Rural Health Reform Policy
RESEARCH CENTER

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USER'S GUIDE

Index for Mortality Rates by Cause Related to the National Rate among Persons by Age, Region, and Rural-Urban Status: United States, 2011-2013 Online Tool

Purpose: This tool allows users to explore variation in mortality rate indices through graphs by Health and Human Services (HHS) region, cause of death, age, and rural-urban status. Graphs can be created dynamically for the Top 10 Causes of Mortality or for a Single Cause of mortality. Underlying data come from the National Vital Statistics System (NVSS) based on U.S. Standard Death Certificates.

Using the tool

Navigation

There are four tabs located at the top of the page.   The first tab, *Introduction*, is the home page for the tool. From the Introduction tab you can navigate to the other tabs.

Introduction	Top 10 Causes: Ages 0 to 14	Top 10 Causes: Ages 15 and Over	Single Cause: Ages 0 to 14	Single Cause: Ages 15 and Over

To return to the *Introduction* tab, click the black arrow on the top of the page or click on the *Introduction* tab.

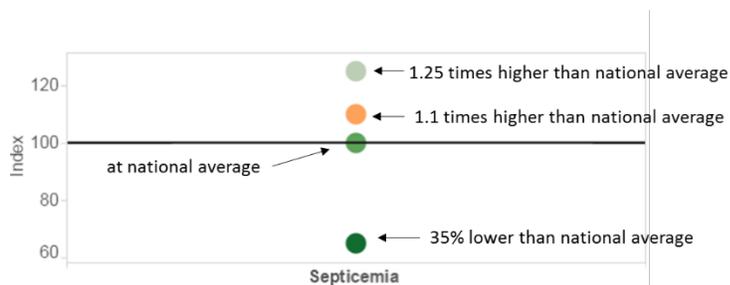Click the arrow to return to the Introduction. ➡

The tabs show options for viewing graphs. Data can be viewed by **Top 10 Causes** of mortality or by **Single Cause** of mortality. The second and third tabs show data from the Top 10 Causes of mortality for ages *0-14 years* and for *15+ years*. The last two tabs show data for mortality from a Single Cause for ages *0-14 years* and for *15+ years*.

Table of Contents
Click on "Go" to navigate to each view.

Top 10 Causes: Ages 0 to 14   GO

Top 10 Causes: Ages 15 and Over   GO

Single Cause: Ages 0 to 14   GO

Single Cause: Ages 15 and Over   GO

There are two ways to navigate to the graphs: either select from the tabs at the top of the page (pictured above) or click on the GO button to the right of the age range and mortality category (Top 10 or Single Cause) under "Table of Contents" (pictured above right).

Understanding the Graphs

Mortality Rate Index: The national mortality rate is represented by the horizontal line at 100.   Points above the line indicate the subpopulation mortality rate is *higher* than the national average and points below the line indicate a mortality rate *lower* than the national average. The Index is calculated as the subpopulation mortality rate divided by the national mortality rate, multiplied by 100. For example, the mortality rate for females, age 25 to 64 who died of lower respiratory disease is 19.6 per 100,000 persons nationally and 9.8 persons per 100,000 in non-core areas within HHS Region 6. Thus, the index value is 200, which indicates that the death rate in this subpopulation is twice as high as the national average. Note that although differences may be present between the national mortality rate (index = 100) and the subpopulation mortality rate, a value greater than or less than 100 does not imply that the comparison is statistically significant. Please see

The *Exploring Rural and Urban Mortality Differences* may be accessed from the Rural Health Research Gateway website at http://www.ruralhealthresearch.org/.

Excel Workbook Tables: Mortality Rates among Persons by Cause of Death, Age, Region, and Rural-Urban Status: United States, 2011-2013 for complete details on statistical comparisons provided through data tables.

Other key features of the graphs are described below:

- **Dynamic graph title:** The title of the graph will change to reflect selected inputs.
- **Number of Rural-Urban Statuses:** For Age categories from 0-24 years, data are shown by two rural-urban status categories. For Age categories 25 +, data are shown by five rural-urban status categories.
- **Missing points:** A missing point indicates either 1) a suppressed rate or 2) identical values between an urban and rural estimate (where more urban cases cover the more rural cases).

Top 10 Causes Graph

Selecting Demographic Characteristics

Use the drop-down menus at the top of the page to make a selection from each of the input categories: Age, Sex, and Region. To see the options within each category, click once on the triangle (▼). Note that for the 0-14 year age categories data are only available for Both Sexes in the Sex input category.

Please select:

Age	15 to 24 Years ▼
Sex	Males ▼
Region	Females Males

As the graph is being generated the processing icon ⠿ will display. Mortality rate indices for persons 24 years or older will display results with up to **5 rural-urban categories** while mortality rate indices for those under 24 years of age will display results with up to **2 rural-urban categories**. Graphs include up to the top ten causes of death for that age range.

Some graphs will display fewer than 10 causes of death indicating that all points are suppressed for the missing cause(s) due to suppressed or unreliable data. Mortality rates representing fewer than 10 deaths are suppressed and unreliable rates have been omitted for continuity so as to not mislead the reader (death count less than 20). Because mortality rates for individuals under the age of 25 are lower than for those over the age of 25, more omitted rates exist thus limiting the visual display.
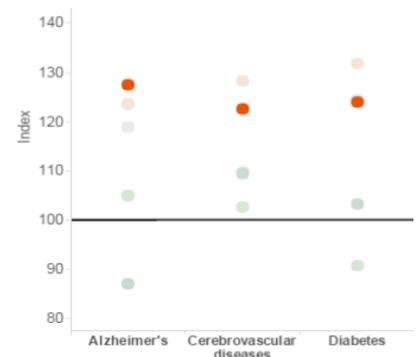
Graph Navigation and Customization

To view a specific index value and mortality rate for a point on the graph, hover the cursor over the point, or click on the point (pictured left).

Cause of Death: Alzheimer's
Urban-Rural Status: Medium/Small Metro
Index: 118.8
Mortality Rate: 245.6

Rural-Urban Status ✎
- Large Central
- Large Fringe
- Medium/Small Metro
- Micropolitan
- Non-core

The default view for the graph will display all rural-urban categories in color according the Rural-Urban Status legend (5 categories version is pictured left). To highlight only a certain rural-urban status category, hover the cursor over the Rural-Urban Status legend to display the edit pencil icon ✎ . Click on the edit pencil icon once, and then click on the desired category. The selected status will show in color and the unselected status(es) will show in gray (example, right).

Single Cause Graphs

The Single Cause tabs display two graphs for a single cause of death by rural-urban status. The top graph is a dot plot showing the mortality rate indices and the bottom graph is a bar graph showing the mortality rates.

Selecting Demographic Characteristics

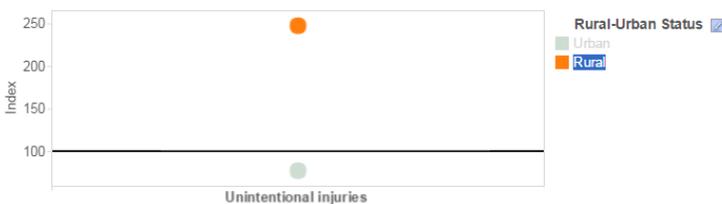**Please select:**

Age
| 25 to 64 Years | ▼ |

Cause of Death
| Septicemia | ▼ |

Sex
| Female | ▼ |

Region
| HHS Region #2 (NJ, NY) | ▼ |

Use the drop-down menus at the top of the page to make a selection from each of the input categories: Age, Cause of Death, Sex, and Region. To see the options within each category, click once on the triangle (▼). Note that for the 0-14 year age categories there is no input category for Sex as data are only available for Both Sexes combined.

As the graph are being generated the processing icon ⣿ will display.
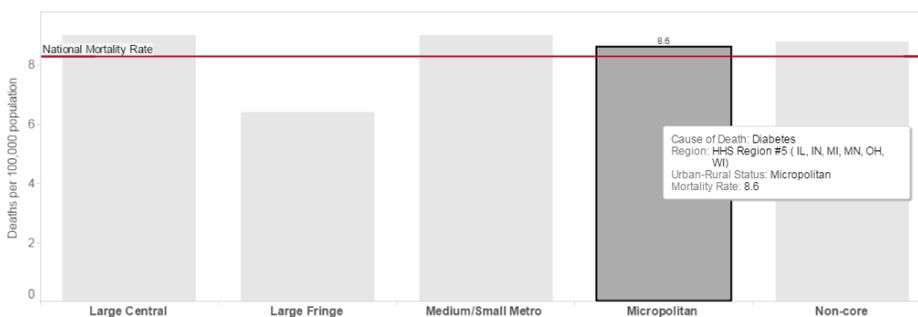
Graph Navigation and Customization

The dot plot at the top of the page is a "zoomed in" version of the Top 10 Causes graphs, and has similar navigation features. The graph shows the morality rate index for a single cause of mortality by rural-urban status. The default view for the graph will display all rural-urban categories in color according the Rural-Urban Status legend (2 categories version pictured above). To highlight only a certain rural-urban status category, hover the cursor over the Rural-Urban Status legend to display the edit pencil icon ✎ . Click on the edit pencil icon once, and then click on the desired category. The selected status will show in color and the unselected status(es) will show in gray.
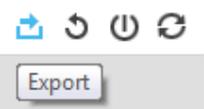
Suppressed data are indicated in the Rural-Urban Status legend with note (pictured right).

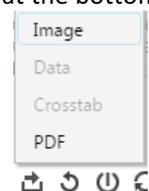| Urban | Suppressed Data (See Notes for more details) |
| Rural | Suppressed Data (See Notes for more details) |

In the bar graph at the bottom of the page, each bar represents the mortality rate for a specific rural-urban status. The red line represents the national mortality rate. To see a mortality rate's details, hover the cursor over the bar or click on the bar (pictured left).

Exporting and Printing Graphs

To export Graphs for either printing or to insert into presentations, click the Export icon at the bottom of the page.   Graphs can be exported as either an Image (.png) or as a PDF using the menu that pops up when the Export icon is selected.

| Image |
| Data |
| Crosstab |
| PDF |

For More Information

For information on the source data available through this tool see the technical notes (http://ruralhealth.und.edu/projects/health-reform-policy-research-center).