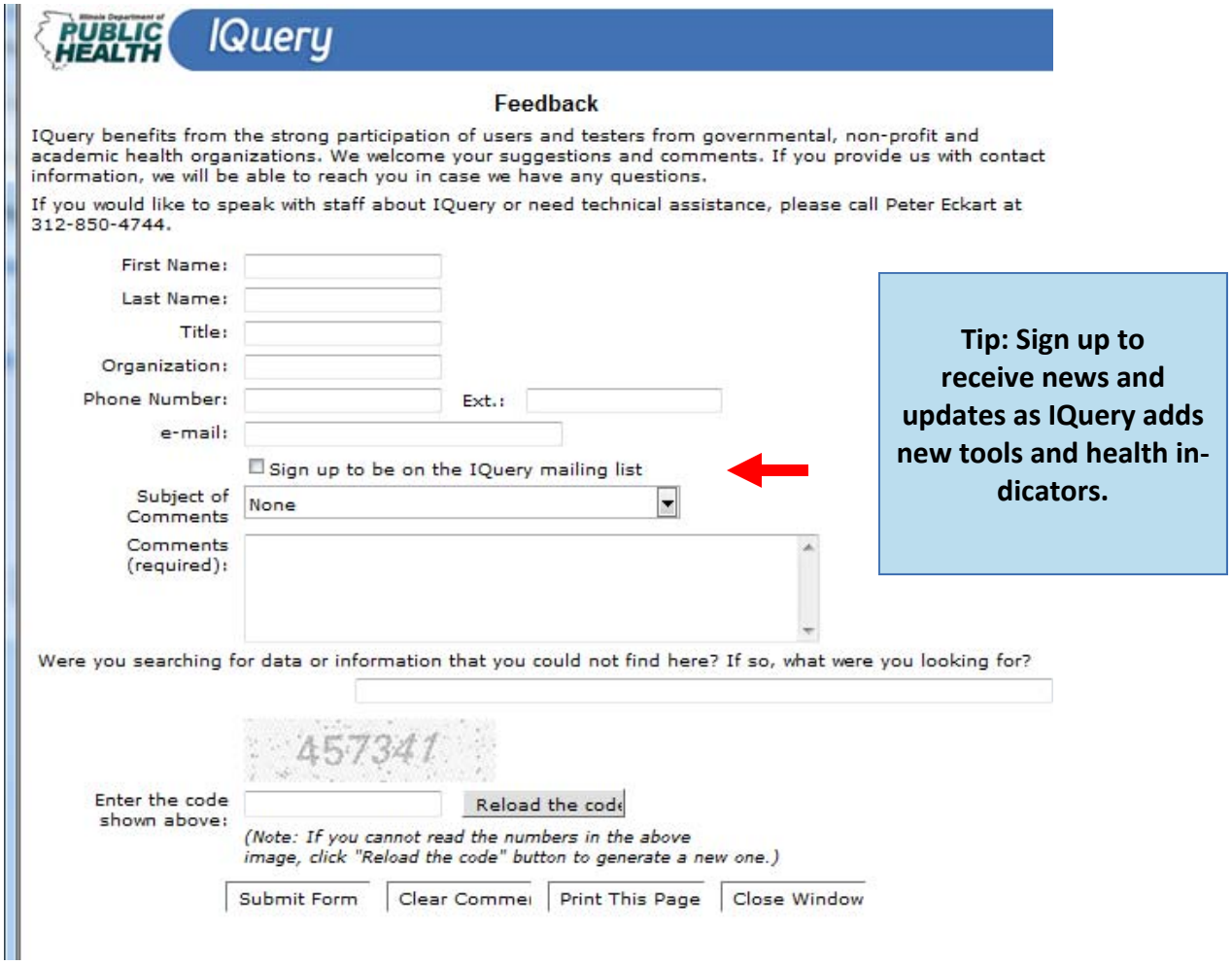


This page includes basic information about IQuery, including

- its origins in the Illinois Health Data Dissemination Initiative (IHDDI), a project funded by the U.S. Centers for Disease Control and Prevention Assessment Initiative;
- a listing of the seven agencies that make up the IHDDI and which will eventually contribute data to the system;
- a list of upcoming revisions to IQuery and the overall project timeline;
- and a disclaimer concerning the nature of using public health data provided by IQuery.

If you have any questions, please contact us.

Feedback



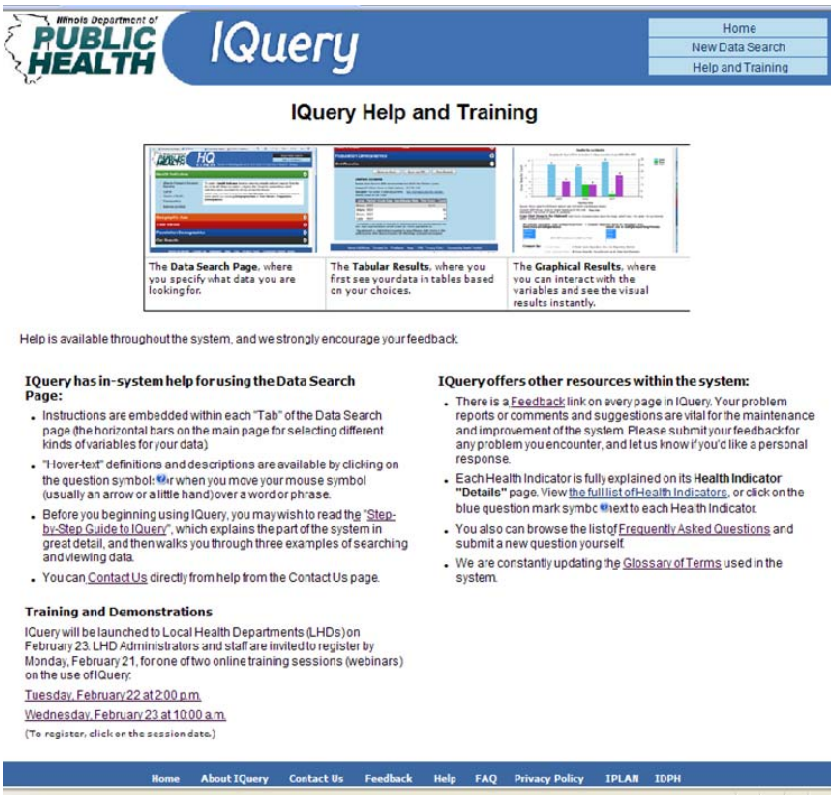
The development of IQuery has benefited greatly from approximately 75 public and community health professionals who participated in focus groups on the original design, reviewed early prototypes of the site, offered comments and suggestions to interim versions, and then participated in a month-long online beta test.

Many of the best ideas on how to improve the site have come from users, and we encourage you to give us your suggestions and comments on this form. There is a link to the feedback form at the bottom of almost every page in the system, so feel free to comment.

You also can sign up for the IQuery update mailing list, or request a response from project staff.

Help and Training

As IQuery is publically released, the project staff is preparing a number of different resources to help the target audiences use and benefit from the system. This page is the hub and archive for all the resources that have been and will be developed, including the latest version of this Step-by-Step Guide and a video version to walk you through your first data searches.



The schedule for upcoming demonstrations and trainings will be posted at this page, as well as links to archived presentations and accompanying materials.

IQuery is designed to be clear and simple to use, but the proper use of public health data is complicated. The project is compiling a list of **Frequently Asked Questions** and updating it with the latest answers. We also are maintaining a **Glossary of Terms** used on the site and their definitions.

Please use the feedback form to share your opinion of the materials, and to suggest additional resources that would be useful to you.