

IBIS and SEOW Online Data Systems Guides

These one page guides are intended to provide basic step-by-step instructions for conducting prevention related data queries of both: a) the Division of Substance Abuse and Mental Health's (DSAMH) State Epidemiological Outcomes Workgroup (SEOW) online data system, as well as, b) the Department of Public Health's Indicator Based Information System (IBIS) data query functions. While this guide is not intended to be a comprehensive manual of how to navigate the two data systems, hopefully, it will act as an effective complement to the more detailed trainings that are offered through the SEOW/DSAMH.

SEOW Online Data System

<http://www.bach-harrison.com/utsocialindicators>

The SEOW Online Data System is designed as a "single indicator" data query system that allows you to look up prevention related indicators and quickly download and/or view data in rates and numbers as well as through comparative charts. The system was designed to be user friendly for people with limited background in statistics. Charts provide visual presentation of trends over time, comparison to the state and/or other regions/counties, as well as breakouts by demographic variables such as grade or age. As a result of the SEOW online data system's ease of use, its query functions are somewhat limited regarding the levels of data that can be displayed for each indicator. However, the system does provide data at levels that are most likely to be useful for needs assessments at the regional and county levels.

A detailed step-by-step guide is available by clicking on the "How to Use" tab located at the website. You are encouraged to peruse the various tabs on the website and familiarize yourself with what the system is capable of providing. Below are basic steps for navigating and querying data within the SEOW online data system:

1. Click on the "Indicators" tab for query options
 - a. The "View Data" option provides a drop down menu with all of the indicators in alphabetical order. (Good option if you know what you are looking for)
 - b. The "Indicator Browse" option provides a more detailed and clickable list of indicators in the system such as: indicator type, substance type and risk factor. You can further click on check boxes to display descriptions of the indicators and source information. Best of all, you can sort indicators by any of these attributes. (Best option for general queries; *Hint: you can adjust how many indicators are displayed on the page by adjusting the "Records per page" box in the bottom left corner*)
 - c. The "Indicator Search" and "Search by Risk Factor" options allow you to narrow down on to a list of indicators within the system that match a specific set of criteria.
2. After clicking on an indicator name, choose the data level of interest. The "Data Level" drop down will display all available levels for the indicator chosen.
3. Next, additional choices may become available depending on what level of data you chose.
 - a. If the data are available by sub-state level (county or region), specify the counties or regions you desire.
 - b. If you chose to examine data by a demographic (e.g., State and Region Data ***by Grade***), you will be able to specify whether you would like to compare all levels of the demographic variable (e.g., 6th, 8th, 10th and 12th graders) or focus on just one level (e.g., 12th graders only).
 - c. Click on the "Show Chart Table" checkbox if you would to view a table of the exact values of the data displayed (Recommended)
4. Next, click "Draw Chart" or "Draw Map" as appropriate/available
5. **Downloading the Data:** If you would like to download the data for an indicator, click the "Indicator data download" link available to the right of the indicator drop down box at anytime.

Indicator Based Information System (IBIS)

<http://ibis.health.utah.gov/query>

The IBIS is a powerful data query system that allows you to look up indicators collected by the Utah Department of Public Health (UDOH). Compared to the SEOW online data system, the IBIS allows much more flexibility regarding data queries, but is more difficult to use. It is extremely important to run your queries in IBIS with all of the same parameters each time you query an indicator if you desire to compare one query to the next. If the parameters of one query do not match the next query, the data may not be comparable. The UDOH offers basic IBIS trainings on a quarterly basis (link available from IBIS homepage)

Below are basic steps for navigating and querying MORTALITY data within the IBIS:

A. Steps for running mortality indicator queries

1. Click on the “Datasets Queries” link in the Left Bar (far left side of the screen)
2. Choose the “Mortality” dataset from the list
3. Next, specify whether you would like to run the data for “Age-adjusted Rates” or “Crude Rates”
 - a. In most cases age-adjusted is appropriate. The main exception is when you would like to calculate rates for specific age groups, then choose “Crude Rates.”
4. Choose the year(s) of interest (Step 1). You can specify custom years as well.
5. Select cause of death (Step 2). You can either search pre-defined causes of death using the “NCHS 50 (or 113) leading causes of death” choice boxes, or specify your own “User defined causes,” using ICD 10 codes (see list of common prevention ICD 10 codes provided).
6. Select sex (Step 3) if you only want to query one sex; default is both sexes.
7. Select geographic area(s) (Step 4). You can choose either county(s) or health department district(s). You can specify a single county or district, or create custom districts by combining counties.
8. Select choices for displaying the data (Step 5).
 - a. If you want trend data, be sure that “Year” is chosen as one of the display variables
 - b. You can also specify another variable (e.g., geographic region, sex, etc.) if you would like a breakout of the data by that variable. So, for example, if you want to compare all counties over time, you should indicate “Year” in one of the boxes and “Geographic Area” in the other box.
9. **Exporting the Data:** To save the results of your query, click on the “Output to Excel” link in the Left Bar.

B. Alternative Query for Utah Small Areas (sub-county)

1. Click on the “Datasets Queries” link in the Left Bar (far left side of the screen)
2. Choose the “Mortality” dataset from the list
3. Select “Advanced Selection,” then “Utah Small Areas,” then “Years 2010 and later”
4. Select either “Age Adjusted Rates” (most queries) or “Crude Rates” (if desire rates for specific age groups)
 - a. For age adjusted rates, choose “11 age adjustment age groups”
5. Follow steps 4-9 in the list above.

For information on the small area boundaries, go to:

<https://ibis.health.utah.gov/ibisph-view/pdf/resource/UtahSmallAreaInfo.pdf>

Indicator Based Information System (IBIS)

<http://ibis.health.utah.gov/query>

Below are basic steps for navigating and querying BEHAVIORAL RISK FACTOR SURVEILLANCE SURVEY (BRFSS) data within the IBIS:

A. Steps for running BRFSS encounter indicator queries

1. Click on the “Datasets Queries” link in the Left Bar (far left side of the screen)
2. Choose the “BRFSS” dataset from the list (Under Health Surveys Heading)
3. Next, specify whether you would like to run the data for “Age-adjusted Rates/Percentages” or “Crude Rates/Percentages.” For data that compares to national BRFSS data, choose “Crude Rates/Percentages”
4. Choose the data category of interest. For substance use estimates, choose “Addictive and Abused Substances”
 - a. Then, choose the indicator of interest (e.g., Current Alcohol Use)
5. Choose the year(s) of interest (Step 2).
6. Select age (Step 3). You can either search pre-defined age groups or customize your own specific age groups.

Note: “Select age” will only be an option IF you chose Crude Rates – If you chose Age Adjusted Rates: all steps below will be off by one – e.g., step 4 below will be step 3, etc.)
7. Select sex (Step 4) if you only want to query one sex, otherwise skip.
8. Select other demographic characteristics (Step 5) if you want to specify certain demographics only, otherwise skip.
9. Skip “Select another BRFSS” (Step 6) unless you specifically want to examine responses to one item based on responses to another item (e.g., want to look at binge drinking as a function of 30 day [current] alcohol use).
10. Select Geographic Area (Step 7) to specify what area(s) you would like to include in the data query.
11. Select choices for displaying the data (Step 8).
 - a. If you want trend data, be sure that “Year” is chosen as one of the display variables
 - b. You can also choose another variable (e.g., geographic region, age, sex, another BRFSS question, etc.) if you would like a breakout of the data by that variable. So, for example, if you want to compare all counties over time, you should indicate “Year” in one of the boxes and “Geographic Area” in the other box.
12. **Exporting the Data:** To save the results of your query, click on the “Output to Excel” link in the Left Bar.

For more information on small area boundaries, go to:

<https://ibis.health.utah.gov/ibisph-view/pdf/resource/UtahSmallAreaInfo.pdf>

Indicator Based Information System (IBIS)

<http://ibis.health.utah.gov/query>

Below are basic steps for navigating and querying EMERGENCY DEPARTMENT ENCOUNTER data within the IBIS. **Please NOTE that at the time of writing, ED Data was limited to 2014 and prior using ICD-9. The Utah Department of Health has not provided information about when more recent ED data will be available through IBIS.**

A. Steps for running ED encounter indicator queries

1. Click on the “Datasets Queries” link in the Left Bar (far left side of the screen)
2. Choose the “Emergency Department Encounter” dataset from the list (Under Hospital and Emergency Department and EMS Heading)
3. Next, choose “All ED Encounters” unless you specifically want only treat and release or treat and admit cases.
 - a. Then, choose “Hospital ED Encounters”
 - b. Next, specify whether you would like to run the data for “Age-adjusted Rates” or “Crude Rates.” In most cases age-adjusted is appropriate. The main exception is when you would like to calculate rates for specific age groups, then choose “Crude Rates.”
4. Choose the year(s) of interest (Step 1). You can specify custom years as well.
5. Select diagnosis (Step 2). You can either search pre-defined causes of death using the lists available, OR SPECIFY YOUR OWN “User defined causes,” using ICD 9 codes.
 - a. If defining your own, choose “User-defined ICD-9 diagnosis or E codes – ANY diagnosis code or E code” (this option will include any Emergency Department case where the ICD 9 code was listed, whether primary reason or secondary reason) OR E codes – primary diagnosis code (only cases where the reasons specified are the primary cause)
6. Skip “Select Procedure” (Step 3).
7. *IF you chose Crude Rates: Select age groups (Step 4). (Note all steps below will be off by one – e.g., step 4 will be step 5, etc.)*
8. Select sex (Step 4) if you only want to query one sex.
9. Skip “Select primary payer” (Step 5) unless you are interested in specific payer (insurance) types.
10. Skip “Select discharge status” (Step 6) unless you are interested only in specific discharge types.
11. Select resident status (Step 7) to include/exclude non-Utah residents.
12. Select geographic area(s) (Step 8). You can choose either county(s) or health department district(s). You can specify a single county or district, or create custom districts by combining counties.
13. Select choices for displaying the data (Step 9).
 - a. If you want trend data, be sure that “Year” is chosen as one of the display variables
 - b. You can also another variable (e.g., geographic region, sex, etc.) if you would like a breakout of the data by that variable. So, for example, if you want to compare all counties over time, you should indicate “Year” in one of the boxes and “Geographic Area” in the other box.
14. **Exporting the Data:** To save the results of your query, click on the “Output to Excel” link in the Left Bar.

B. Alternative Query for Utah Small Areas (sub-county)

1. Click on the “Datasets Queries” link in the Left Bar (far left side of the screen)
2. Choose the “Emergency Department Encounter” dataset from the list
3. Select “Advanced Selection,” then “Utah Small Areas,” then “Year 2014 and before,” then “Utah Small Areas”
4. Follow steps 3-14 in the list above.

Common ICD-10 and ICD-9 Codes for Substance Abuse Prevention Data Queries

Cause of Death Injury	ICD Code(s)
Accidental deaths due to drowning	NCHS 113 selected causes: "Accidental accidental drowning and submersion"
Accidental deaths due to fires	NCHS 113 selected causes: "Accidental exposure to smoke, fire and flames"
Accidental falls deaths	w00-w19
Alcoholic liver disease deaths (alcohol related cirrhosis)	k70
Other cirrhosis deaths	k73, k74
Cardiovascular disease deaths	i00-i09, i11, i13, i26-i51, i51.6
Drug poisoning deaths*	x40-x44, x46, x60-x64, x66, y10-y14, y16
Homicide deaths	x85-y09, y87.1
Lung cancer deaths	c34
Suicide deaths	x60-x84, y87
Emergency department encounters: Alcohol poisoning	980 (ICD-9)
Emergency department encounters: Drug poisoning	965 (ICD-9)
Emergency department encounters: Intentional self-harm	NCHS 50 leading causes, injury causes: "Intentional self-harm (suicide)"

*Codes can be configured to constrain data to certain types of drug/substances.