

# CHIERS Tutorial

This tutorial provides you with a general overview of the CHIERS query process.

The CHIERS system uses a custom query process to provide public health data to the public. While the scope of the data available to you has been predetermined, the flexibility exists to extract information that is not readily available through the Department of Public Health's annual publications.

For example, the following questions cannot be answered easily using the annual reports, but the information is readily accessible through the CHIERS system.

- For each year since 2000, how many unmarried mothers less than 20 years old gave birth to a premature baby?
- What are the rates of blood lead levels for white and black children under the age of 24 months who are living in Hartford, Bridgeport, and New Haven?
- What are the differences (by race and by method of payment) in the rates of newborns who failed the initial hearing screening test in Hartford county?

Design your table by filling out the query screen.

**Connecticut Births**  
Description: Live births to Connecticut residents (including those that delivered out of state) by calendar year. Births to residents of other states that occurred in Connecticut are not included here. For more information about this dataset, see our [Documentation](#) page.

Follow this step-by-step process to customize your own data table for the above dataset.

**Step One**  
Select a new variable (default value: Indicator).  
 Year  Age  Race  Ethnicity  Education  Marital Status  
 Medical Status  Prenatal Care  Sex  Member Born  Residence (Town and/or County)  Indicator\*

**Step Two**  
Select a column variable (default value: Year).  
 Year  Age  Race  Ethnicity  Education  Marital Status  
 Medical Status  Prenatal Care  Sex  Member Born  Residence (Town and/or County)  Indicator\*

**Step Three (Optional)**  
If you want to choose a particular range (example: Ages 15-20), do not select that variable above. Instead, choose the range from the pull-down box below of interest in Steps 1 and 2.  
Age: [All Ages] | Race: [All Races] | Ethnicity: [All Ethnicities] | Years of Education: [All]  
Marital Status: [All] | Medical Status: [All]  
Prenatal Care: [All] | Member Born: [All Possibilities] | Sex: [All]

**Step Four**  
Select year(s) of interest (default):  
 2000  2001  2002  2003  2004  2005  Prenatal 2005

**Step Five**  
Select county(ies) or city(ies) of interest (default: state total).  
To select multiple counties/cities: Select the first county/city with pointer and hold the control key down while making additional selections. To deselect, hold control key and point to county/city to be deselected.

**Step Six**

Review your table.

**Births for the State of Connecticut**

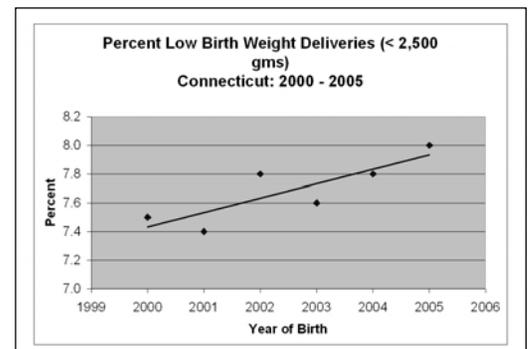
Year	Outcomes			
	Birth Weight: Law (< 2,500g)		Live Births	
	Number	Rate	Number	Rate
2000	3,185	7.5	41,075	100.0
2001	3,199	7.4	42,659	100.0
2002	3,245	7.6	41,996	100.0
2003	3,210	7.6	42,326	100.0
2004	3,270	7.8	42,005	100.0
2005	3,312	8.0	41,719	100.0
2000-6; 2001-6; 2002-6; 2003-6; 2004-6; 2005	19,381	7.7	254,280	100.0

Footnote: [Return](#) Rates Per 100 [Download](#)

Additional Footnotes

Live Births to CT residents  
Denominator - Live Births  
Birth Weight: Law - A birthweight of less than 2,500 grams (approximately 5 lbs., 8 oz.) reported on birth record.  
Denominator - Birthweight Denominator

Download your table for analysis or graphing.



# Table of Contents

This tutorial includes:

Quick Start Guide .....	3
Overview of the CHIERS system .....	4-6
Key Points .....	7
Query Examples: .....	8-14
Example 1: Frequencies table .....	8
Example 2: Display rates .....	9-10
Example 3: Display rates by demographic subgroups .....	11-12
Example 4: Display rates by demographic subgroups in 2 geographies .....	13-14
Step-by-step guide that details the options available in the query process .....	15-19
and the results tables. (Data from the CHIERS Birth module is used to illustrate the linkage between the selected options and the final output.)	

# Quick Start Guide

This quick start guide will demonstrate how to create a simple table.

- From the CHIERS Welcome page, click [To access CHIERS data, click here.](#)
- From the CHIERS Modules page, click the dataset from which you want information.
- On the Query page, choose an option for each step, as outlined here:

1. Select a variable to define the table rows (e.g., 'Age')
2. Select a variable to define the table columns (e.g., 'Sex')
3. This step can be skipped. Skipping this step will keep all records in the table.
4. Pick a year of interest.
5. Select 'State of CT' to look at all records for the state. It should be the default option.
6. Select the statistical indicator for which you would like data.
7. Select the 'Frequencies' to display the number of records that meet the criteria you specified above.

**Children's Blood Lead Screening Data**

Description: Counts are based on the total number of individual children (CT residents, 0 to 5 years) who were screened for blood lead in the identified year.  
For more information about this data, see our [Documentation](#) page.

The following *step-by-step* process will allow you to customize a data table for the above dataset.

**Step One**  
Select a row variable (default value: Residence).  
 Year  Screening Status \*  Child's Sex  Race  Hispanic Origin  Age Group  Residence (Town and/or County)\*  
\* Sort rows from highest to lowest cell value.  Sort  No Sort

**Step Two**  
Select a column variable (default value: Year).  
 Year  Screening Status \*  Child's Sex  Race  Hispanic Origin  Age Group  Residence (Town and/or County)\*

**Step Three (Optional)**  
If you want to choose a particular range (example: Ages 12 - 23 months), do not select that variable above. Instead, choose the range from the pull down box variables of interest in Steps 1 and 2.  
Child's Sex:  Race:  Hispanic Origin:  Age Group:

**Step Four**  
Select year(s) of interest (default: 2004).  
 2002  2003  2004

**Step Five**  
Select county(ies) or town(s) of interest (default: state total).  
To select multiple counties/towns: Select the first county/town with pointer and hold the control key down while making additional selections. To deselect, hold control key and point to county/town to be deselected.  
State of Connecticut:           And/Or

**Step Six**  
Select a Confirmed Blood Screening Range (default: Total Screened).  
If you have chosen "Screening Status" in Steps 1 or 2, you can display results for multiple indicators by selecting more than one item. Otherwise, do not select multiple indicators.  
To select multiple items: select the first item with the pointer and hold the control key down while making additional selections. To deselect, hold control key and click on the item to be deselected.

**Step Seven**  
Output Type (Frequencies with/without Percents)

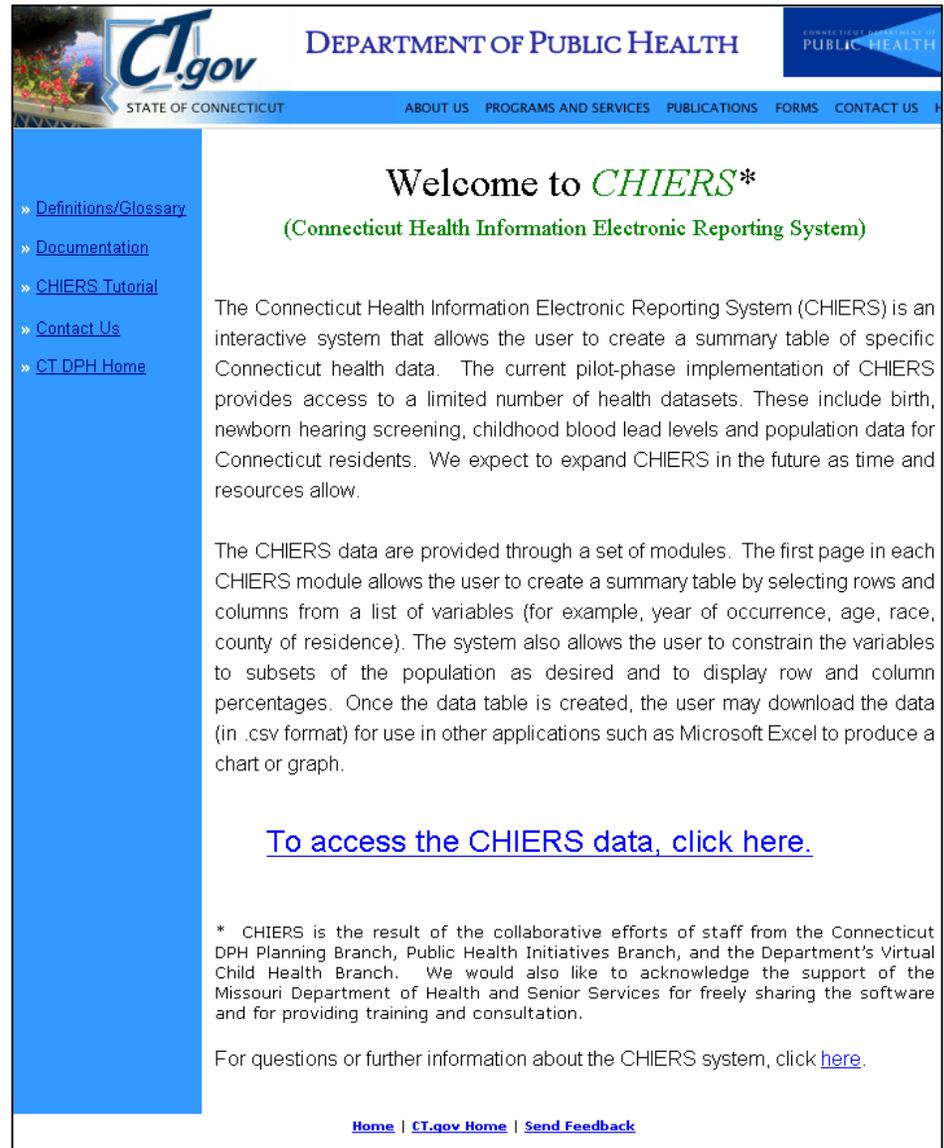
- Click 'Submit Query' to generate your results table.
- The results table appears on a new page.

# Overview: Welcome Page

This is the CHIERS Welcome page.

CHIERS is modeled after a web-based query system developed by the Missouri Department of Health and Senior Services. At present, the Missouri DHSS kindly hosts the CHIERS system. To access the CHIERS query system, use the link on this Welcome page. This link will take you to Missouri's site at [www.dhss.mo.gov/Connecticut](http://www.dhss.mo.gov/Connecticut).

The welcome page also contains additional resources for you. In the menu bar on the left, you can access this tutorial, a glossary of the terms used in the CHIERS datasets, documentation about the datasets and their sources, and contact information. You may also link to the CT Department of Public Health's homepage.



The screenshot shows the CHIERS Welcome Page. At the top, there is a header with the CT.gov logo, the text 'STATE OF CONNECTICUT', and the 'DEPARTMENT OF PUBLIC HEALTH' logo. A navigation bar contains links for 'ABOUT US', 'PROGRAMS AND SERVICES', 'PUBLICATIONS', 'FORMS', and 'CONTACT US'. On the left side, a blue sidebar menu lists: 'Definitions/Glossary', 'Documentation', 'CHIERS Tutorial', 'Contact Us', and 'CT DPH Home'. The main content area features the heading 'Welcome to CHIERS\*' followed by '(Connecticut Health Information Electronic Reporting System)'. Below this, a paragraph explains that CHIERS is an interactive system for creating summary tables of health data. A second paragraph describes how data is provided through modules and can be downloaded in .csv format. A blue link 'To access the CHIERS data, click here.' is provided. A footnote explains the collaborative effort behind CHIERS. At the bottom, a link 'here.' is provided for further information, and a footer contains 'Home | CT.gov Home | Send Feedback'.

# Overview: Modules Page

This is the CHIERS Modules page.

The link from the CHIERS Welcome page will bring you to the CHIERS Modules page. The page is similar to the Welcome page but contains links to each of the CHIERS modules. A dataset and its query screen are referred to as a module.

As of Spring 2007, there are five modules available to the public. We expect to add more modules as we develop the CHIERS system further.

The screenshot shows the CHIERS Modules page. At the top, there is a header for the Connecticut Department of Public Health with the CT.gov logo and navigation links: ABOUT US, PROGRAMS AND SERVICES, PUBLICATIONS, FORMS, CONTACT US, HOME. The main heading is "CHIERS Modules" with the subtitle "(Connecticut Health Information Electronic Reporting System)". A left sidebar contains navigation links: CHIERS Home, Definitions/Glossary, Documentation, CHIERS Tutorial, Contact Us, and CT DPH Home. The main content area describes the system as an interactive tool for creating summary tables of health data, listing available datasets like birth, newborn hearing screening, and childhood blood lead levels. It also lists five available modules: Birth Data, Children's Blood Lead Screening Data, Early Hearing Detection and Intervention Program (EHDI) Data, Population Census for April 1, 2000, and Population Estimates for July 1, 2000.

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

ABOUT US PROGRAMS AND SERVICES PUBLICATIONS FORMS CONTACT US HOME

» [CHIERS Home](#)

» [Definitions/Glossary](#)

» [Documentation](#)

» [CHIERS Tutorial](#)

» [Contact Us](#)

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## CHIERS Modules

(Connecticut Health Information Electronic Reporting System)

The Connecticut Health Information Electronic Reporting System (CHIERS) is an interactive system that allows the user to create a summary table of specific Connecticut health data. The current pilot-phase implementation of CHIERS provides access to a limited number of health datasets. These include birth, newborn hearing screening, childhood blood lead levels and population data for Connecticut residents. We expect to expand CHIERS in the future as time and resources allow.

The CHIERS data are provided through a set of modules. The first page in each CHIERS module allows the user to create a summary table by selecting rows and columns from a list of variables (for example, year of occurrence, age, race, county of residence). The system also allows the user to constrain the variables to subsets of the population as desired and to display row and column percentages. Once the data table is created, the user may download the data (in .csv format) for use in other applications such as Microsoft Excel to produce a chart or graph.

**Statewide, county and/or town data are available for the following:**

[Birth Data](#)

[Children's Blood Lead Screening Data](#)

[Early Hearing Detection and Intervention Program \(EHDI\) Data](#)

[Population Census for April 1, 2000](#)

[Population Estimates for July 1, 2000](#)

# Overview: Query & Results Pages

The query screen contains a series of 7 steps that walk you through the process of creating your data query. This is a picture of the Births module query screen. 

Although each module varies slightly in the options within each step, the general process is the same.

After selecting all of your options, clicking on the “Submit Query” button will open a new page with the results table.

This is an example of a results table. 

Births for the State of Connecticut			
Outcomes: Birth Weight: Low (<2,500g)			
Residence Town/County	Year		
	2000	2005	2000&2005
Number	Number	Number	Number
Fairfield County	875	874	1,749
Hartford County	846	919	1,765
Litchfield County	135	116	251
Middlesex County	114	102	216
New Haven County	787	839	1,626
New London County	203	239	442
Tolland County	107	113	220
Windham County	118	110	228
<b>Total for Selection</b>	<b>3,185</b>	<b>3,312</b>	<b>6,497</b>
<a href="#">Rotate</a>		<a href="#">Download</a>	
Additional Footnotes			
Birth Weight: Low = A birthweight of less than 2,500 grams (approximately 5 lbs., 8 oz.) reported on birth record.			

## Connecticut Births

Description: Live births to Connecticut residents (including those that delivered out-of-state) by calendar year. Births to residents of other states that occurred in Connecticut are not included here. For more information about this dataset, see our [Documentation](#) page.

Follow this *step-by-step* process to customize your own data table for the above dataset.

**Step One**

Select a row variable (default value: Indicator).

Year    Age    Race    Ethnicity    Education    Marital Status  
 Medicaid Status    Prenatal Care    Sex    Number Born    Residence (Town and/or County)\*    Indicator\*

\* Sort rows from highest to lowest cell value.    Sort    No Sort

**Step Two**

Select a column variable (default value: Year).

Year    Age    Race    Ethnicity    Education    Marital Status  
 Medicaid Status    Prenatal Care    Sex    Number Born    Residence (Town and/or County)\*    Indicator\*

**Step Three (Optional)**

If you want to choose a particular range (example: Ages 25-29), **do not** select that variable above. Instead, choose the range from the pull-down box below of interest in Steps 1 and 2.

Age:  Race:  Ethnicity:  Years of Education:

Marital Status:  Medicaid Status:

Prenatal Care:  Number Born:  Sex:

**Step Four**

Select year(s) of interest (default:)

2000    2001    2002    2003    2004    Provisional 2005

**Step Five**

Select county(ies) or city(ies) of interest (default: state total).

To select multiple counties/cities: Select the first county/city with pointer and hold the control key down while making additional selections. To deselect, hold control key and point to county/city to be deselected.

State of Connecticut  
 Andover  
 Ansonia  
 Ashford  
 Avon  
 Barkhamsted

And/Or

Fairfield County  
 Hartford County  
 Litchfield County  
 Middlesex County

**Step Six**

Select an indicator variable (default: Live Births).

This list contains selected maternal and infant health indicators:

If you have chosen "Indicator" in Steps 1 or 2, you can display results for multiple indicators by selecting more than one item. Otherwise, **do not** select multiple indicators.

To select multiple items: select the first item with the pointer and hold the control key down while making additional selections. To deselect, hold control key and click on the item to be deselected.

Birth Weight: Low (Less than 2500 grams)  
 Birth Weight: Very Low (Less than 1500 grams)  
 Gestation: Preterm (Less than 37 completed weeks)  
 Gestation: Normal Weeks  
 Prenatal Care: Adequate+  
 Prenatal Care: Adequate  
 Prenatal Care: Inadequate

**Step Seven**

Output Type (Frequencies with/without Rates)

Submit Query
Reset

# Key Points

Please exercise caution when interpreting the meaning of your results table! Through the CHIERS system, we have strived to provide a simple and effective portal for accessing public health information. The indicator statistics provided with each CHIERS module were chosen to provide useful information for assessing community health status and health risks. Despite this, there are several limitations to the system that may affect the display of the results table and/or the interpretation of the results table.

1. Read the Documentation page. The Documentation page lists important information about the modules and their data limitations.
2. Row and column category variables represent 100% of the population examined. Each standard category variable used to define the table rows and columns will display counts for all records in the selected population. When information was missing for a given variable, the record was classified as an “unknown” and included in the results table under a separate category. The inclusion of ‘unknowns’ insures that 100% of the population is represented. In addition to standard category variables like 'Sex' and 'Age', some CHIERS modules also allow you to use the indicator variables selected in Step-6 to create the rows or columns of your table. As noted below, indicator variables provide independent outcome statistics and they will not produce counts that add to 100% of the selected population over the respective rows or columns.
3. Indicator statistics are independent of each other. This is because each indicator statistic is calculated without reference to any other indicator statistics. Just as ‘low birth weight’ and ‘smoking during pregnancy’ are independent statistics, so are indicators like ‘very low birth weight’ and ‘low birth weight’. Records with unknown values are not included in the calculation of indicator statistics. Please read the footnotes in each table for details about the calculation of each indicator statistic.
4. If selecting multiple years, multiple geographies, or multiple indicators, review the results table to be sure you have created the table as you intended. Unless you choose ‘Year’, or ‘Residence’ in steps 1 or 2, the results table will aggregate your multiple selection into a single dataset from which the results table is calculated. For example, if you choose several towns (e.g., Andover (n=100), Avon (n=50) and Ashford (n=25)) but do not choose ‘Residence’ in steps 1 or 2, the results table will display values based on the aggregate population (n=175). The exception to this occurs when you choose ‘Indicator’ in steps 1 or 2 and then select multiple indicators in step 6. In this case, the data are not aggregated in the results table for the reasons discussed above in Key Point 3.

## Example 1: Frequencies Table

What is the race and ethnicity breakdown of infants born in CT in 2000?

Solution on next page.

## Connecticut Births

Description: Live births to Connecticut residents (including those that delivered out-of-state) by calendar year. Births to residents of other states that occurred in Connecticut are not included here. For more information about this dataset, see our [Documentation](#) page.

Follow this *step-by-step* process to customize your own data table for the above dataset.

### Step One

Select a row variable (default value: Indicator).

Year
  Age
  Race
  Ethnicity
  Education
  Marital Status
  Medicaid Status
  Prenatal Care
  Sex
  Number Born
  Residence (Town and/or County)\*
  Indicator\*

\* Sort rows from highest to lowest cell value.  Sort  No Sort

### Step Two

Select a column variable (default value: Year).

Year
  Age
  Race
  Ethnicity
  Education
  Marital Status
  Medicaid Status
  Prenatal Care
  Sex
  Number Born
  Residence (Town and/or County)\*
  Indicator\*

### Step Three (Optional)

If you want to choose a particular range (example: Ages 25-29), **do not** select that variable above. Instead, choose the range from the pull-down box below of interest in Steps 1 and 2.

Age:  Race:  Ethnicity:  Years of Education:

Marital Status:  Medicaid Status:

Prenatal Care:  Number Born:  Sex:

### Step Four

Select year(s) of interest (default:)

2000
  2001
  2002
  2003
  2004
  Provisional 2005

### Step Five

Select county(ies) or city(ies) of interest (default: state total).

To select multiple counties/cities: Select the first county/city with pointer and hold the control key down while making additional selections. To deselect, hold control key and point to county/city to be deselected.

### Step Six

Select an indicator variable (default: Live Births).

This list contains selected maternal and infant health indicators:

If you have chosen "Indicator" in Steps 1 or 2, you can display results for multiple indicators by selecting more than one item. Otherwise, **do not** select multiple indicators.

To select multiple items: select the first item with the pointer and hold the control key down while making additional selections. To deselect, hold control key and click on the item to be deselected.

### Step Seven

Output Type (Frequencies with/without Rates)

Births for the State of Connecticut			
Year: 2000			
Hispanic Origin			
	Hispanic	Non-Hispanic	All Ethnicities
Race	Number	Number	Number
White	6,083	28,033	35,017
Black	120	4,842	5,162
All Races	6,478	35,009	43,075
<a href="#">Rotate</a>		<a href="#">Download</a>	
Additional Footnotes			
Live Births to CT residents			

**Solution:**

The Race by Ethnicity counts are now displayed for all races and all ethnicities, including unknown records. There were a total of 43,075 births in CT in 2000.

The rows and columns that appear in blue underline indicate that additional levels of the variable are available.

To expand the levels, simply click on the blue underlined text.

Births for the State of Connecticut			
Year: 2000			
Hispanic Origin			
	<u>Hispanic</u>	<u>Non-Hispanic</u>	<u>All Ethnicities</u>
<u>Race</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>
White	6,083	28,033	35,017
Black	120	4,842	5,162
<u>All Races</u>	6,478	35,009	43,075
<a href="#">Rotate</a>		<a href="#">Download</a>	
Additional Footnotes			
Live Births to CT residents			

Births for the State of Connecticut				
Year: 2000				
Hispanic Origin				
	<u>Hispanic</u>	<u>Non-Hispanic</u>	<u>Unknown</u>	<u>All Ethnicities</u>
<u>Race</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>
White	6,083	28,033	901	35,017
Black	120	4,842	200	5,162
<u>American Indian</u>	19	97	5	121
<u>Asian</u>	6	1,714	49	1,769
<u>Other</u>	74	112	5	191
<u>Unknown</u>	176	211	428	815
<u>All Races</u>	6,478	35,009	1,588	43,075
<a href="#">Rotate</a>		<a href="#">Download</a>		
Additional Footnotes				
Live Births to CT residents				

## Example 2: Display Rates

Display the rates of low birth weight (LBW) and very low birth weight (VLBW) infants born in 2005.

### Solution:

Statewide, the rate of LBW infants is 8.0/100 and the rate for VLBW is 1.6/100.

Follow this *step-by-step* process to customize your own data table for the above dataset.

#### Step One

Select a row variable (default value: Indicator).

Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator\*

\* Sort rows from highest to lowest cell value.  Sort  No Sort

#### Step Two

Select a column variable (default value: Year).

Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator\*

#### Step Three (Optional)

If you want to choose a particular range (example: Ages 25-29), **do not** select that variable above. Instead, choose the range from the pull-down box below of interest in Steps 1 and 2.

Age:  Race:  Ethnicity:  Years of Education:

Marital Status:  Medicaid Status:

Prenatal Care:  Number Born:  Sex:

#### Step Four

Select year(s) of interest (default:)

2000  2001  2002  2003  2004  Provisional 2005

#### Step Five

Select county(ies) or city(ies) of interest (default: state total).

To select multiple counties/cities: Select the first county/city with pointer and hold the control key down while making additional selections. To deselect, hold control key and point to county/city to be deselected.

And/Or

#### Step Six

Select an indicator variable (default: Live Births).

and infant health indicators:

Steps 1 or 2, you can display results for multiple one item. Otherwise, **do not** select multiple indicators. First item with the pointer and hold the control key down To deselect, hold control key and click on the item to be

Birth Weight: Low (Less than 2500 grams)  
 Birth Weight: Very Low (Less than 1500 grams)  
 Gestation: Preterm (Less than 37 completed weeks)  
 Gestation: Normal Weeks  
 Prenatal Care: Adequate+  
 Prenatal Care: Intermediate  
 Prenatal Care: Inadequate

out Rates)

Submit Query

Reset

#### Births for the State of Connecticut

Year	Outcomes					
	Birth Weight: Low (<2,500g)		Birth Weight: Very Low (<1,500g)		Live Births	
	Number	Rate	Number	Rate	Number	Rate
2005	3,312	8.0	666	1.6	41,719	100.0

[Rotate](#)

[Download](#)

Footnote

Rates Per 100

Additional Footnotes

Live Births to CT residents

Denominator - Live Births

Birth Weight: Low = A birthweight of less than 2,500 grams (approximately 5 lbs., 8 oz.) reported on birth record.

Denominator - Birthweight Denominator

Birth Weight: Very Low = A birthweight of less than 1,500 grams (approximately 3 lbs., 5 oz.) reported on birth record.

Denominator - Birthweight Denominator

### Example 3: Display rates by demographic subgroups.

Display the rates of LBW and VLBW infants born between 2000 and 2004 to Hispanic mothers by mother's education level.

Solution on next page.

Subsets the dataset to the Hispanic population only

Aggregates 5 years of data together

Calculates results for all of CT

Displays all levels of Education

Displays the indicators as the column variables

Births for the State of Connecticut  
 Year: 2000 & 2001 & 2002 & 2003 & 2004  
 Hispanic Origin: Hispanic

Education	Birth Weight: Low (<2,500g)		Birth Weight: Very Low (<1,500g)		Live Births	
	Number	Rate	Number	Rate	Number	Rate
Under 12 yrs	1,176	9.3	253	2.0	12,612	100.0
12 yrs	958	7.9	207	1.7	12,055	100.0
13-15 yrs	495	8.2	111	1.8	6,064	100.0
16 yrs or More	236	6.3	44	1.2	3,737	100.0
Unknown	118	12.2	33	3.4	966	100.0
All	2,983	8.4	648	1.8	35,434	100.0

Rotate      Download

Footnote      Rates Per 100

Additional Footnotes

Live Births to CT residents  
 Denominator - Live Births  
 Birth Weight: Low = A birthweight of less than 2,500 grams (approximately 5 lbs., 8 oz.) reported on birth record.  
 Denominator - Birthweight Denominator  
 Birth Weight: Very Low = A birthweight of less than 1,500 grams (approximately 3 lbs., 5 oz.) reported on birth record.  
 Denominator - Birthweight Denominator

**Step One**  
 Select a row variable (default value: Indicator).  
 Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence  Indicator\*  
 \* Sort rows from highest to lowest cell value.  Sort  No Sort

**Step Two**  
 Select a column variable (default value: Year).  
 Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator\*

**Step Three (Optional)**  
 If you want to choose a particular range (example: Ages 25-29), do not select that variable above. Instead, choose the range from the pull-down box below of interest in Steps 1 and 2.  
 Age: All Ages    Race: All Races    Ethnicity: Hispanic    Years of Education: All  
 Marital Status: All    Medicaid Status: All  
 Prenatal Care: All    Number Born: All Pluralities    Sex: All

**Step Four**  
 Select year(s) of interest (default: 2000).  
 2000  2001  2002  2003  2004  Provisional 2005

**Step Five**  
 Select county(ies) or city(ies) of interest (default: state).  
 To select multiple counties/cities: Select the first county/city, hold the control key down while making additional selections. To deselect, hold control key and point to the item to be deselected.  
 State of Connecticut  
 Andover  
 Ansonia  
 Ashford  
 Avon  
 Barkhamsted  
 And/Or  
 Fairfield County  
 Hartford County  
 Litchfield County  
 Middlesex County

and infant health indicators:  
 Steps 1 or 2, you can display results for multiple indicators. Otherwise, do not select multiple indicators. Select the first item with the pointer and hold the control key down to select multiple items. To deselect, hold control key and click on the item to be deselected.  
 Birth Weight: Low (Less than 2500 grams)  
 Birth Weight: Very Low (Less than 1500 grams)  
 Gestation: Preterm (Less than 37 completed weeks)  
 Gestation: Normal Weeks  
 Prenatal Care: Adequate+  
 Prenatal Care: Intermediate  
 Prenatal Care: Inadequate

Output Rates) Frequencies and Rates

Submit Query    Reset

Displays both frequencies and rates for each indicator variable

## Solution:

For 5 years combined (2000-2004), Hispanic mothers who graduated from college have lower rates of low and very low birth weight infants than Hispanic mothers who did not graduate from high school.

**Step One**  
 Select a row variable (default value: Indicator).  
 Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator\*  
 \* Sort rows from highest to lowest cell value.  Sort  No Sort

**Step Two**  
 Select a column variable (default value: Year).  
 Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator\*

**Step Three (Optional)**  
 If you want to choose a particular range (example: Ages 25-29), **do not** select that variable above. Instead, choose the range from the pull-down box below of interest in Steps 1 and 2.  
 Age:  Race:  Ethnicity:  Years of Education:   
 Marital Status:  Medicaid Status:   
 Prenatal Care:  Number Born:  Sex:

**Step Four**  
 Select year(s) of interest (default):  
 2000  2001  2002  2003  2004  Provisional 2005

**Step Five**  
 Select county(ies) or city(ies) of interest (default: state total).  
 To select multiple counties/cities: Select the first county/city with pointer and hold the control key down while making additional selections. To deselect, hold control key and point to county/city to be deselected.

State of Connecticut  
 Andover  
 Ansonia  
 Ashford  
 Avon  
 Barkhamsted  
 Fairfield County  
 Hartford County  
 Litchfield County  
 Middlesex County

And/or

Birth Weight: Low (Less than 2500 grams)  
 Birth Weight: Very Low (Less than 1500 grams)  
 Gestation: Preterm (Less than 37 completed weeks)  
 Gestation: Normal Weeks  
 Prenatal Care: Adequate  
 Prenatal Care: Intermediate  
 Prenatal Care: Inadequate

Hour Rates)

Submit Query Reset

Births for the State of Connecticut						
Year: 2000 & 2001 & 2002 & 2003 & 2004						
Hispanic Origin: Hispanic						
Outcomes						
Education	Birth Weight: Low (<2,500g)		Birth Weight: Very Low (<1,500g)		Live Births	
	Number	Rate	Number	Rate	Number	Rate
Under 12 yrs	1,176	9.3	253	2.0	12,612	100.0
12 yrs	958	7.9	207	1.7	12,055	100.0
13-15 yrs	495	8.2	111	1.8	6,064	100.0
16 yrs or More	236	6.3	44	1.2	3,737	100.0
Unknown	118	12.2	33	3.4	966	100.0
All	2,983	8.4	648	1.8	35,434	100.0

[Rotate](#)
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Footnote	Rates Per 100
Additional Footnotes	
Live Births to CT residents Denominator - Live Births Birth Weight: Low = A birthweight of less than 2,500 grams (approximately 5 lbs., 8 oz.) reported on birth record. Denominator - Birthweight Denominator Birth Weight: Very Low = A birthweight of less than 1,500 grams (approximately 3 lbs., 5 oz.) reported on birth record. Denominator - Birthweight Denominator	

## Example 4: Display rates by demographic subgroups in 2 geographies.

For 2000-2004, display rates of LBW and VLBW infants born to Hispanic mothers by mother's education level for the city of Bridgeport and for Fairfield county.

Solution on next page.

**Step One**  
Select a row variable (default value: Indicator).  
 Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator  
 \* Sort rows from highest to lowest cell value.  Sort  No Sort

**Step Two**  
Select a column variable (default value: Year).  
 Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator

**Step Three (Optional)**  
If you want to choose a particular range (example: Ages 25-29), do not select that variable above. Instead, choose the range of interest in Steps 1 and 2.  
 Age: All Ages Race: All Races Ethnicity: Hispanic Years of Education: All  
 Marital Status: All Medicaid Status: All  
 Prenatal Care: All Number Born: All Pluralities Sex: All

**Step Four**  
Select year(s) of interest (default: Year).  
 2000  2001  2002  2003  2004  Provisional 2005

**Step Five**  
Select county(ies) or city(ies) of interest (default: state total).  
 To select multiple counties/cities: Select the first county/city with pointer and hold the control key down while making additional selections. To deselect, hold control key and point to county/city to be deselected.

Bridgeport  
 Bridgeport  
 Bridgeport  
 Bristol  
 Brookfield  
 Brooklyn

And/Or

Fairfield County  
 Hartford County  
 Litchfield County  
 Middlesex County

Displays Residence as the column variable so that you can compare rates

Calculates results for each selected geography separately

Births for the State of Connecticut  
 Year: 2000 & 2001 & 2002 & 2003 & 2004  
 Hispanic Origin: Hispanic  
 Outcomes: Birth Weight: Low (<2,500g)

Education	Bridgeport		Fairfield County		Total for Selection	
	Number	Rate	Number	Rate	Number	Rate
Under 12 yrs	177	9.5	305	7.9	482	8.4
12 yrs	146	8.7	277	6.8	423	7.3
13-15 yrs	81	10.2	164	8.7	245	9.1
16 yrs or More	21	8.9	86	5.6	107	6.1
Unknown	7	8.6	20	6.8	27	7.2
All	432	9.3	852	7.3	1,284	7.9

Rotate Download

Footnote Rates Per 100

Additional Footnotes

Birth Weight: Low = A birthweight of less than 2,500 grams (approximately 5 lbs., 8 oz.) reported on birth record.  
 Denominator - Birthweight Denominator

(default: Live Births).

maternal and infant health indicators:  
 Indicator" in Steps 1 or 2, you can display results for multiple more than one item. Otherwise, do not select multiple indicator  
 Select the first item with the pointer and hold the control key down  
 To deselect, hold control key and click on the item to be

Birth Weight: Low (Less than 2500 grams)  
 Birth Weight: Very Low (Less than 1500 grams)  
 Gestation: Preterm (Less than 37 completed weeks)  
 Gestation: Normal Weeks  
 Prenatal Care: Adequate+  
 Prenatal Care: Intermediate  
 Prenatal Care: Inadequate

with/without Rates) Frequencies and Rates

Indicator is not selected for either your step 1 or 2 variable, so you may not choose more than one indicator in Step 6.

## Solution:

Hispanic mothers who live in Bridgeport have higher rates of low birth weight infants than Hispanic mothers of the same education level who live in Fairfield county.

To create the table for the very low birth weight rates, use your browsers 'Back' button to return to the query page. Change the indicator to 'very low birth weight' and re-submit query.

**Step One**  
 Select a row variable (default value: Indicator).  
 Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator\*  
 \* Sort rows from highest to lowest cell value.  Sort  No Sort

**Step Two**  
 Select a column variable (default value: Year).  
 Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator\*

**Step Three (Optional)**  
 If you want to choose a particular range (example: Ages 25-29), do not select that variable above. Instead, choose the range from the pull-down box below of interest in Steps 1 and 2.  
 Age: All Ages Race: All Races Ethnicity: Hispanic Years of Education: All  
 Marital Status: All Medicaid Status: All  
 Prenatal Care: All Number Born: All Pluralities Sex: All

**Step Four**  
 Select year(s) of interest (default:)  
 2000  2001  2002  2003  2004  Provisional 2005

**Step Five**  
 Select county(ies) or city(ies) of interest (default: state total).  
 To select multiple counties/cities: Select the first county/city with pointer and hold the control key down while making additional selections. To deselect, hold control key and point to county/city to be deselected.

Bridgeport  
 Bridgeport  
 Bridgeport  
 Bristol  
 Brookfield  
 Brooklyn

And/Or

Fairfield County  
 Hartford County  
 Litchfield County  
 Middlesex County

Births for the State of Connecticut						
Year: 2000 & 2001 & 2002 & 2003 & 2004						
Hispanic Origin: Hispanic						
Outcomes: Birth Weight: Low (<2,500g)						
Education	Residence Town/County					
	Bridgeport		Fairfield County		Total for Selection	
	Number	Rate	Number	Rate	Number	Rate
Under 12 yrs	177	9.5	305	7.9	482	8.4
12 yrs	146	8.7	277	6.8	423	7.3
13-15 yrs	81	10.2	164	8.7	245	9.1
16 yrs or More	21	8.9	86	5.6	107	6.1
Unknown	7	8.6	20	6.8	27	7.2
All	432	9.3	852	7.3	1,284	7.9

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Footnote Rates Per 100

Additional Footnotes

Birth Weight: Low = A birthweight of less than 2,500 grams (approximately 5 lbs., 8 oz.) reported on birth record.  
 Denominator - Birthweight Denominator

Select indicator (default: Live Births).  
 Select maternal and infant health indicators:  
 "Indicator" in Steps 1 or 2, you can display results for multiple more than one item. Otherwise, do not select multiple indicators.  
 select the first item with the pointer and hold the control key down selections. To deselect, hold control key and click on the item to be deselected.

Birth Weight: Low (Less than 2500 grams)  
 Birth Weight: Very Low (Less than 1500 grams)  
 Gestation: Preterm (Less than 37 completed weeks)  
 Gestation: Normal Weeks  
 Prenatal Care: Adequate+  
 Prenatal Care: Intermediate  
 Prenatal Care: Inadequate

Display with/without Rates: Frequencies and Rates

# Tutorial: Step-by-step

CHIERS is a user friendly system that allows users to create data tables customized to their needs and interests. Limitations of the system require that the variables available within each step of the query process be pre-selected for you. There remains, however, extensive flexibility within the query system to extract the information that you desire by varying the combinations of the variables that are available. If you desire access to information not represented in a particular module, please contact us.

The name and description of the dataset are located at the top of the screen, along with a link to the Documentation page. The Documentation page is a valuable resource for information regarding the source of the data provided, limitations in scope, usage notes, reference information, and details about the censoring of the results tables. Please read the documentation notes before interpreting your results tables.

(1 & 2) Steps 1 and 2 define the structure of the results table. The variable that you select for **step 1** will display as the **row category** on the left side of the results table. The variable that you select for **step 2** will display as the **column category** on the top of the results table.

## Connecticut Births

Description: Live births to Connecticut residents (including those that delivered out-of-state) by calendar year. Births to residents of other states that occurred in Connecticut are not included here. For more information about this dataset, see our [Documentation](#) page.

Follow this *step-by-step* process to customize your own data table for the above dataset.

**Step One**

Select a row variable (default value: Indicator).

Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator\*

\* Sort rows from highest to lowest cell value.  Sort  No Sort

**Step Two**

Select a column variable (default value: Year).

Year  Age  Race  Ethnicity  Education  Marital Status  
 Medicaid Status  Prenatal Care  Sex  Number Born  Residence (Town and/or County)\*  Indicator\*

# Tutorial: Step-by-step

## (3) In step three, you may subset the results of the query by one of the variables listed in the step 3 drop downs.

The variable selection boxes in step 3 are referred to as “drop-downs” because the levels of the variable drop down when clicking on the arrow on the right of the field box. Step 3 is optional. The benefit of step 3 is that it allows you to create a table for only a subset of the data, if desired.

For example, you can limit the results displayed in your table to only one demographic subgroup, such as Hispanic births only. Do this by selecting the “Hispanic” category from the “Ethnicity” drop-down box, as illustrated below. This subgroup of the larger population will be classified by the row & column categories specified in step 1 and step 2. Items from multiple drop-down boxes may be selected in step 3 to define the subgroup of interest. Please note that you will not get the desired subset of the data if the variable selected in step 3 was already chosen in steps 1 or 2. So, be sure you have selected a new variable in step 3.

### Step Three (Optional)

If you want to choose a particular range (example: Ages 25-29), do not select that variable above. Instead, choose the range from the pull-down box below and then select other variables of interest in Steps 1 and 2.

Age:  Race:  Ethnicity:  Years of Education:

Marital Status:  Medicaid Status:

Prenatal Care:  Number Born:  Sex:

### Step Four

Select year(s) of interest (default:)

2000  2001  2002  2003  2004  Provisional 2005

## (4) In step four, you can choose a particular year or several years of data. Check each year you are interested in.

The results table will combine information from the selected years. If you want to display single data years in the table row or column, then choose ‘Year’ in steps 1 or 2.

# Tutorial: Step-by-step

(5) In step five, you set the geography for your query. There are 3 levels of geography in the CHIERS system: state, county, and town. Multiple towns, and/or counties may be selected. The results table will combine information from the selected geographic units. To display the selected geographic units separately, choose 'Residence' in steps 1 or 2, as the row or column variable. If you do not choose 'Residence' in steps 1 or 2, the table will display results that have been aggregated for each of the geographic units selected.

**Step Five**

Select county(ies) or city(ies) of interest (default: state total).

To select multiple counties/cities: Select the first county/city with pointer and hold the control key down while making additional selections. To deselect, hold control key and point to county/city to be deselected.



(6) In step six, you select the indicator variable(s) for which you would like data.

- If you select a single indicator, those values will displayed as the cell counts in your table.
- If you select multiple indicators in step 6, then you must choose 'Indicator' in steps 1 or 2. The indicator variable(s) selected will be displayed as the appropriate row or column categories in the results table. Multiple indicator statistics are not summed in CHIERS, so you should not select more than one indicator if you have not chosen 'Indicator' in steps 1 or 2.

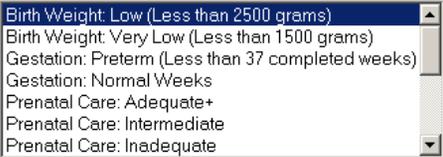
**Step Six**

Select an indicator variable (default: Live Births).

This list contains selected maternal and infant health indicators:

If you have chosen "Indicator" in Steps 1 or 2, you can display results for multiple indicators by selecting more than one item. Otherwise, do not select multiple indicators.

To select multiple items: select the first item with the pointer and hold the control key down while making additional selections. To deselect, hold control key and click on the item to be deselected.



# Tutorial: Step-by-step

(7) In step seven, you can choose to display frequencies, frequencies and percents, or frequencies and rates.

Hit the Submit Query button...

**Step Seven**

Output Type (Frequencies with/without Rates)

## Results Table !

The “Download” option allows you to save the table as a .csv file that can be opened with Excel.

Births for the State of Connecticut			
Outcomes: Birth Weight: Low (<2,500g)			
	Year		
	2000	2005	2000&2005
Residence Town/County	Number	Number	Number
Fairfield County	875	874	1,749
Hartford County	846	919	1,765
Litchfield County	135	116	251
Middlesex County	114	102	216
New Haven County	787	839	1,626
New London County	203	239	442
Tolland County	107	113	220
Windham County	118	110	228
Total for Selection	3,185	3,312	6,497

[Rotate](#) [Download](#)

**Additional Footnotes**

Birth Weight: Low = A birthweight of less than 2,500 grams (approximately 5 lbs., 8 oz.) reported on birth record.

The “Rotate” option rotates the table such that rows become columns and columns become rows.

Footnotes provide important details about the variables in the table.

# Tutorial: Step-by-step

## Elements of the results table.

Step 1:

We chose 'Residence' as the row variable.

Step 2:

We chose 'Year' as the column variable.

Step 3: Not used.

Step 4:

We chose 2 years of data to be our column variables

Step 5:

We chose all 8 Counties to be our row variables

Step 6:

We chose to look at the indicator 'Birth Weight: Low'

Step 7:

We were interested in 'Frequencies Only', not rates or percents.

Births for the State of Connecticut			
Outcomes: Birth Weight: Low (<2,500g)			
Residence Town/County	Year		
	2000	2005	2000&2005
	Number	Number	Number
Fairfield County	875	874	1,749
Hartford County	846	919	1,765
Litchfield County	135	116	251
Middlesex County	114	102	216
New Haven County	787	839	1,626
New London County	203	239	442
Tolland County	107	113	220
Windham County	118	110	228
<b>Total for Selection</b>	<b>3,185</b>	<b>3,312</b>	<b>6,497</b>

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Additional Footnotes

Birth Weight: Low = A birthweight of less than 2,500 grams (approximately 5 lbs., 8 oz.) reported on birth record.