

# Exploring Rural and Urban Mortality Differences by HHS Region

*A Consortium of*



Center *for*  
Rural Health

The University of North Dakota  
School of Medicine & Health Sciences

The Walsh Center   
for Rural Health Analysis

NORC AT THE UNIVERSITY OF CHICAGO

# Rural Health Reform Policy Research Center

RHRPRC is a consortium that combines the resources of two premier institutions:

- The University of North Dakota Center for Rural Health
- NORC Walsh Center for Rural Health Analysis

Research conducted by the RHRPRC informs policy makers and rural providers to:

- Increase access to health care services
- Improve overall health status of rural residents
- Assist rural communities in securing adequate, affordable, high-quality health care services

**Contact Information:**

For answers to questions about this report, contact:

Alana Knudson, PhD

Deputy Director, Rural Health Reform Policy Research Center

Co-Director, Walsh Center for Rural Health Analysis

NORC at the University of Chicago

4350 East-West Highway, Suite 800

Bethesda, MD 20814

Phone: 301-634-9326

Email: [Knudson-Alana@norc.org](mailto:Knudson-Alana@norc.org)

Where you live should not determine  
whether you live, or whether you die  
— Bono



## Introduction

- Cause-specific mortality is often higher in rural counties than urban counties
- Risk factors contribute to high mortality rates in rural areas
  - Smoking
  - Obesity
  - Physical inactivity
- High mortality rates and risk factors are a reflection of the physical and social environment in which people live and work

## Study Purpose

- To examine the impact of rurality on mortality and to explore the regional differences in causes of death

## Research Question

- What are the geographical differences in rural and urban mortality rates?

## Methods

Source of Mortality data:

National Vital Statistics System (NVSS)

- Years 2011-2013

Data are grouped by:

- 2013 NCHS Urban-Rural Classification Scheme for Counties
  - (Large Central, Large Fringe, Small/Medium Metro, Micropolitan, Non-core)
- HHS Regions
- Age
- Gender
- Cause of Death
  - Top 10 Nation-wide causes of death for each age group

## 2013 NCHS Urban-Rural Classification Scheme for Counties

2013 NCHS Urban-Rural Classification	Definition
<b>Large central</b> (inner cities)	Counties in MSA of 1 million or more population that: Contain the entire population of the largest principal city of the MSA; Are completely contained in the largest principal city of the MSA; or Contain at least 250,000 residents of any principal city of the MSA
<b>Large Fringe</b> (suburban)	Counties in MSAs with a population of at least 1 million residents
<b>Small Metro</b>	Counties in MSAs with a population of less than 1 million residents
<b>Micropolitan</b> (large rural)	Counties with populations of 10,000 to 49,999
<b>Non-core</b> (small rural)	Remaining nonmetropolitan counties that are not in a micropolitan statistical area

## Additional Notes on the Charts

- Estimates for the top ten causes of death are shown.
- A missing dot 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). See Appendix A for list of such cases.
- Suppressed data points occur when there are fewer than 10 deaths within that population sub-group (age, sex, rural-urban status, region). Since mortality rates for individuals under the age of 25 years are lower, more suppressed and unreliable rates exist thus limiting the visuals for almost all but the top causes of death for a specific region.
- If a cause is not listed on the graph, then all data points for that cause are suppressed. A graph with fewer than 10 causes of death indicates that all points are suppressed for the missing cause(s).
- Light to dark shades represent urban to rural areas.

## Additional Notes on the Charts

- Data Tables and Technical Notes are available via electronic access with explicit details including mortality rates, explanation of mortality index, age-adjustment, cause of death, etc.
- Rates are age-adjusted for ages 1-14 Years, 25-64 Years, and 65 Years and Over, and represent deaths per 100,000 population.
- Index is calculated as:  $(\text{local mortality rate} / \text{national mortality rate}) * 100$  where the national mortality rate is calculated using age-specific and sex-specific (over 15 years) death rates.
- Although large differences may be present between the national mortality rate (index = 100) and the subpopulation mortality rate (if index is not equal to 100), presentation of the index does not imply that the rates are statistically significant. Please see 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.

## Additional Notes on the Charts

Deaths of nonresidents are excluded, as are residents of:

- American Samoa
- Commonwealth of the Northern Mariana Islands
- Federated States of Micronesia
- Guam
- Marshall Islands
- Puerto Rico
- Republic of Palau
- U.S. Virgin Islands



## Additional Notes on the Charts

- The graphs and accompanying text are part of a group of available information including Technical Notes and data tables corresponding to the graphed data. The Technical Notes provide information about data sources and methods.
- All data tables include the mortality rates underlying the graphics. The tables also include related data not included in the chart, as well as standard errors of estimates and results of statistical comparisons.

### **Electronic access:**

Exploring Rural and Urban Mortality Differences by HHS Region may be accessed from the Rural Health Research Gateway website at:

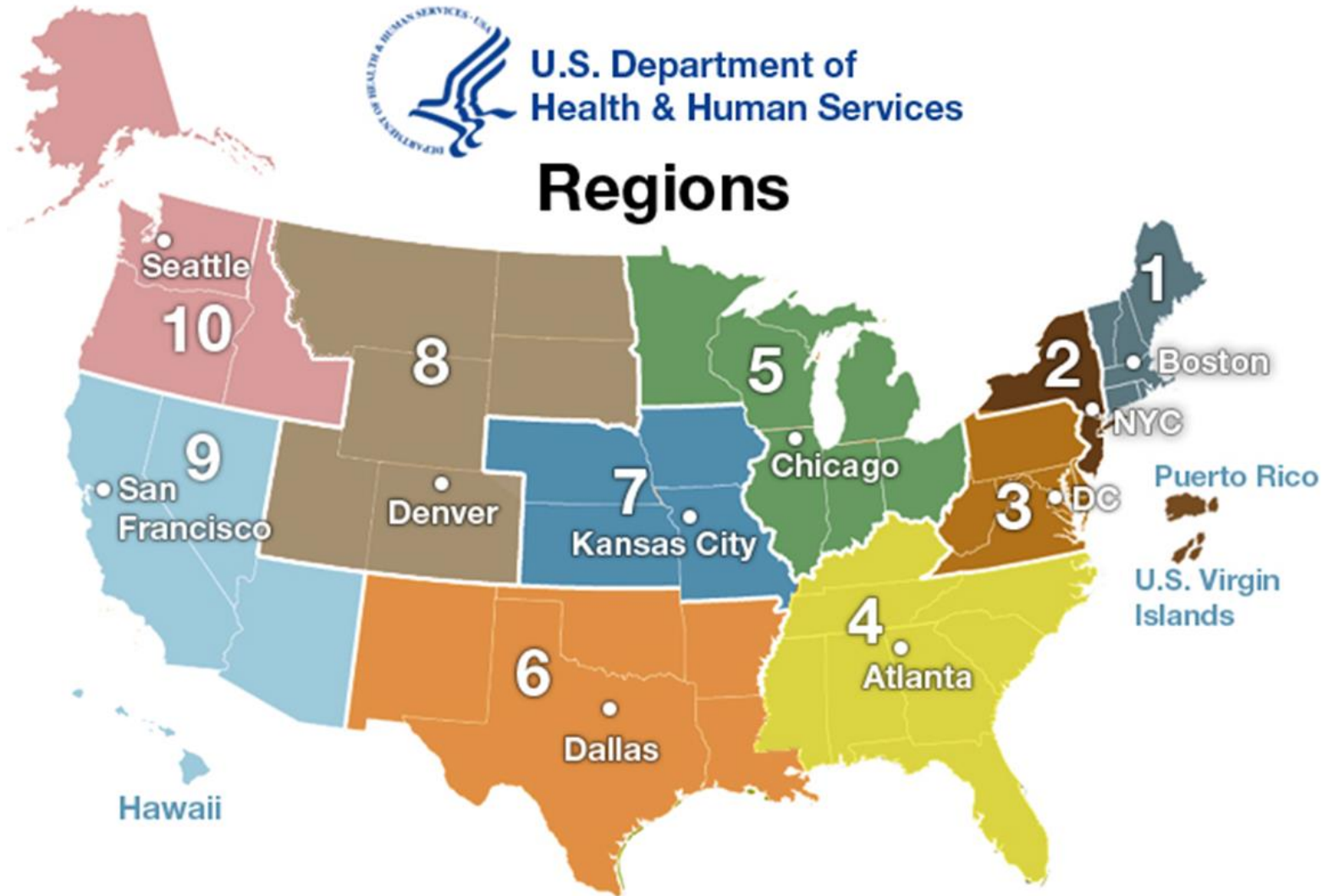
<http://www.ruralhealthresearch.org/>.

The graphs from this presentation may be accessed at:

[https://viz.norc.org/views/On-LineToolIndexforMortalityRates/Introduction?:embed=y&:display\\_count=no](https://viz.norc.org/views/On-LineToolIndexforMortalityRates/Introduction?:embed=y&:display_count=no)

# Geographic Definitions

# HHS Regions



U.S. Department of  
Health & Human Services

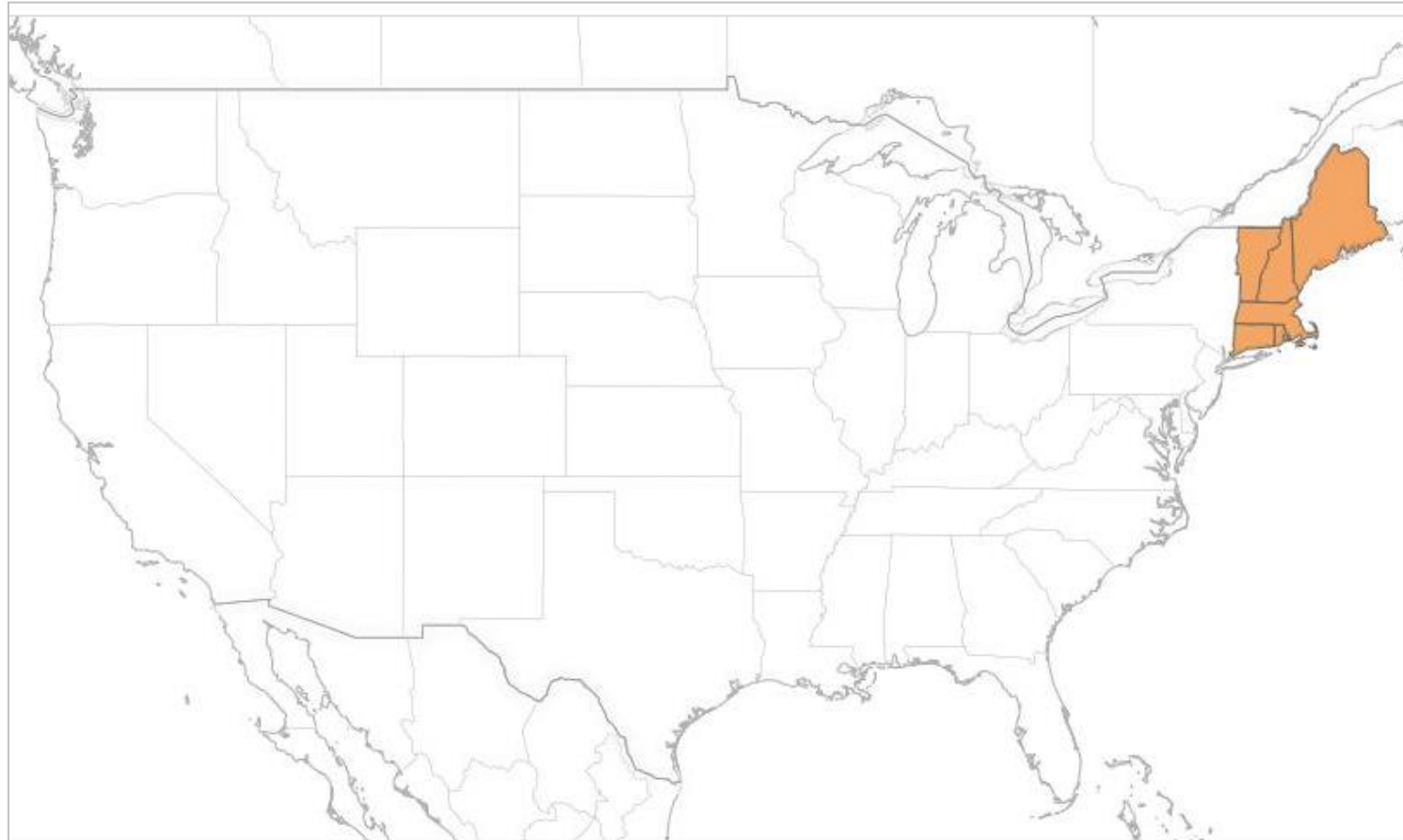
## Regions

# Table of Contents

- [Introduction](#)
- [HHS Region 1](#)
- [HHS Region 2](#)
- [HHS Region 3](#)
- [HHS Region 4](#)
- [HHS Region 5](#)
- [HHS Region 6](#)
- [HHS Region 7](#)
- [HHS Region 8](#)
- [HHS Region 9](#)
- [HHS Region 10](#)

# HHS Region 1

Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont



## Index for Regional Mortality Rates of Region 1, by Rural-Urban Status: United States, 2011-2013

### Persons:

- [Figure 2: Age Under 1 Years, Both Sexes](#)
- [Figure 3: Age 1 to 14 Years, Both Sexes](#)
- [Figure 4: Age 15 to 24 Years, Males](#)
- [Figure 5: Age 15 to 24 Years, Female](#)
- [Figure 6: Age 25 to 64 Years, Male](#)
- [Figure 7: Age 25 to 64 Years, Female](#)
- [Figure 8: Age  \$\geq\$ 65 Years, Male](#)
- [Figure 9: Age  \$\geq\$ 65 Years, Female](#)

Figure 2

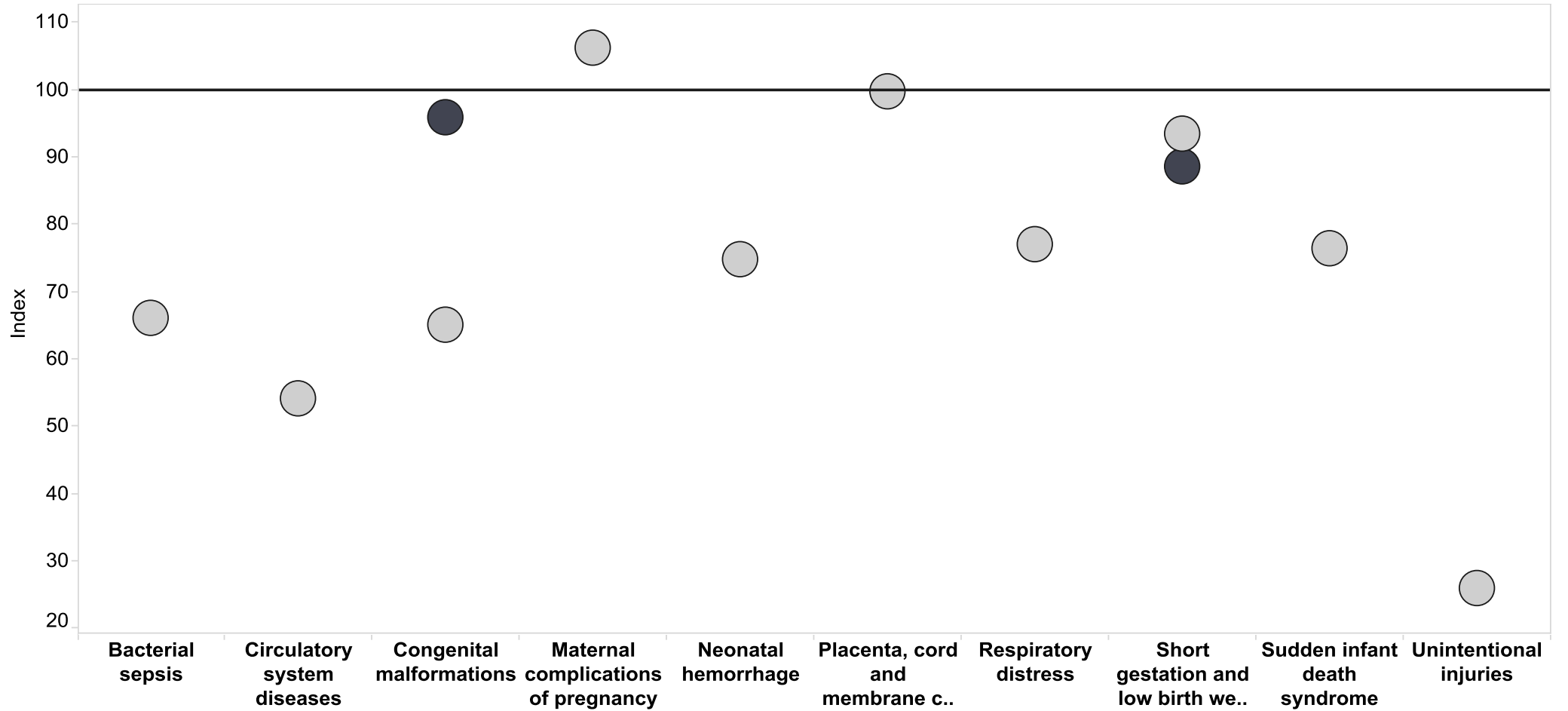
***Please select:***

Age Under 1  
 Sex Both sexes  
 Region HHS Region #1 CT, ME, MA, NH, RI, VT

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age Under 1, in HHS Region #1 CT, ME, MA, NH, RI, VT, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 3

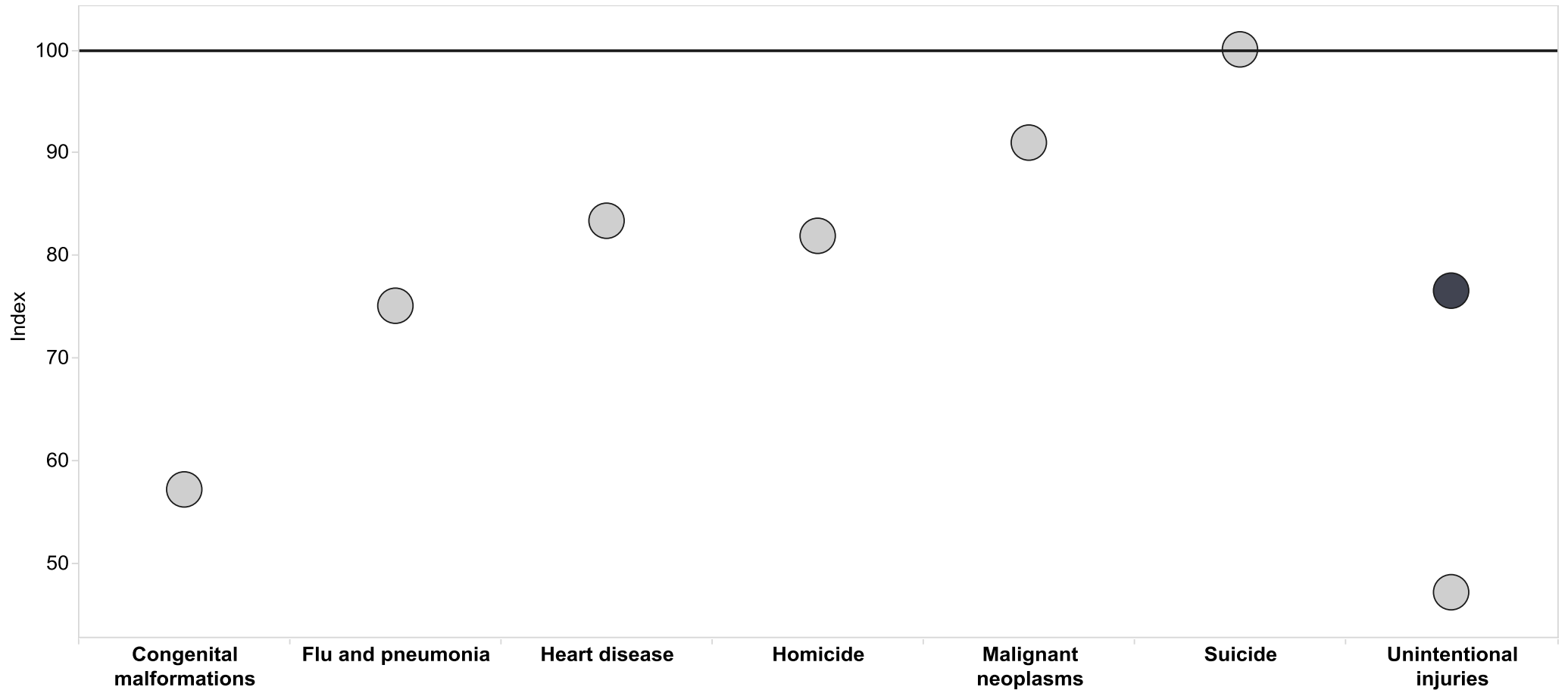
***Please select:***

Age 1 to 14  
Sex Both sexes  
Region HHS Region #1 CT, ME, MA, NH, RI, VT

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age 1 to 14, in HHS Region #1 CT, ME, MA, NH, RI, VT, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.



Figure 4

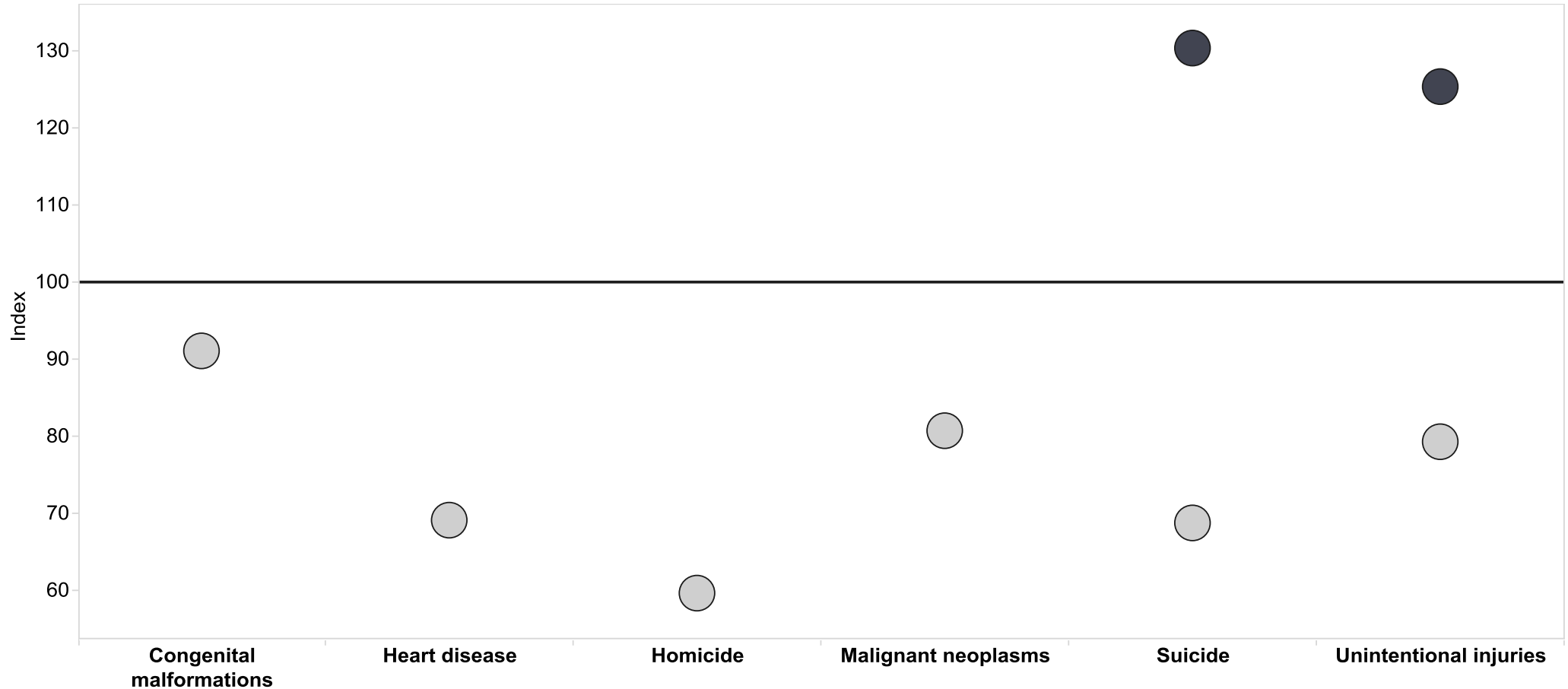
***Please select:***

Age 15 to 24  
Sex Male  
Region HHS Region #1 CT, ME, MA, NH, RI, VT

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 15 to 24, in HHS Region #1 CT, ME, MA, NH, RI, VT, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 5

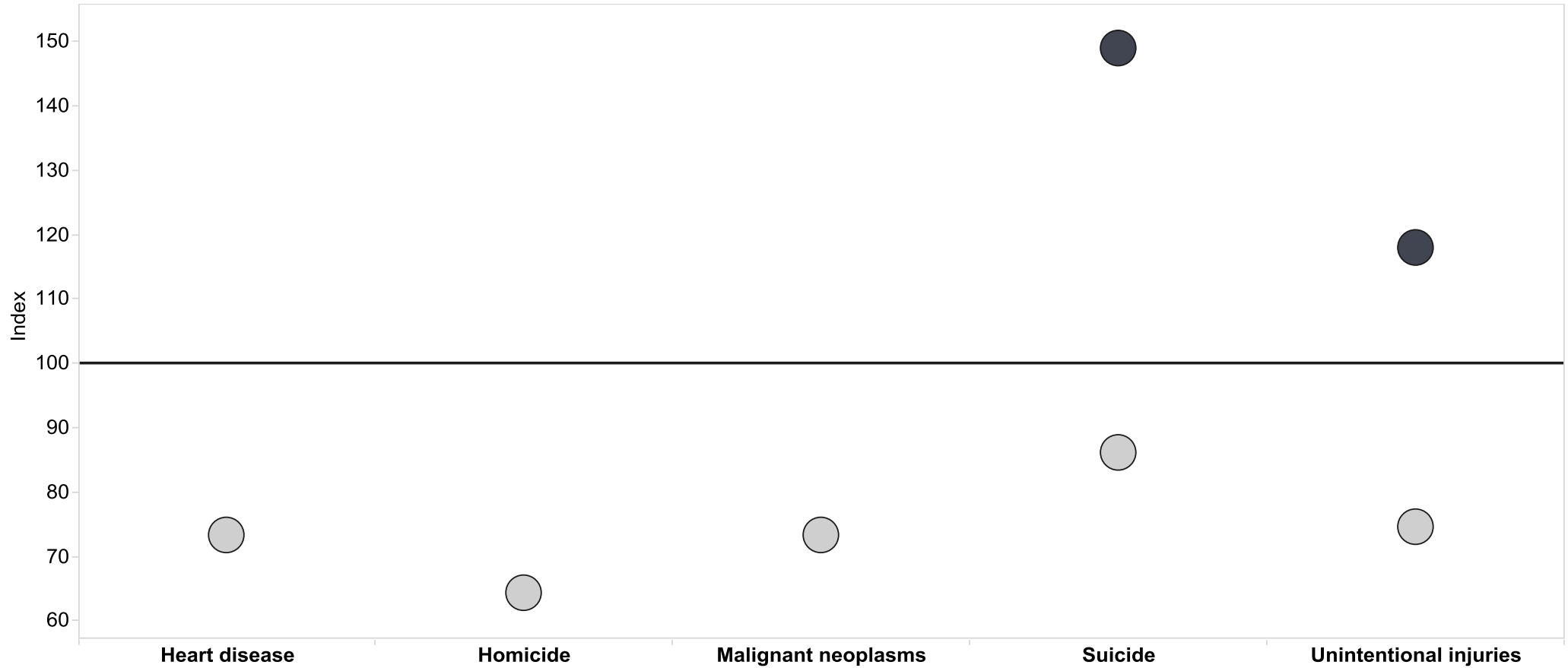
***Please select:***

Age 15 to 24  
Sex Female  
Region HHS Region #1 CT, ME, MA, NH, RI, VT

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 15 to 24, in HHS Region #1 CT, ME, MA, NH, RI, VT, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 6

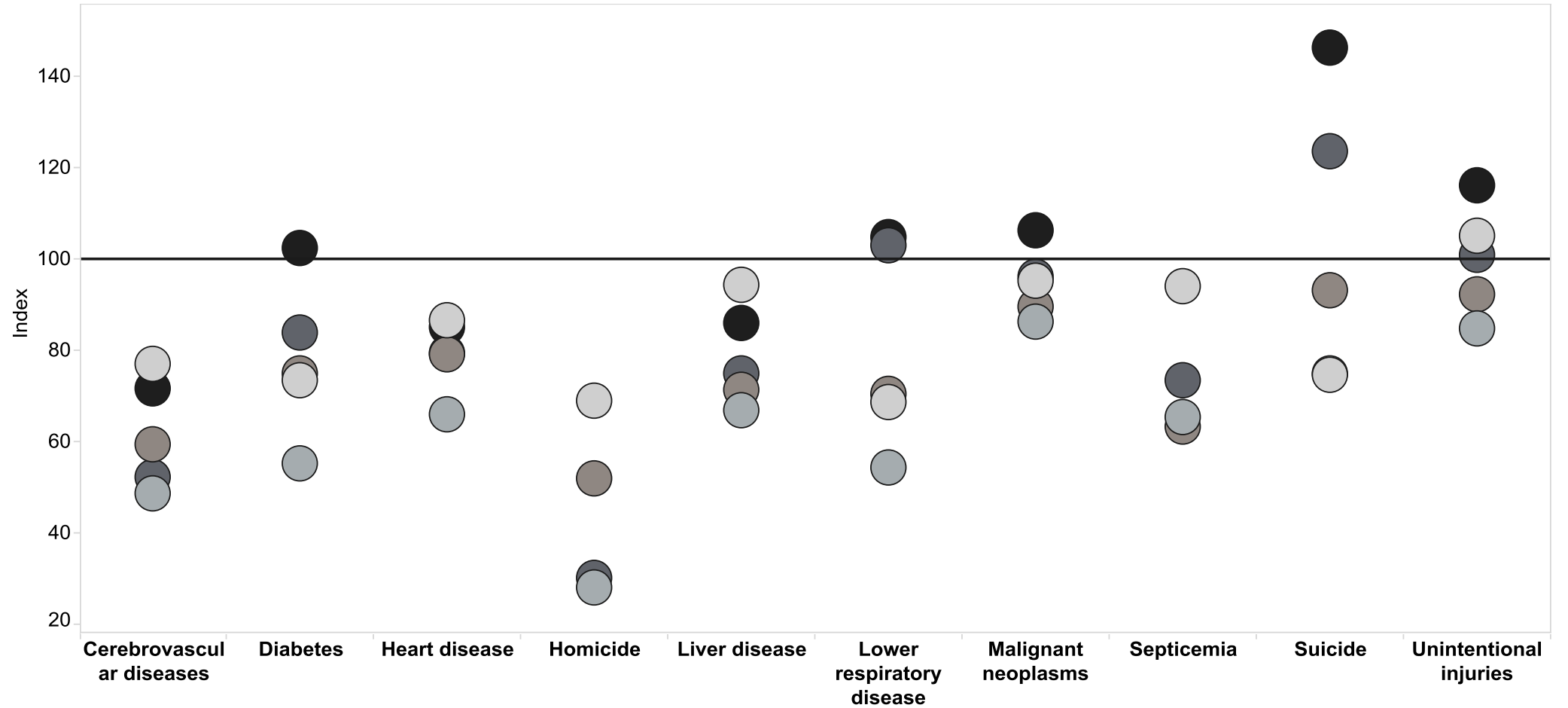
***Please select:***

Age 25 to 64  
 Sex Male  
 Region HHS Region #1 CT, ME, MA, NH, RI, VT

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 25 to 64, in HHS Region #1 CT, ME, MA, NH, RI, VT, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 7

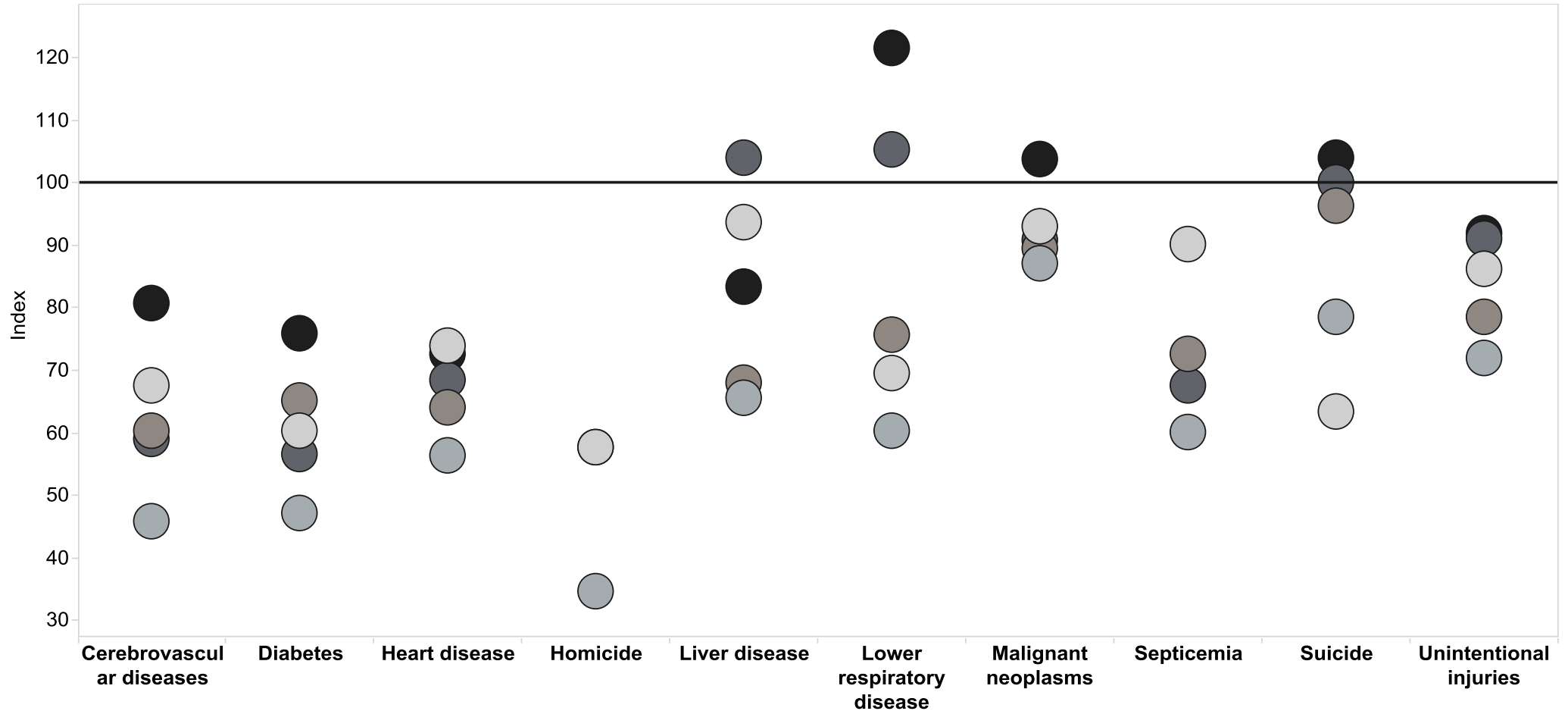
***Please select:***

Age 25 to 64  
 Sex Female  
 Region HHS Region #1 CT, ME, MA, NH, RI, VT

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 25 to 64, in HHS Region #1 CT, ME, MA, NH, RI, VT, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 8

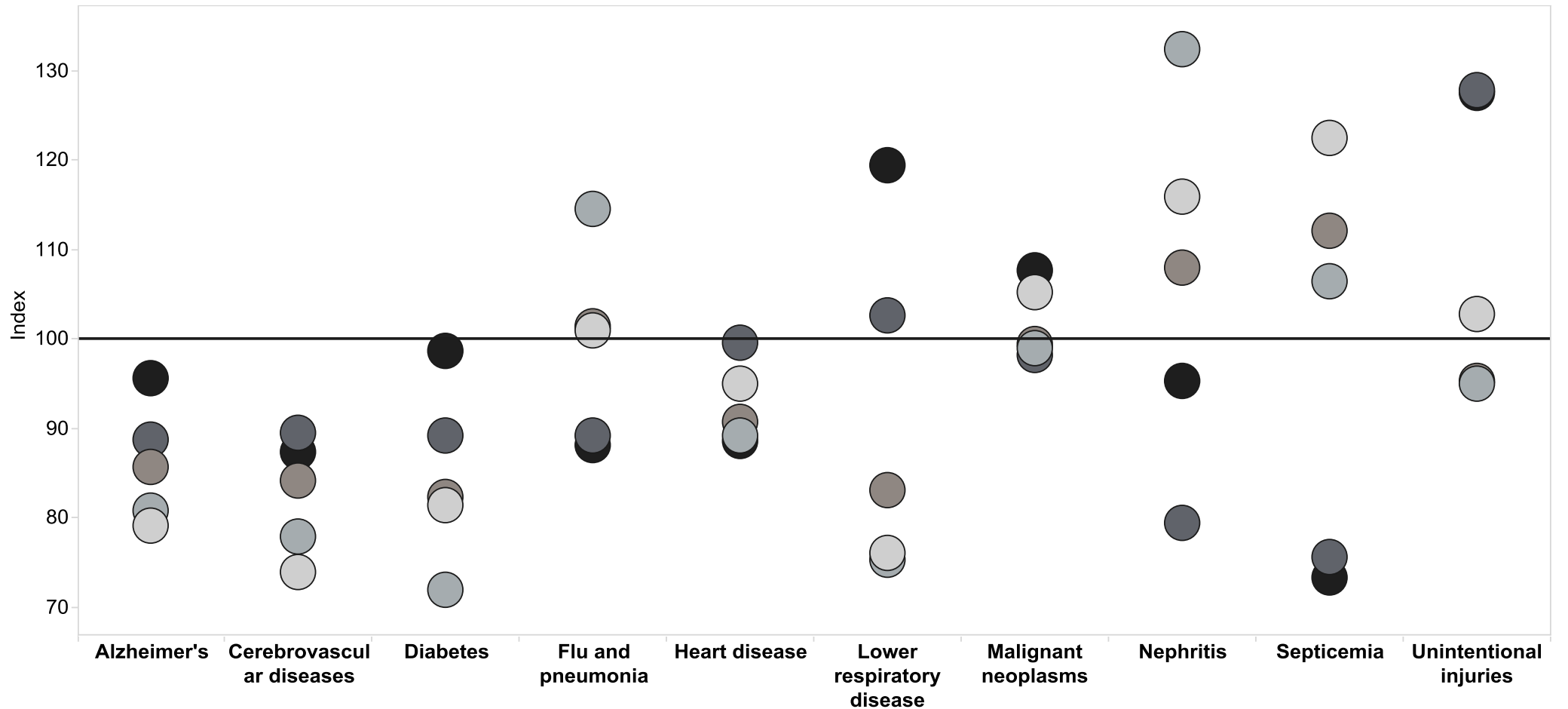
***Please select:***

**Age** 65 and older  
**Sex** Male  
**Region** HHS Region #1 CT, ME, MA, NH, RI, VT

**Rural-Urban Status**  
 □ Large Central  
 □ Large Fringe  
 □ Medium/Small Metro  
 □ Micropolitan  
 ■ Non-core

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 65 and older, in HHS Region #1 CT, ME, MA, NH, RI, VT, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 9

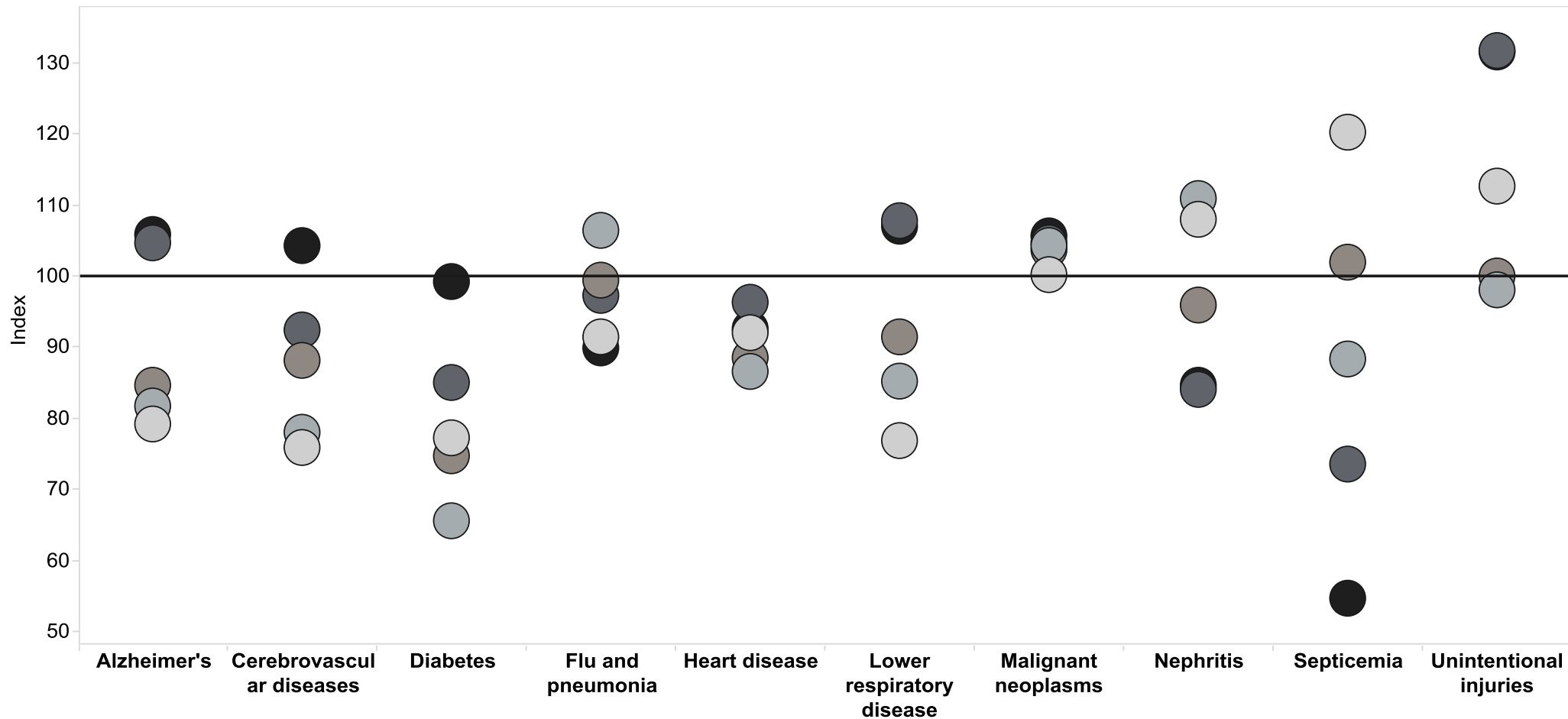
**Please select:**

Age 65 and older  
 Sex Female  
 Region HHS Region #1 CT, ME, MA, NH, RI, VT

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 65 and older, in HHS Region #1 CT, ME, MA, NH, RI, VT, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

# HHS Region 2<sup>1</sup>

New York and New Jersey



<sup>1</sup>Note: Deaths of nonresidents including those in Puerto Rico and the U.S. Virgin Islands are excluded

<http://www.hhs.gov/iea/regional/> <http://wonder.cdc.gov/wonder/help/mcd.html>

## Index for Regional Mortality Rates of Region 2, by Rural-Urban Status: United States, 2011-2013

### Persons:

- [Figure 10: Age Under 1 Years, Both Sexes](#)
- [Figure 11: Age 1 to 14 Years, Both Sexes](#)
- [Figure 12: Age 15 to 24 Years, Males](#)
- [Figure 13: Age 15 to 24 Years, Female](#)
- [Figure 14: Age 25 to 64 Years, Male](#)
- [Figure 15: Age 25 to 64 Years, Female](#)
- [Figure 16: Age  \$\geq\$ 65 Years, Male](#)
- [Figure 17: Age  \$\geq\$ 65 Years, Female](#)



Figure 10

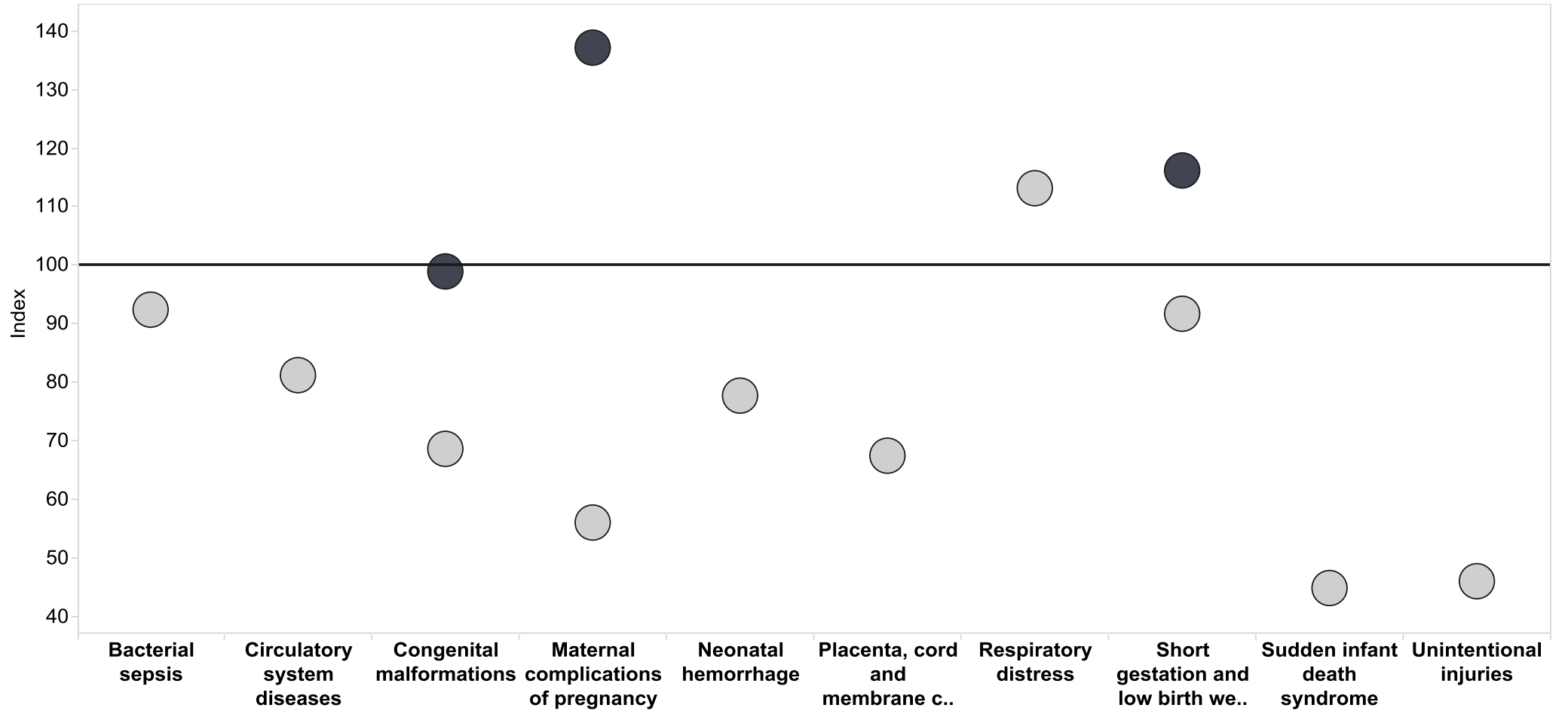
***Please select:***

Age Under 1  
Sex Both sexes  
Region HHS Region #2 NJ, NY

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age Under 1, in HHS Region #2 NJ, NY, by Rural-Urban Status: United States, 2011-2013

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 11

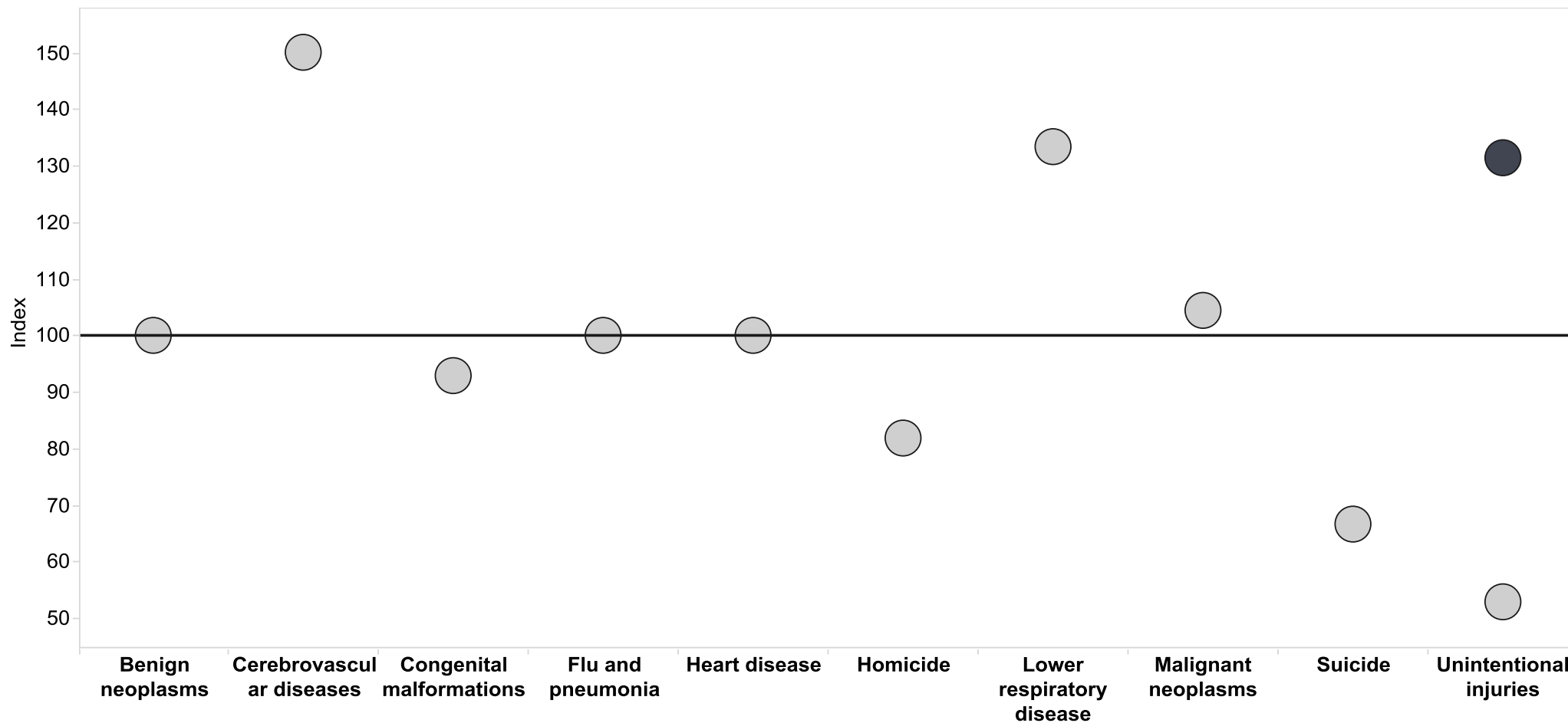
**Please select:**

Age 1 to 14  
Sex Both sexes  
Region HHS Region #2 NJ, NY

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age 1 to 14, in HHS Region #2 NJ, NY, by Rural-Urban Status: United States, 2011-2013

Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 12

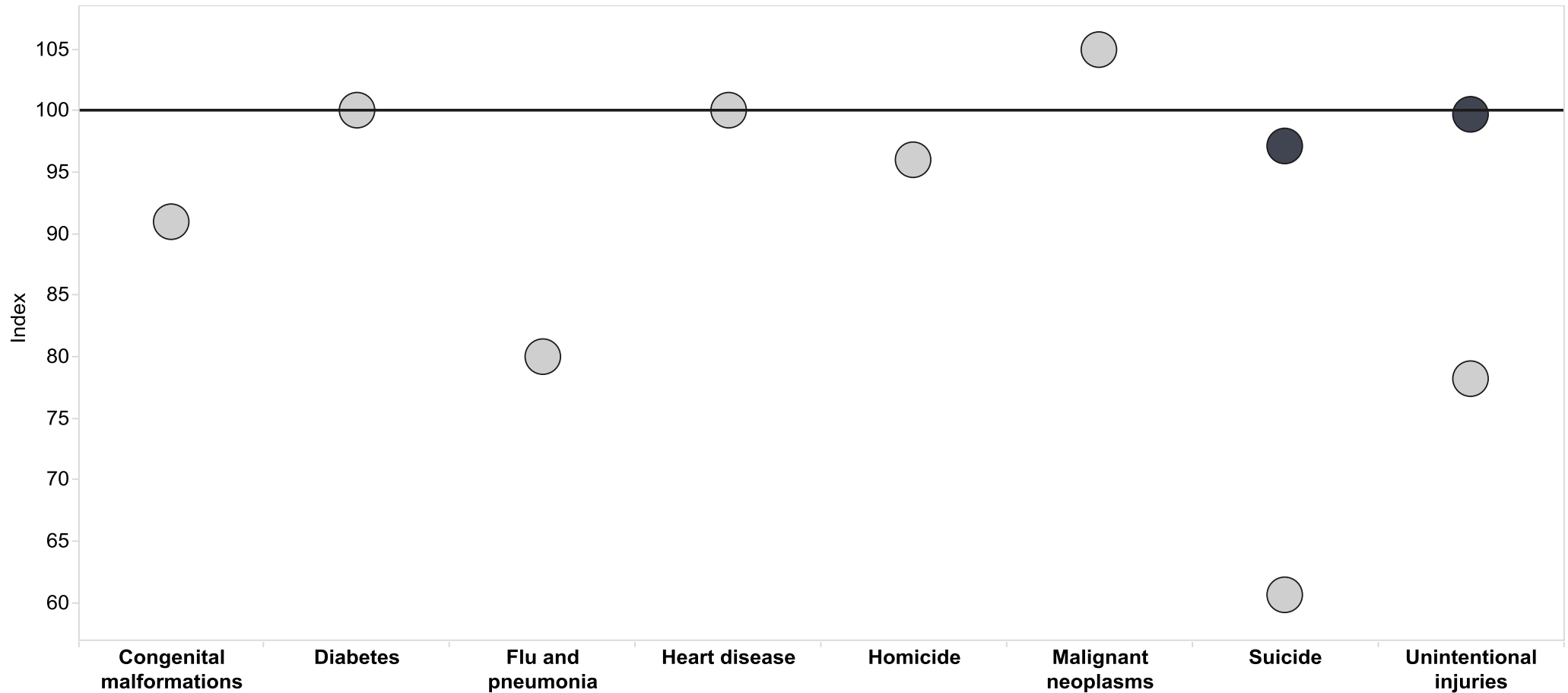
***Please select:***

Age 15 to 24  
Sex Male  
Region HHS Region #2 NJ, NY

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 15 to 24, in HHS Region #2 NJ, NY, by Rural-Urban Status: United States, 2011-2013

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 13

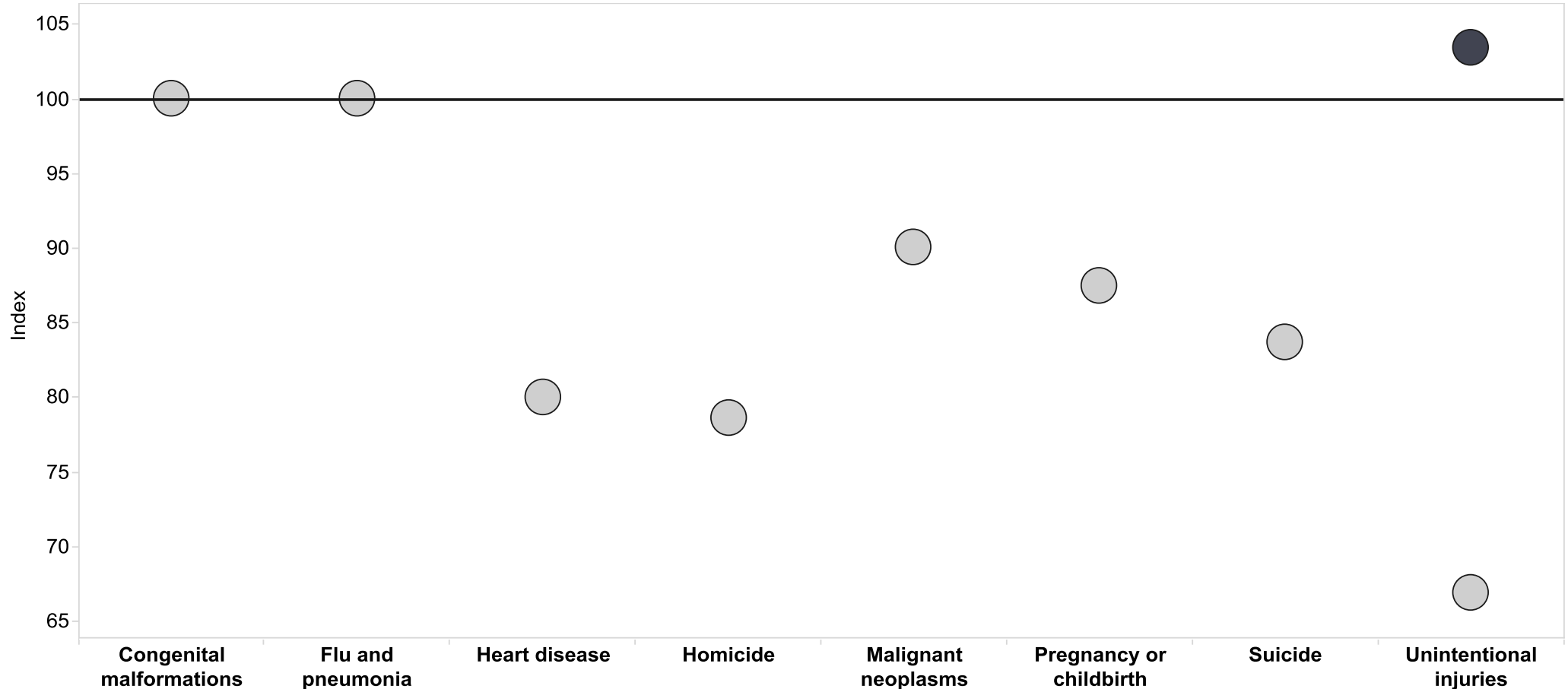
***Please select:***

Age 15 to 24  
Sex Female  
Region HHS Region #2 NJ, NY

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 15 to 24, in HHS Region #2 NJ, NY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 14

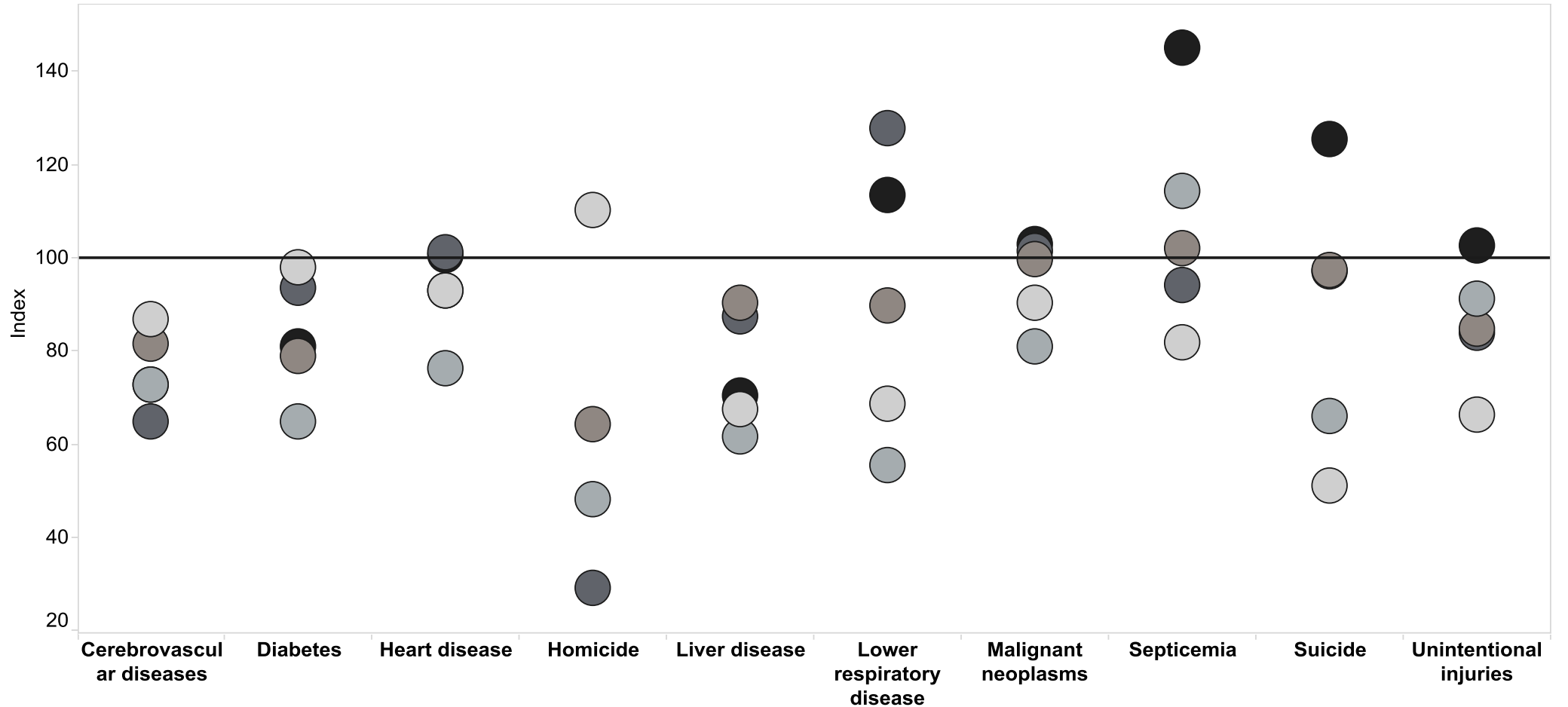
***Please select:***

Age 25 to 64  
 Sex Male  
 Region HHS Region #2 NJ, NY

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 25 to 64, in HHS Region #2 NJ, NY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 15

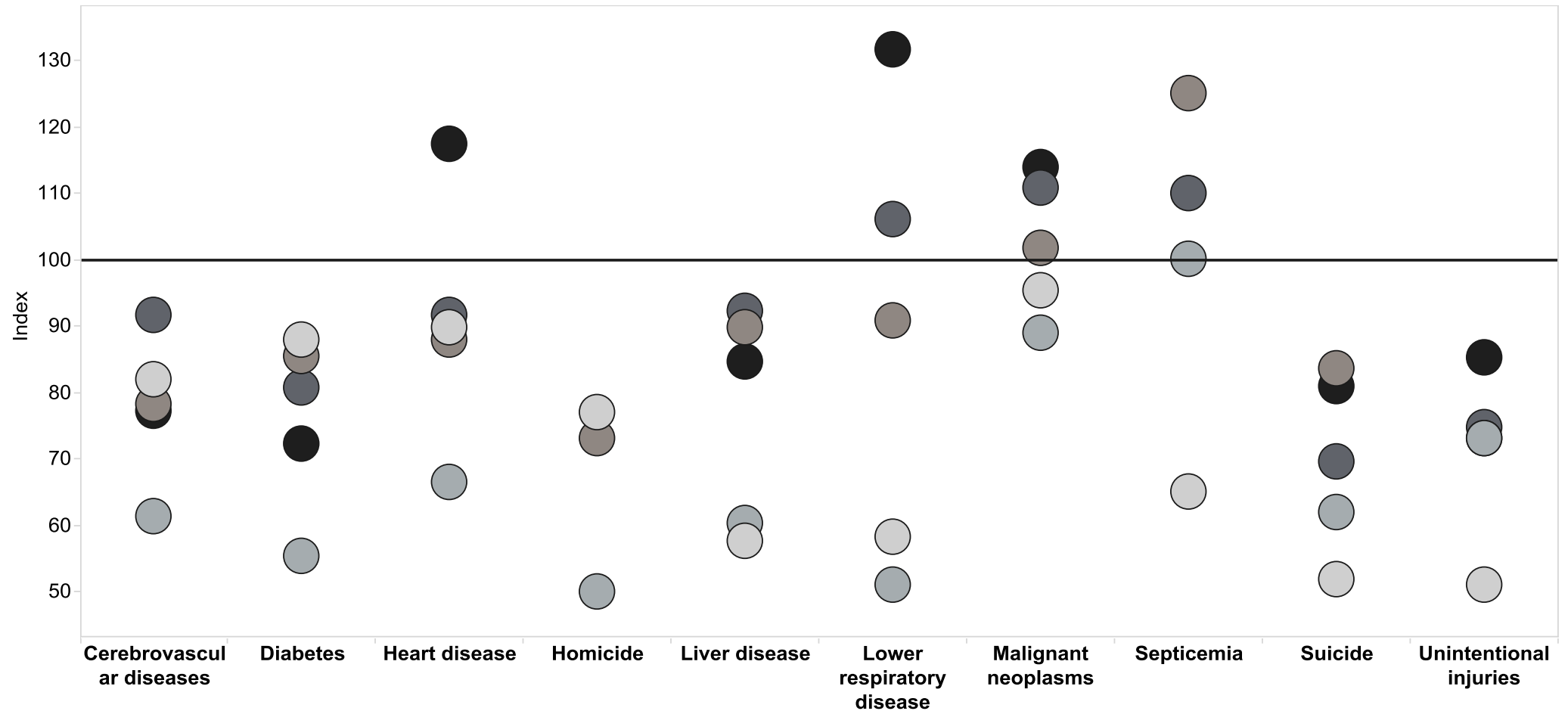
***Please select:***

Age 25 to 64  
 Sex Female  
 Region HHS Region #2 NJ, NY

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 25 to 64, in HHS Region #2 NJ, NY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 16

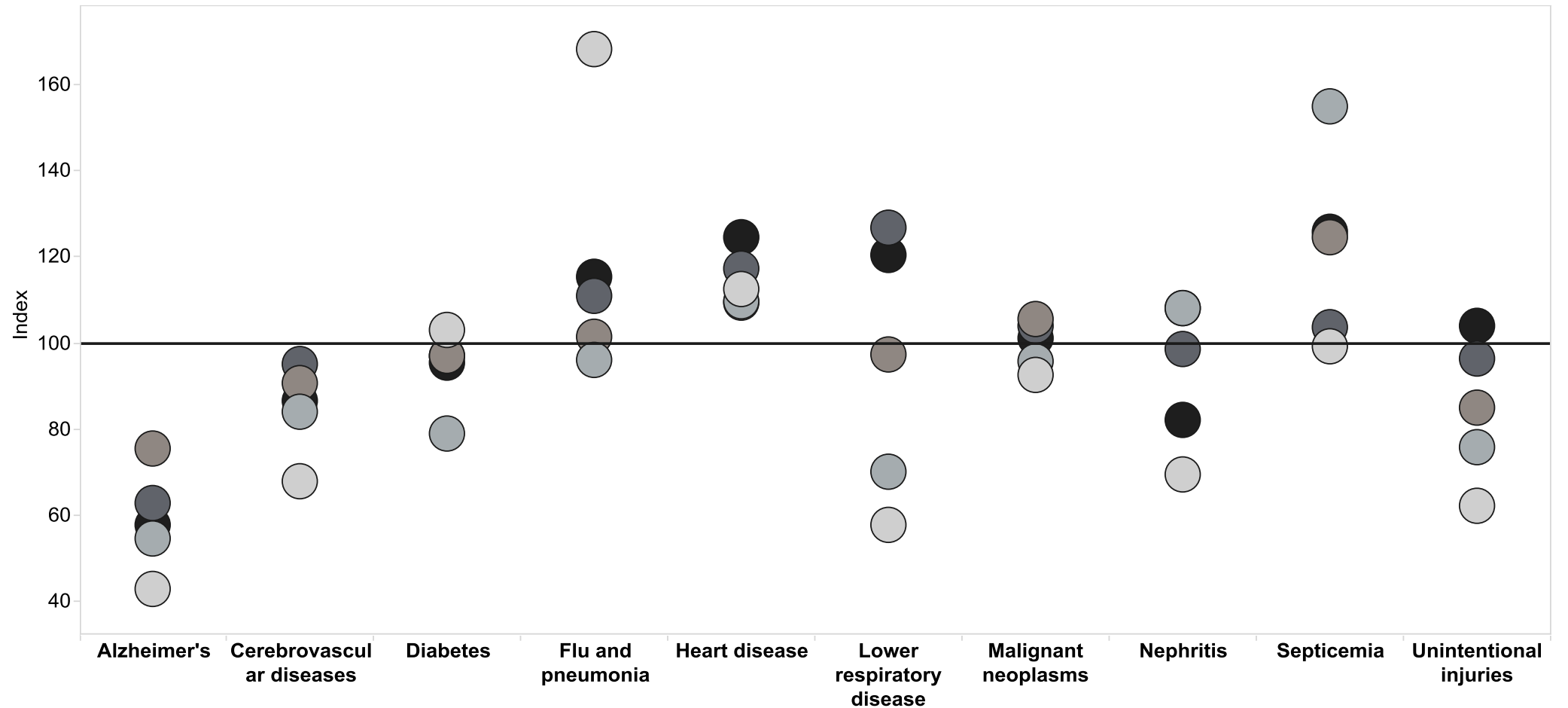
**Please select:**

Age 65 and older  
 Sex Male  
 Region HHS Region #2 NJ, NY

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 65 and older, in HHS Region #2 NJ, NY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 17

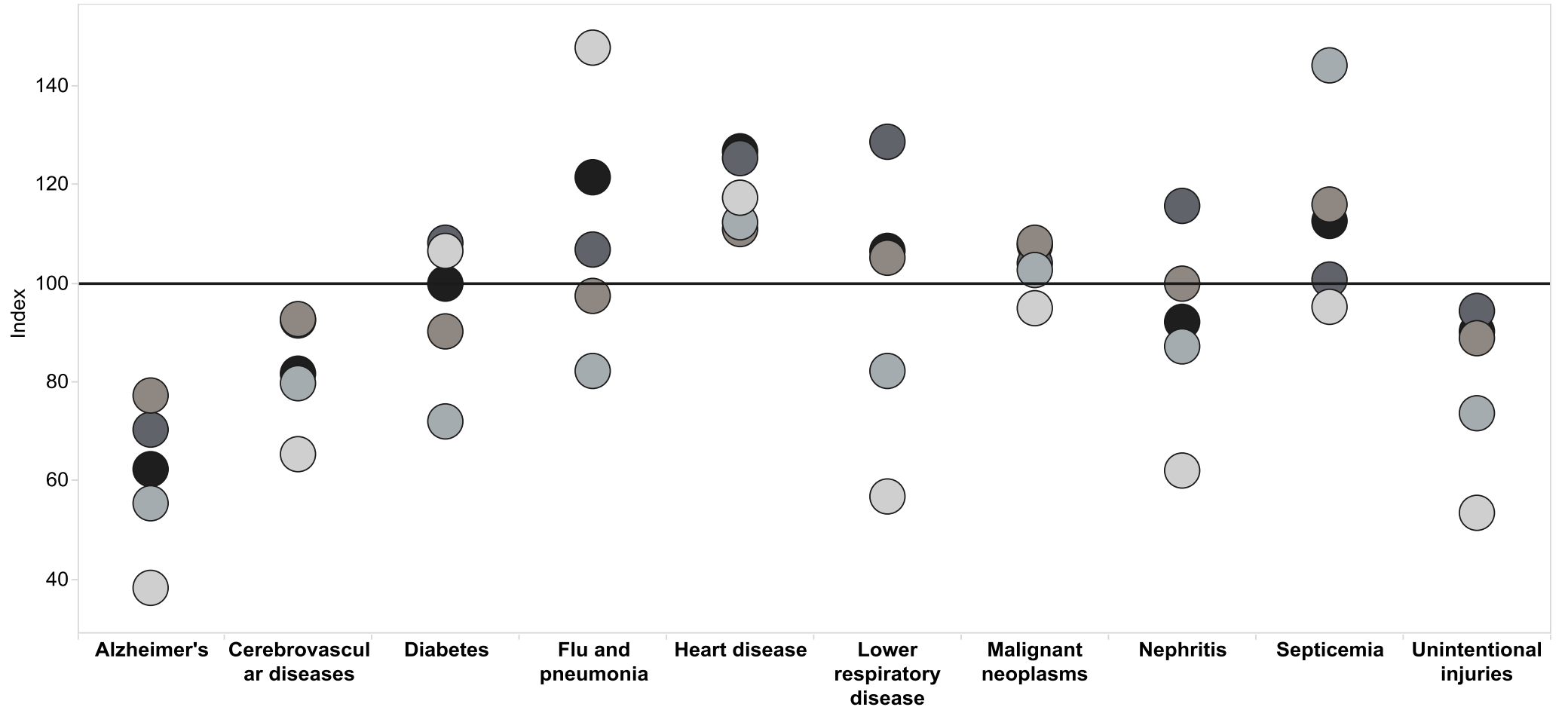
***Please select:***

Age 65 and older  
 Sex Female  
 Region HHS Region #2 NJ, NY

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 65 and older, in HHS Region #2 NJ, NY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*

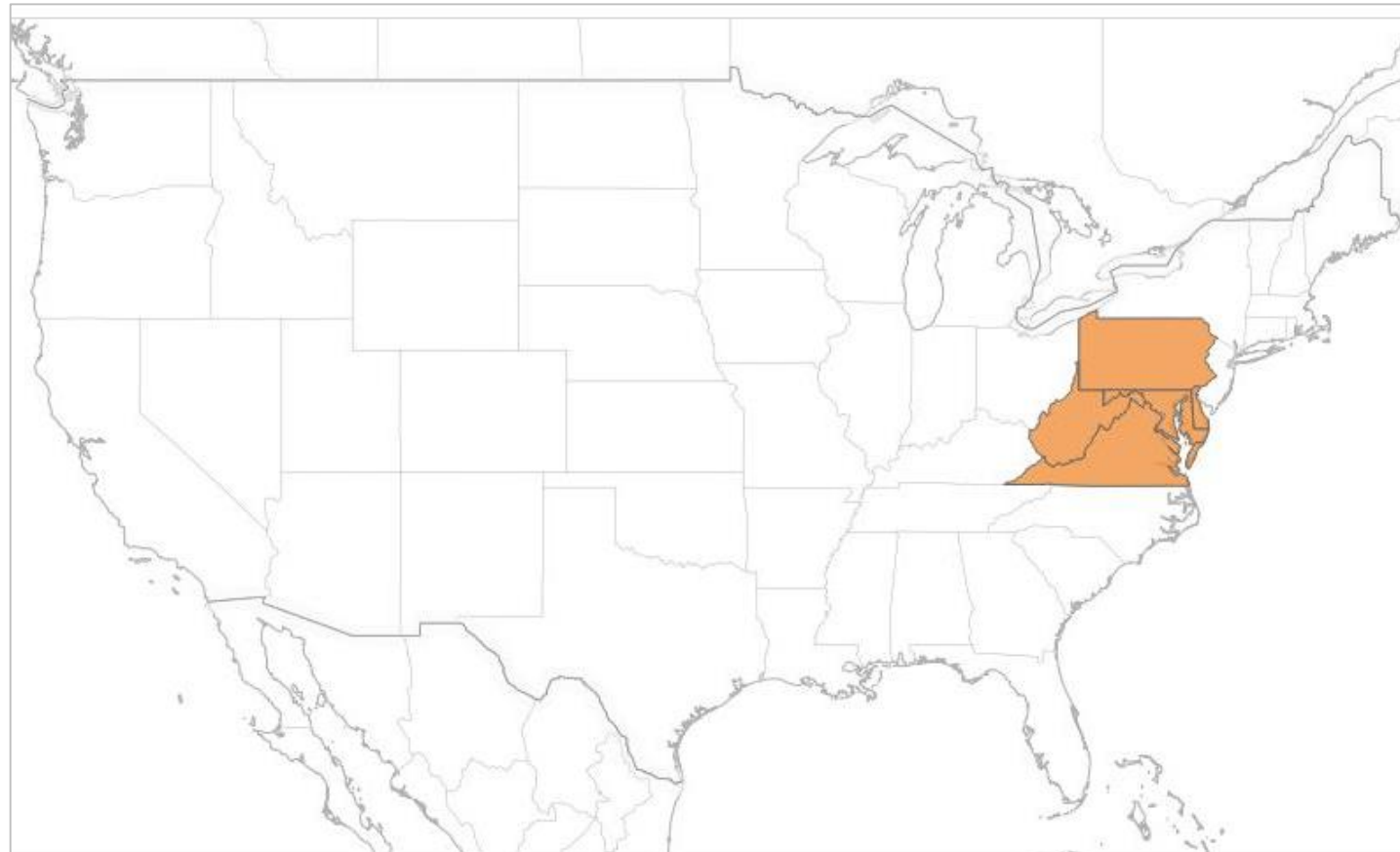


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.



# HHS Region 3

Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia



## Index for Regional Mortality Rates of Region 3, by Rural-Urban Status: United States, 2011-2013

### Persons:

- [Figure 18: Age Under 1 Years, Both Sexes](#)
- [Figure 19: Age 1 to 14 Years, Both Sexes](#)
- [Figure 20: Age 15 to 24 Years, Males](#)
- [Figure 21: Age 15 to 24 Years, Female](#)
- [Figure 22: Age 25 to 64 Years, Male](#)
- [Figure 23: Age 25 to 64 Years, Female](#)
- [Figure 24: Age  \$\geq\$ 65 Years, Male](#)
- [Figure 25: Age  \$\geq\$ 65 Years, Female](#)

Figure 18

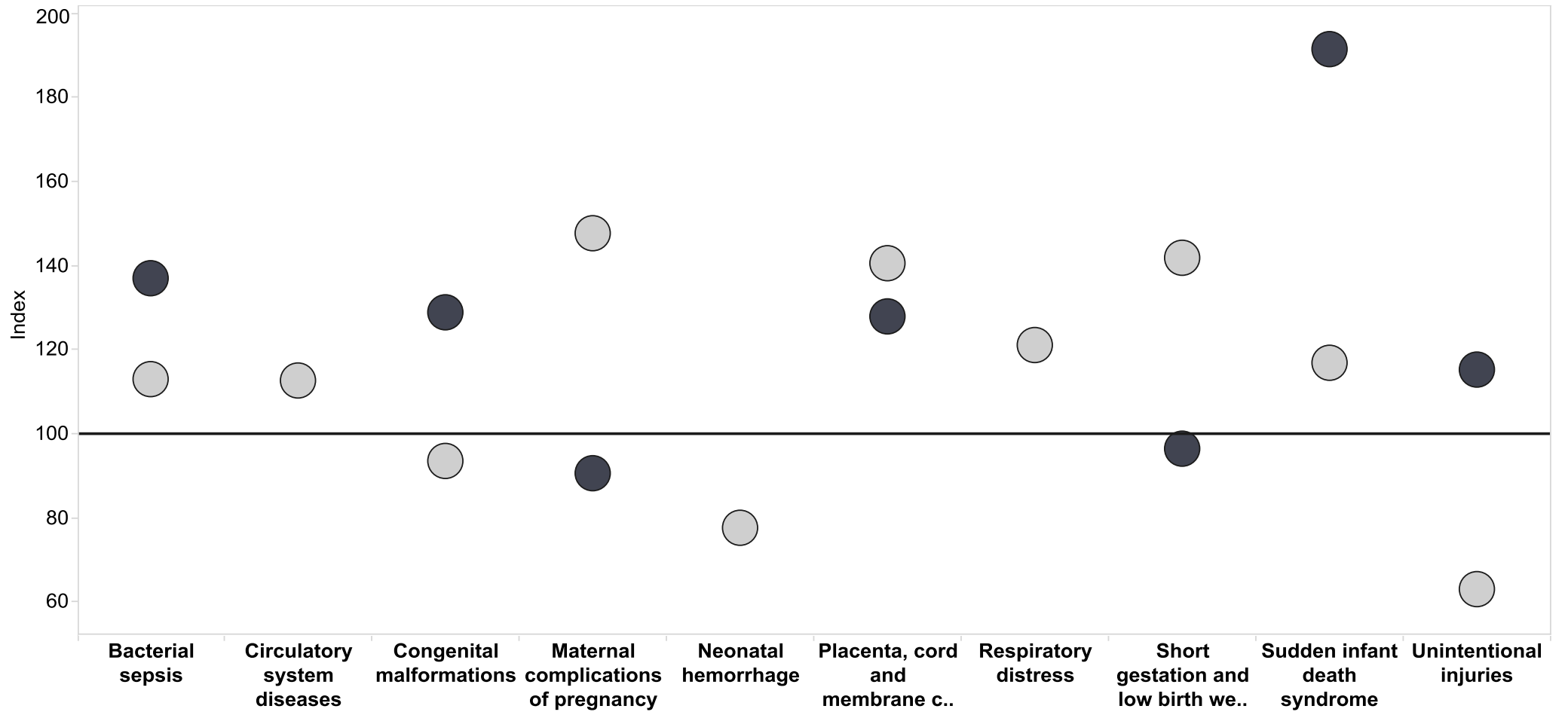
**Please select:**

Age Under 1  
 Sex Both sexes  
 Region HHS Region #3 DE, DC, MD, PA, VA, WV

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age Under 1, in HHS Region #3 DE, DC, MD, PA, VA, WV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 19

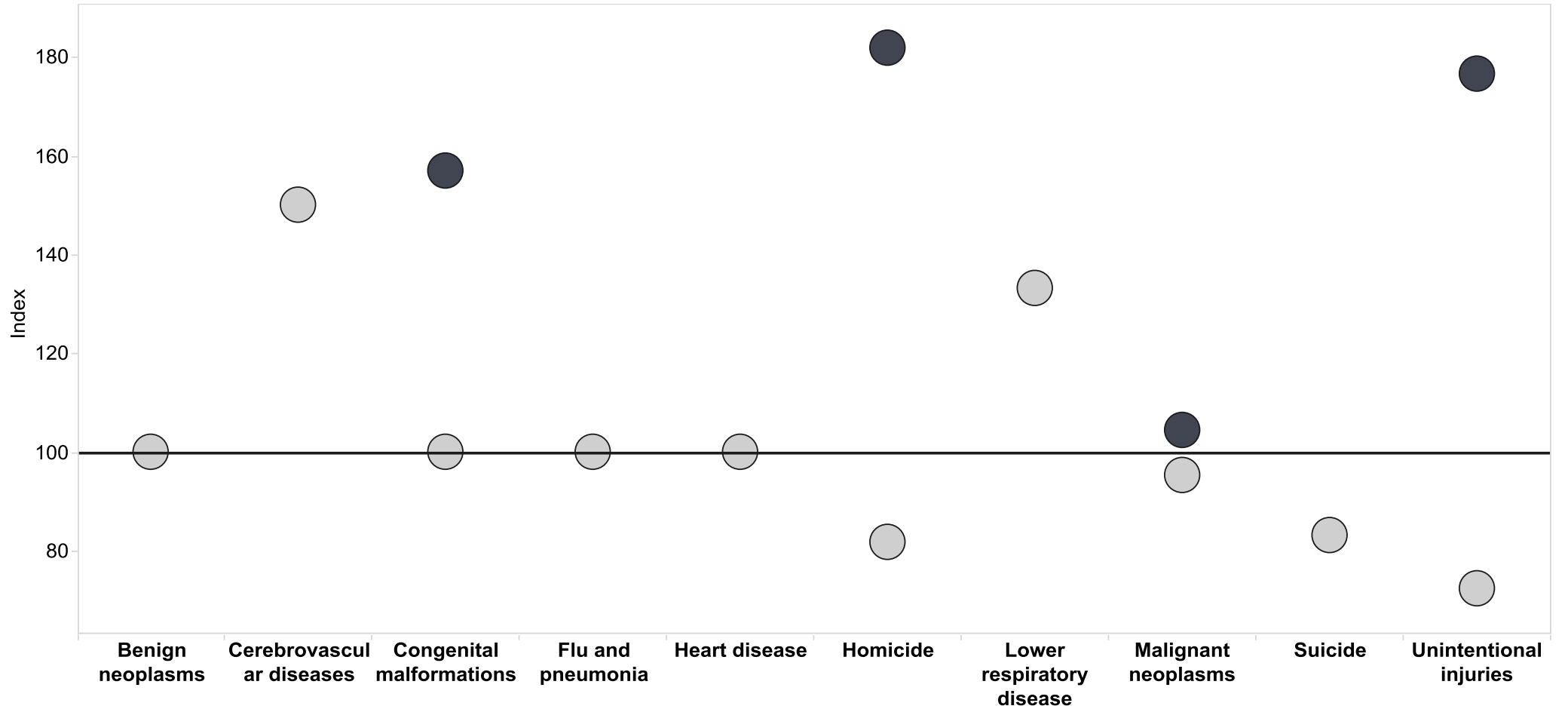
***Please select:***

Age 1 to 14  
Sex Both sexes  
Region HHS Region #3 DE, DC, MD, PA, VA, WV

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age 1 to 14, in HHS Region #3 DE, DC, MD, PA, VA, WV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 20

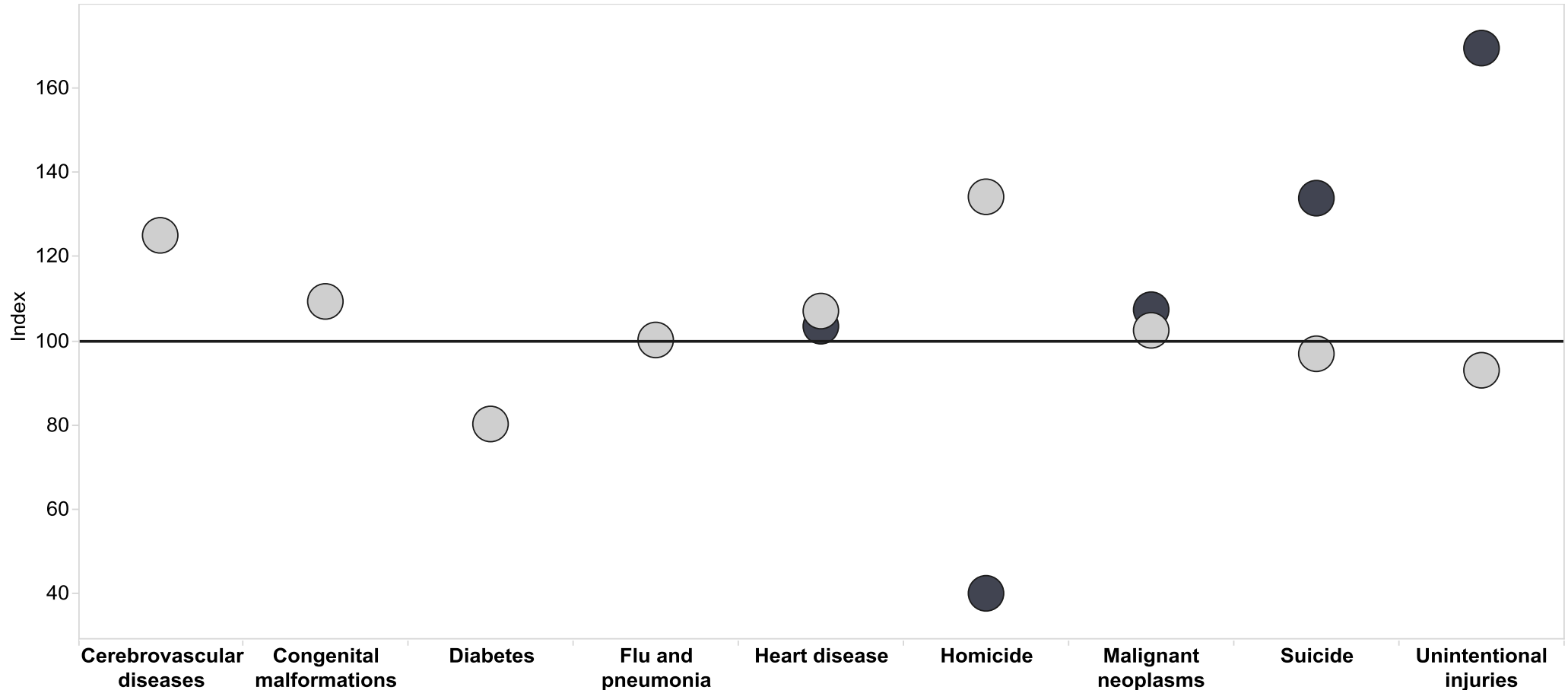
***Please select:***

Age 15 to 24  
Sex Male  
Region HHS Region #3 DE, DC, MD, PA, VA, WV

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 15 to 24, in HHS Region #3 DE, DC, MD, PA, VA, WV, by Rural-Urban Status: United States, 2011-2013

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 21

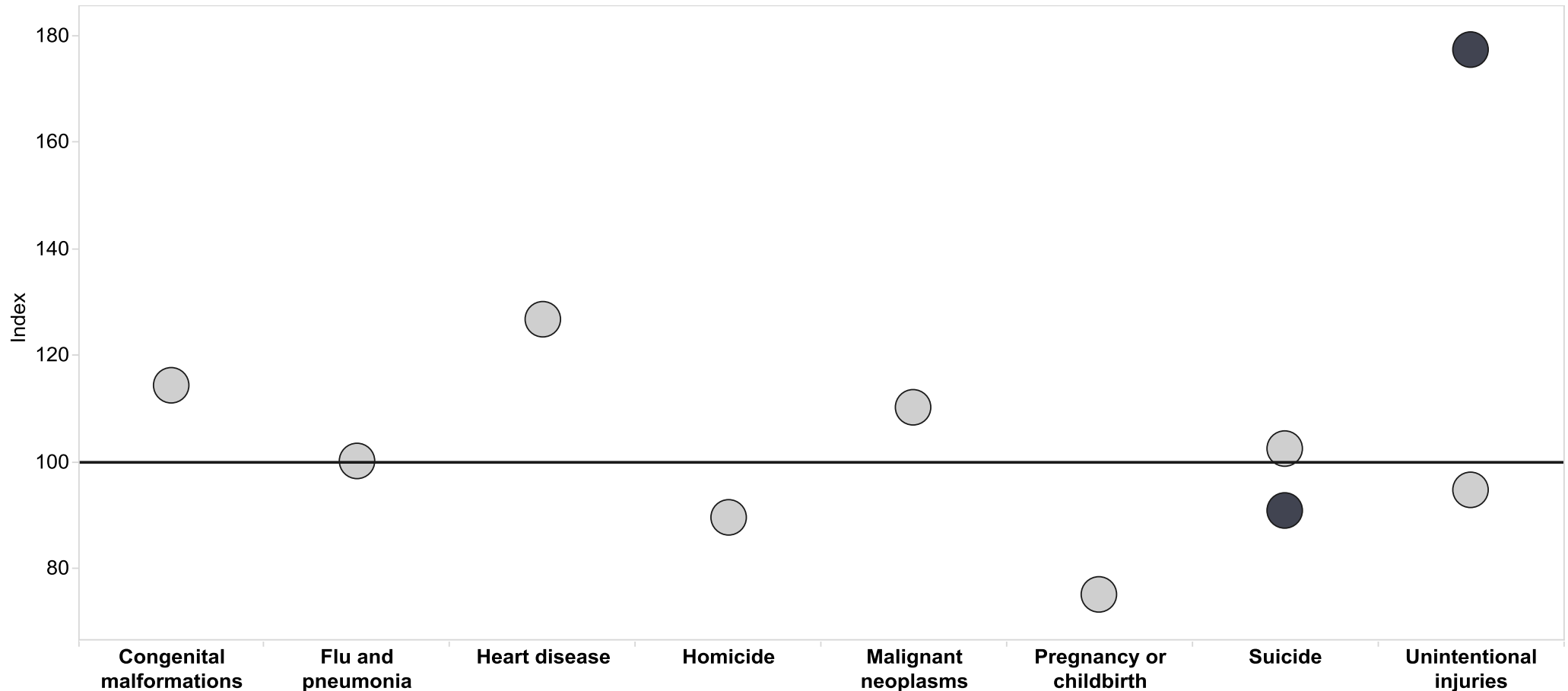
***Please select:***

Age 15 to 24  
Sex Female  
Region HHS Region #3 DE, DC, MD, PA, VA, WV

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 15 to 24, in HHS Region #3 DE, DC, MD, PA, VA, WV, by Rural-Urban Status: United States, 2011-2013

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 22

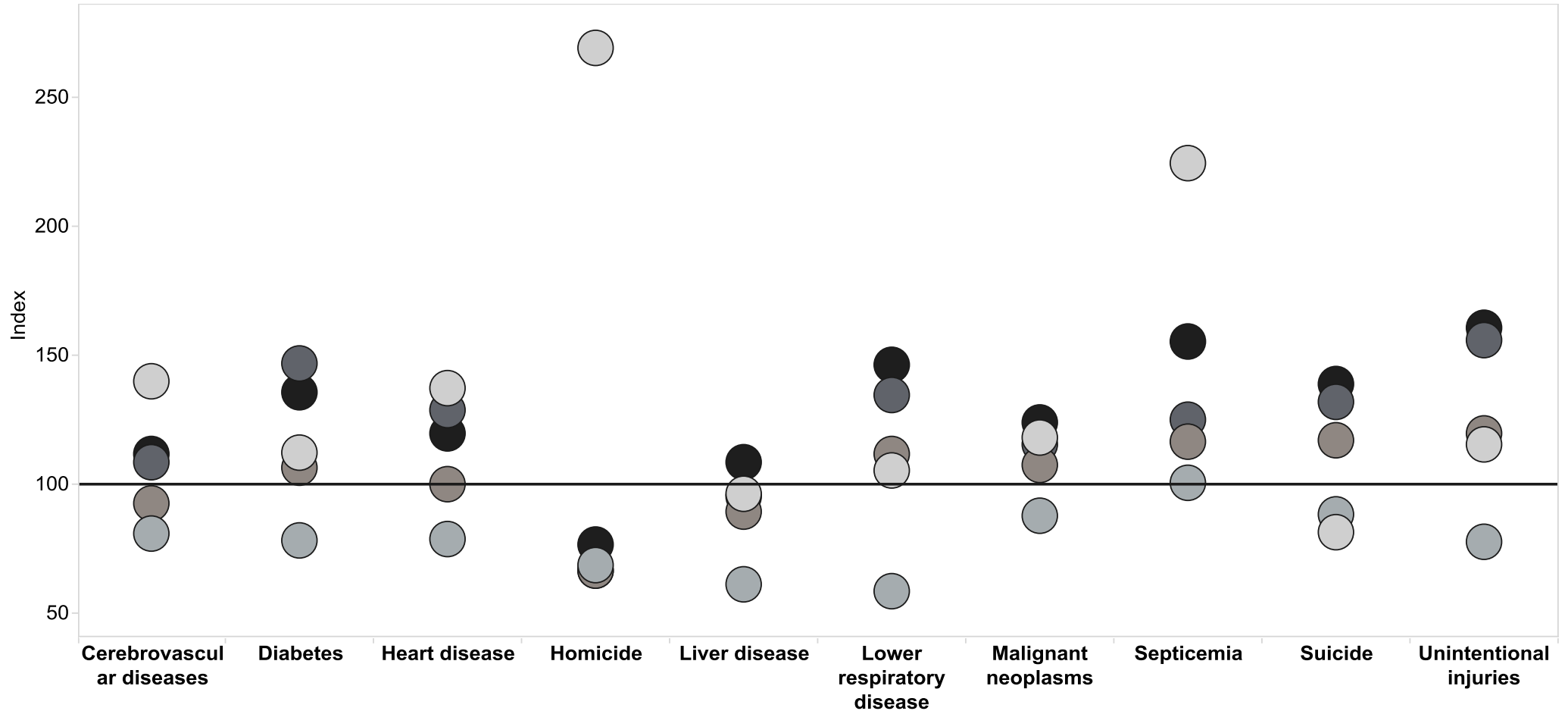
***Please select:***

Age 25 to 64  
 Sex Male  
 Region HHS Region #3 DE, DC, MD, PA, VA, WV

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 25 to 64, in HHS Region #3 DE, DC, MD, PA, VA, WV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 23

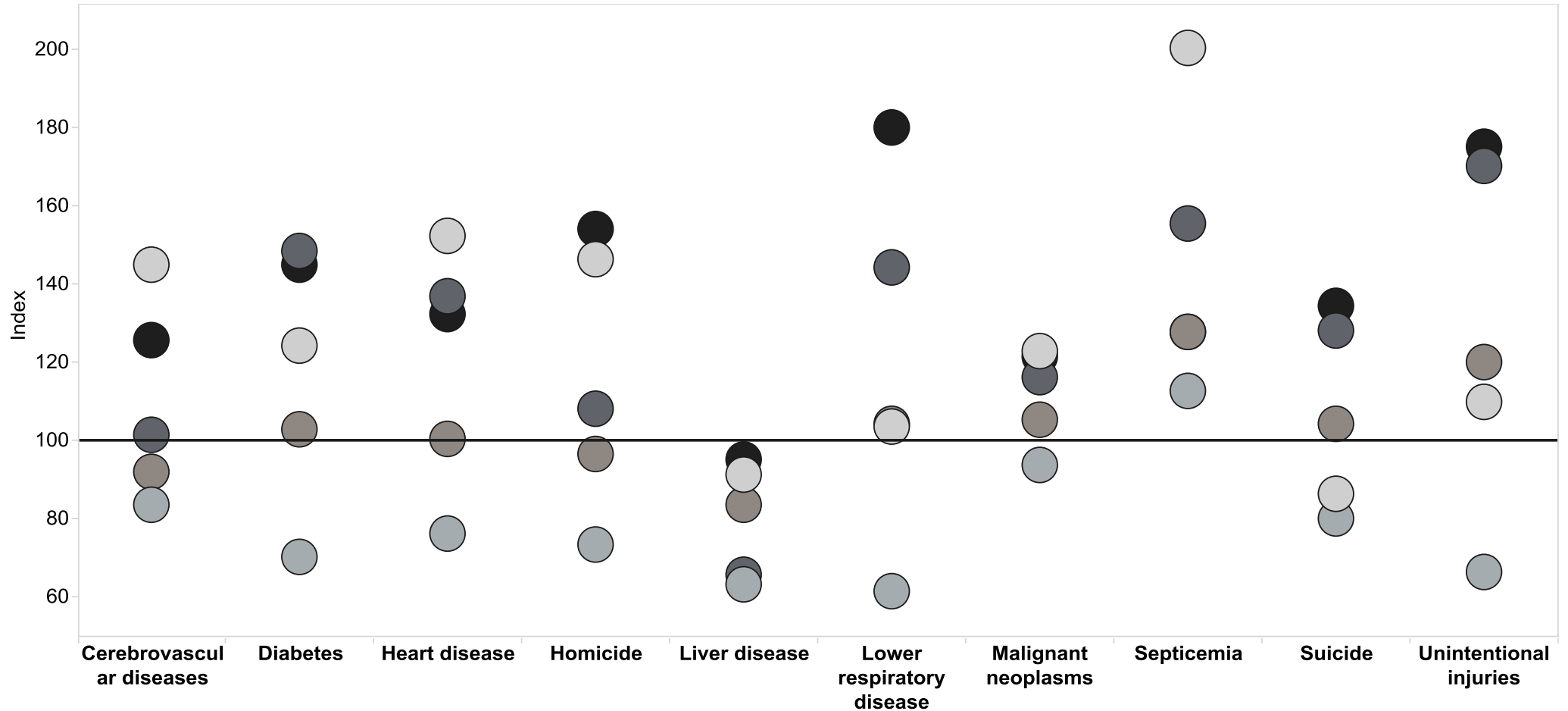
**Please select:**

Age 25 to 64  
 Sex Female  
 Region HHS Region #3 DE, DC, MD, PA, VA, WV

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 25 to 64, in HHS Region #3 DE, DC, MD, PA, VA, WV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.



Figure 24

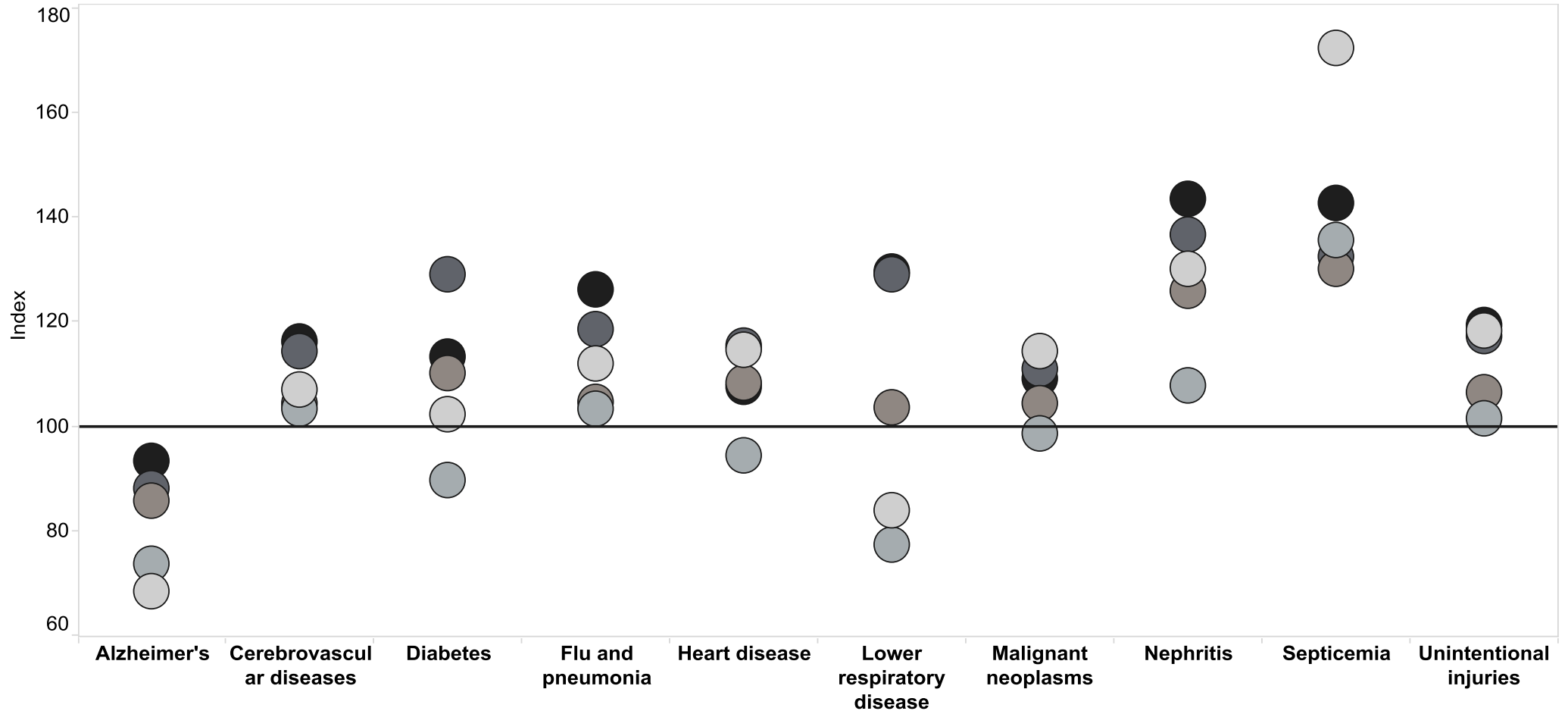
**Please select:**

**Age** 65 and older  
**Sex** Male  
**Region** HHS Region #3 DE, DC, MD, PA, VA, WV

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 65 and older, in HHS Region #3 DE, DC, MD, PA, VA, WV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 25

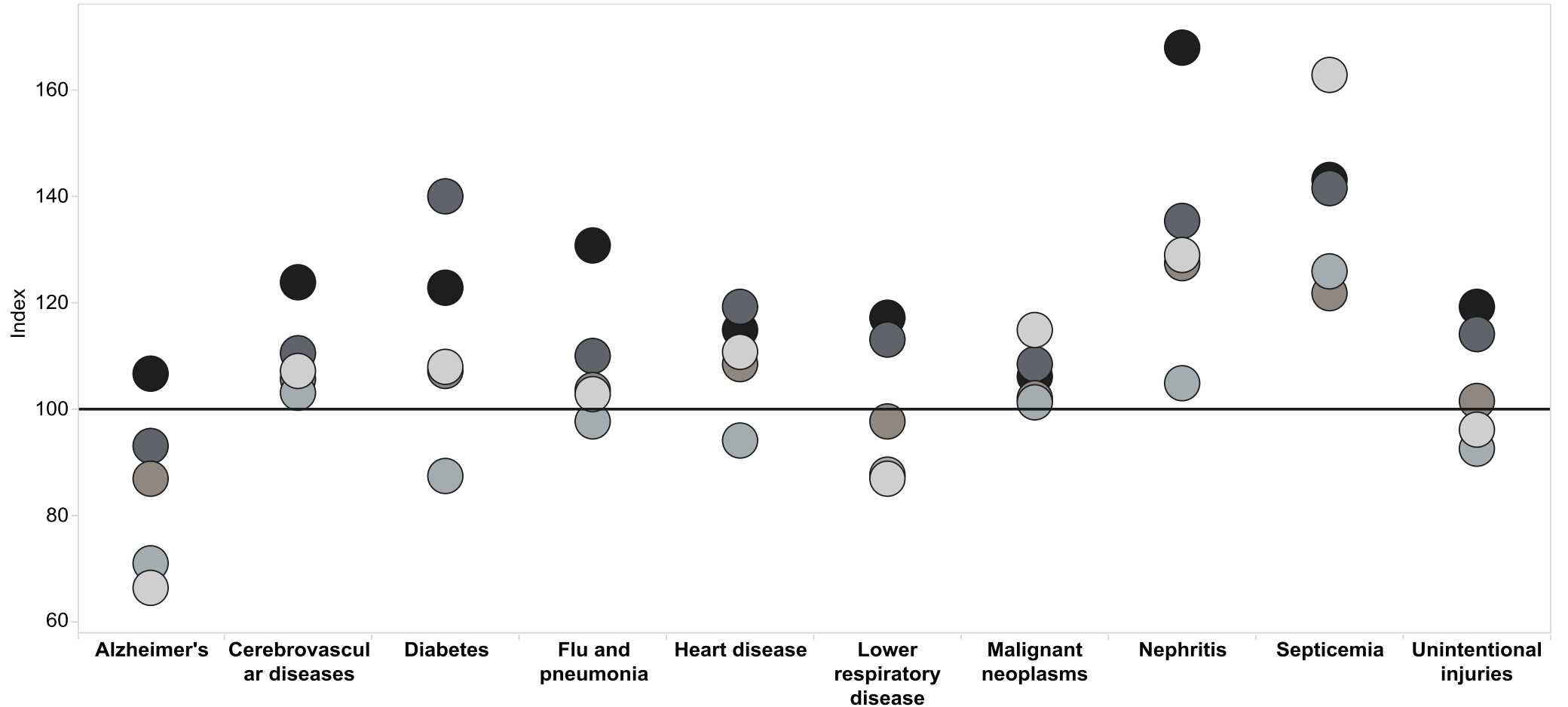
**Please select:**

Age 65 and older  
 Sex Female  
 Region HHS Region #3 DE, DC, MD, PA, VA, WV

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 65 and older, in HHS Region #3 DE, DC, MD, PA, VA, WV, by Rural-Urban Status: United States, 2011-2013**

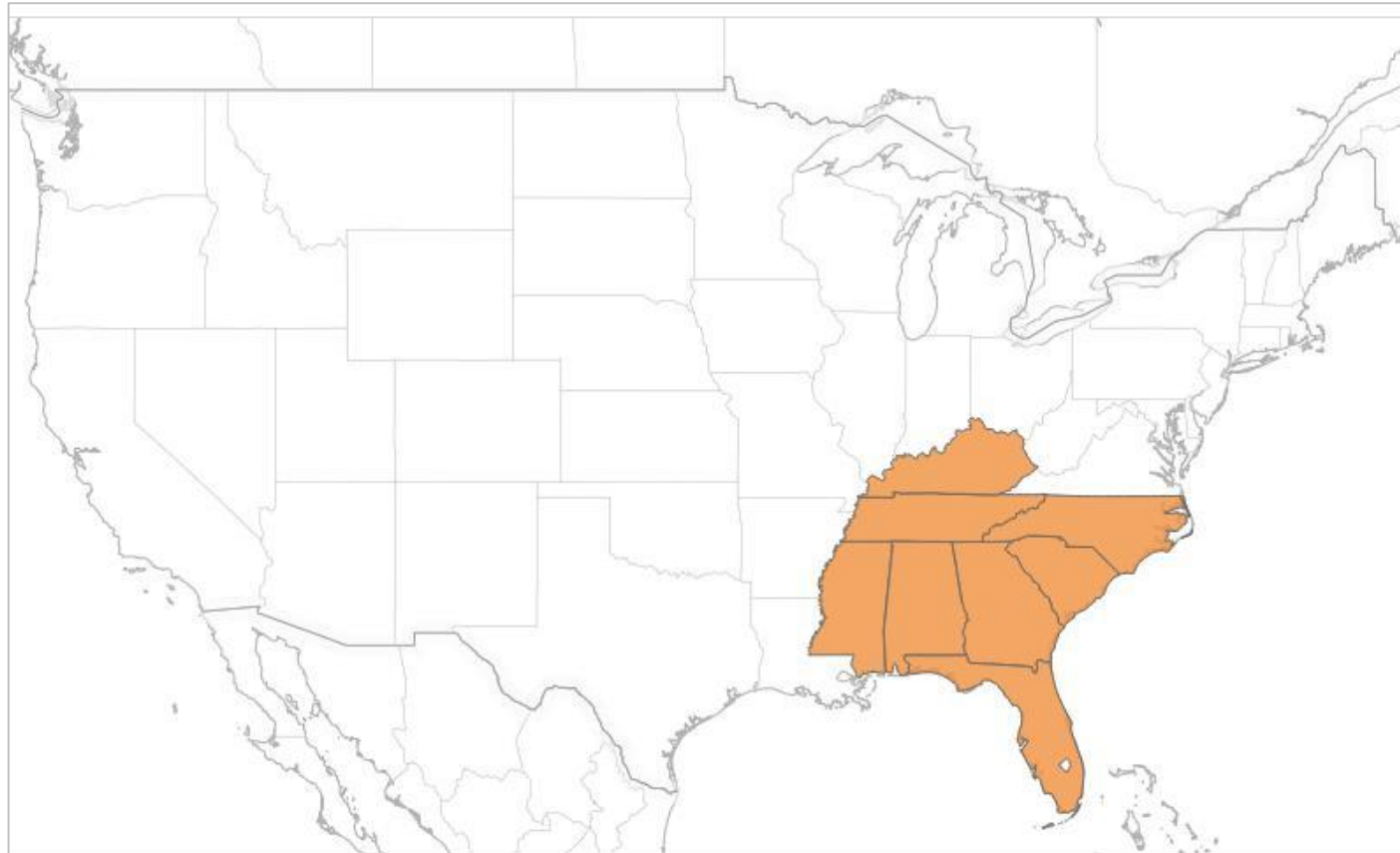
*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

# HHS Region 4

Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee



## Index for Regional Mortality Rates of Region 4, by Rural-Urban Status: United States, 2011-2013

### Persons:

- [Figure 26: Age Under 1 Years, Both Sexes](#)
- [Figure 27: Age 1 to 14 Years, Both Sexes](#)
- [Figure 28: Age 15 to 24 Years, Males](#)
- [Figure 29: Age 15 to 24 Years, Female](#)
- [Figure 30: Age 25 to 64 Years, Male](#)
- [Figure 31: Age 25 to 64 Years, Female](#)
- [Figure 32: Age  \$\geq\$ 65 Years, Male](#)
- [Figure 33: Age  \$\geq\$ 65 Years, Female](#)

Figure 26

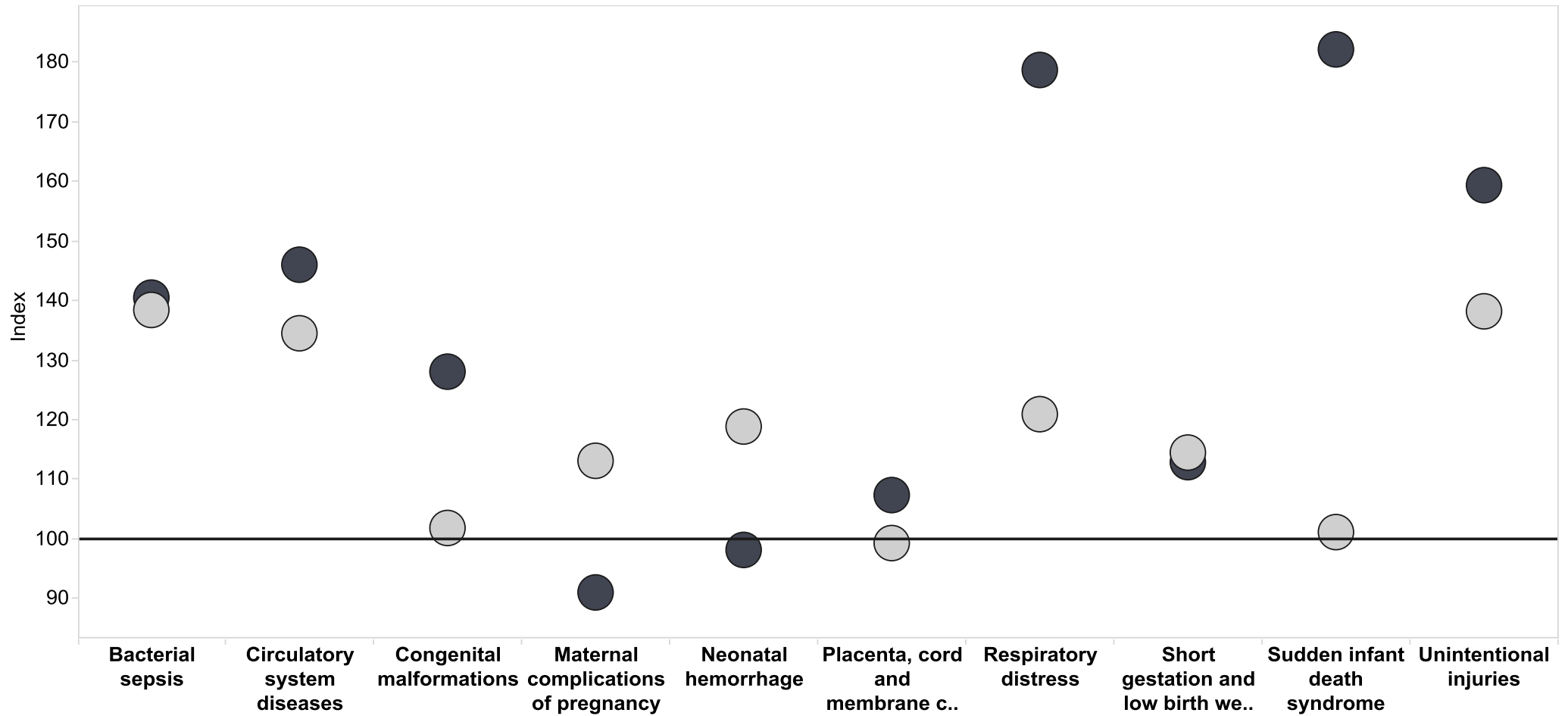
**Please select:**

Age Under 1  
 Sex Both sexes  
 Region HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age Under 1, in HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 27

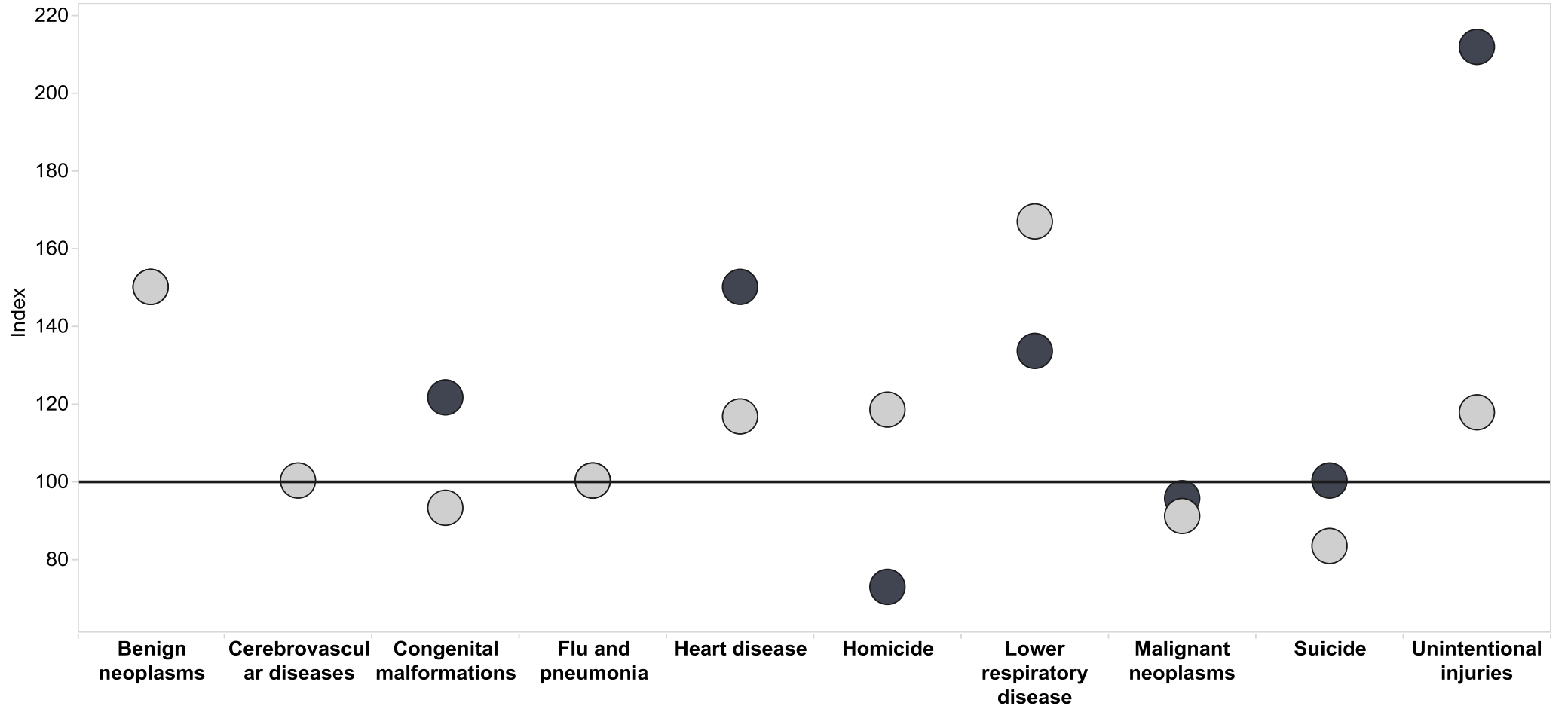
***Please select:***

Age 1 to 14  
 Sex Both sexes  
 Region HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age 1 to 14, in HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 28

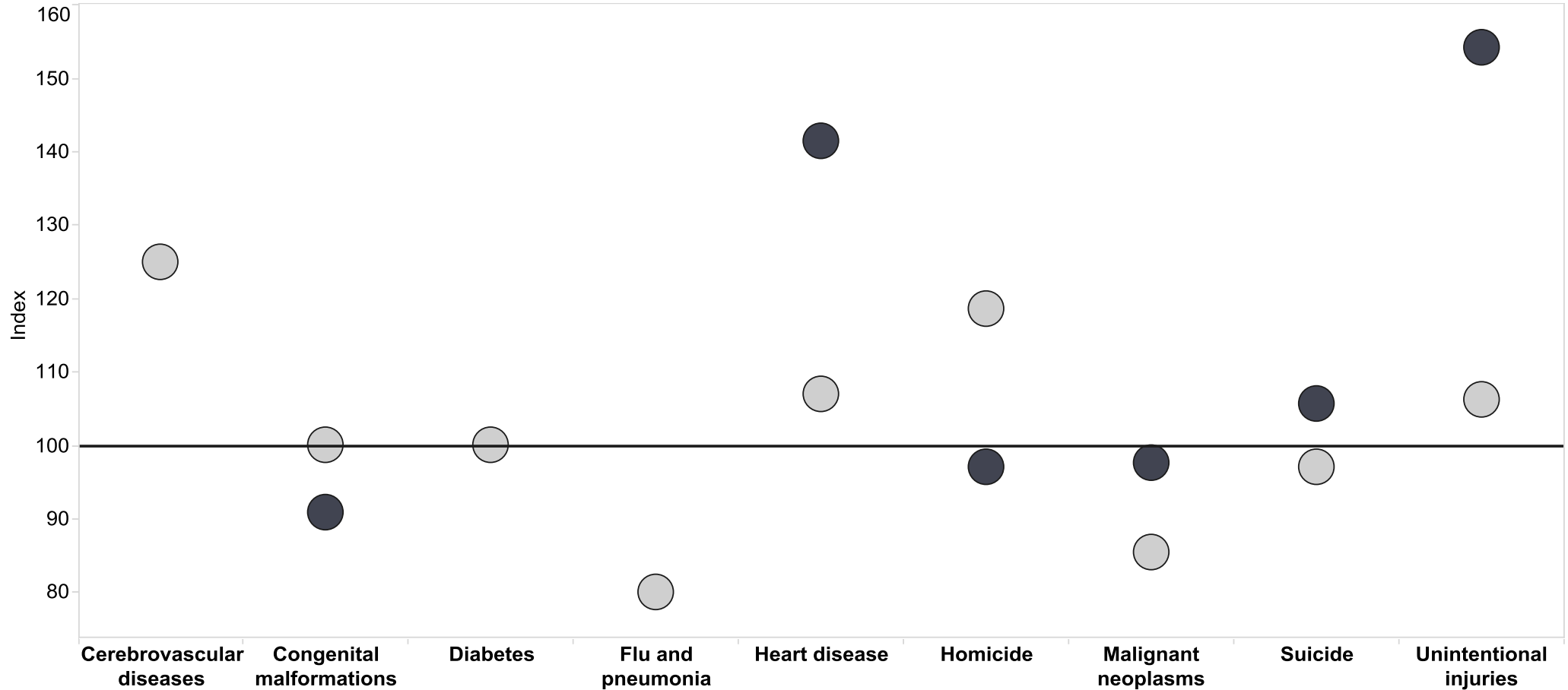
***Please select:***

Age 15 to 24  
Sex Male  
Region HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 15 to 24, in HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 29

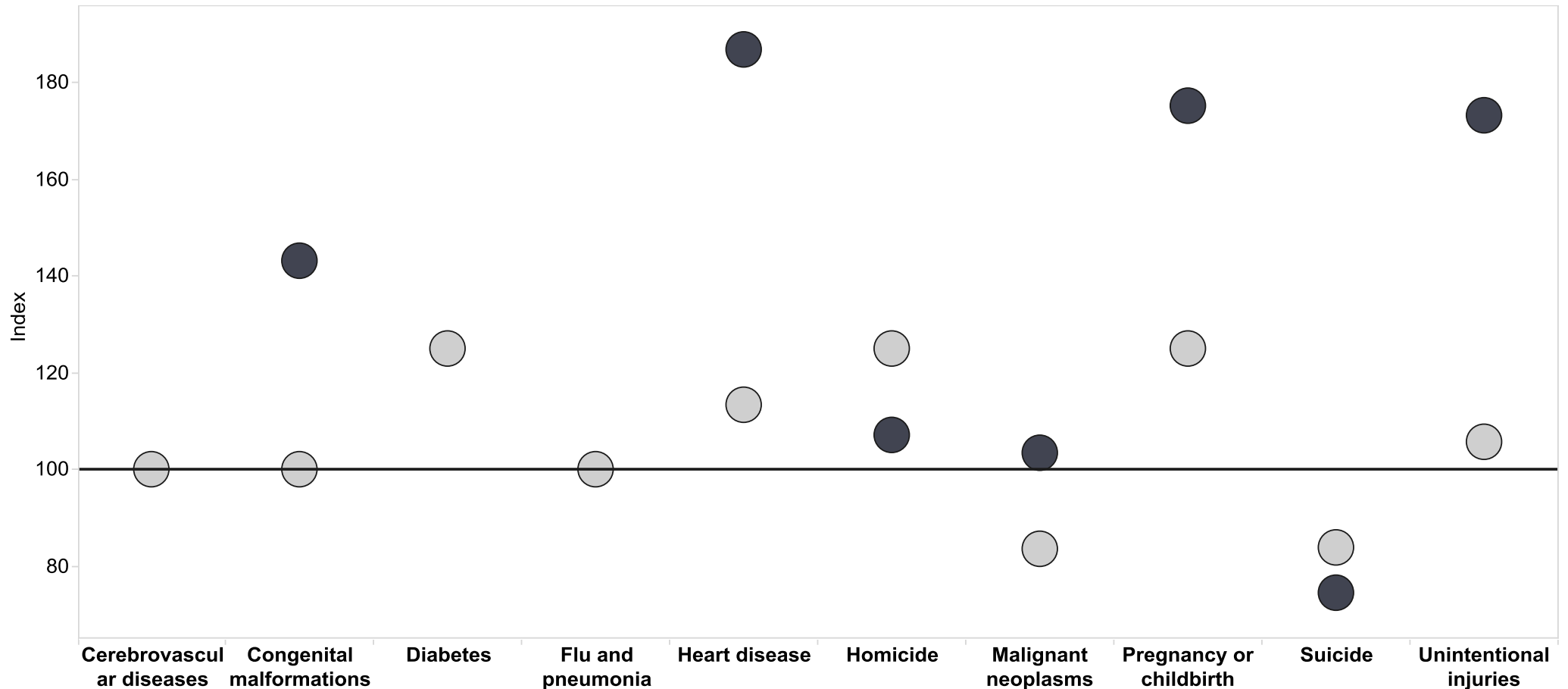
**Please select:**

Age 15 to 24  
 Sex Female  
 Region HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 15 to 24, in HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.



Figure 30

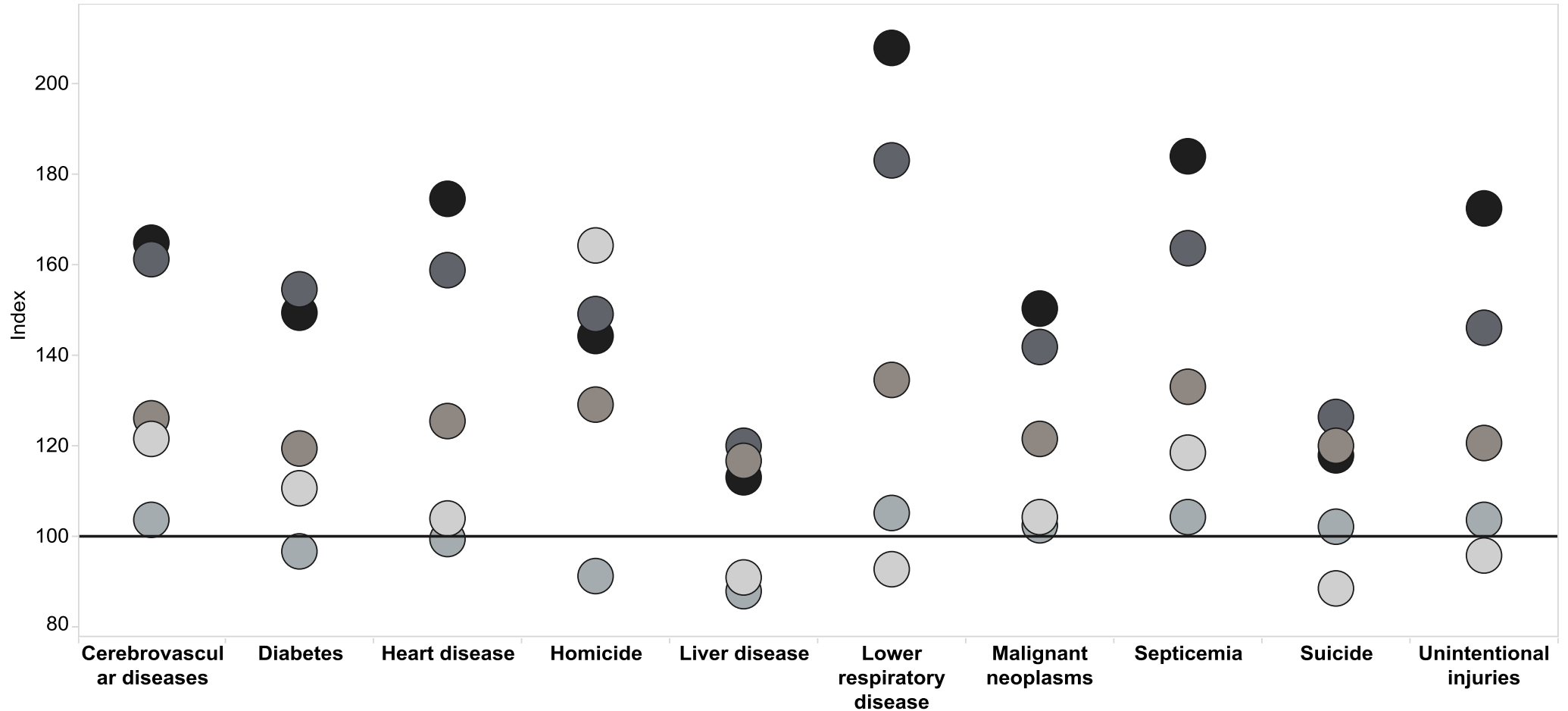
***Please select:***

Age 25 to 64  
 Sex Male  
 Region HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 25 to 64, in HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 31

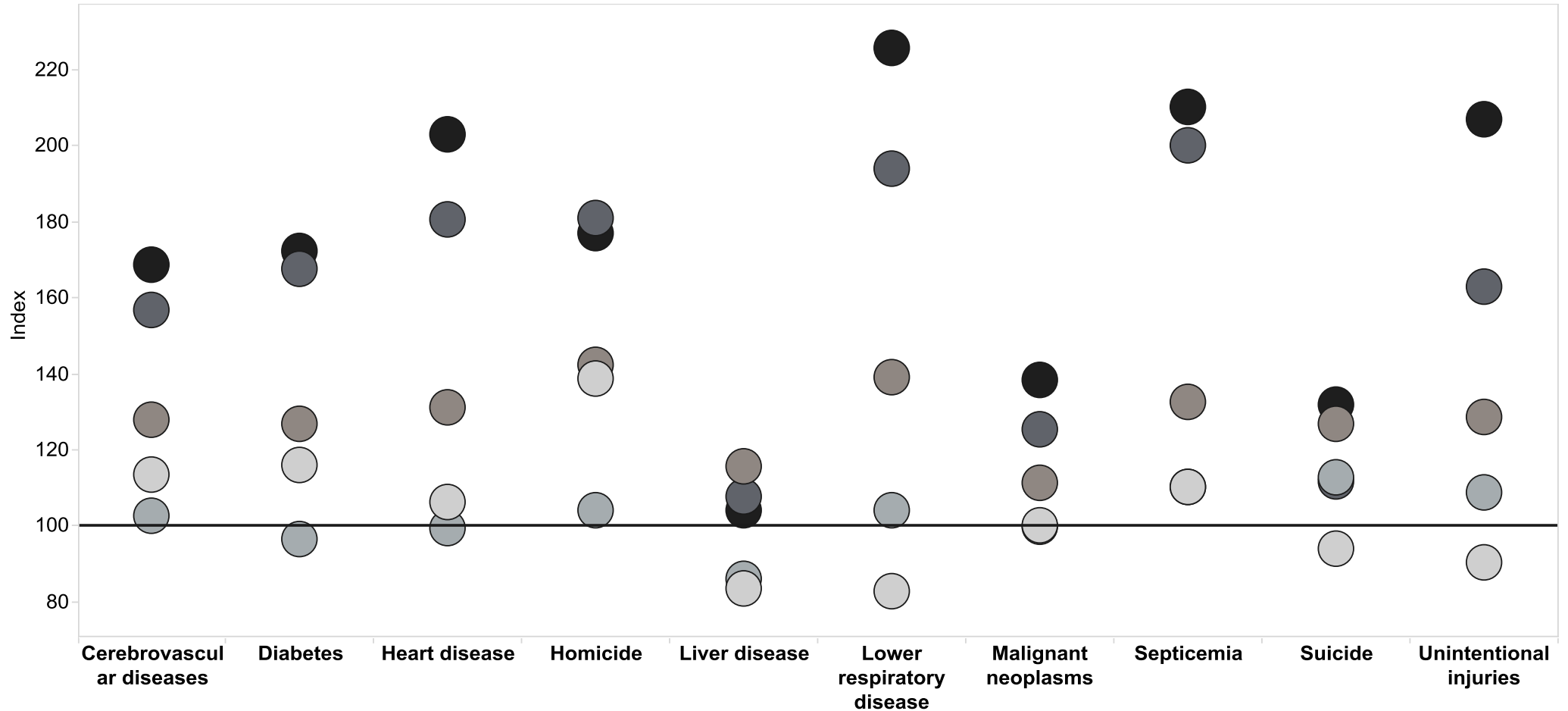
**Please select:**

Age 25 to 64  
 Sex Female  
 Region HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 25 to 64, in HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 32

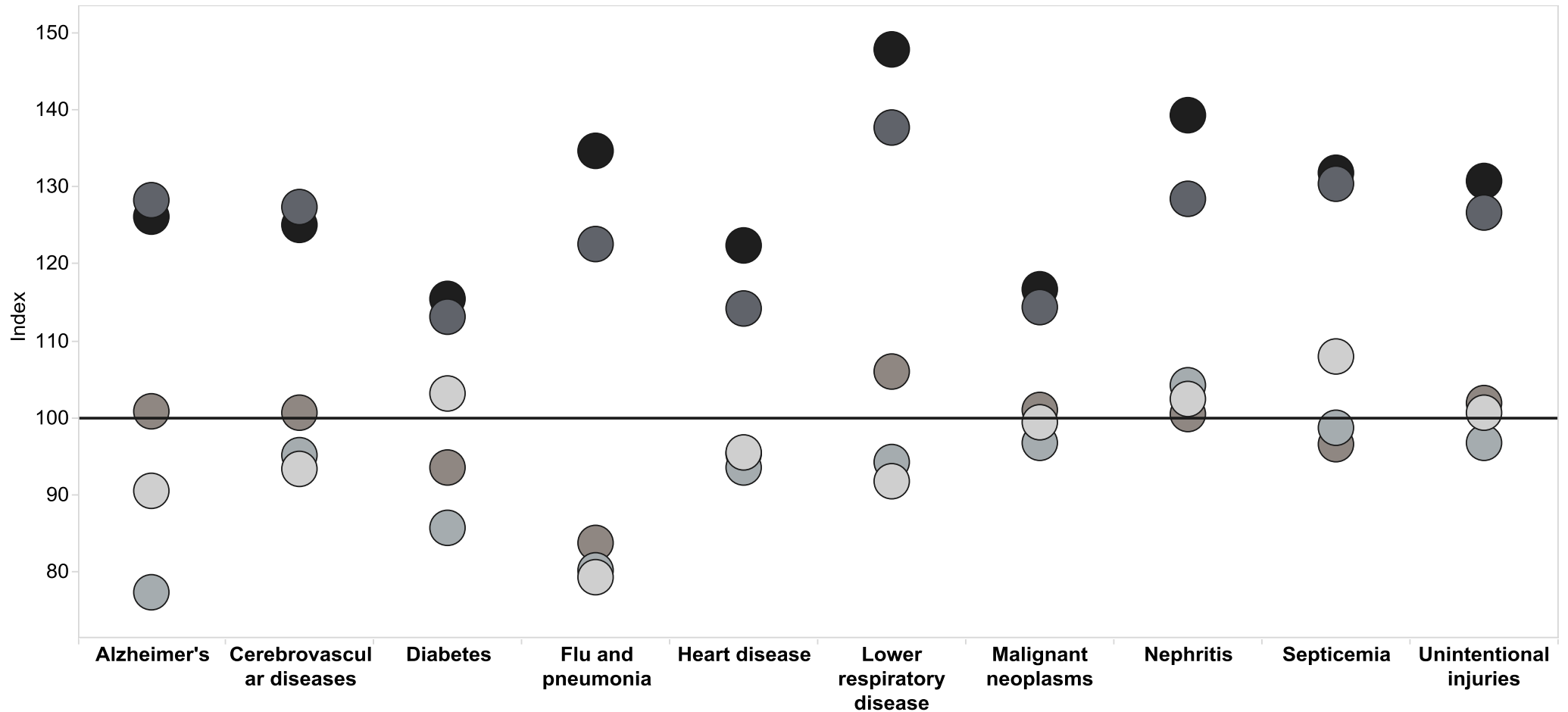
**Please select:**

**Age** 65 and older  
**Sex** Male  
**Region** HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN

**Rural-Urban Status**  
 □ Large Central  
 □ Large Fringe  
 □ Medium/Small Metro  
 □ Micropolitan  
 ■ Non-core

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 65 and older, in HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 33

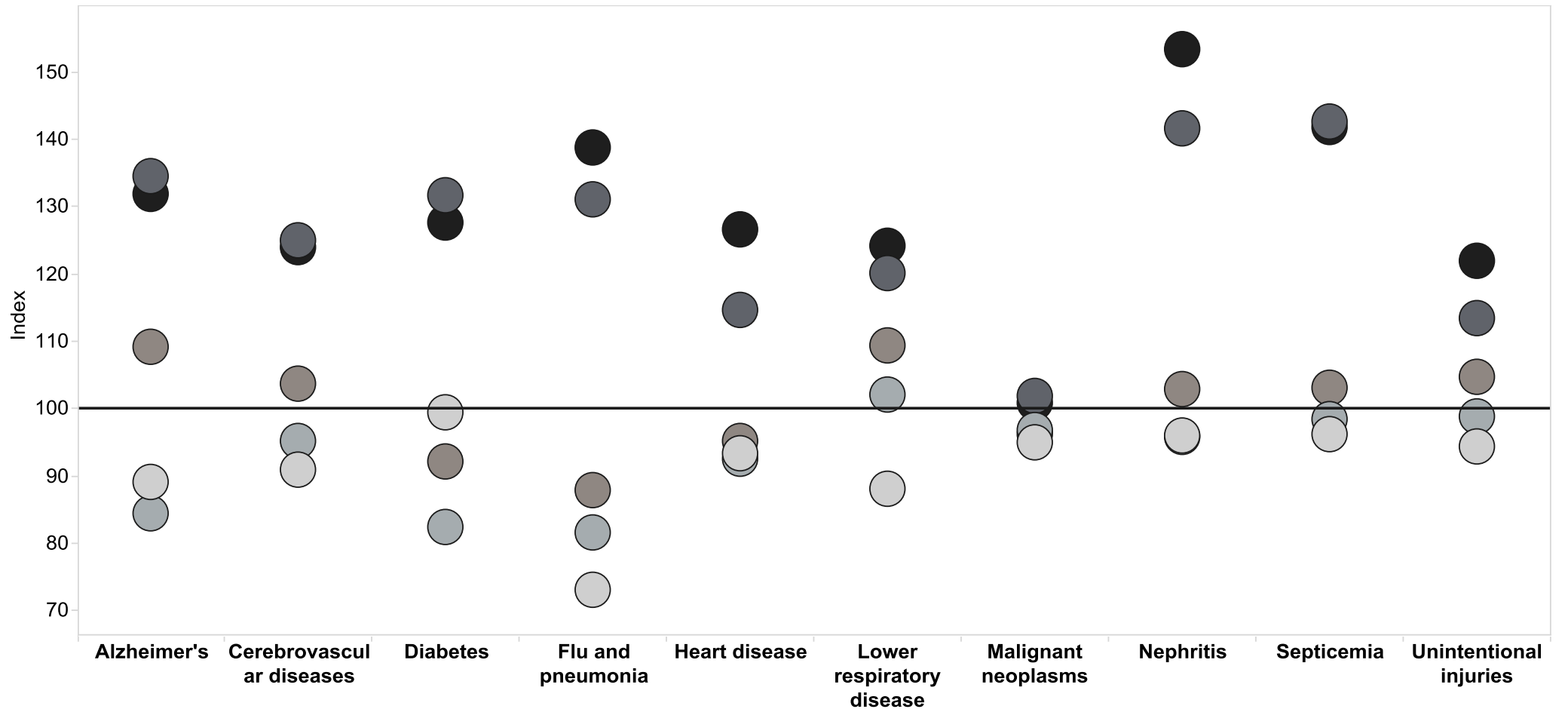
**Please select:**

**Age** 65 and older  
**Sex** Female  
**Region** HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN

**Rural-Urban Status**  
 □ Large Central  
 □ Large Fringe  
 □ Medium/Small Metro  
 □ Micropolitan  
 ■ Non-core

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 65 and older, in HHS Region #4 AL, FL, GA, KY, MS, NC, SC, TN, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

# HHS Region 5

Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin



## Index for Regional Mortality Rates of Region 5, by Rural-Urban Status: United States, 2011-2013

### Persons:

- [Figure 34: Age Under 1 Years, Both Sexes](#)
- [Figure 35: Age 1 to 14 Years, Both Sexes](#)
- [Figure 36: Age 15 to 24 Years, Males](#)
- [Figure 37: Age 15 to 24 Years, Female](#)
- [Figure 38: Age 25 to 64 Years, Male](#)
- [Figure 39: Age 25 to 64 Years, Female](#)
- [Figure 40: Age  \$\geq\$ 65 Years, Male](#)
- [Figure 41: Age  \$\geq\$ 65 Years, Female](#)

Figure 34

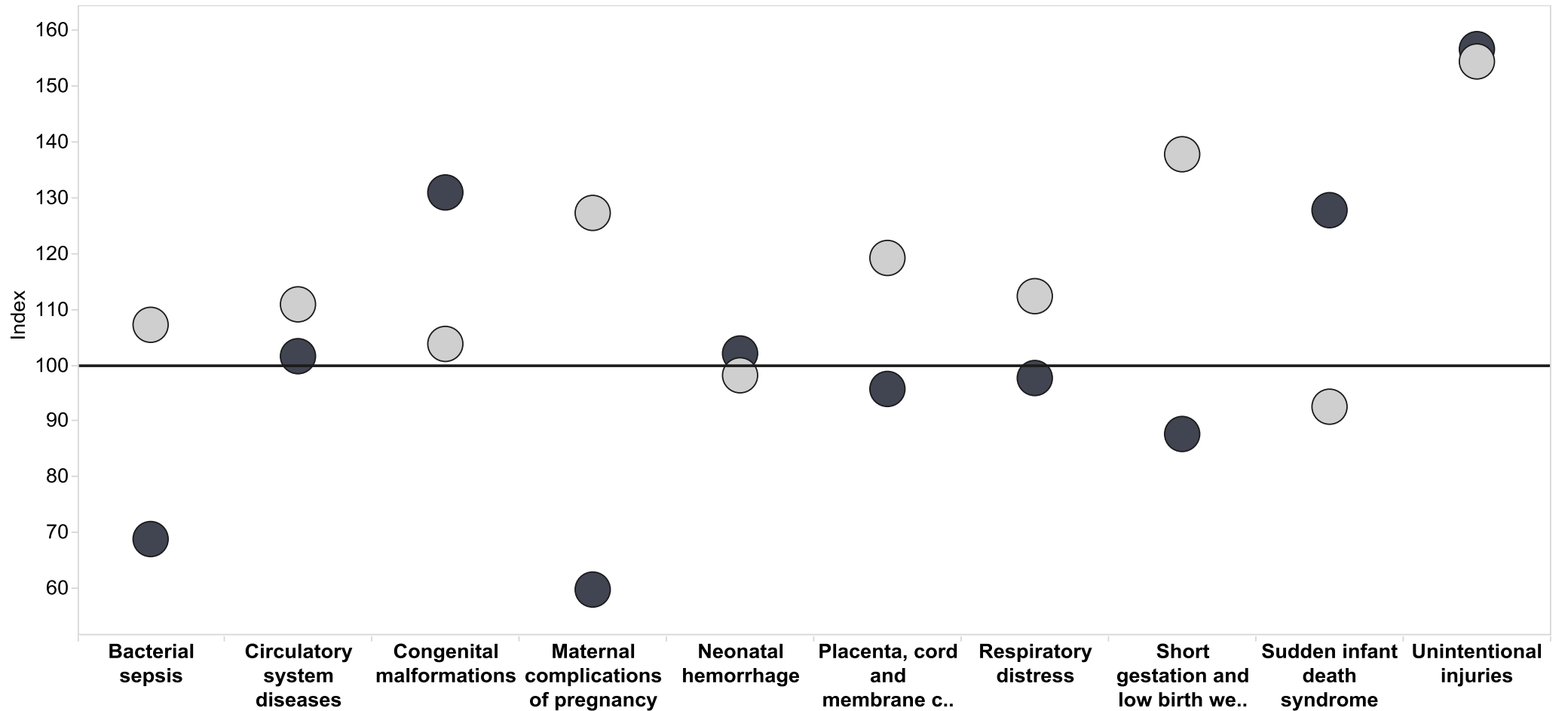
**Please select:**

Age Under 1  
 Sex Both sexes  
 Region HHS Region #5 IL, IN, MI, MN, OH, WI

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age Under 1, in HHS Region #5 IL, IN, MI, MN, OH, WI, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 35

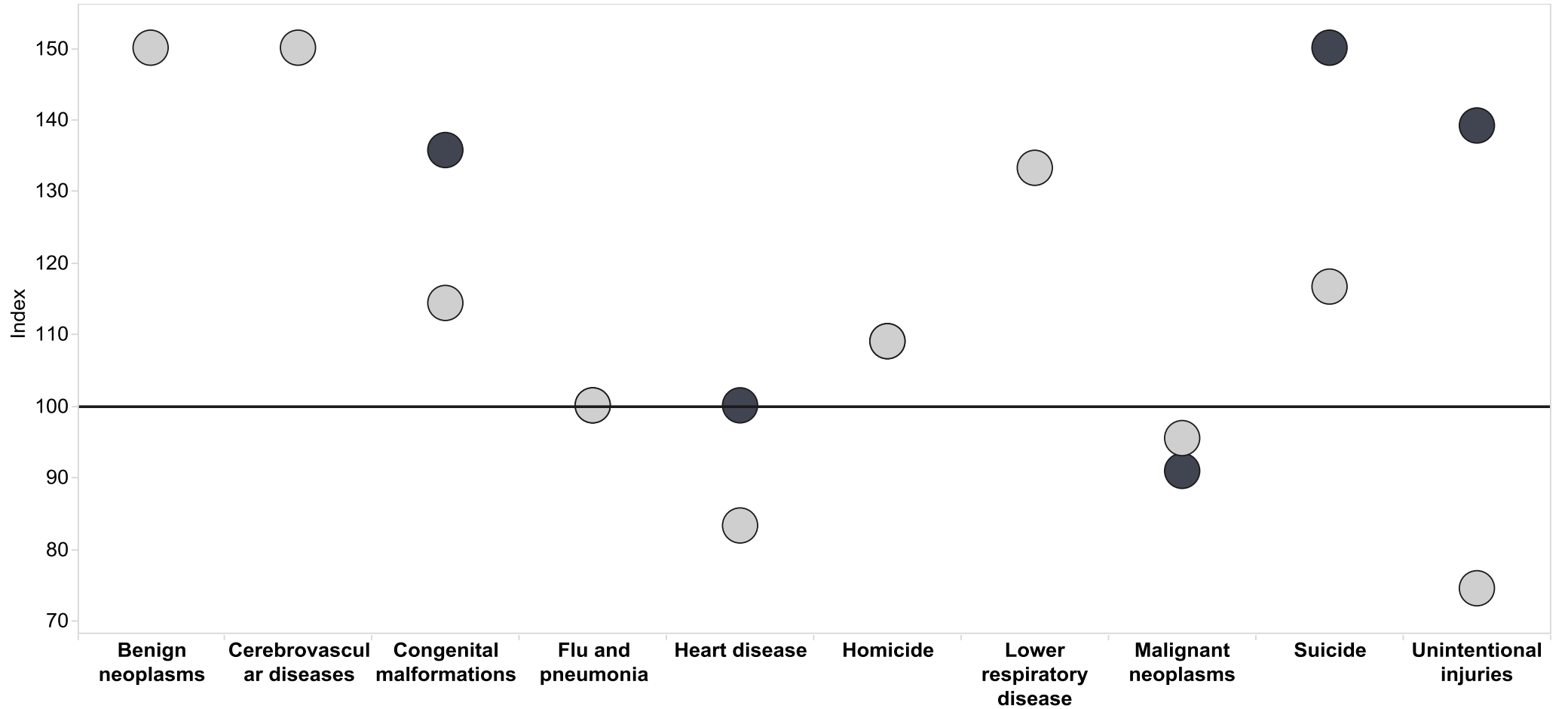
***Please select:***

Age 1 to 14  
Sex Both sexes  
Region HHS Region #5 IL, IN, MI, MN, OH, WI

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age 1 to 14, in HHS Region #5 IL, IN, MI, MN, OH, WI, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.



Figure 36

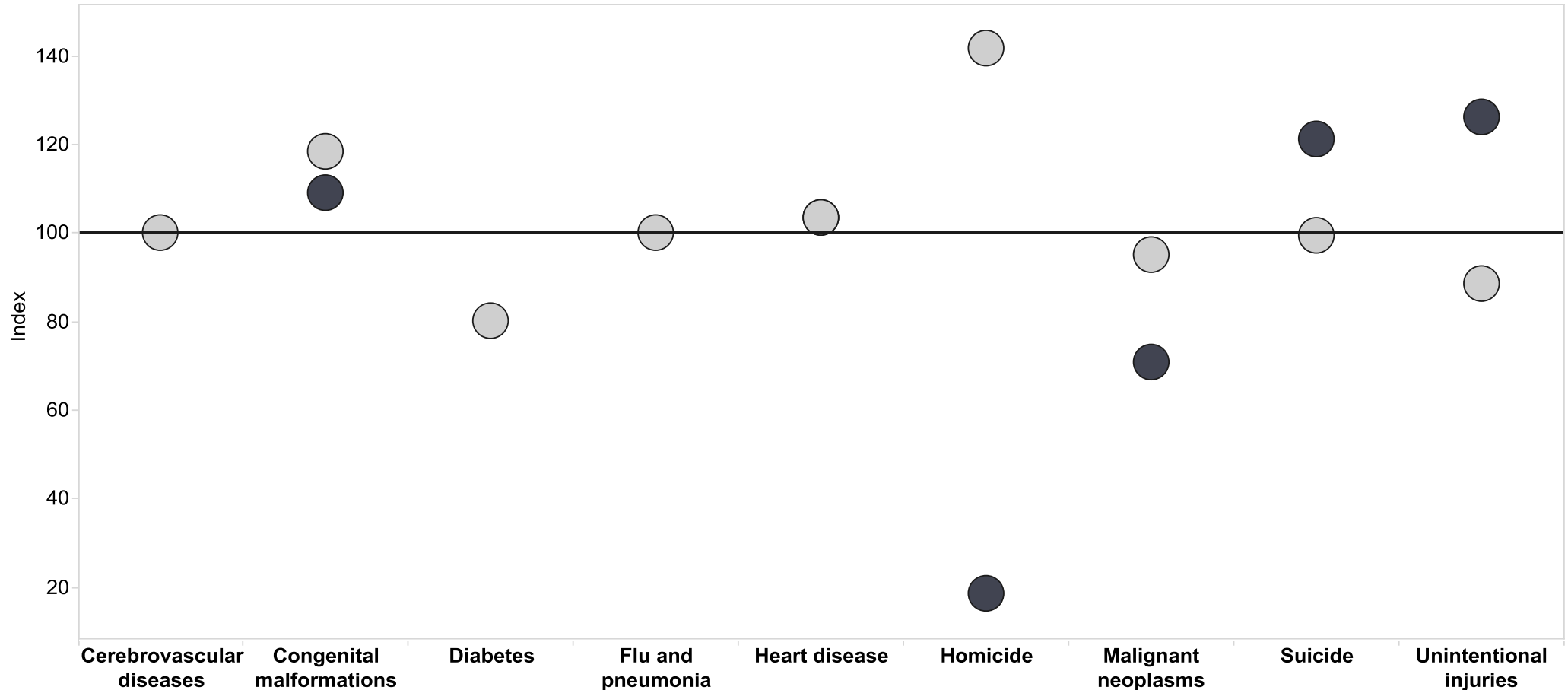
***Please select:***

Age 15 to 24  
Sex Male  
Region HHS Region #5 IL, IN, MI, MN, OH, WI

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 15 to 24, in HHS Region #5 IL, IN, MI, MN, OH, WI, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 37

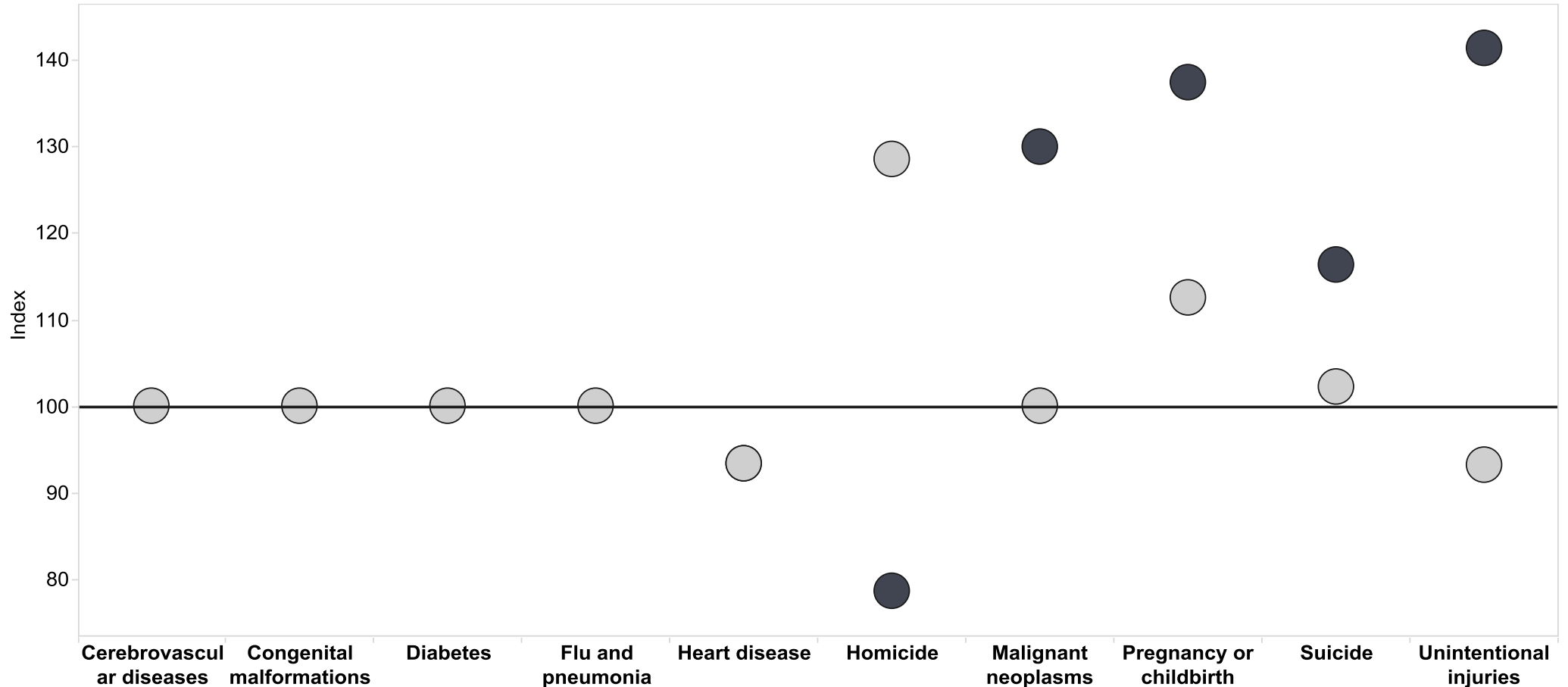
***Please select:***

Age 15 to 24  
Sex Female  
Region HHS Region #5 IL, IN, MI, MN, OH, WI

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 15 to 24, in HHS Region #5 IL, IN, MI, MN, OH, WI, by Rural-Urban Status: United States, 2011-2013

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 38

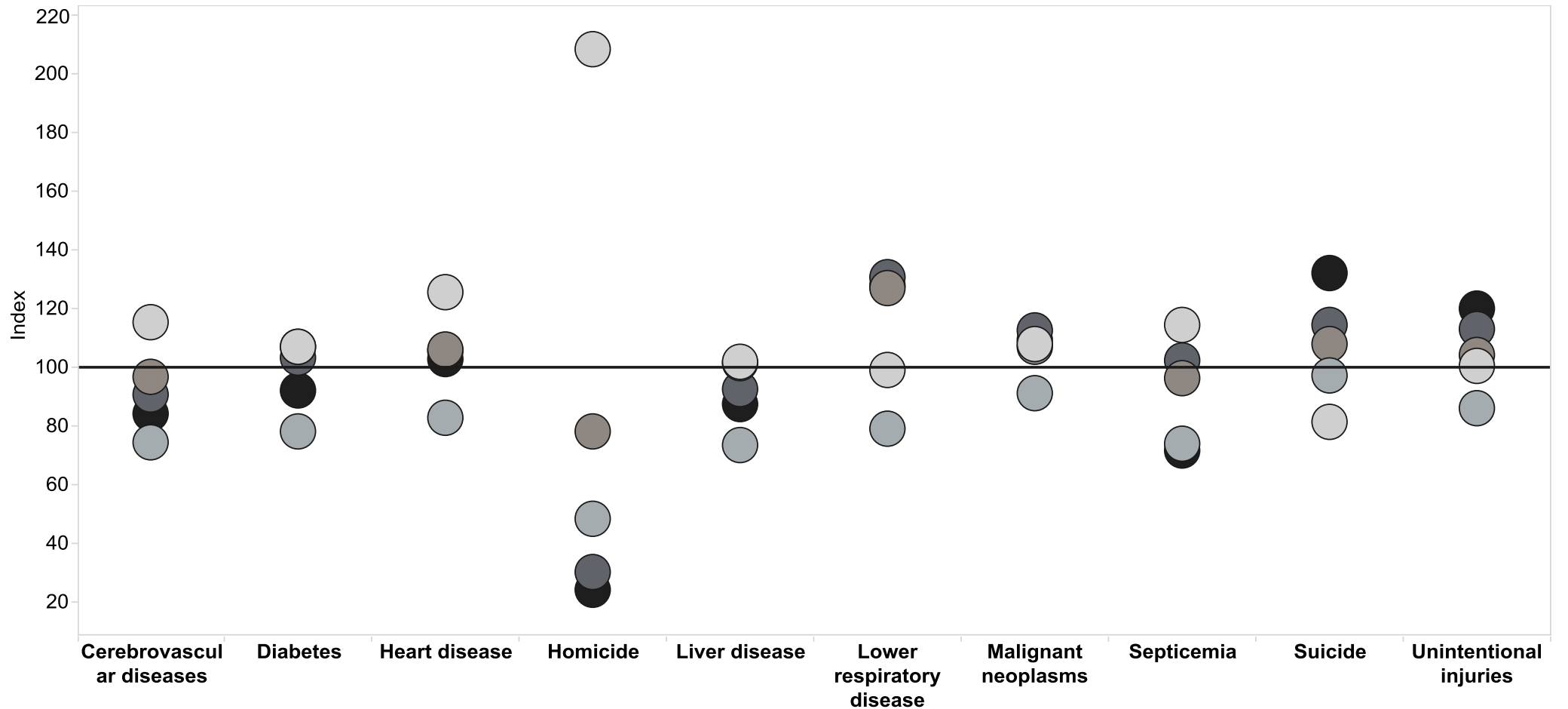
***Please select:***

Age 25 to 64  
 Sex Male  
 Region HHS Region #5 IL, IN, MI, MN, OH, WI

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 25 to 64, in HHS Region #5 IL, IN, MI, MN, OH, WI, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 39

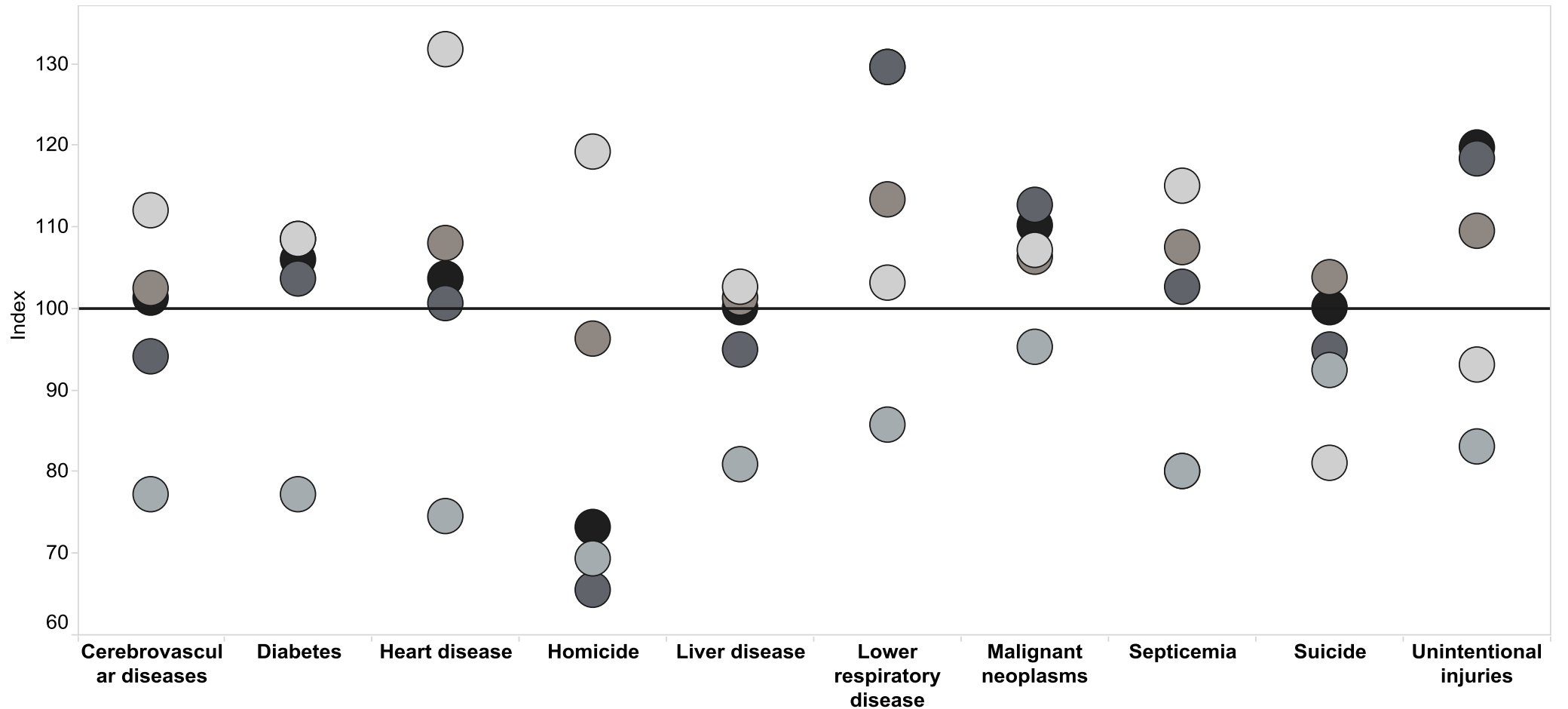
***Please select:***

Age 25 to 64  
 Sex Female  
 Region HHS Region #5 IL, IN, MI, MN, OH, WI

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 25 to 64, in HHS Region #5 IL, IN, MI, MN, OH, WI, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 40

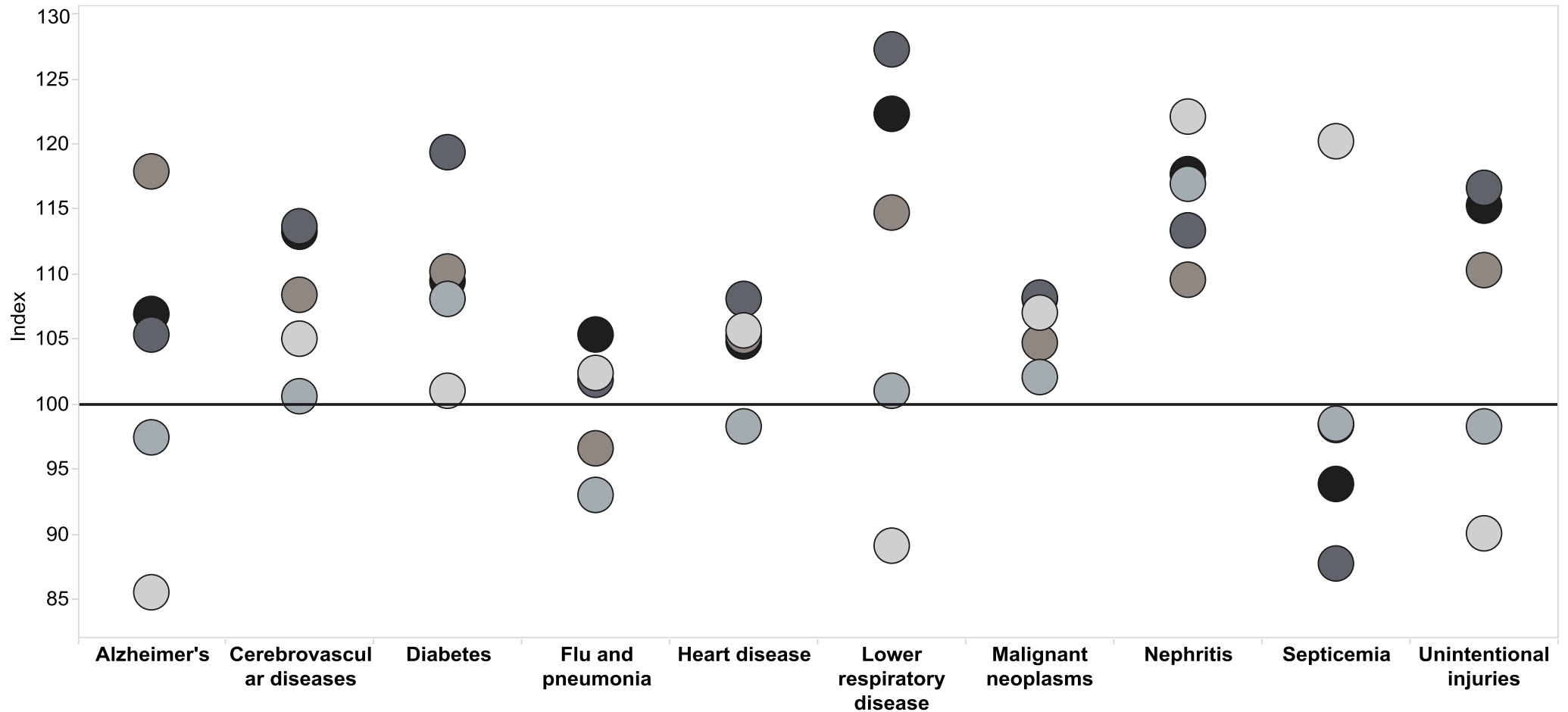
***Please select:***

**Age** 65 and older  
**Sex** Male  
**Region** HHS Region #5 IL, IN, MI, MN, OH, WI

**Rural-Urban Status**  
 □ Large Central  
 □ Large Fringe  
 □ Medium/Small Metro  
 □ Micropolitan  
 ■ Non-core

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 65 and older, in HHS Region #5 IL, IN, MI, MN, OH, WI, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 41

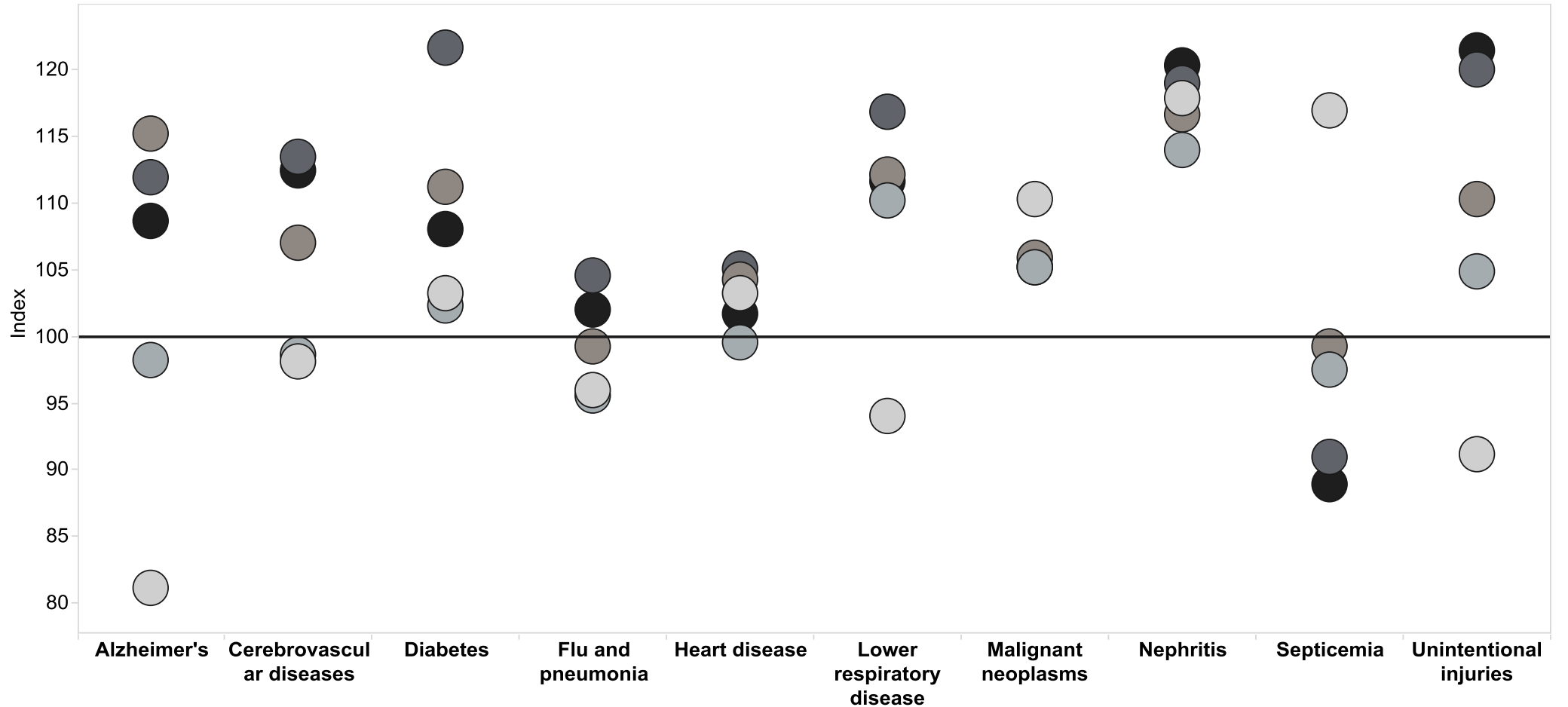
***Please select:***

**Age** 65 and older  
**Sex** Female  
**Region** HHS Region #5 IL, IN, MI, MN, OH, WI

**Rural-Urban Status**  
 □ Large Central  
 □ Large Fringe  
 □ Medium/Small Metro  
 □ Micropolitan  
 ■ Non-core

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 65 and older, in HHS Region #5 IL, IN, MI, MN, OH, WI, by Rural-Urban Status: United States, 2011-2013**

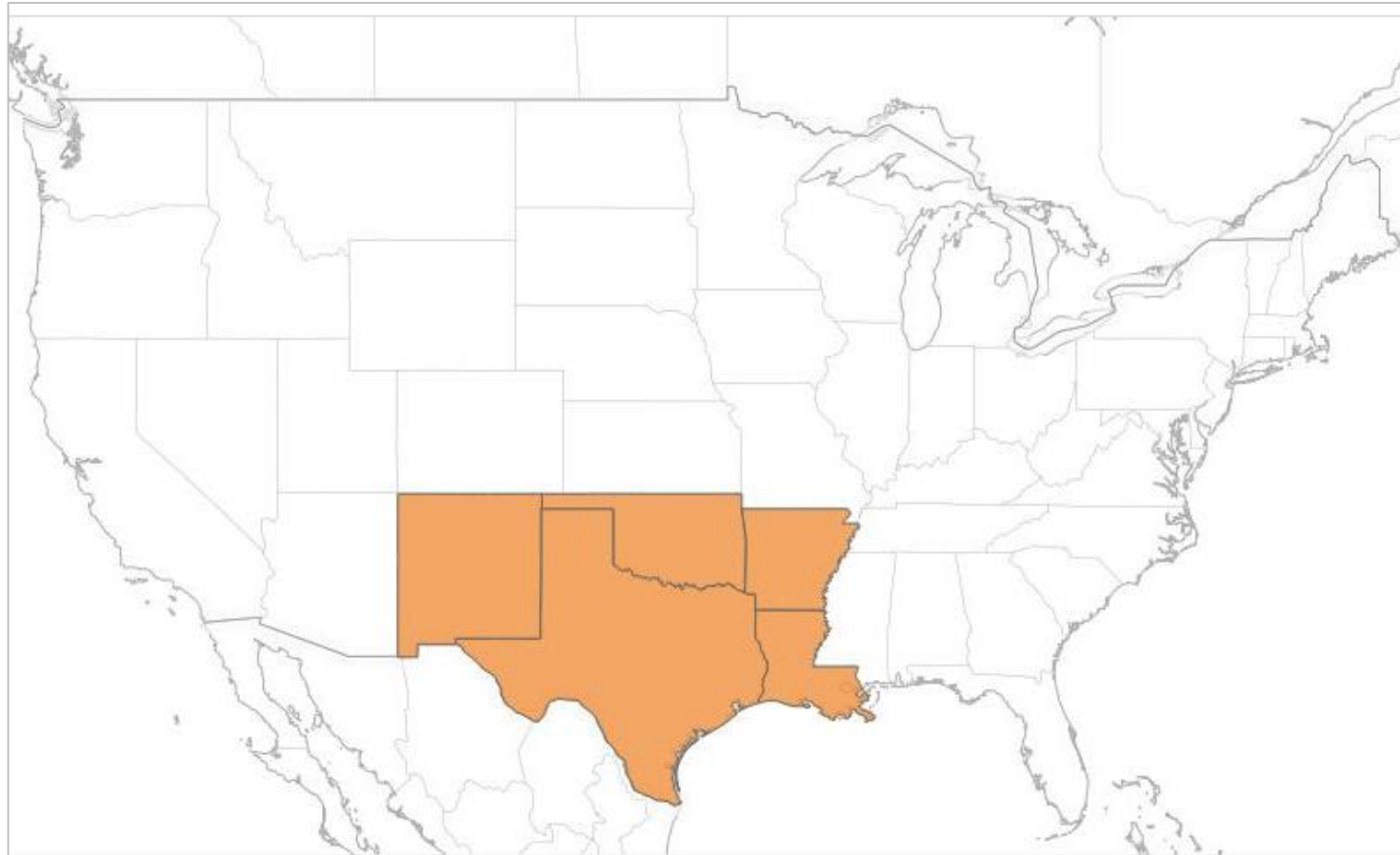
*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

# HHS Region 6

Arkansas, Louisiana, New Mexico, Oklahoma, and Texas



## Index for Regional Mortality Rates of Region 6, by Rural-Urban Status: United States, 2011-2013

### Persons:

- [Figure 42: Age Under 1 Years, Both Sexes](#)
- [Figure 43: Age 1 to 14 Years, Both Sexes](#)
- [Figure 44: Age 15 to 24 Years, Males](#)
- [Figure 45: Age 15 to 24 Years, Female](#)
- [Figure 46: Age 25 to 64 Years, Male](#)
- [Figure 47: Age 25 to 64 Years, Female](#)
- [Figure 48: Age  \$\geq\$ 65 Years, Male](#)
- [Figure 49: Age  \$\geq\$ 65 Years, Female](#)



Figure 42

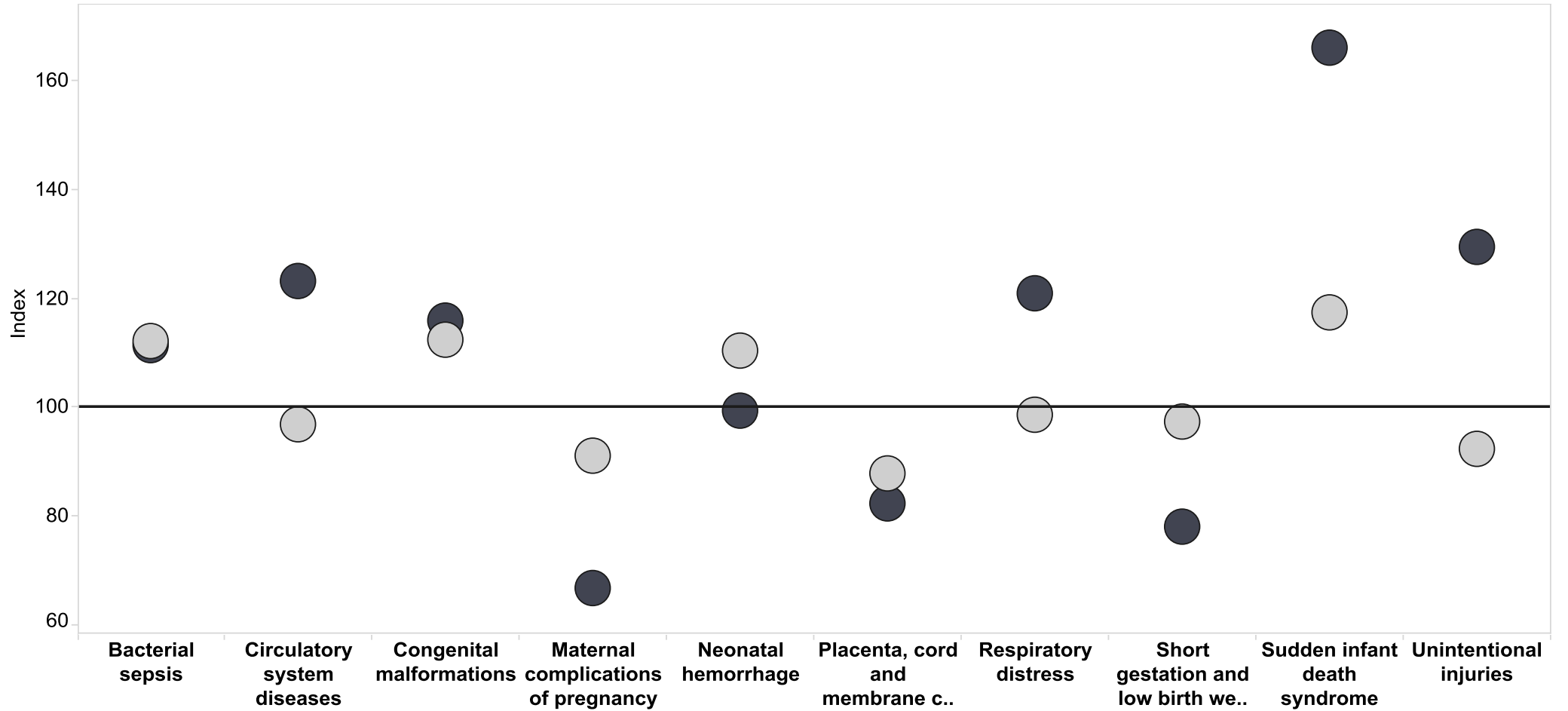
***Please select:***

Age Under 1  
 Sex Both sexes  
 Region HHS Region #6 AR, LA, NM, OK, TX

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age Under 1, in HHS Region #6 AR, LA, NM, OK, TX, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 43

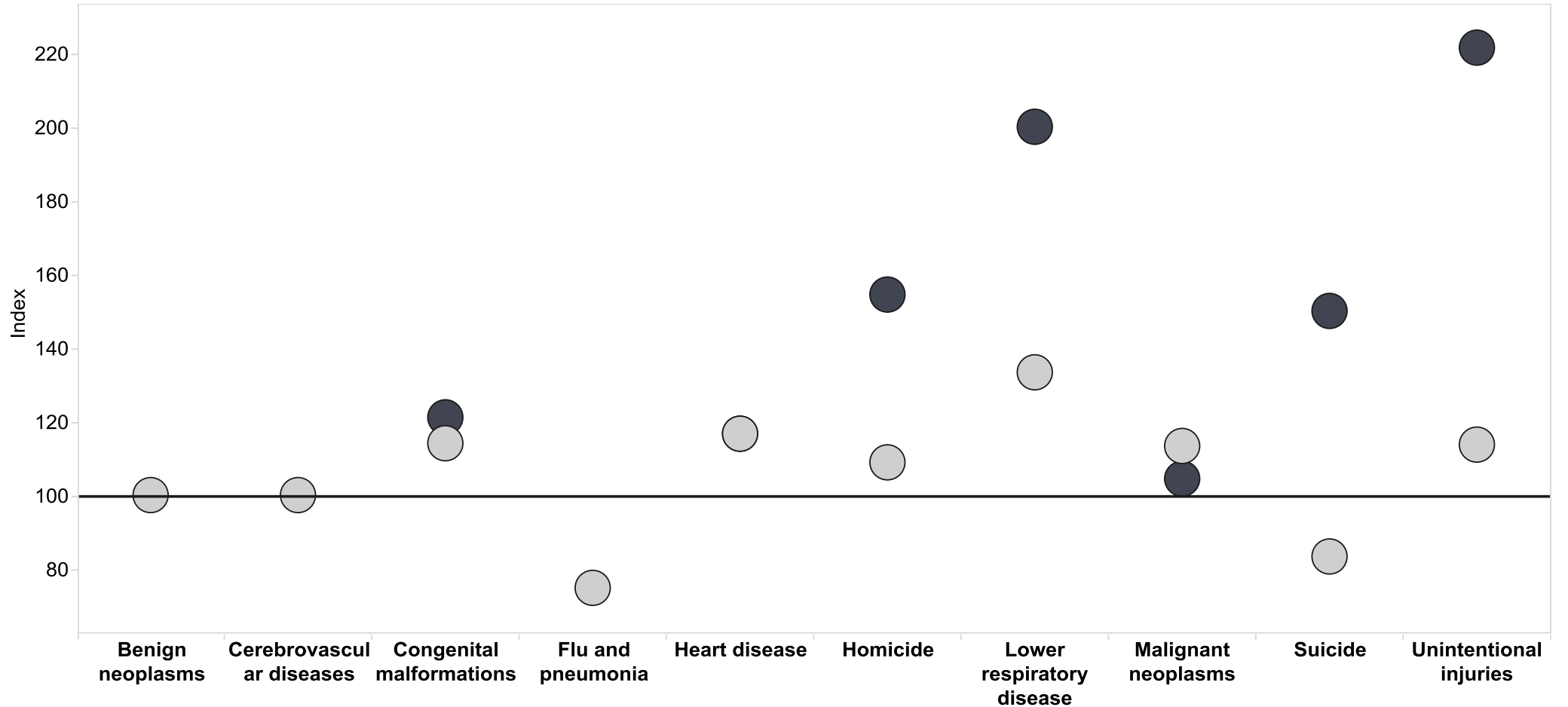
**Please select:**

Age 1 to 14  
 Sex Both sexes  
 Region HHS Region #6 AR, LA, NM, OK, TX

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age 1 to 14, in HHS Region #6 AR, LA, NM, OK, TX, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 44

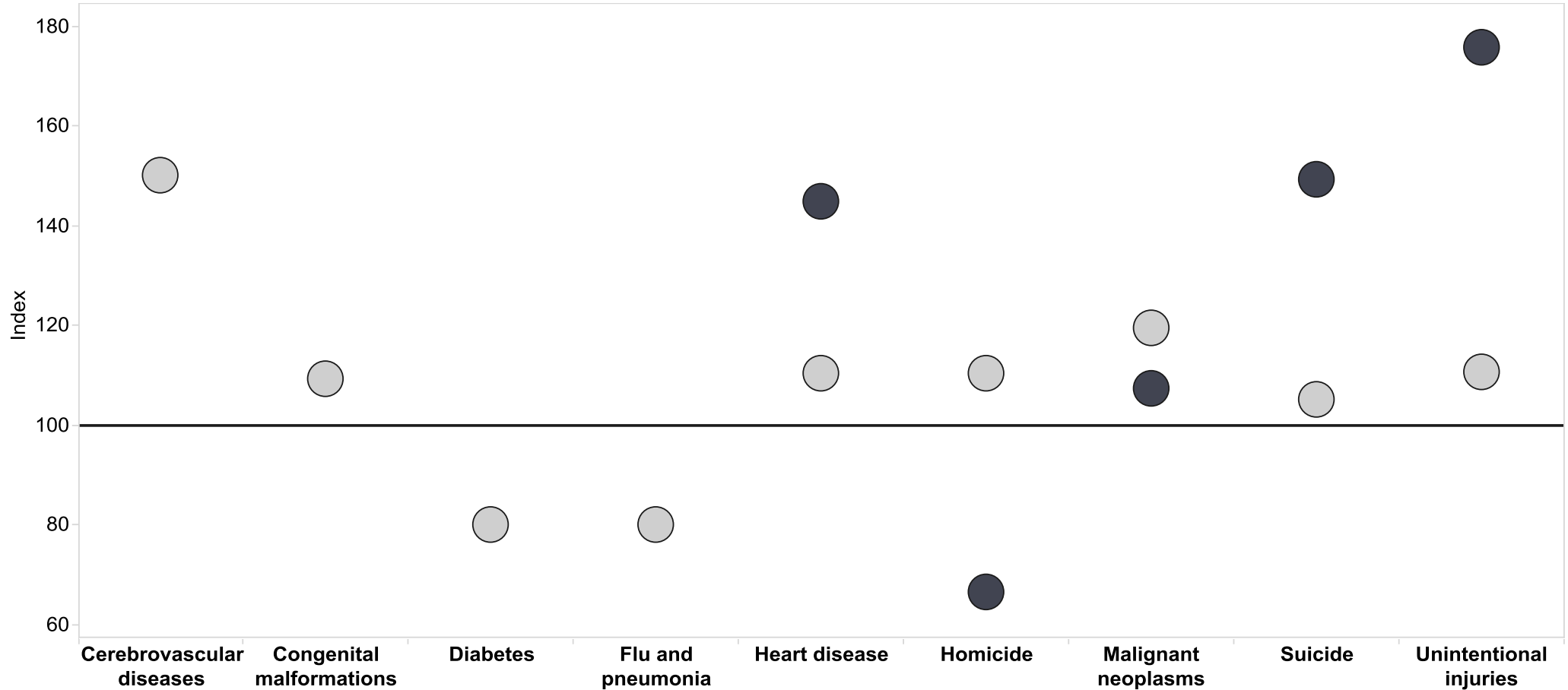
***Please select:***

Age 15 to 24  
Sex Male  
Region HHS Region #6 AR, LA, NM, OK, TX

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 15 to 24, in HHS Region #6 AR, LA, NM, OK, TX, by Rural-Urban Status: United States, 2011-2013

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 45

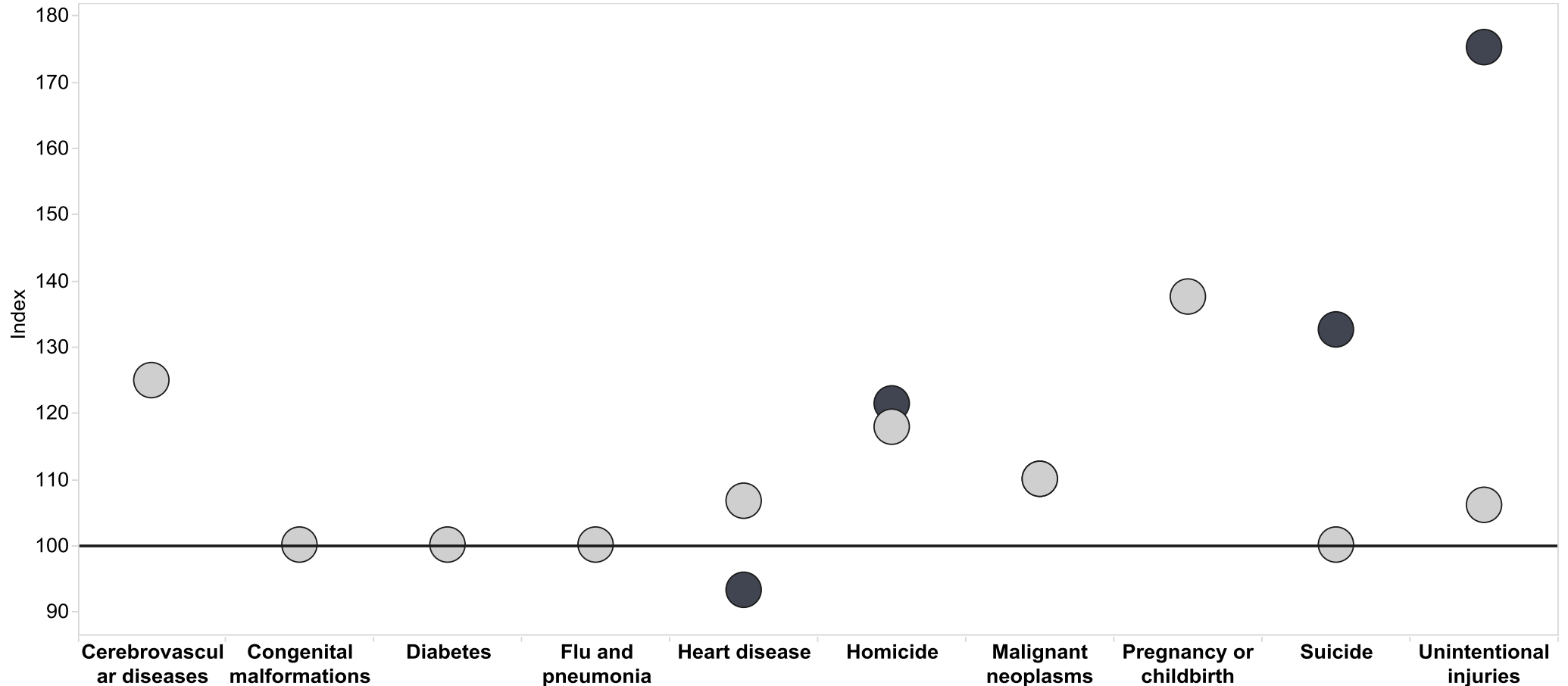
***Please select:***

Age 15 to 24  
Sex Female  
Region HHS Region #6 AR, LA, NM, OK, TX

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 15 to 24, in HHS Region #6 AR, LA, NM, OK, TX, by Rural-Urban Status: United States, 2011-2013

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 46

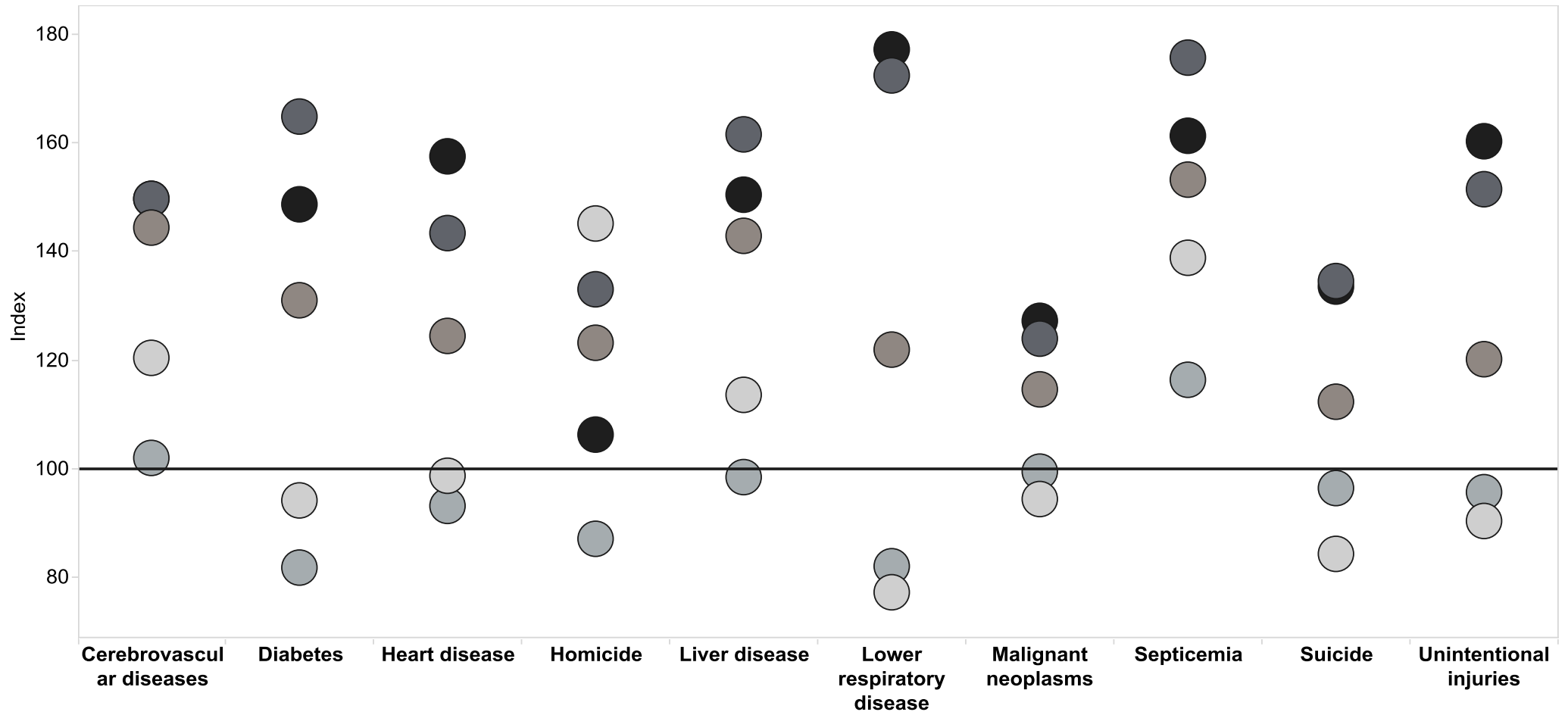
***Please select:***

Age 25 to 64  
 Sex Male  
 Region HHS Region #6 AR, LA, NM, OK, TX

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 25 to 64, in HHS Region #6 AR, LA, NM, OK, TX, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 47

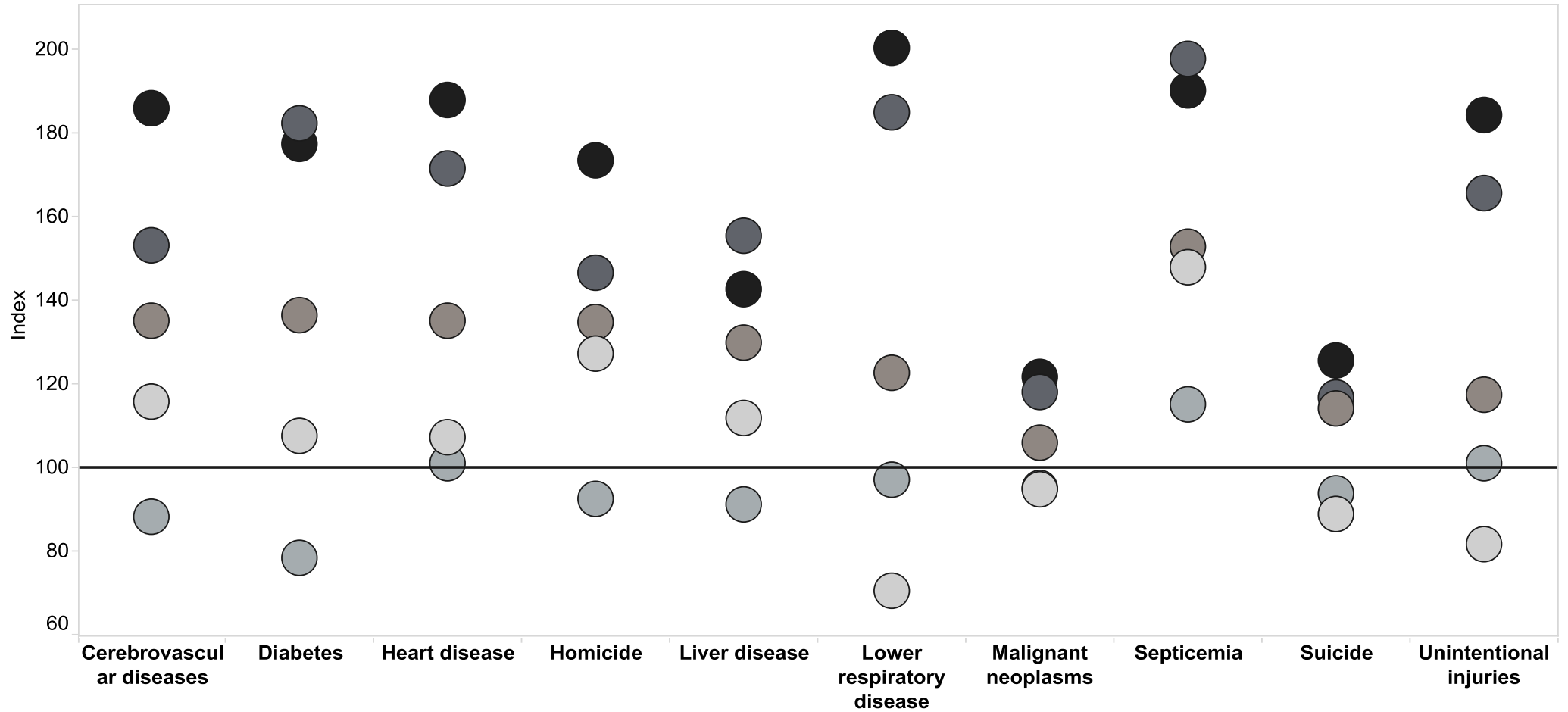
**Please select:**

Age 25 to 64  
 Sex Female  
 Region HHS Region #6 AR, LA, NM, OK, TX

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 25 to 64, in HHS Region #6 AR, LA, NM, OK, TX, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 48

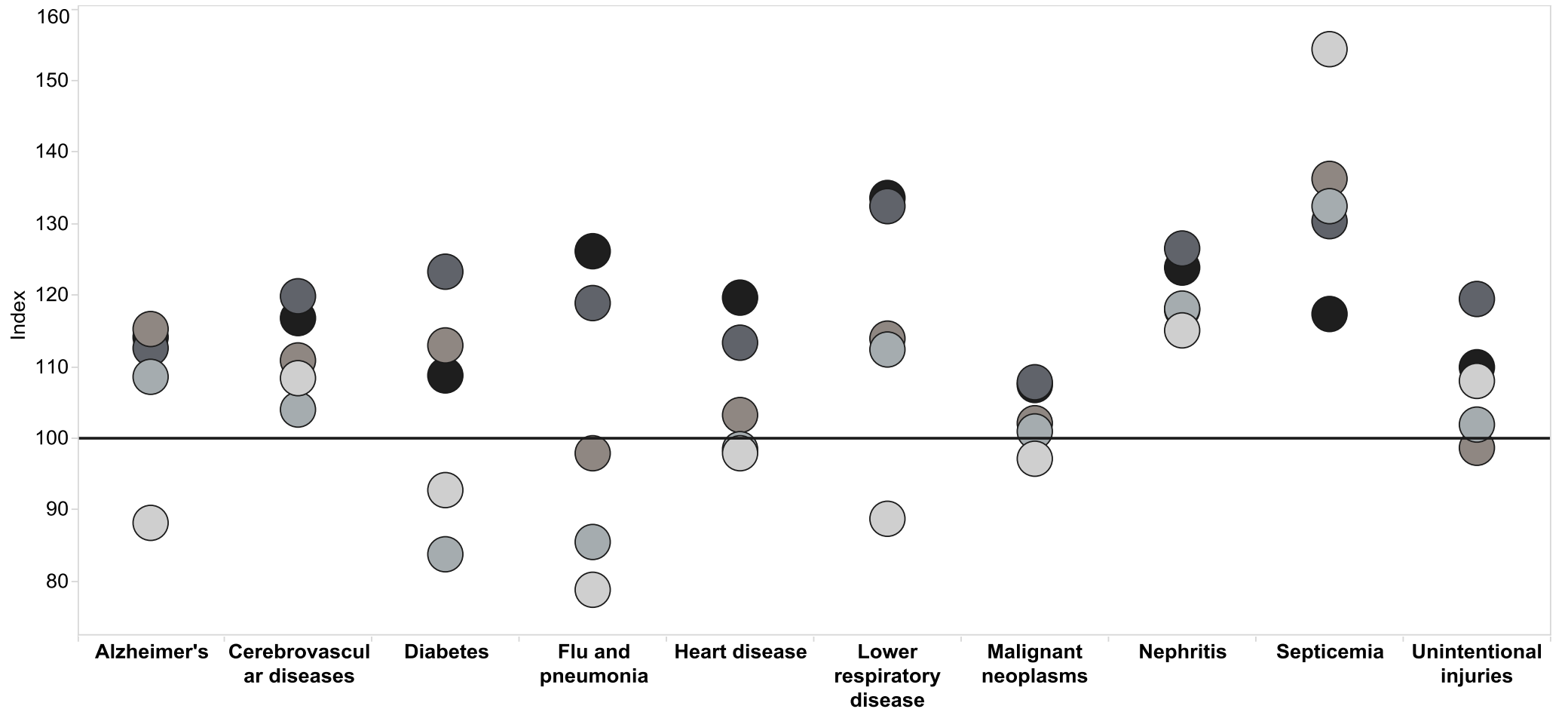
***Please select:***

Age 65 and older  
 Sex Male  
 Region HHS Region #6 AR, LA, NM, OK, TX

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 65 and older, in HHS Region #6 AR, LA, NM, OK, TX, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 49

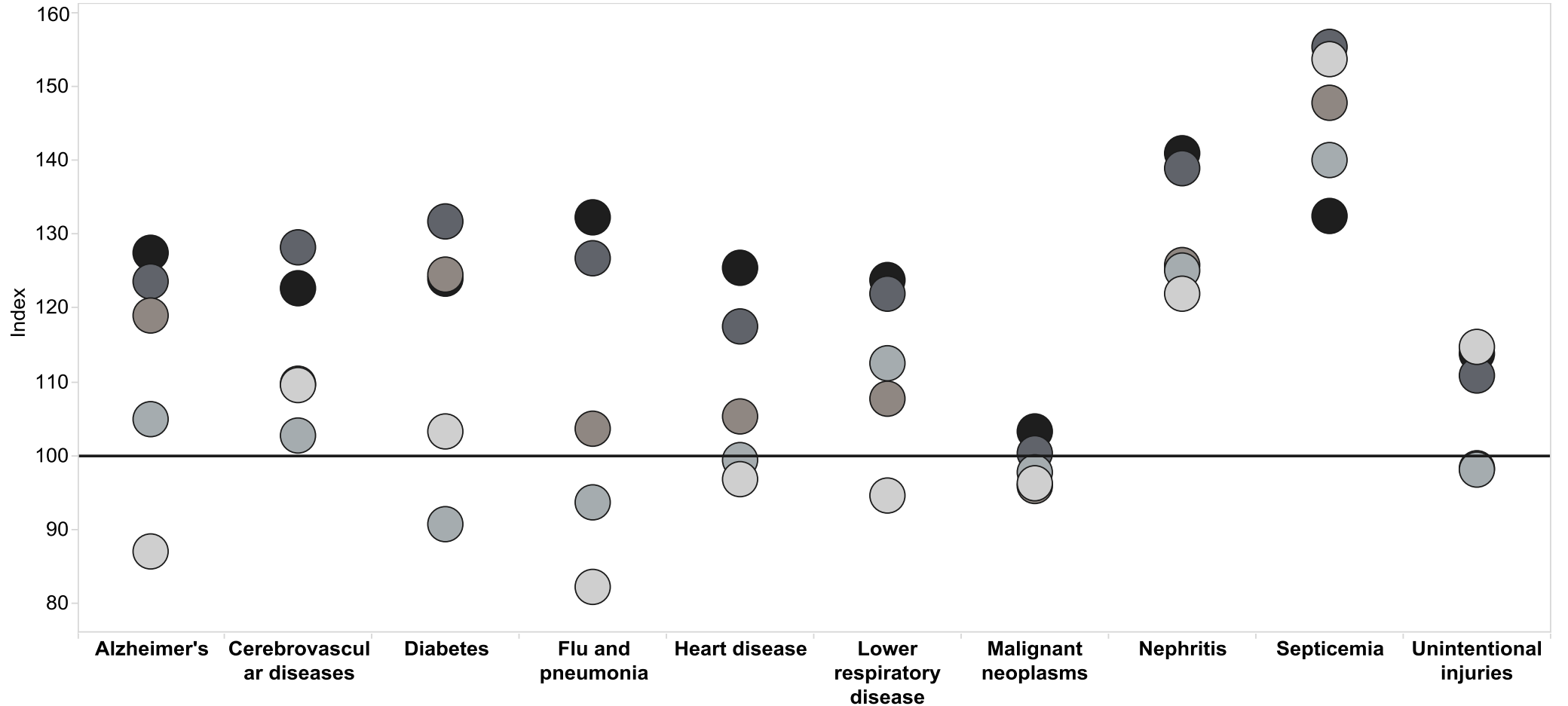
***Please select:***

Age 65 and older  
 Sex Female  
 Region HHS Region #6 AR, LA, NM, OK, TX

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 65 and older, in HHS Region #6 AR, LA, NM, OK, TX, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*

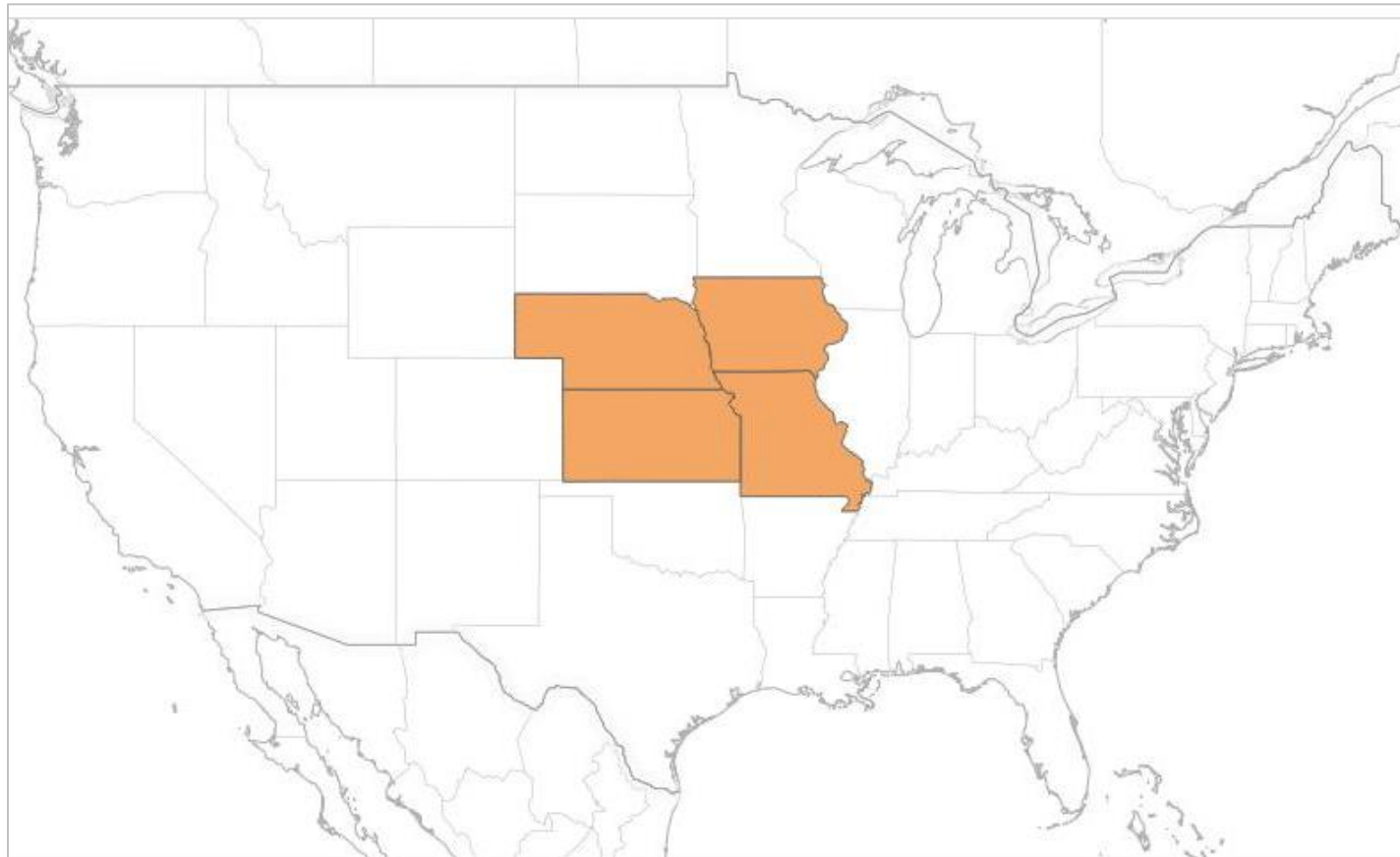


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.



# HHS Region 7

Iowa, Kansas, Missouri, and Nebraska



## Index for Regional Mortality Rates of Region 7, by Rural-Urban Status: United States, 2011-2013

### Persons:

- [Figure 50: Age Under 1 Years, Both Sexes](#)
- [Figure 51: Age 1 to 14 Years, Both Sexes](#)
- [Figure 52: Age 15 to 24 Years, Males](#)
- [Figure 53: Age 15 to 24 Years, Female](#)
- [Figure 54: Age 25 to 64 Years, Male](#)
- [Figure 55: Age 25 to 64 Years, Female](#)
- [Figure 56: Age  \$\geq\$ 65 Years, Male](#)
- [Figure 57: Age  \$\geq\$ 65 Years, Female](#)

Figure 50

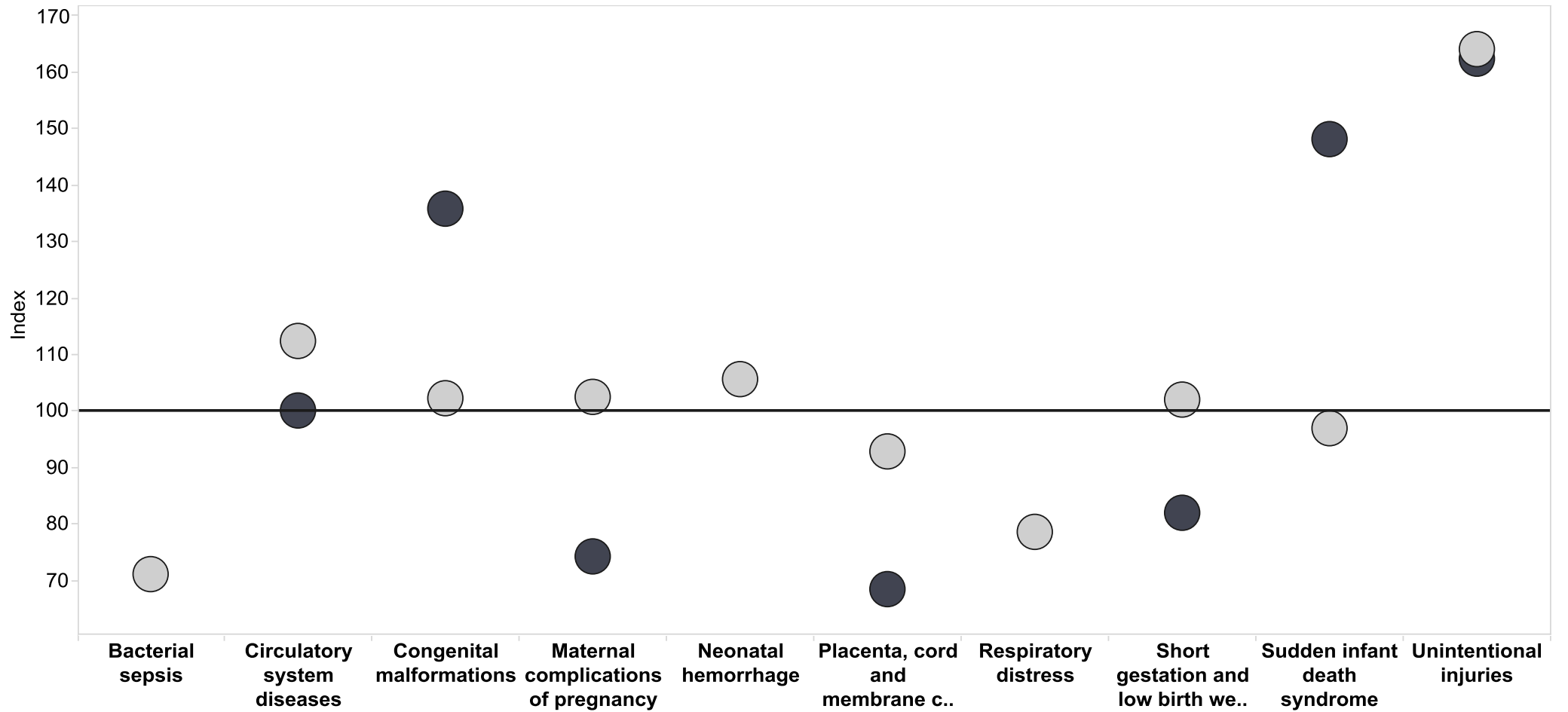
**Please select:**

Age Under 1  
 Sex Both sexes  
 Region HHS Region #7 IA, KS, MO, NE

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age Under 1, in HHS Region #7 IA, KS, MO, NE, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 51

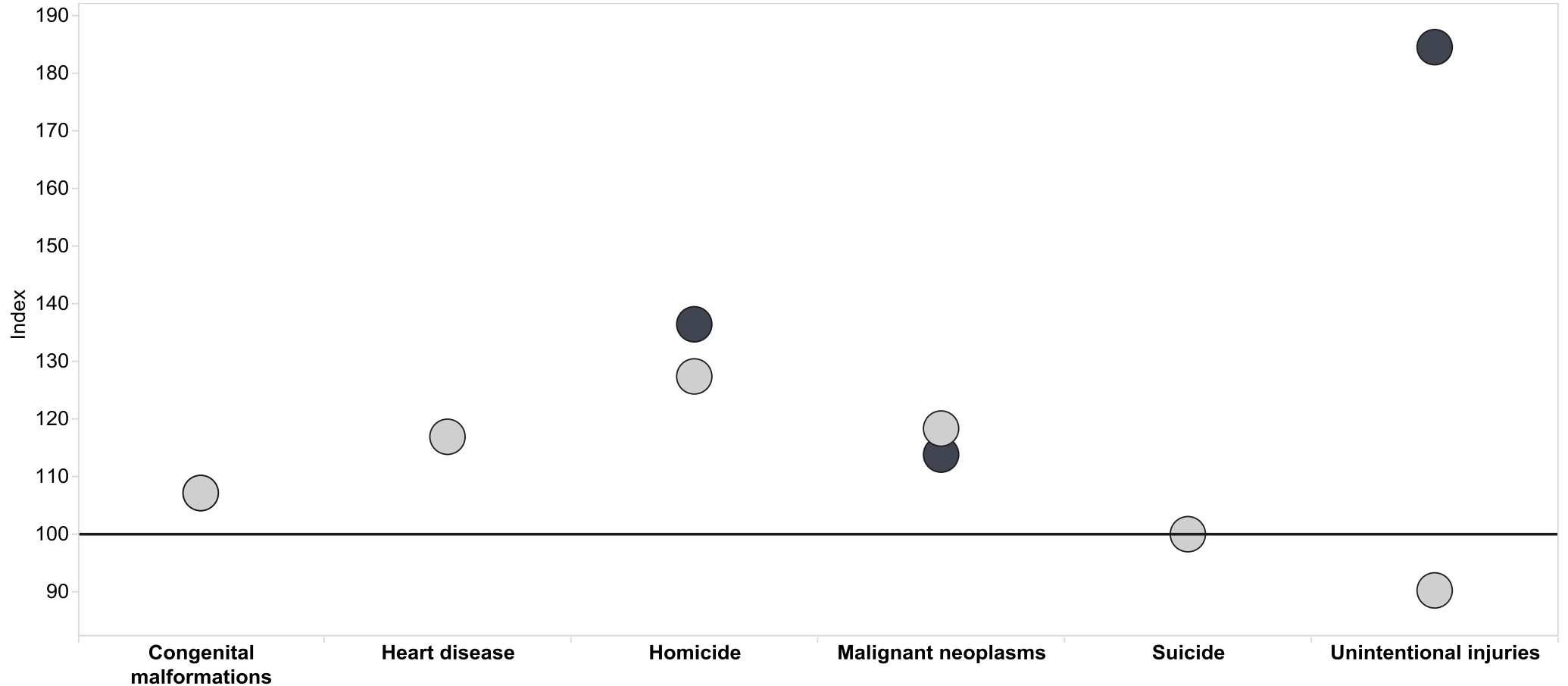
***Please select:***

Age 1 to 14  
Sex Both sexes  
Region HHS Region #7 IA, KS, MO, NE

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age 1 to 14, in HHS Region #7 IA, KS, MO, NE, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 52

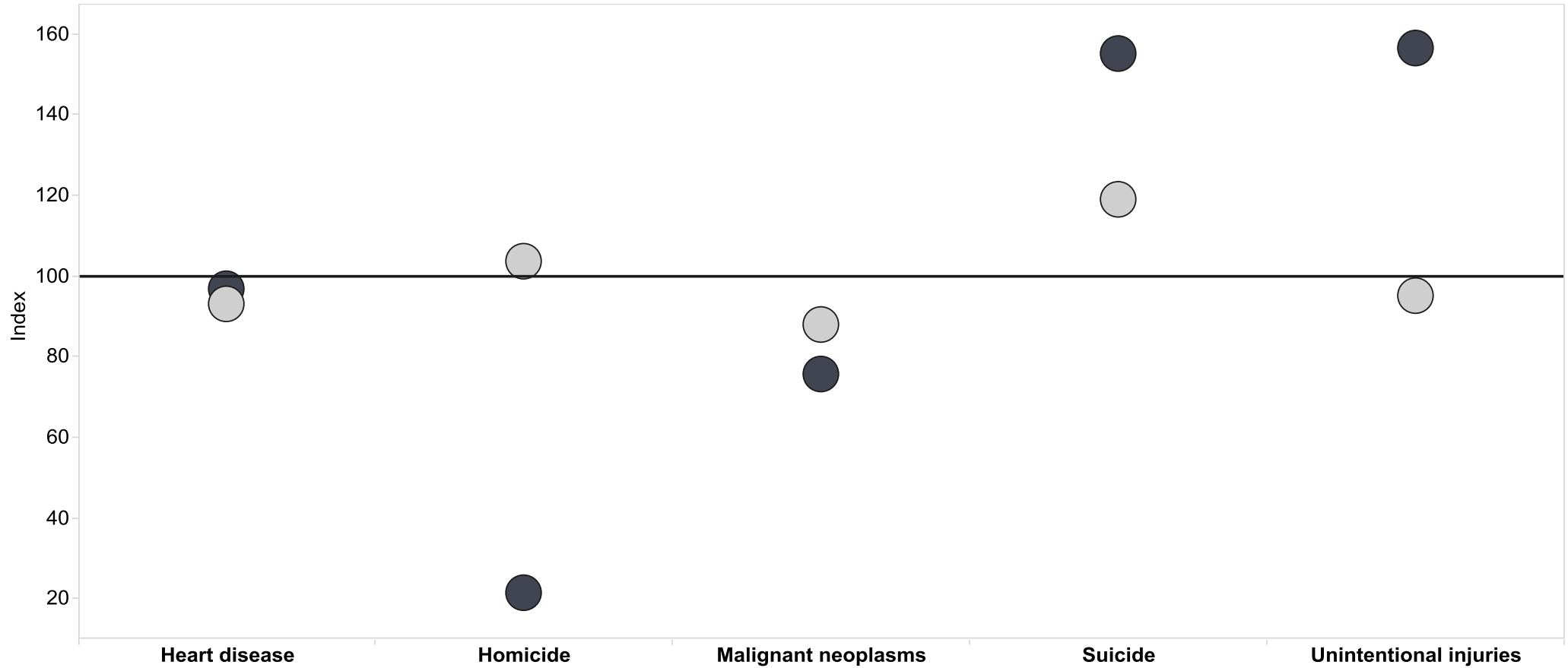
***Please select:***

Age 15 to 24  
Sex Male  
Region HHS Region #7 IA, KS, MO, NE

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 15 to 24, in HHS Region #7 IA, KS, MO, NE, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 53

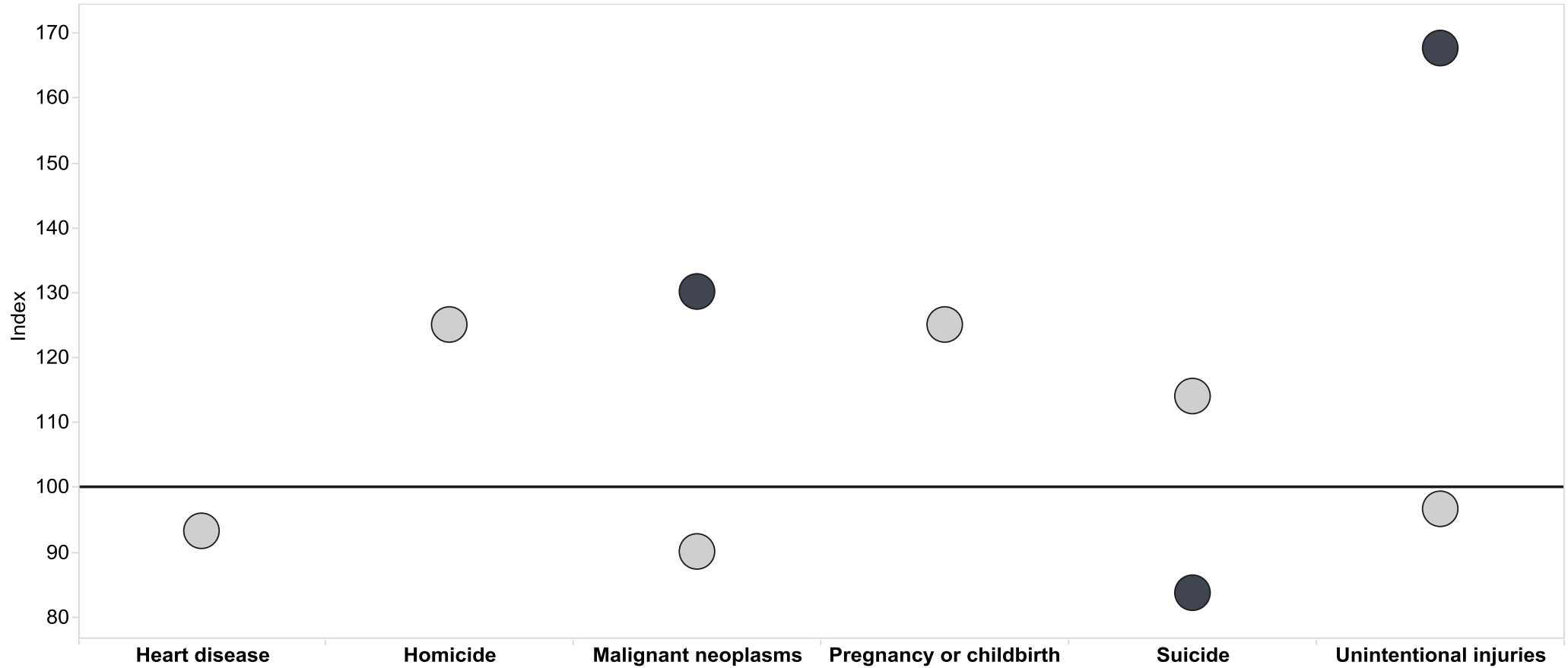
***Please select:***

Age 15 to 24  
Sex Female  
Region HHS Region #7 IA, KS, MO, NE

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 15 to 24, in HHS Region #7 IA, KS, MO, NE, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 54

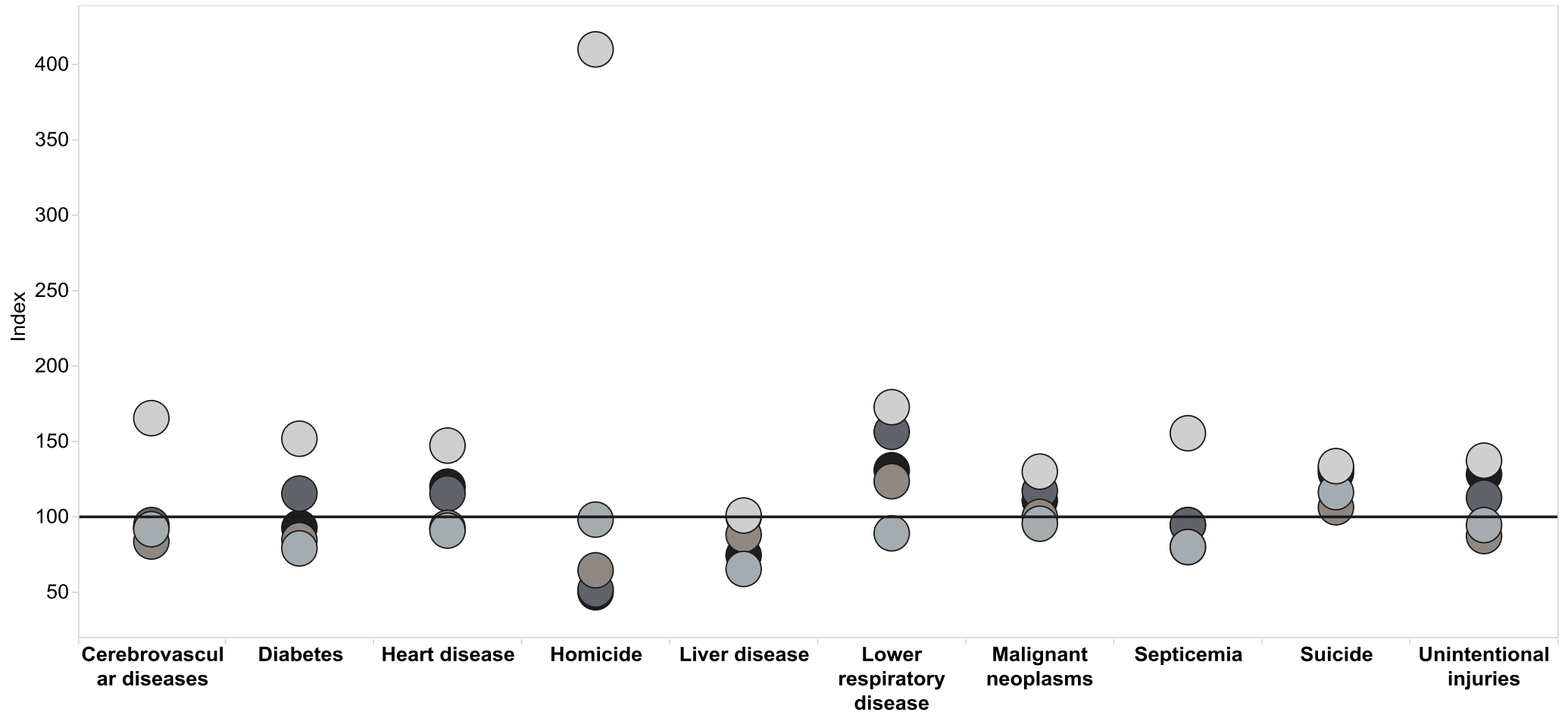
***Please select:***

Age 25 to 64  
 Sex Male  
 Region HHS Region #7 IA, KS, MO, NE

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 25 to 64, in HHS Region #7 IA, KS, MO, NE, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 55

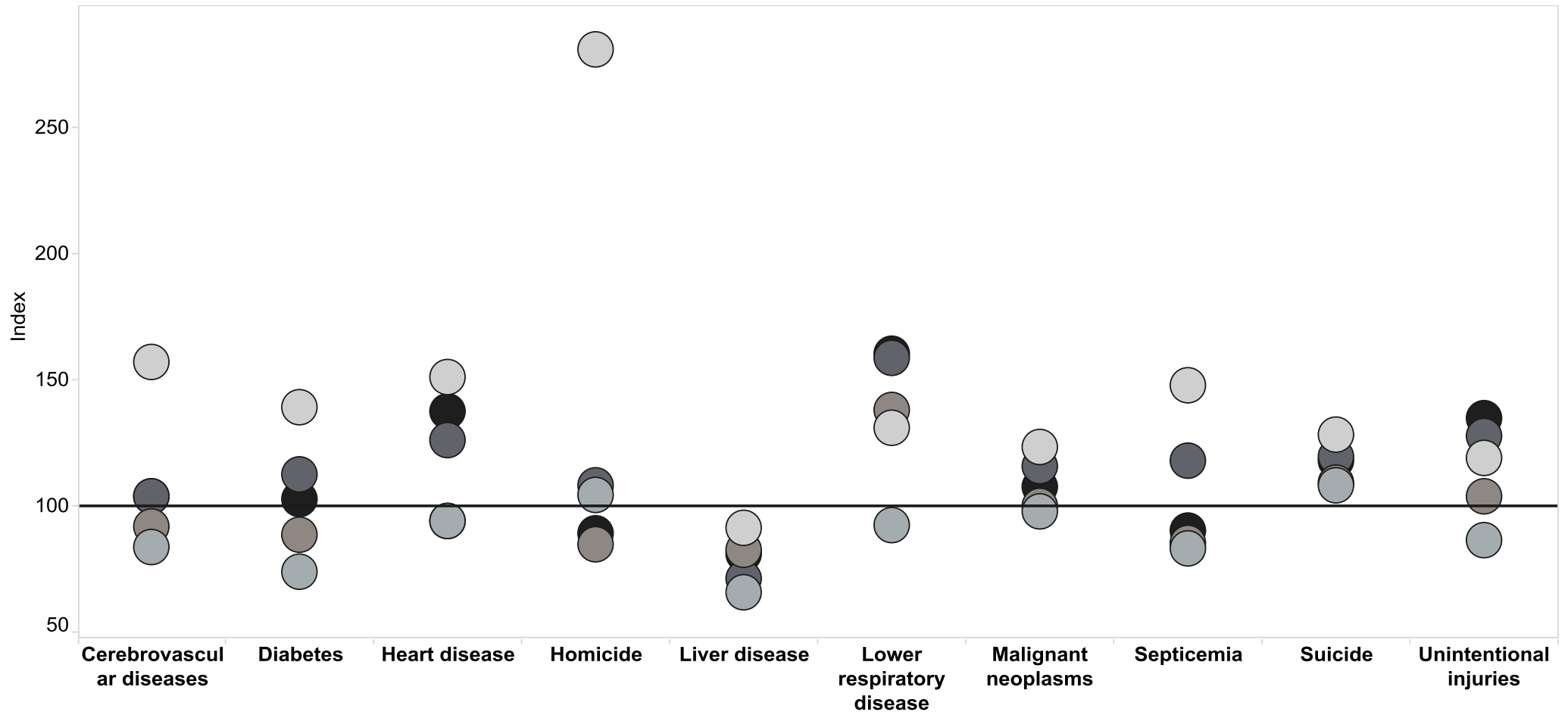
**Please select:**

Age 25 to 64  
 Sex Female  
 Region HHS Region #7 IA, KS, MO, NE

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 25 to 64, in HHS Region #7 IA, KS, MO, NE, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.



Figure 56

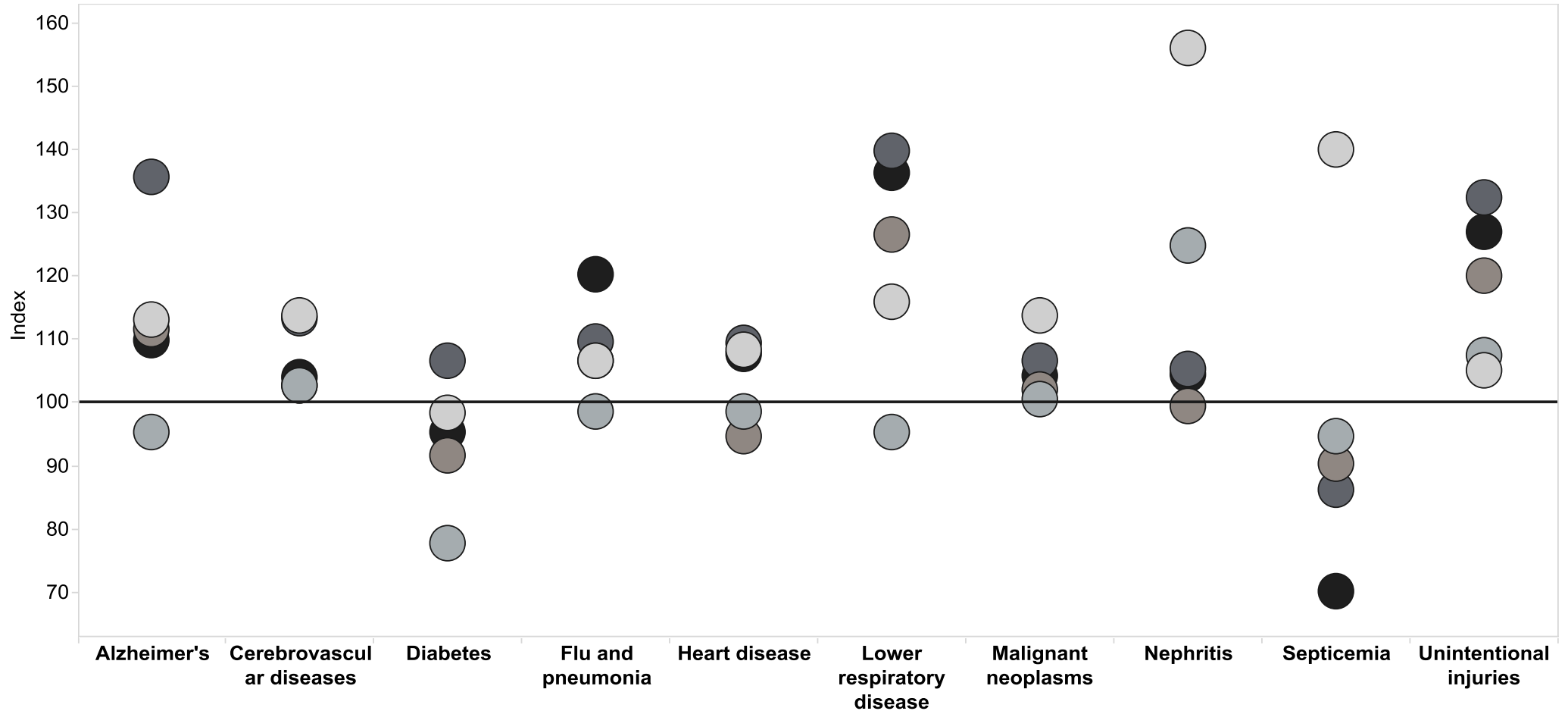
***Please select:***

Age 65 and older  
 Sex Male  
 Region HHS Region #7 IA, KS, MO, NE

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 65 and older, in HHS Region #7 IA, KS, MO, NE, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 57

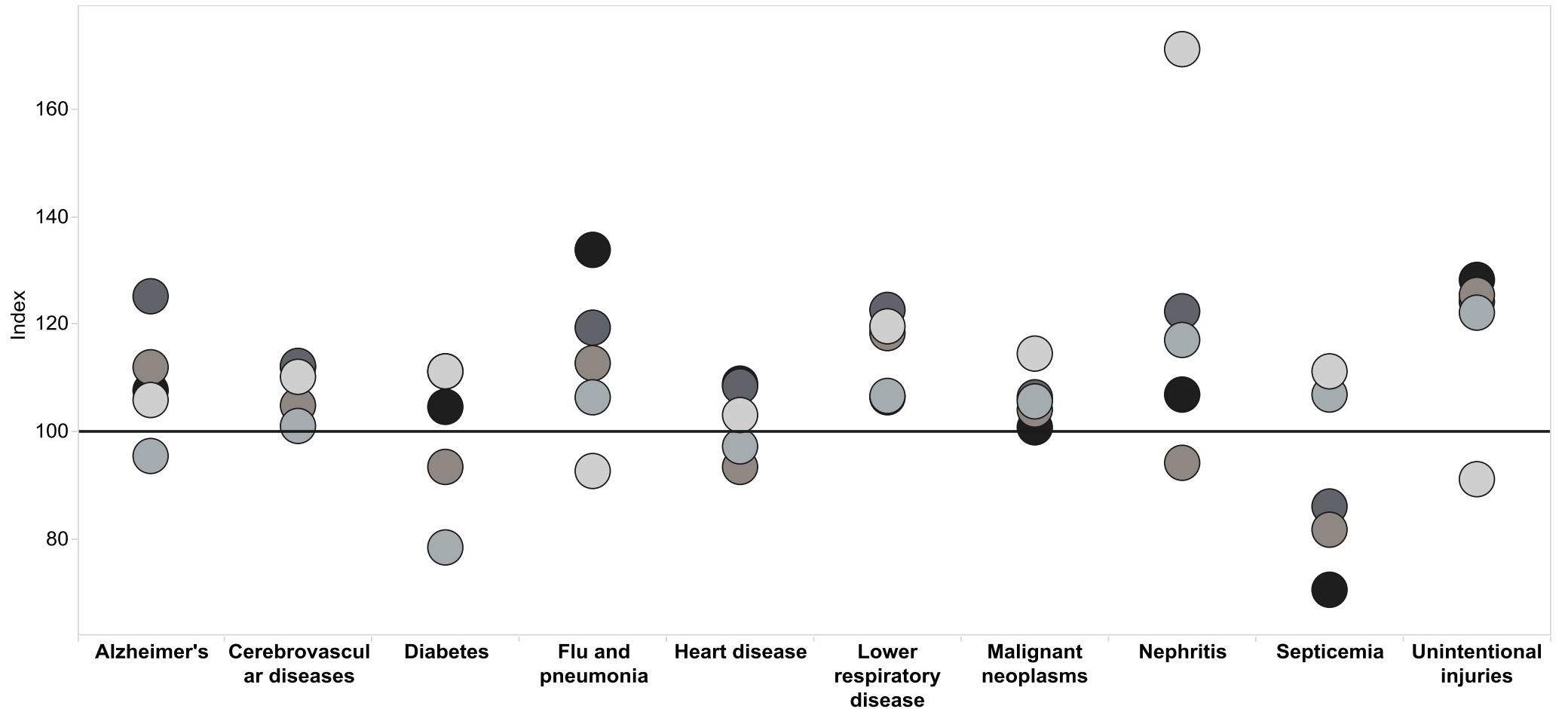
**Please select:**

Age 65 and older  
 Sex Female  
 Region HHS Region #7 IA, KS, MO, NE

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 65 and older, in HHS Region #7 IA, KS, MO, NE, by Rural-Urban Status: United States, 2011-2013**

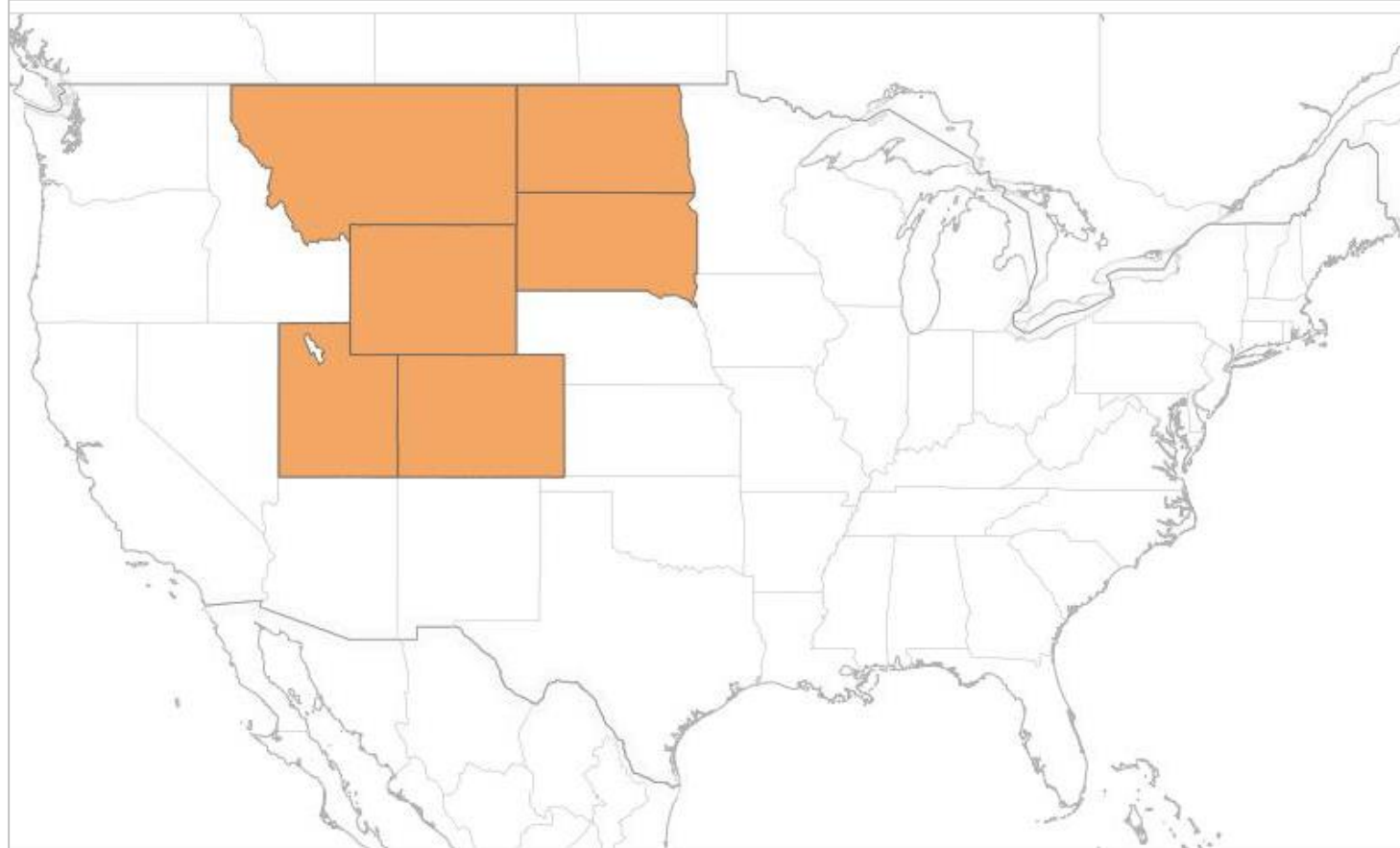
*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

# HHS Region 8

Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming



## Index for Regional Mortality Rates of Region 8, by Rural-Urban Status: United States, 2011-2013

### Persons:

- [Figure 58: Age Under 1 Years, Both Sexes](#)
- [Figure 59: Age 1 to 14 Years, Both Sexes](#)
- [Figure 60: Age 15 to 24 Years, Males](#)
- [Figure 61: Age 15 to 24 Years, Female](#)
- [Figure 62: Age 25 to 64 Years, Male](#)
- [Figure 63: Age 25 to 64 Years, Female](#)
- [Figure 64: Age  \$\geq\$ 65 Years, Male](#)
- [Figure 65: Age  \$\geq\$ 65 Years, Female](#)

Figure 58

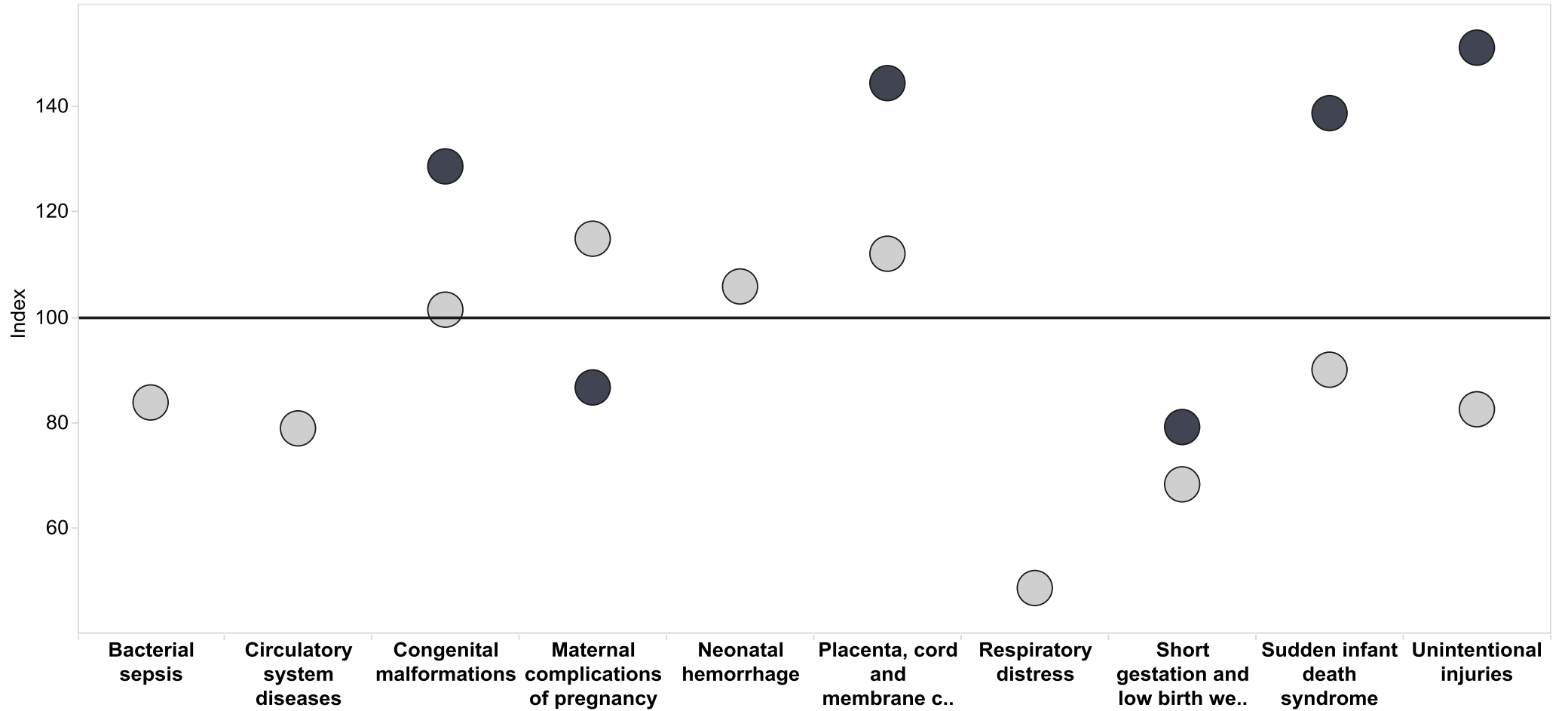
***Please select:***

Age Under 1  
Sex Both sexes  
Region HHS Region #8 CO, MT, ND, SD, UT, WY

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age Under 1, in HHS Region #8 CO, MT, ND, SD, UT, WY, by Rural-Urban Status: United States, 2011-2013

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 59

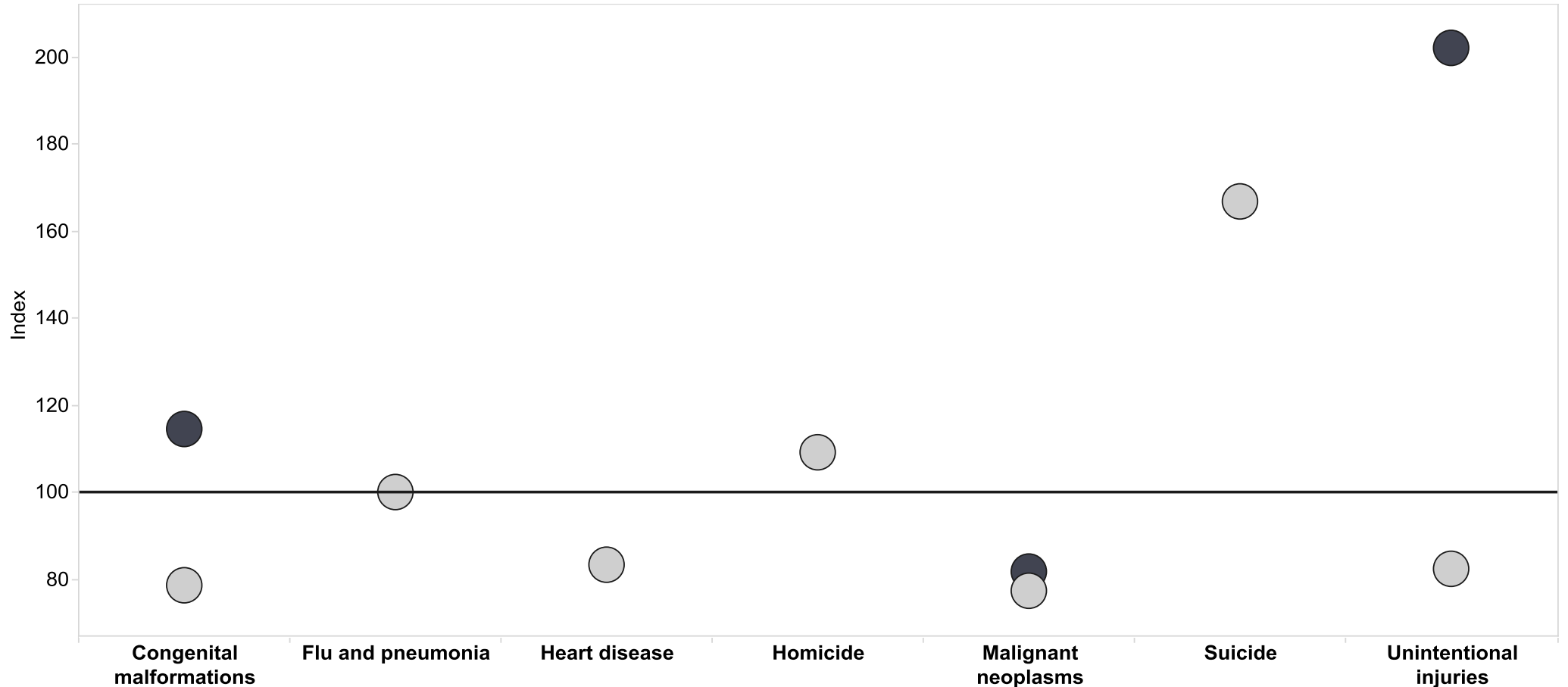
***Please select:***

**Age** 1 to 14  
**Sex** Both sexes  
**Region** HHS Region #8 CO, MT, ND, SD, UT, WY

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age 1 to 14, in HHS Region #8 CO, MT, ND, SD, UT, WY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 60

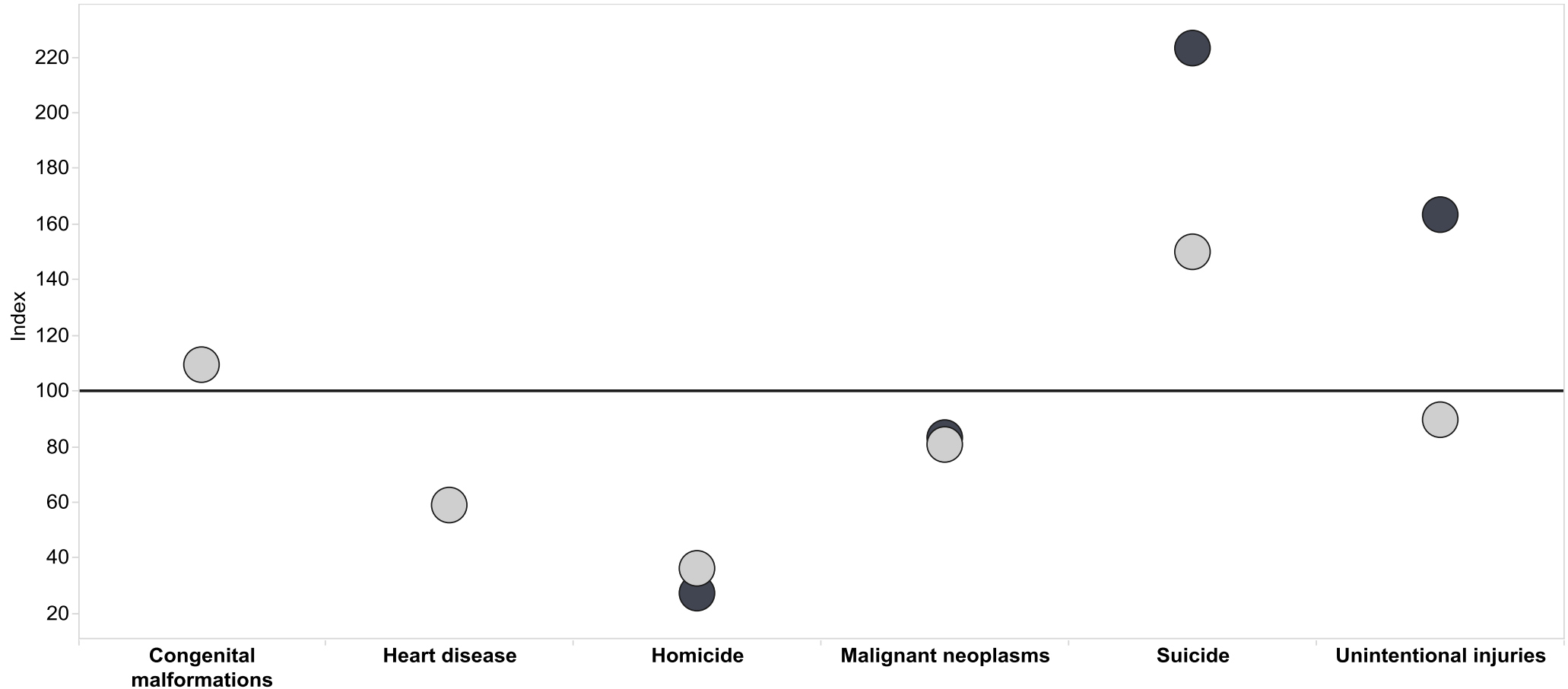
***Please select:***

Age 15 to 24  
Sex Male  
Region HHS Region #8 CO, MT, ND, SD, UT, WY

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 15 to 24, in HHS Region #8 CO, MT, ND, SD, UT, WY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 61

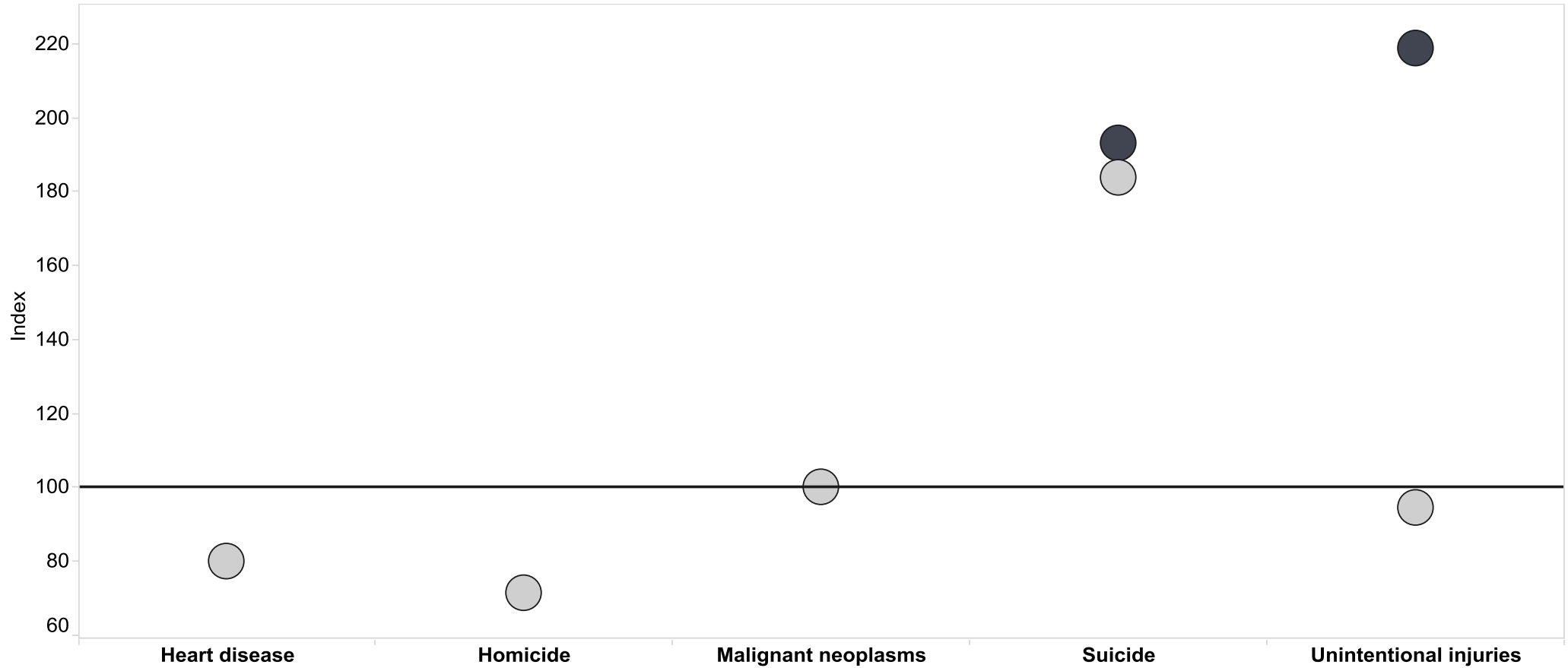
***Please select:***

Age 15 to 24  
Sex Female  
Region HHS Region #8 CO, MT, ND, SD, UT, WY

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 15 to 24, in HHS Region #8 CO, MT, ND, SD, UT, WY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.



Figure 62

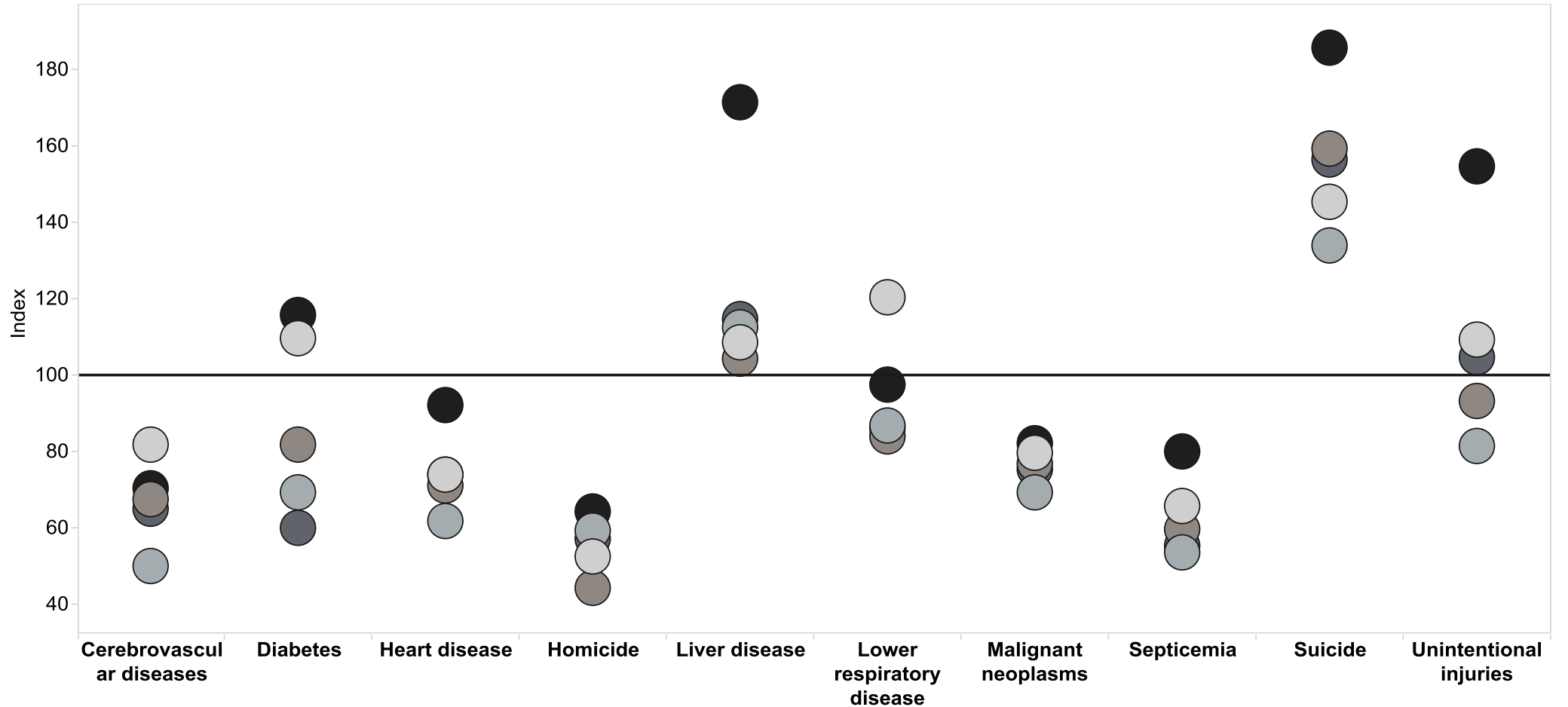
***Please select:***

Age 25 to 64  
 Sex Male  
 Region HHS Region #8 CO, MT, ND, SD, UT, WY

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 25 to 64, in HHS Region #8 CO, MT, ND, SD, UT, WY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 63

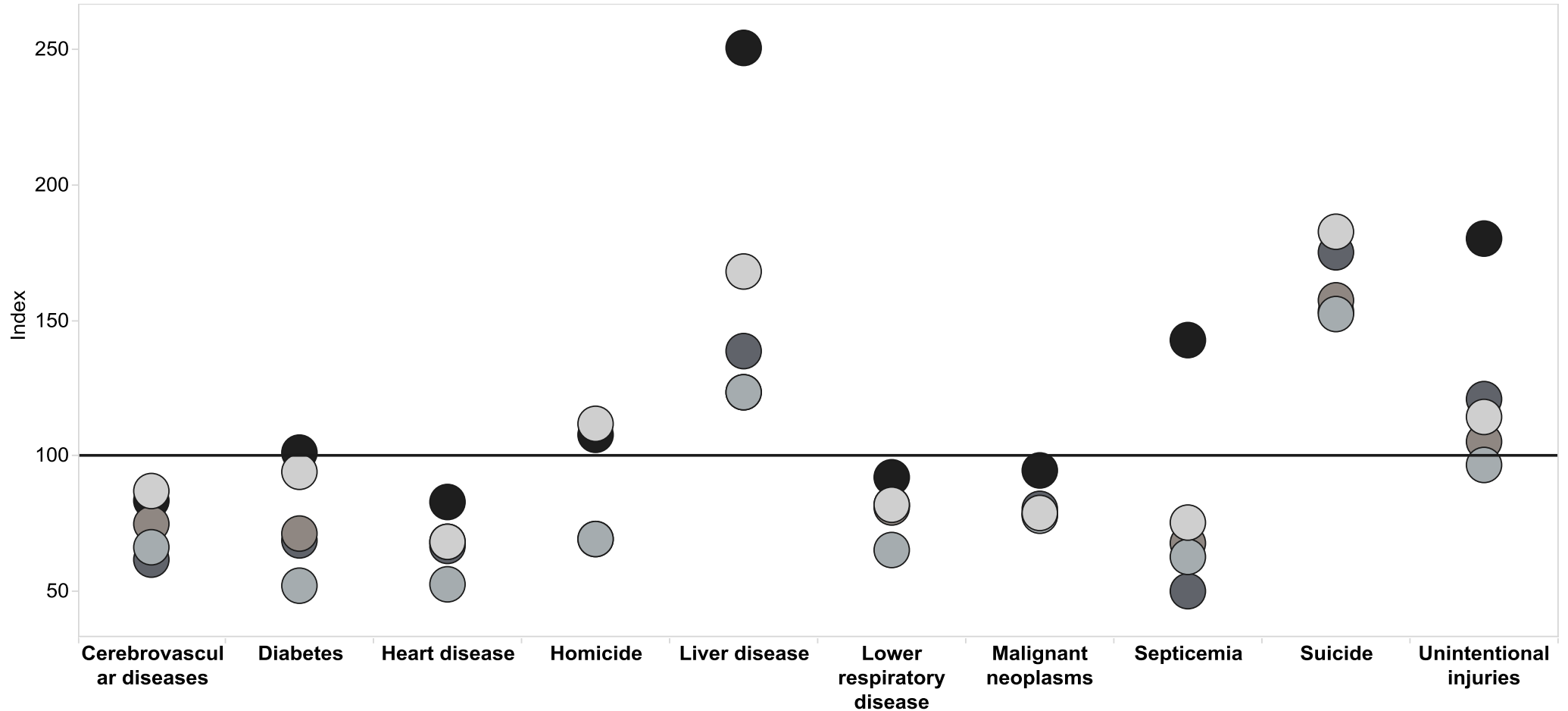
***Please select:***

Age 25 to 64  
 Sex Female  
 Region HHS Region #8 CO, MT, ND, SD, UT, WY

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 25 to 64, in HHS Region #8 CO, MT, ND, SD, UT, WY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 64

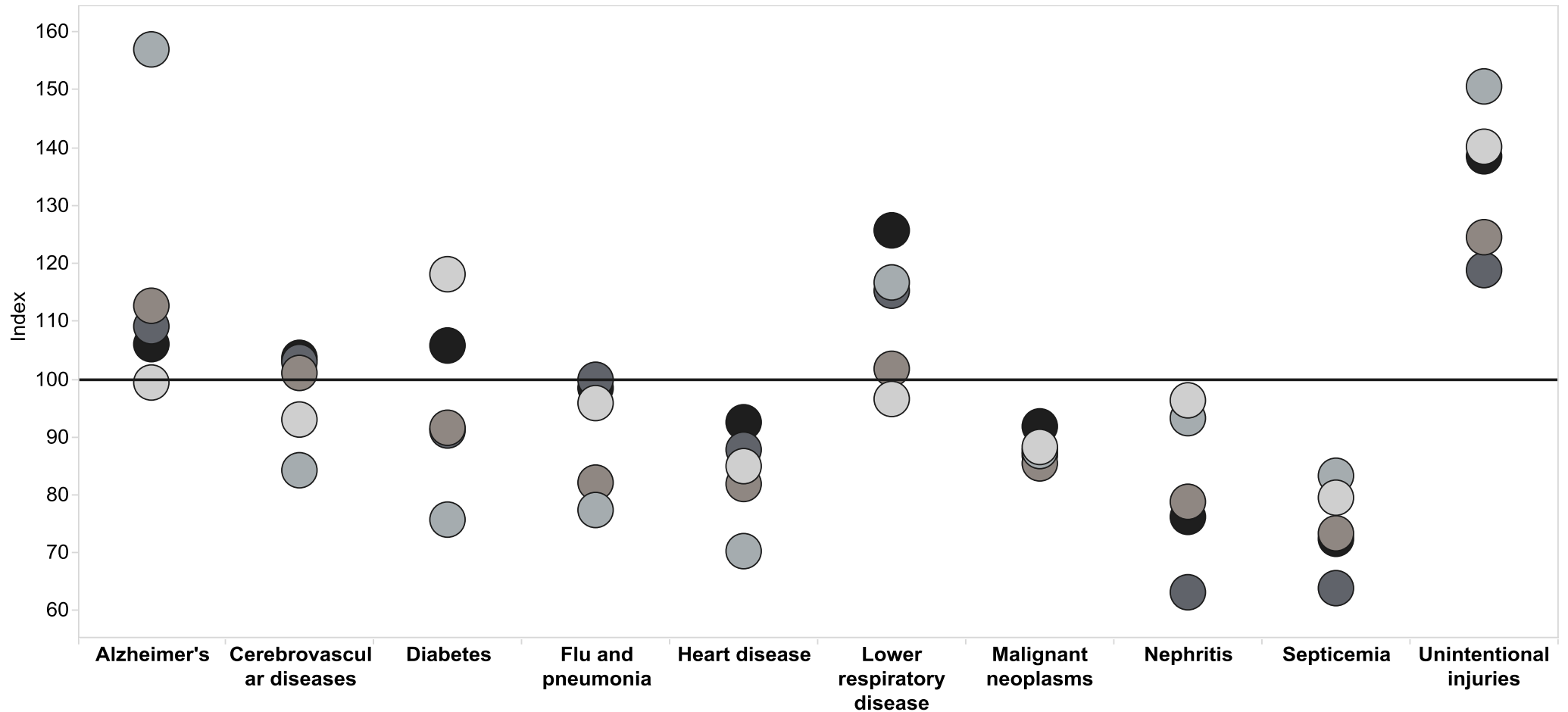
***Please select:***

**Age** 65 and older  
**Sex** Male  
**Region** HHS Region #8 CO, MT, ND, SD, UT, WY

**Rural-Urban Status**  
 □ Large Central  
 □ Large Fringe  
 □ Medium/Small Metro  
 □ Micropolitan  
 ■ Non-core

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 65 and older, in HHS Region #8 CO, MT, ND, SD, UT, WY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 65

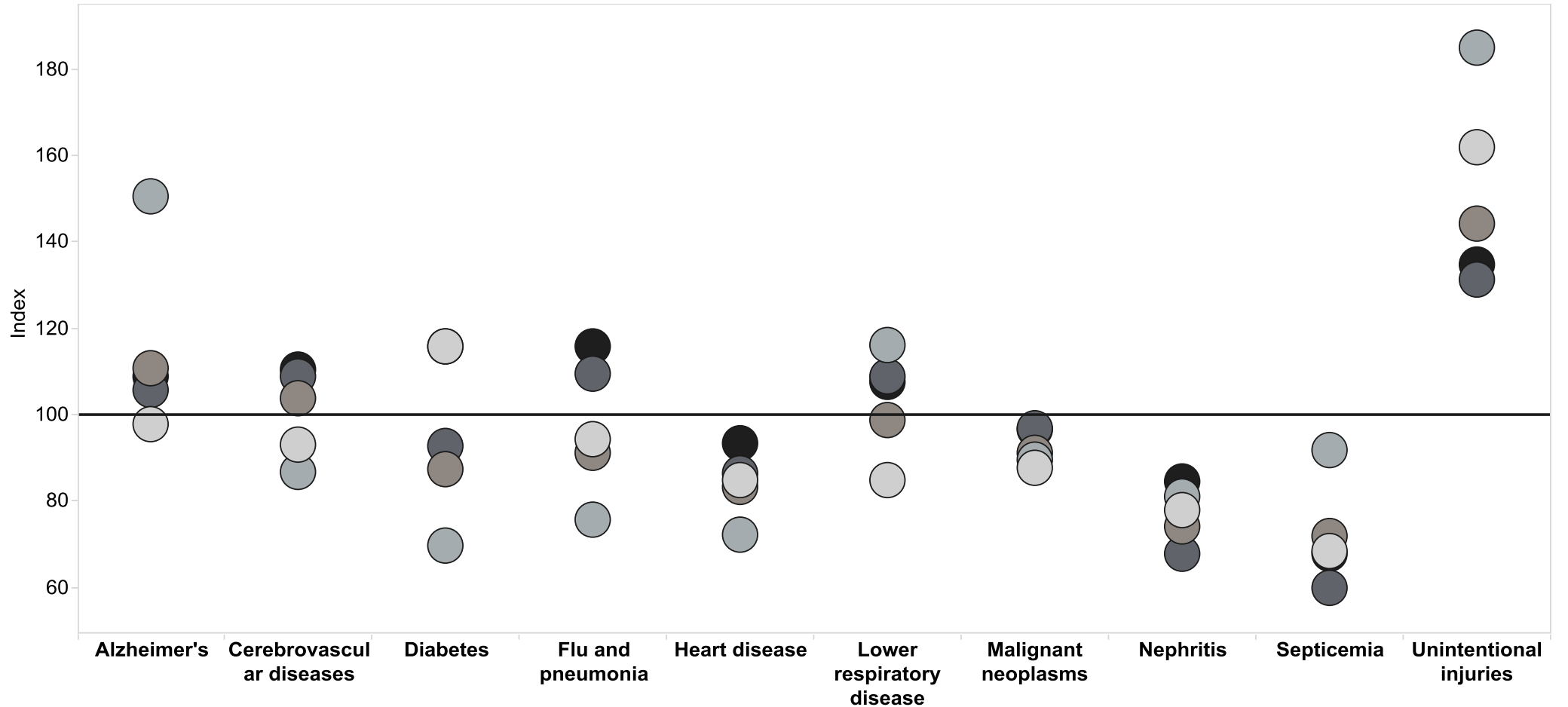
***Please select:***

**Age** 65 and older  
**Sex** Female  
**Region** HHS Region #8 CO, MT, ND, SD, UT, WY

**Rural-Urban Status**  
 □ Large Central  
 □ Large Fringe  
 □ Medium/Small Metro  
 □ Micropolitan  
 ■ Non-core

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 65 and older, in HHS Region #8 CO, MT, ND, SD, UT, WY, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*

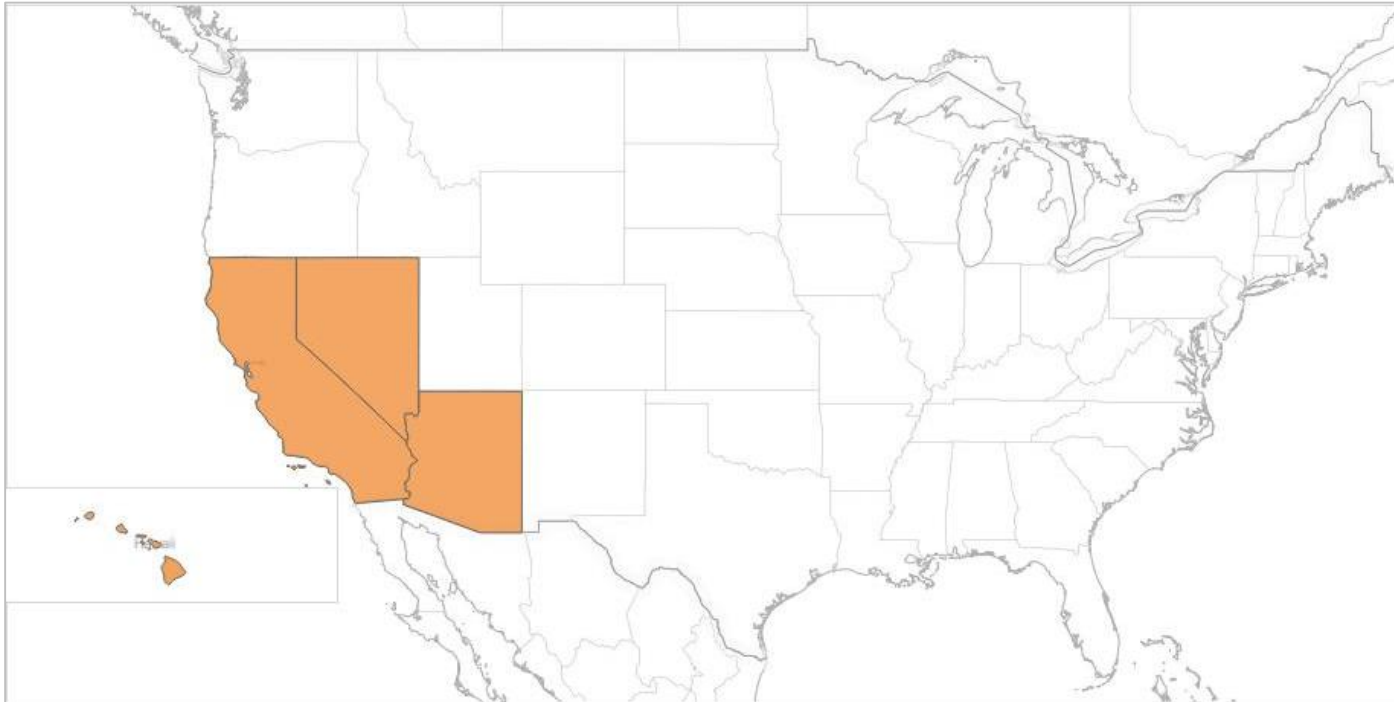


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

# HHS Region 9<sup>2</sup>

Arizona, California, Hawaii, and Nevada



<sup>2</sup>Note: Deaths of nonresidents including those in American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Marshall Islands, and Republic of Palau are excluded.

<http://www.hhs.gov/iea/regional/>, <http://wonder.cdc.gov/wonder/help/mcd.html>

## Index for Regional Mortality Rates of Region 9, by Rural-Urban Status: United States, 2011-2013

### Persons:

- [Figure 66: Age Under 1 Years, Both Sexes](#)
- [Figure 67: Age 1 to 14 Years, Both Sexes](#)
- [Figure 68: Age 15 to 24 Years, Males](#)
- [Figure 69: Age 15 to 24 Years, Female](#)
- [Figure 70: Age 25 to 64 Years, Male](#)
- [Figure 71: Age 25 to 64 Years, Female](#)
- [Figure 72: Age  \$\geq\$ 65 Years, Male](#)
- [Figure 73: Age  \$\geq\$ 65 Years, Female](#)

Figure 66

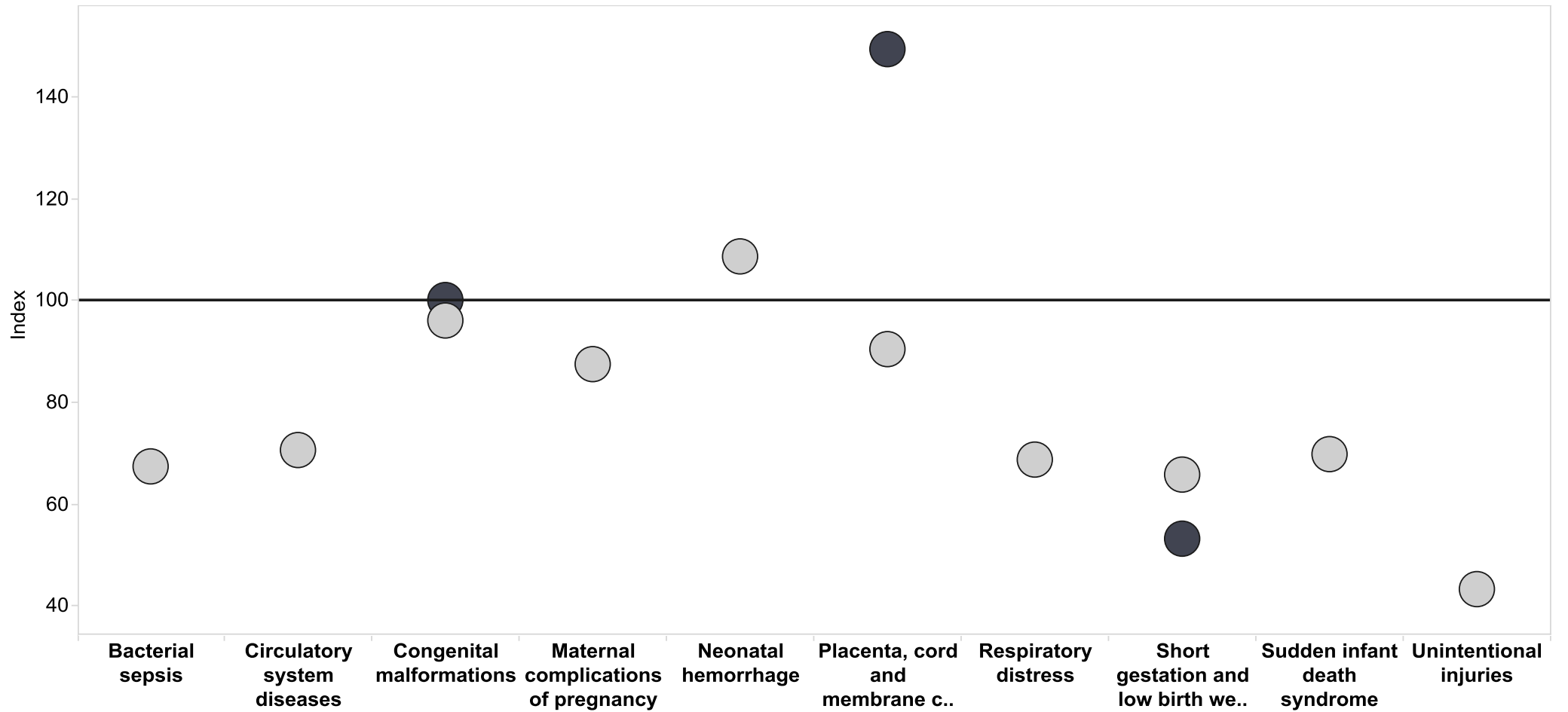
***Please select:***

Age Under 1  
 Sex Both sexes  
 Region HHS Region #9 AZ, CA, HI, NV

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age Under 1, in HHS Region #9 AZ, CA, HI, NV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 67

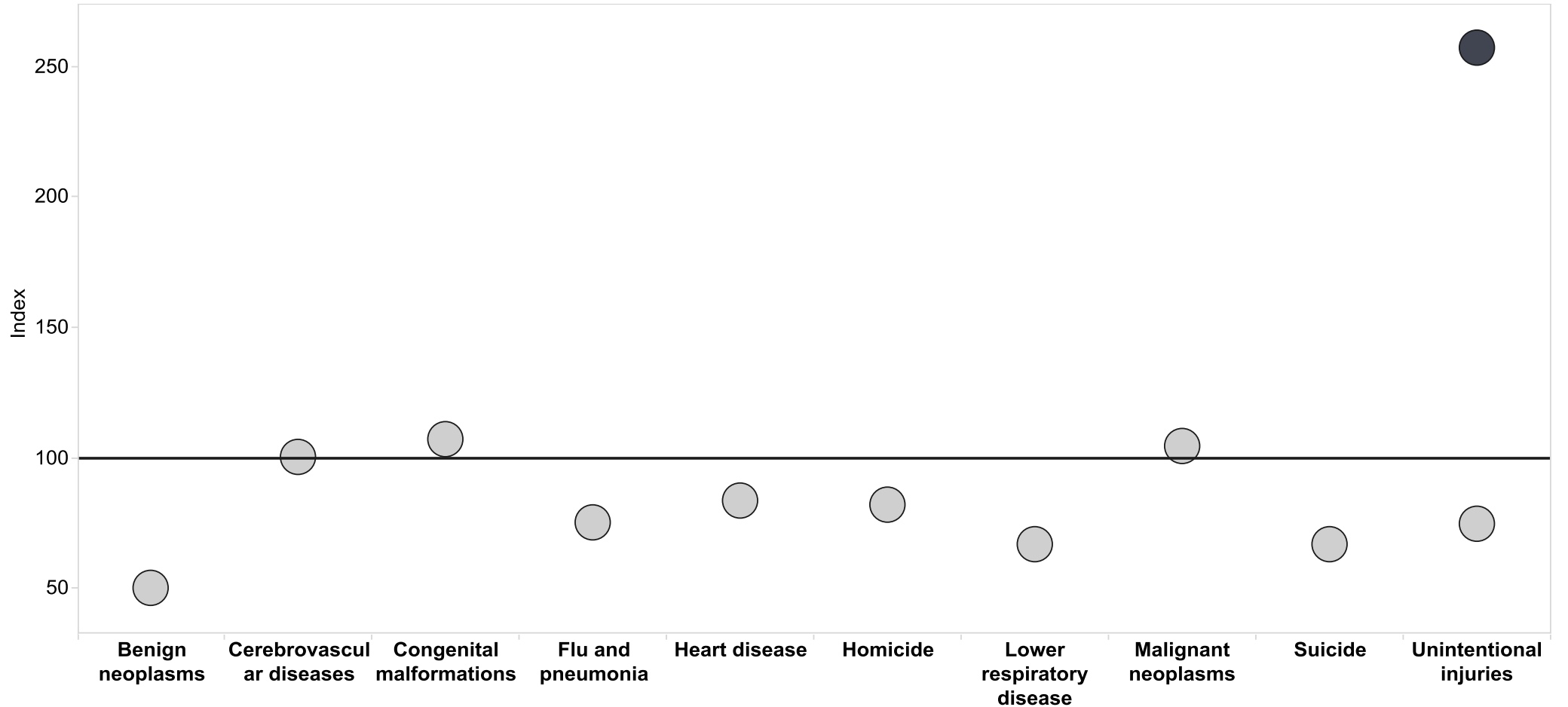
***Please select:***

Age 1 to 14  
Sex Both sexes  
Region HHS Region #9 AZ, CA, HI, NV

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age 1 to 14, in HHS Region #9 AZ, CA, HI, NV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.



Figure 68

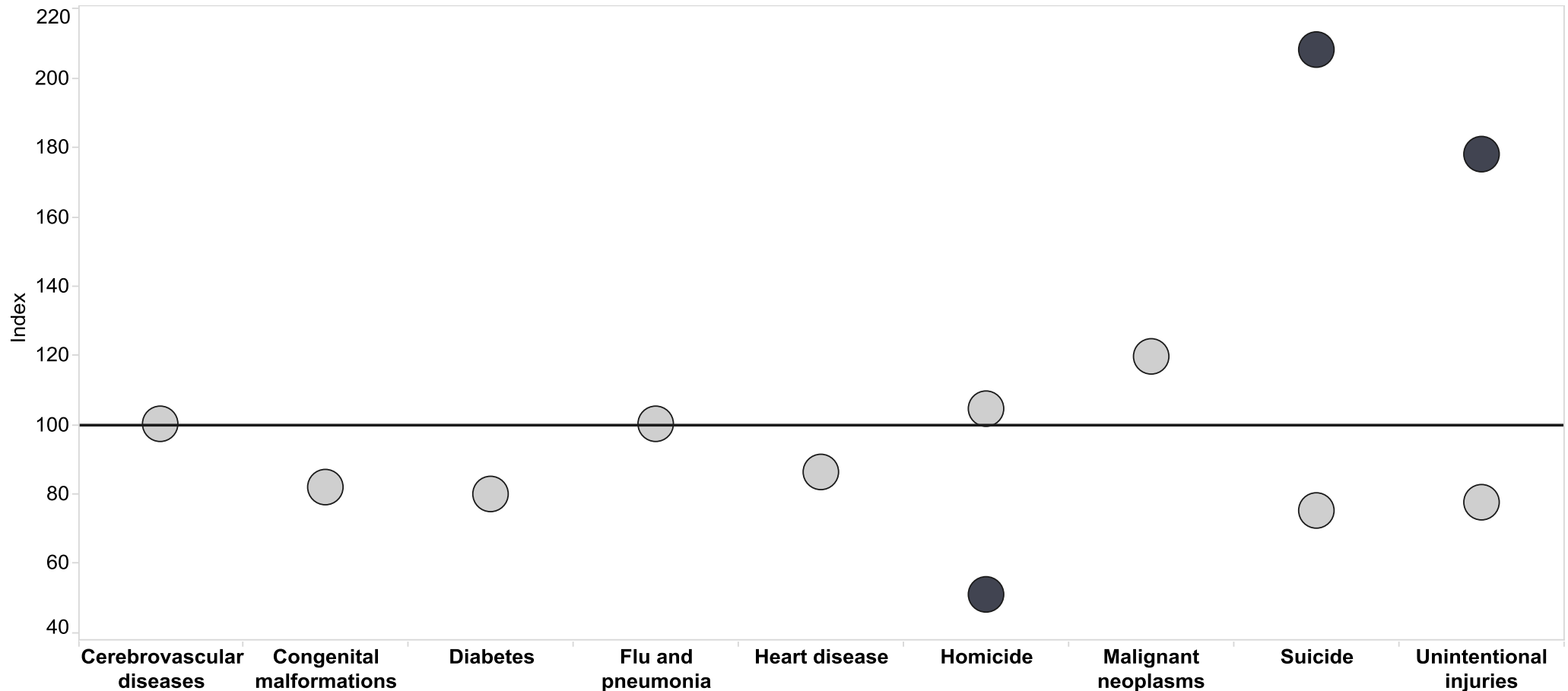
***Please select:***

Age 15 to 24  
Sex Male  
Region HHS Region #9 AZ, CA, HI, NV

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 15 to 24, in HHS Region #9 AZ, CA, HI, NV, by Rural-Urban Status: United States, 2011-2013

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 69

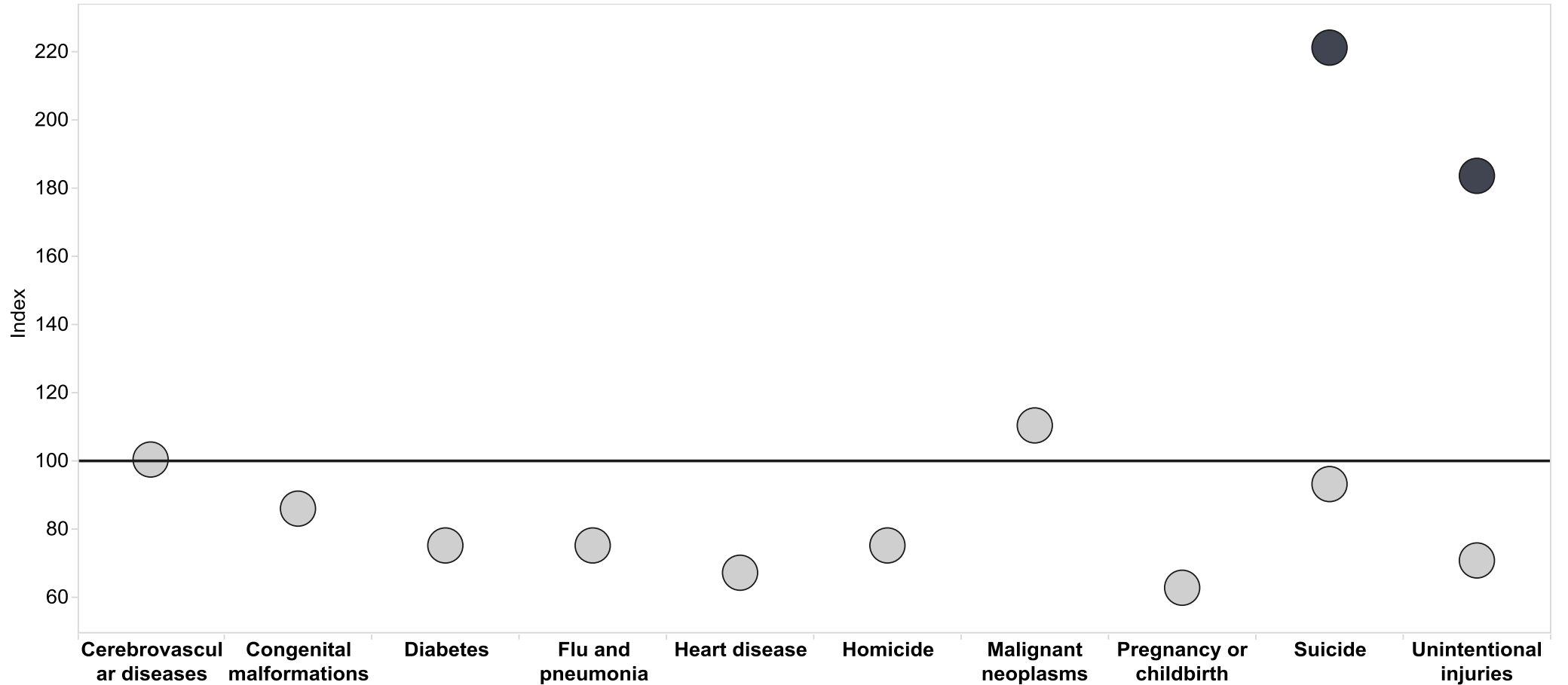
***Please select:***

Age 15 to 24  
Sex Female  
Region HHS Region #9 AZ, CA, HI, NV

**Rural-Urban Status**  
Urban  
Rural

### Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 15 to 24, in HHS Region #9 AZ, CA, HI, NV, by Rural-Urban Status: United States, 2011-2013

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 70

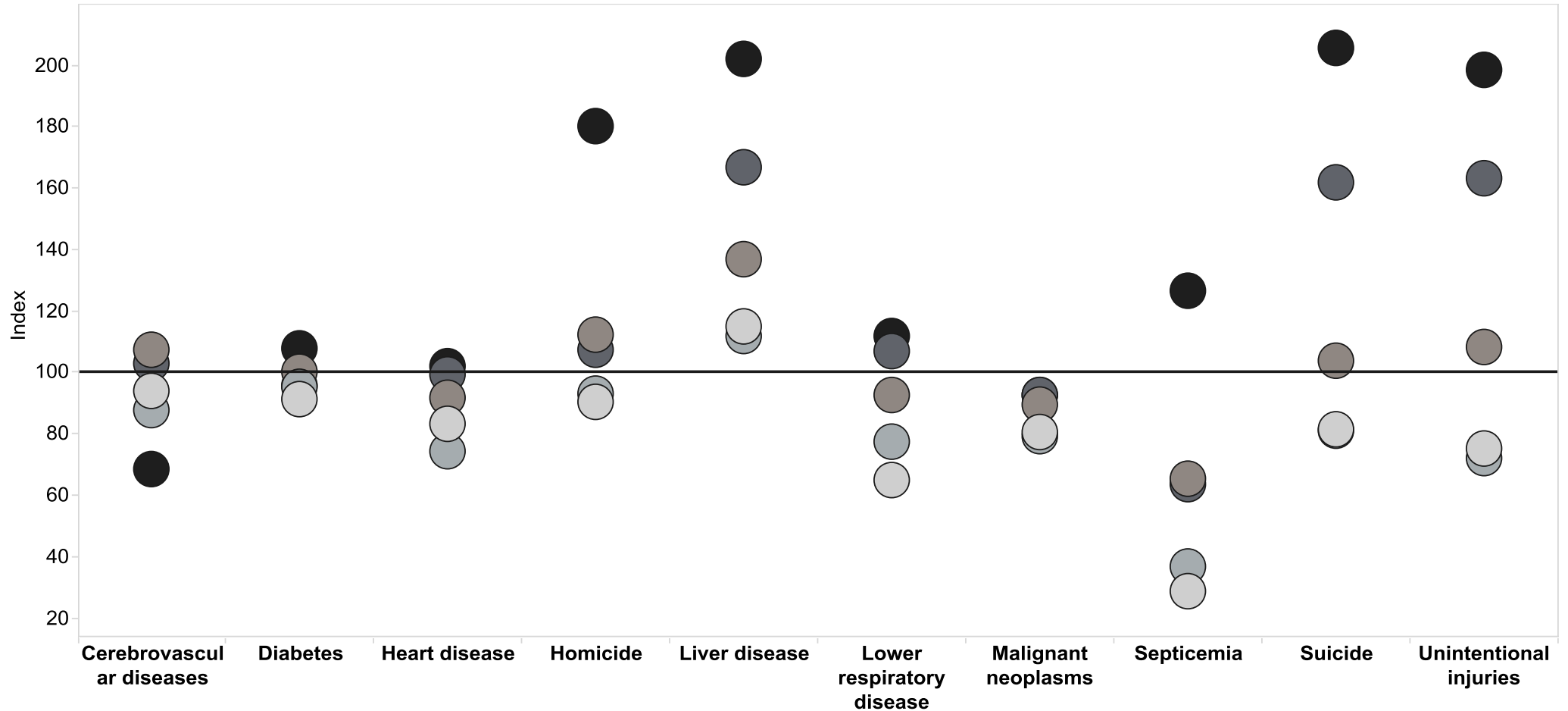
**Please select:**

Age 25 to 64  
 Sex Male  
 Region HHS Region #9 AZ, CA, HI, NV

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 25 to 64, in HHS Region #9 AZ, CA, HI, NV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 71

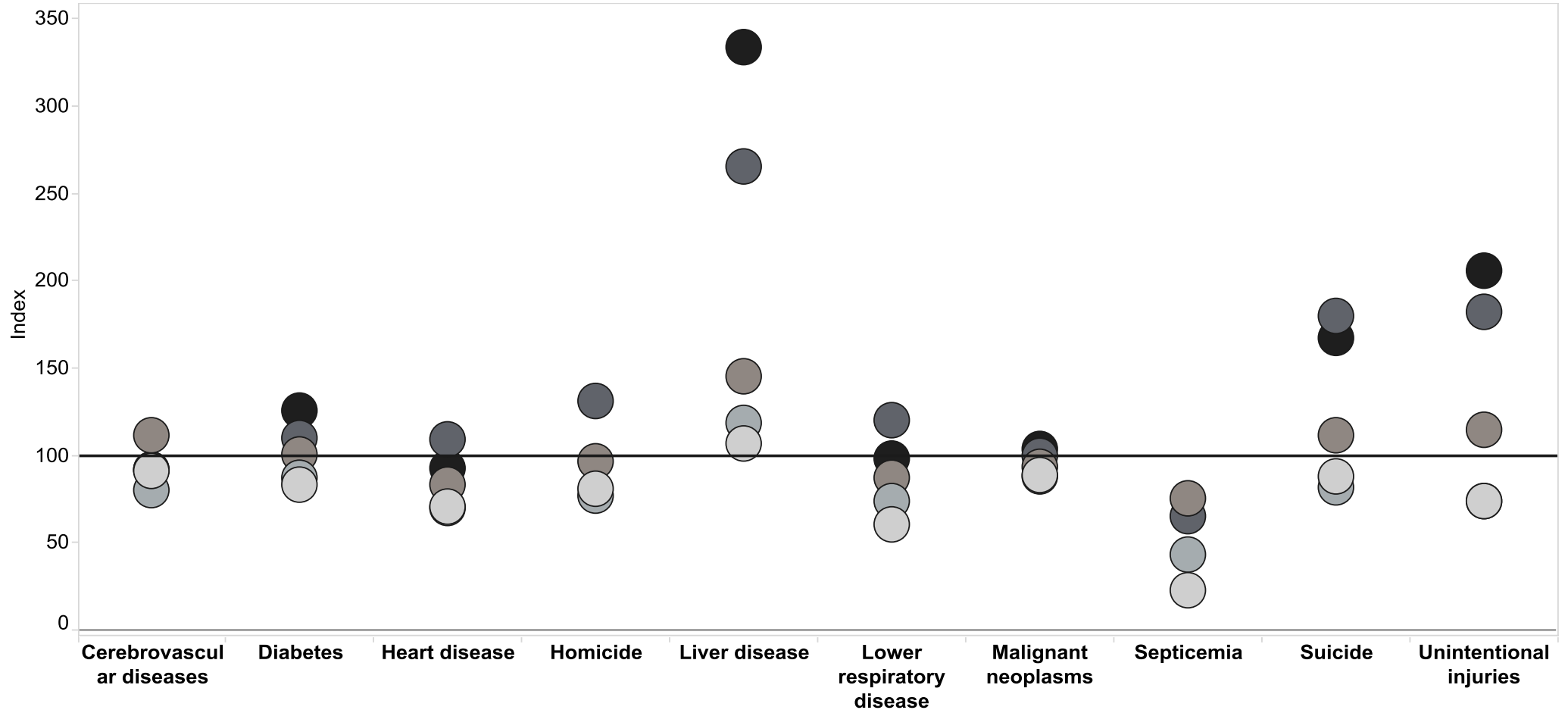
**Please select:**

Age 25 to 64  
 Sex Female  
 Region HHS Region #9 AZ, CA, HI, NV

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 25 to 64, in HHS Region #9 AZ, CA, HI, NV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 72

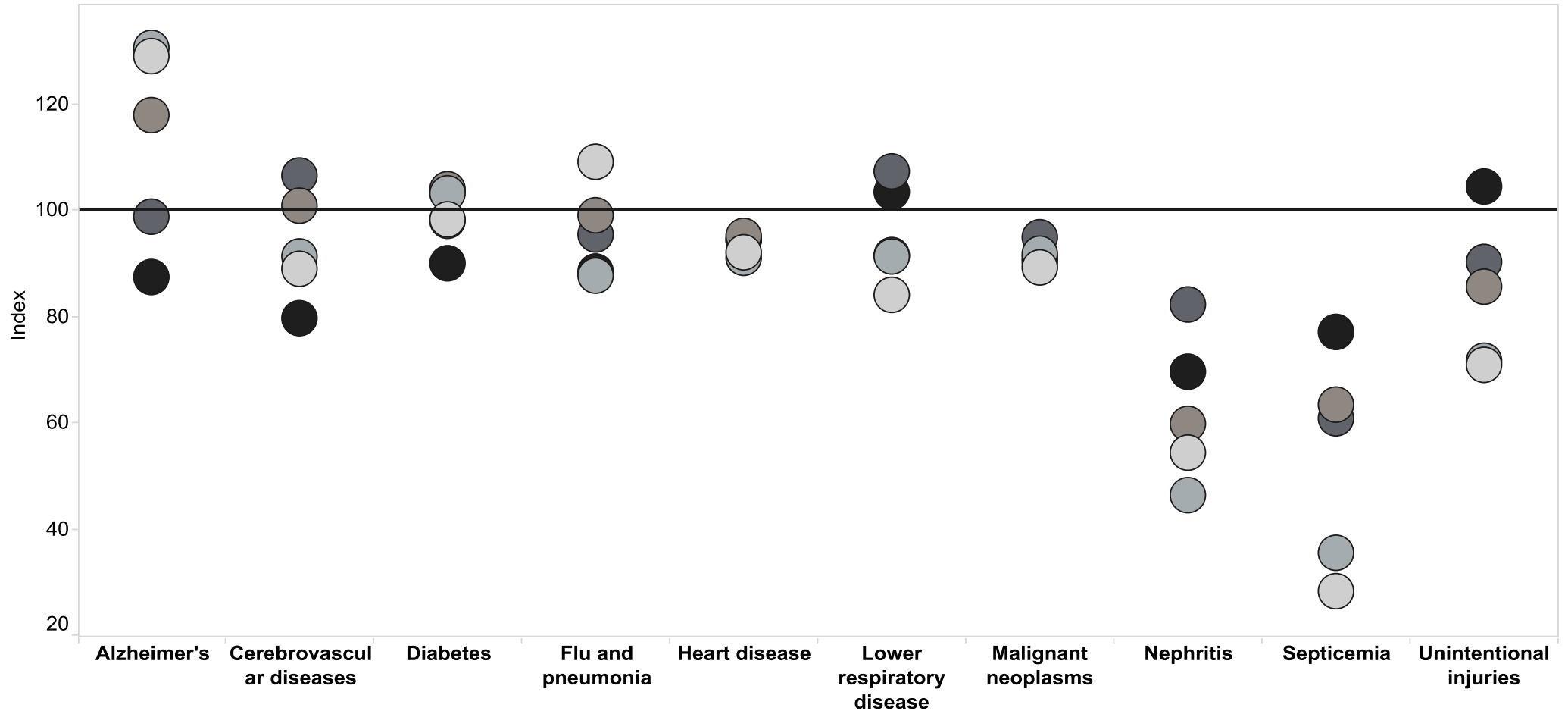
**Please select:**

Age 65 and older  
 Sex Male  
 Region HHS Region #9 AZ, CA, HI, NV

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 65 and older, in HHS Region #9 AZ, CA, HI, NV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 73

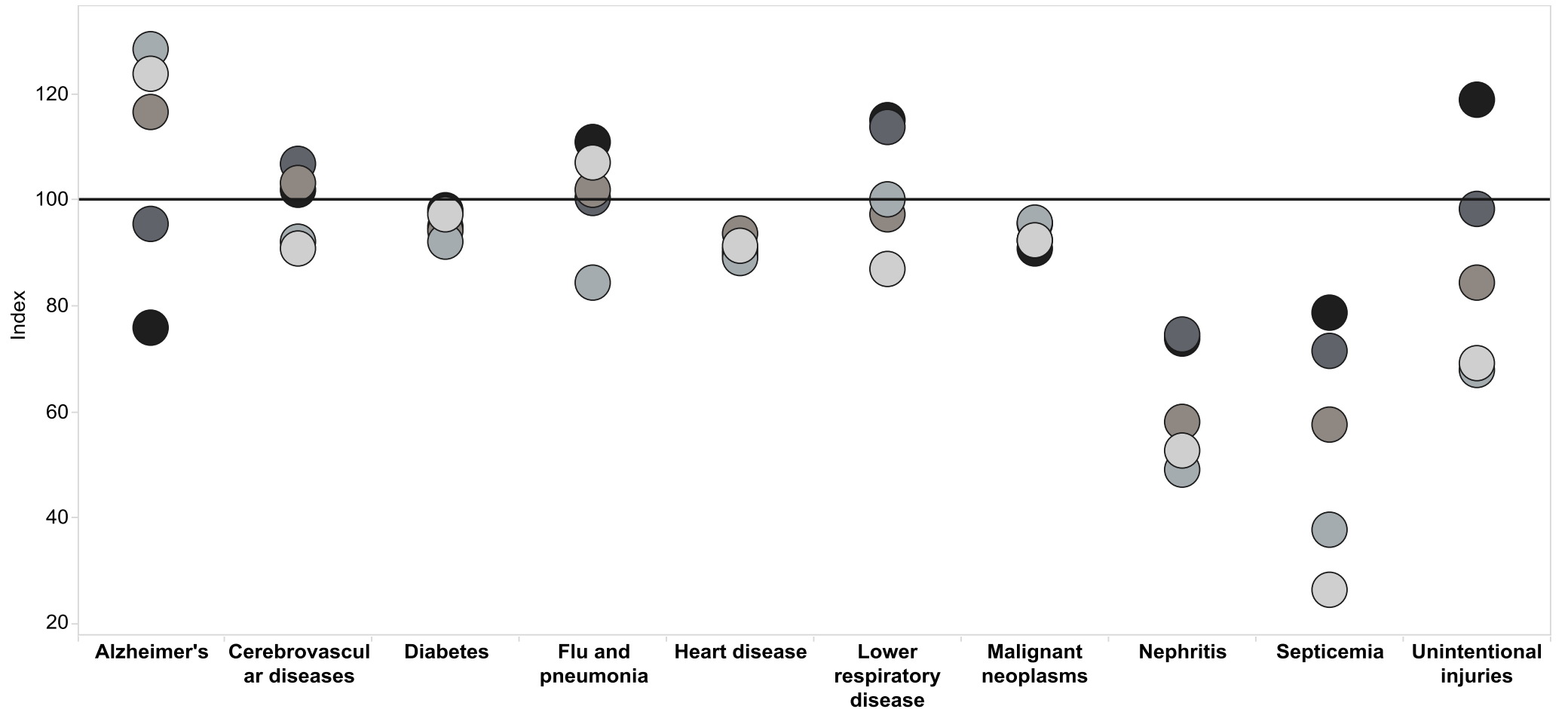
**Please select:**

Age 65 and older  
 Sex Female  
 Region HHS Region #9 AZ, CA, HI, NV

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 65 and older, in HHS Region #9 AZ, CA, HI, NV, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

# HHS Region 10

Alaska, Idaho, Oregon, and Washington



## Index for Regional Mortality Rates of Region 10, by Rural-Urban Status: United States, 2011-2013

### Persons:

- [Figure 74: Age Under 1 Years, Both Sexes](#)
- [Figure 75: Age 1 to 14 Years, Both Sexes](#)
- [Figure 76: Age 15 to 24 Years, Males](#)
- [Figure 77: Age 15 to 24 Years, Female](#)
- [Figure 78: Age 25 to 64 Years, Male](#)
- [Figure 79: Age 25 to 64 Years, Female](#)
- [Figure 80: Age  \$\geq\$ 65 Years, Male](#)
- [Figure 81: Age  \$\geq\$ 65 Years, Female](#)



Figure 74

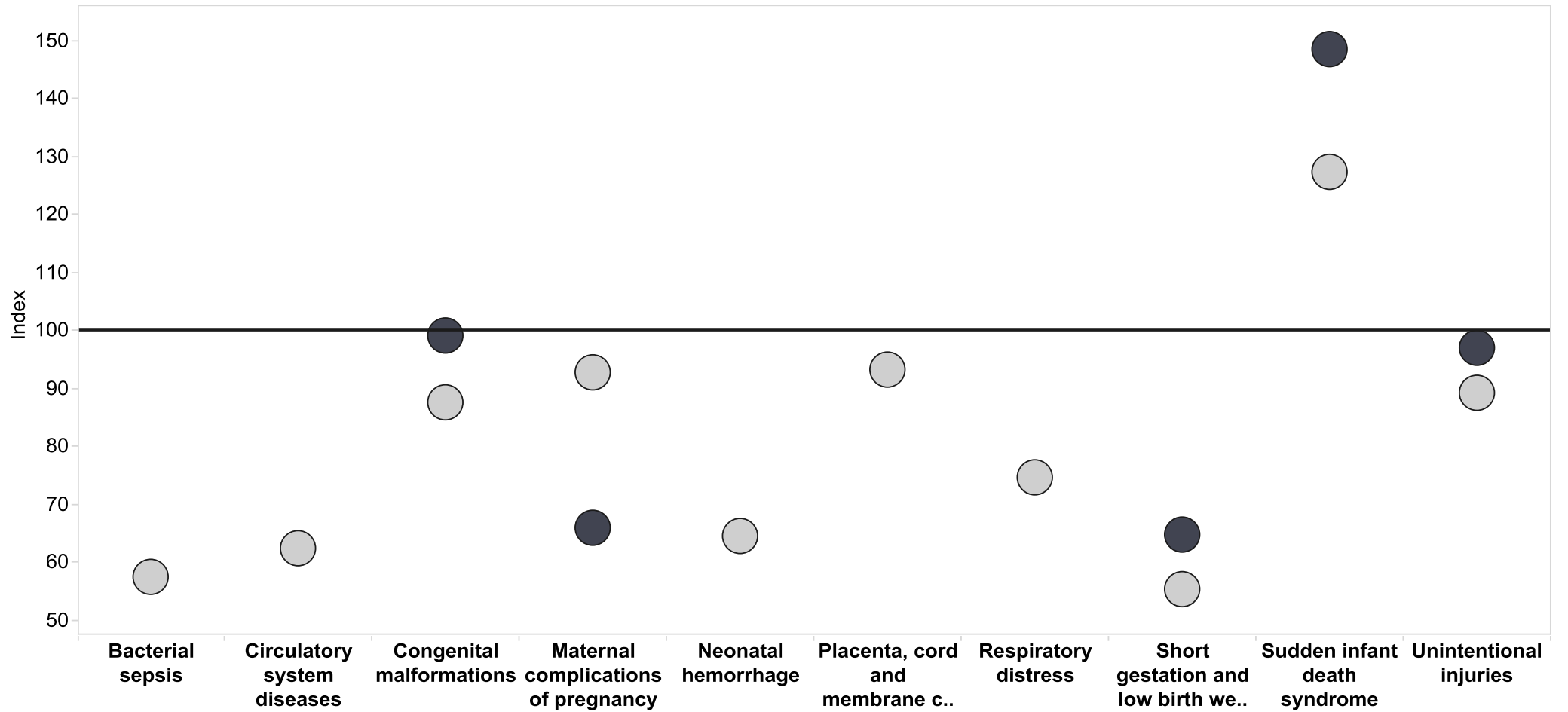
***Please select:***

Age Under 1  
 Sex Both sexes  
 Region HHS Region #10 AK, ID, OR, WA

**Rural-Urban Status**  
 Urban  
 Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age Under 1, in HHS Region #10 AK, ID, OR, WA, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 75

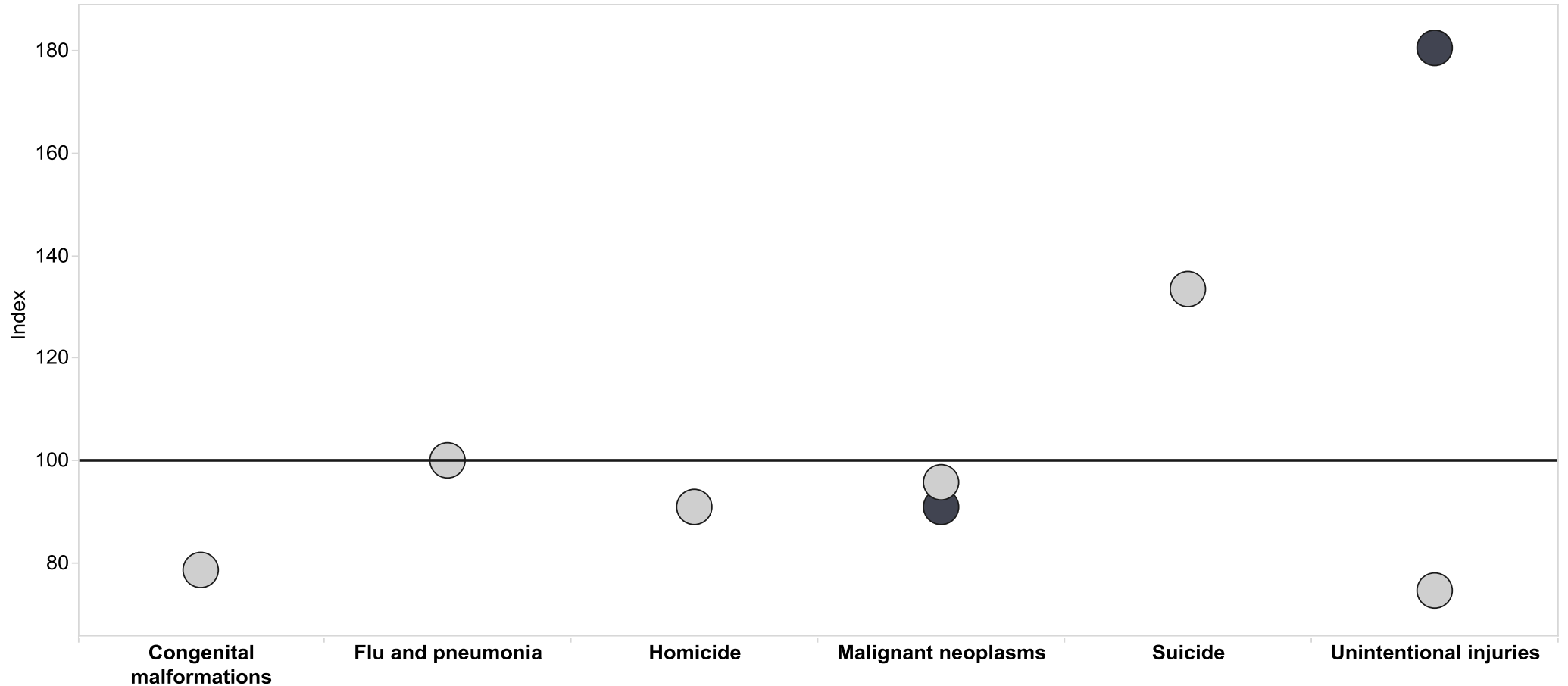
***Please select:***

Age 1 to 14  
Sex Both sexes  
Region HHS Region #10 AK, ID, OR, WA

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Both sexes) Age 1 to 14, in HHS Region #10 AK, ID, OR, WA, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 76

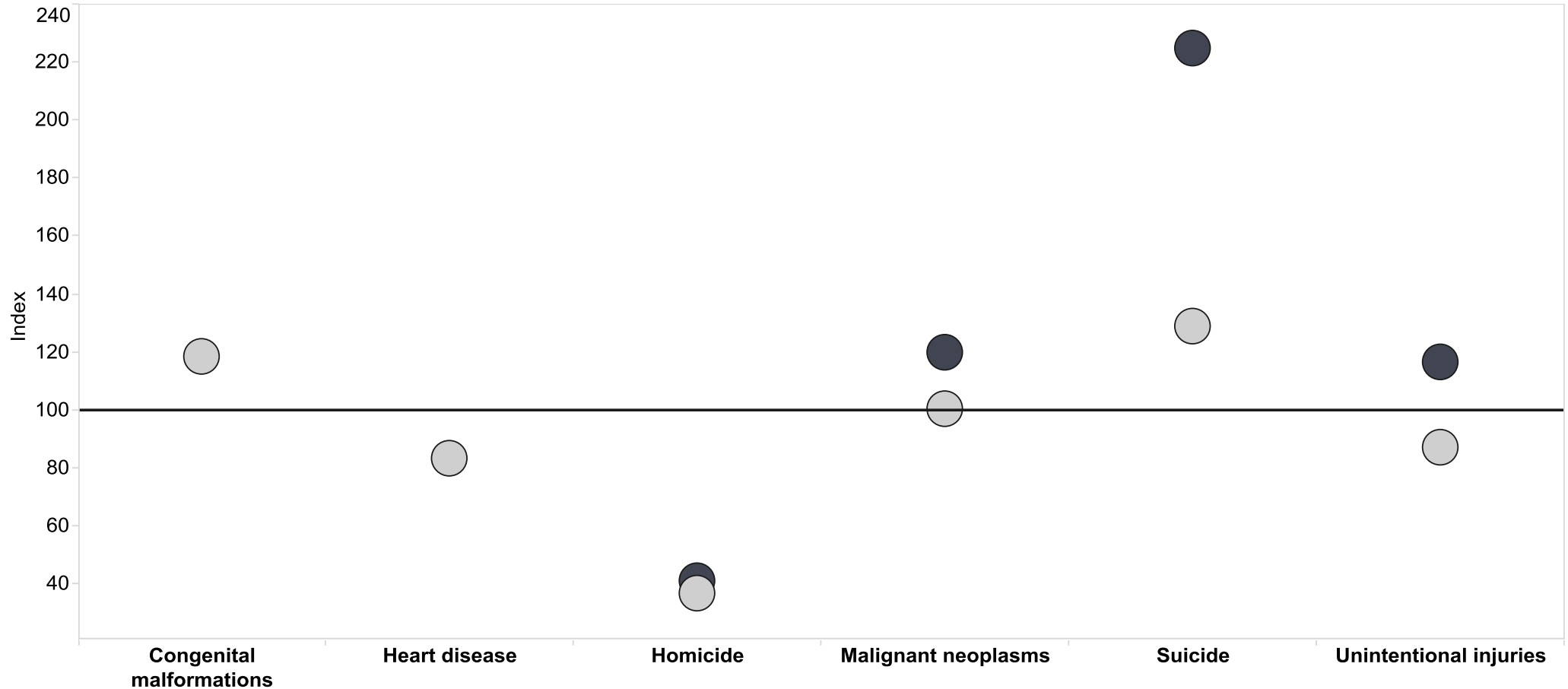
***Please select:***

Age 15 to 24  
Sex Male  
Region HHS Region #10 AK, ID, OR, WA

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 15 to 24, in HHS Region #10 AK, ID, OR, WA, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 77

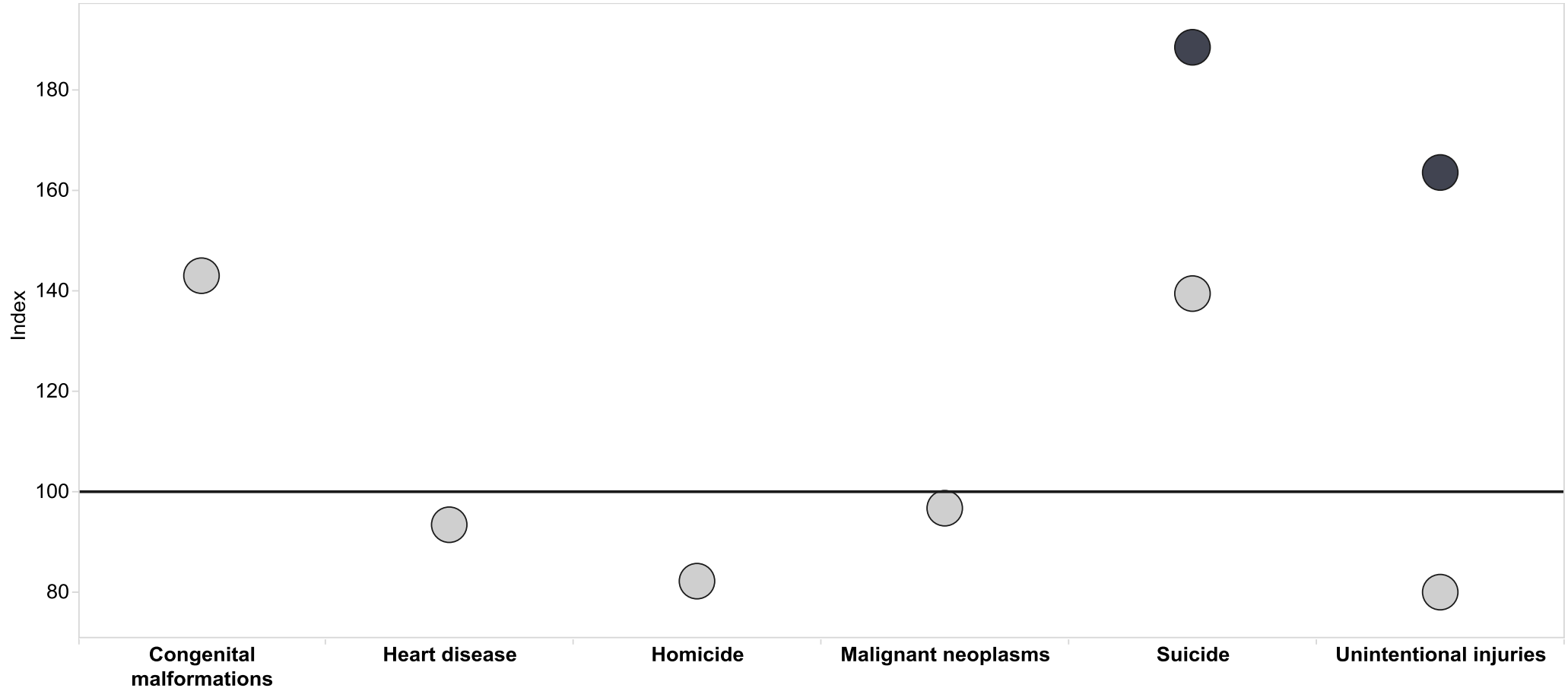
***Please select:***

Age 15 to 24  
Sex Female  
Region HHS Region #10 AK, ID, OR, WA

**Rural-Urban Status**  
Urban  
Rural

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 15 to 24, in HHS Region #10 AK, ID, OR, WA, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 78

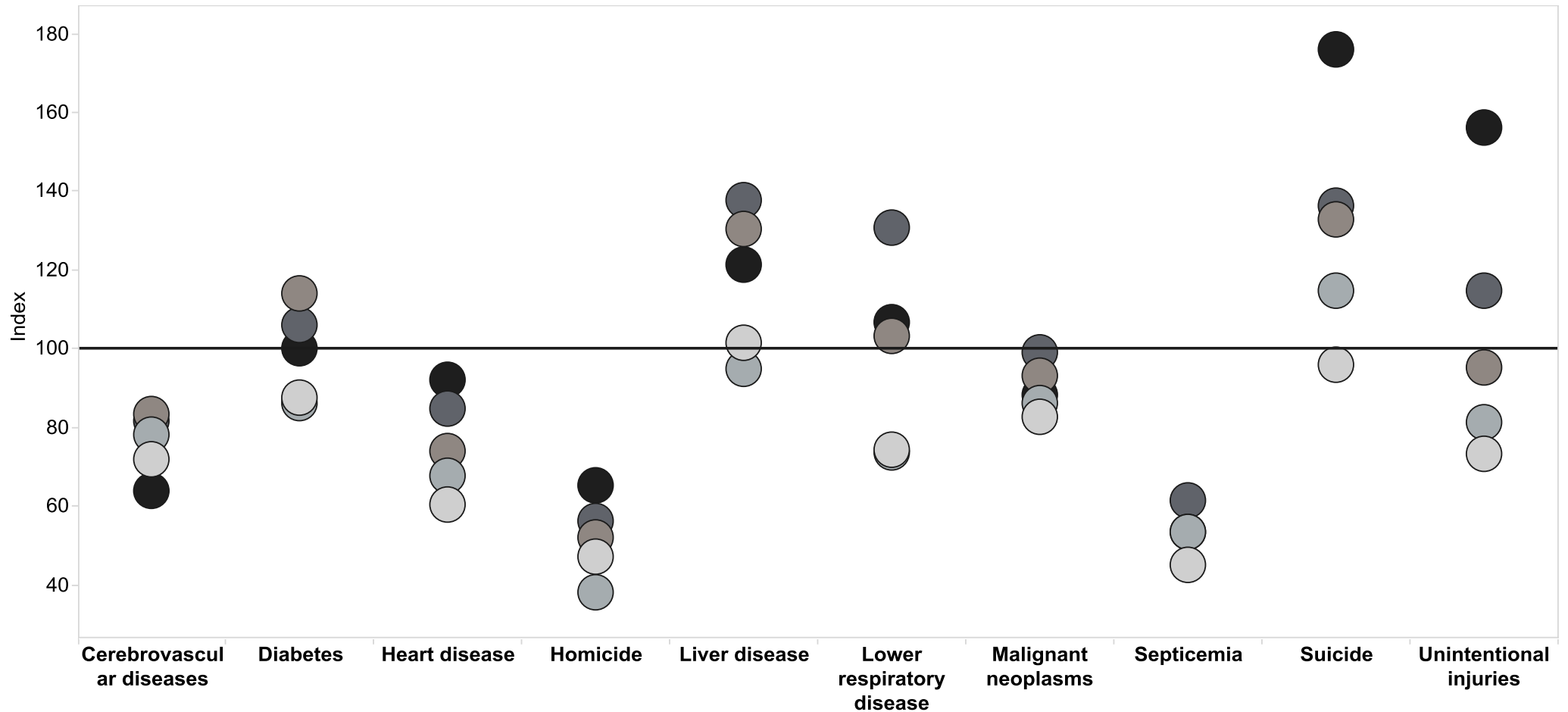
**Please select:**

Age 25 to 64  
 Sex Male  
 Region HHS Region #10 AK, ID, OR, WA

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 25 to 64, in HHS Region #10 AK, ID, OR, WA, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 79

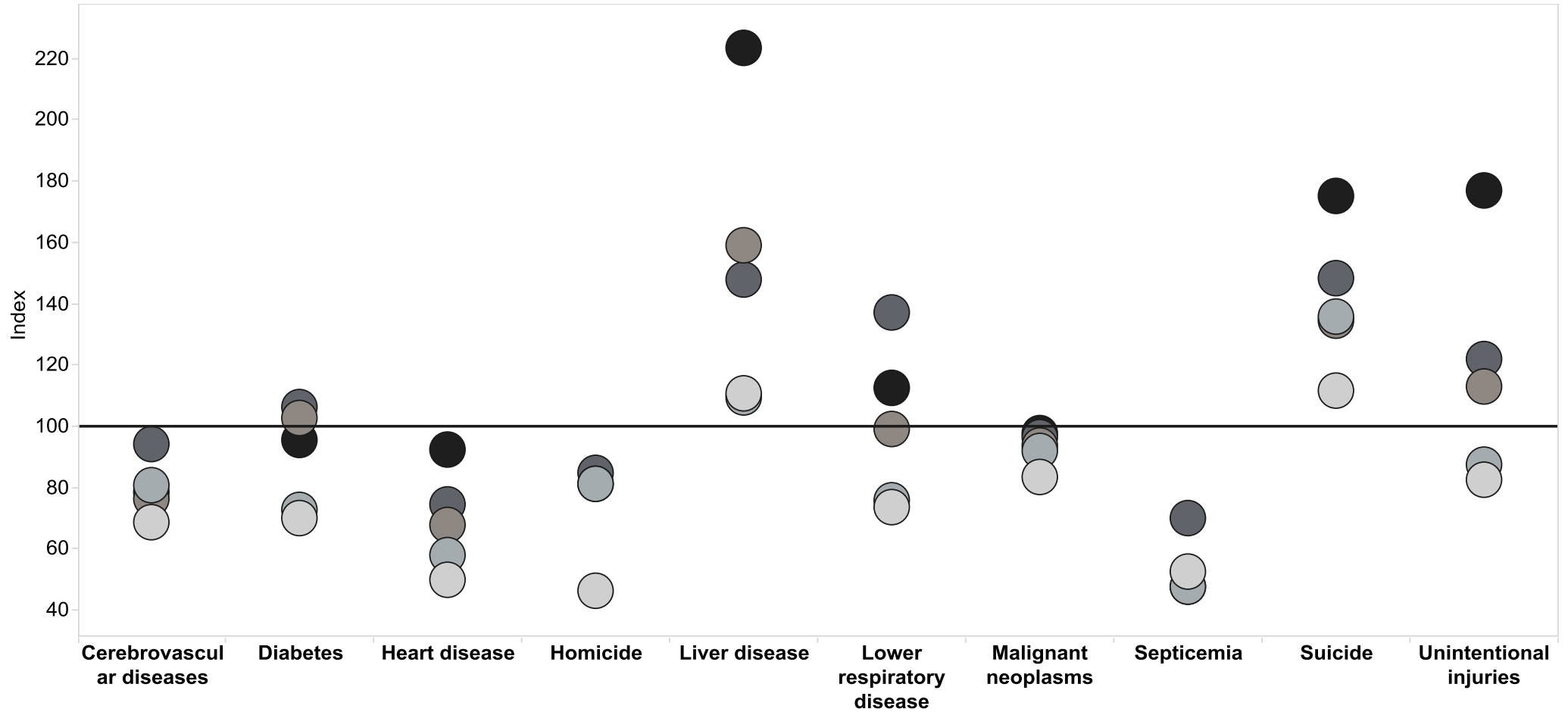
**Please select:**

Age 25 to 64  
 Sex Female  
 Region HHS Region #10 AK, ID, OR, WA

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 25 to 64, in HHS Region #10 AK, ID, OR, WA, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 80

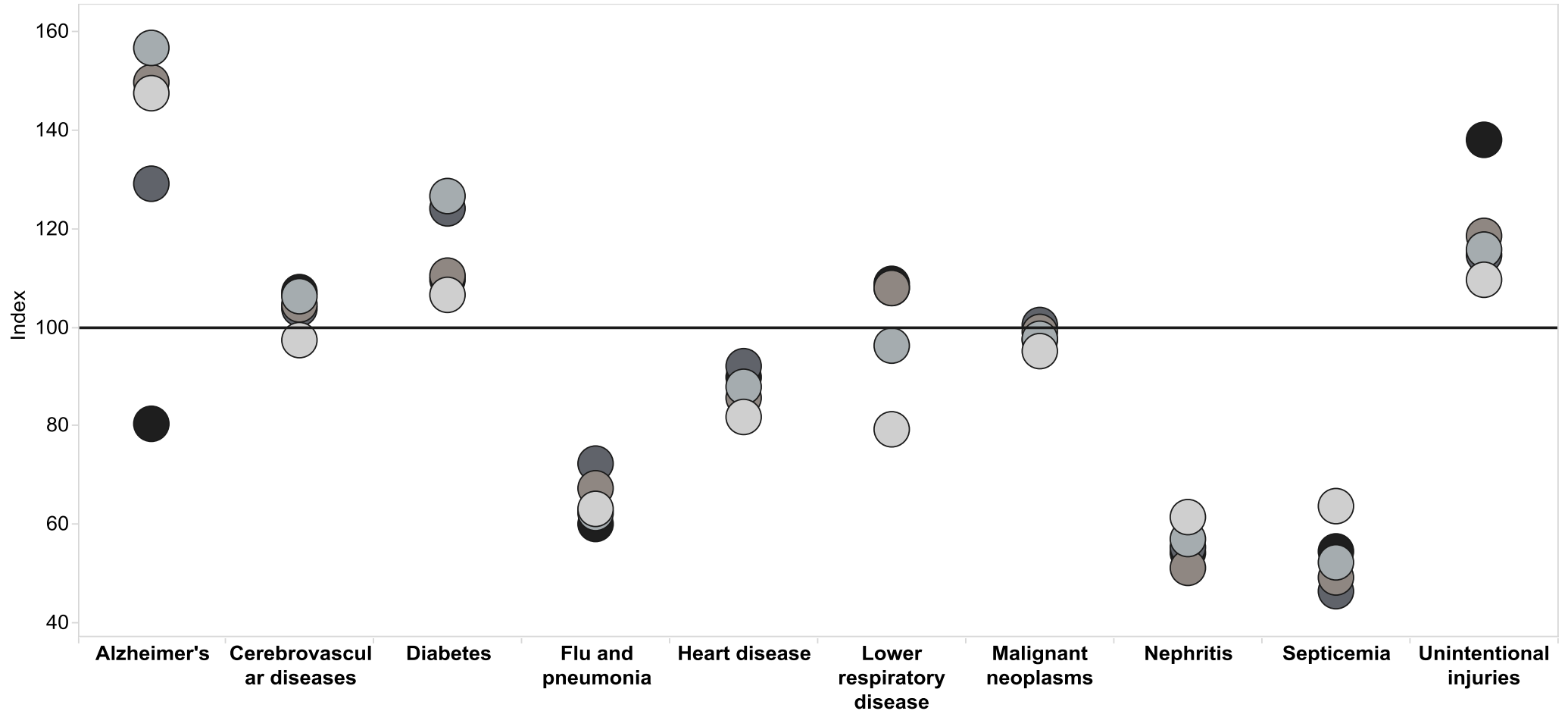
***Please select:***

Age 65 and older  
 Sex Male  
 Region HHS Region #10 AK, ID, OR, WA

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Male) Age 65 and older, in HHS Region #10 AK, ID, OR, WA, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 81

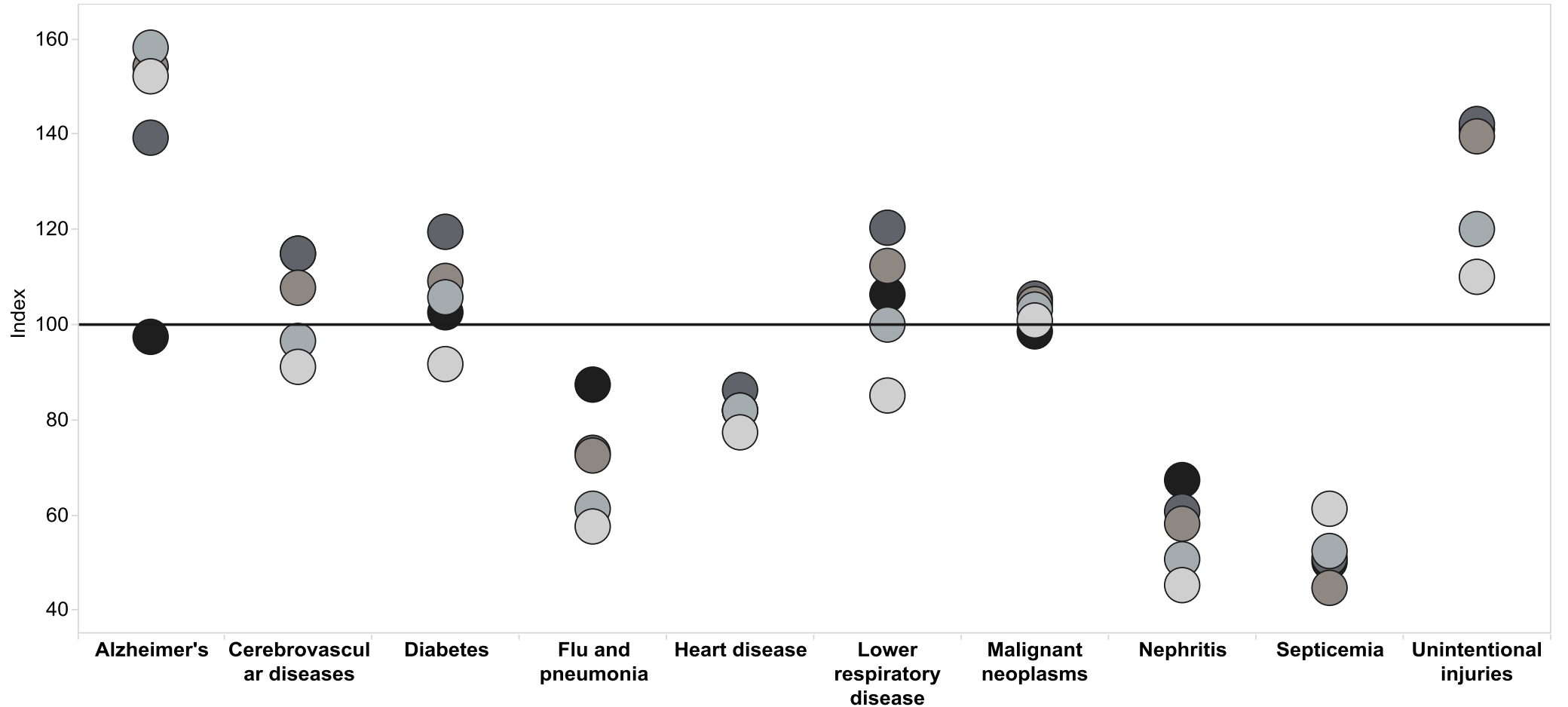
***Please select:***

Age 65 and older  
 Sex Female  
 Region HHS Region #10 AK, ID, OR, WA

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

**Index for Mortality Rates for Cause Related to the National Mortality Rate among Persons (Female) Age 65 and older, in HHS Region #10 AK, ID, OR, WA, by Rural-Urban Status: United States, 2011-2013**

*Objects above the horizontal line where index=100 indicates mortality rates higher than the national average, below the line are values below the average.*

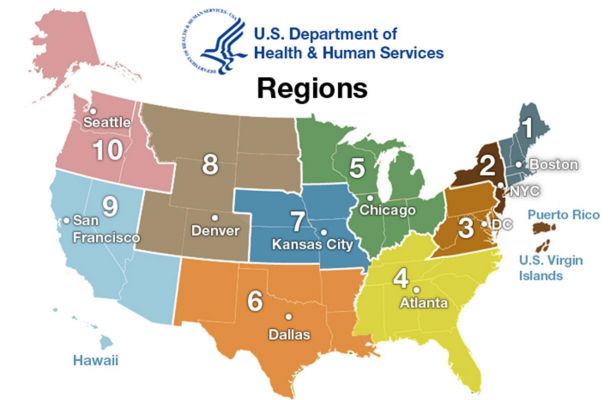


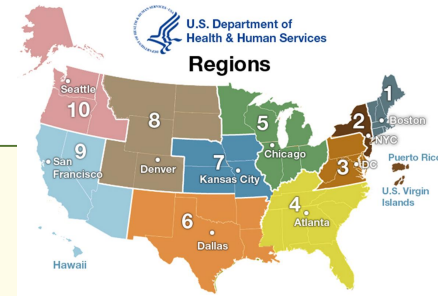
SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.  
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.



## Summary: New England and the Mid-Atlantic States

- Cause-specific, rural mortality rates worse than the nation in:
  - Region 1, CT, ME, MA, NH, RI, VT
    - Unintentional injuries, suicide, 15-24 years of age, males.
  - Region 2, NY, NJ
    - Unintentional Injuries, 1 to 14 years.
    - Lower respiratory disease, 25 to 64 years of age, males.
  - Region 3, DE, DC, MD, PA, VA, WV
    - Congenital malformations, Sudden infant death syndrome, <1 year of age.
    - Congenital malformations, homicide, 1 to 14 years of age.
    - Unintentional injuries, 1 to 14 and 15 to 24 years of age.
    - Malignant neoplasms, heart disease, unintentional injuries, suicide, diabetes, lower respiratory, 25 to 64 years of age.



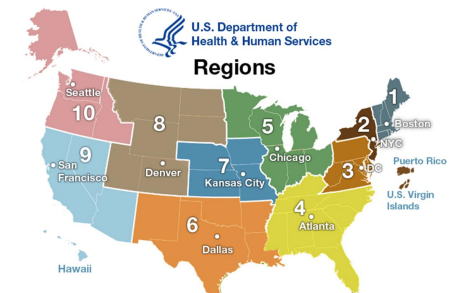


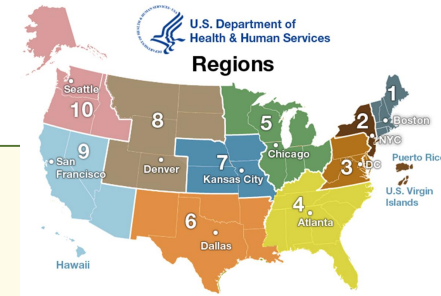
## Summary: The South

- Cause-specific, rural mortality rates worse than the nation in:
  - All top-ten causes of death, 25 to 64 years and 65 or more years of age (region 4 & 6).
  - Region 4, AL, FL, GA, KY, MS, NC, SC, TN
    - Congenital malformations, sudden infant death syndrome, and respiratory distress <1 year of age.
    - Unintentional injuries, heart disease, 1 to 14 years and 15 to 24 years of age.
  - Region 6, AR, LA, NM, OK, TX
    - Congenital malformations, sudden infant death syndrome, <1 year of age.
    - Unintentional injuries, homicide, lower respiratory, 1 to 14 years of age.
    - Unintentional injuries, suicide, 15 to 24 years of age.

## Summary: The Midwest

- Cause-specific, rural mortality rates worse than the nation in:
  - Region 5, IL, IN, MI, MN, OH, WI
    - Unintentional injuries, <1 year of age, 1 to 14 and 15 to 24 years of age.
    - Malignant neoplasm, unintentional injuries, lower respiratory, 25 to 64 years of age.



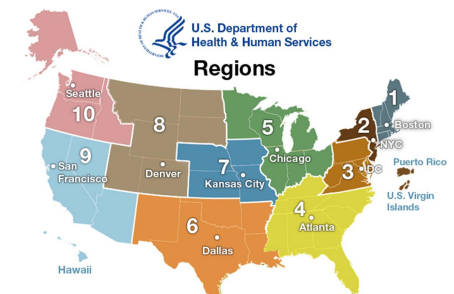


## Summary: The Plains, and Rockies

- Cause-specific, rural mortality rates worse than the nation in:
  - Unintentional injuries, all ages (region 7 & 8).
  - Congenital malformation, sudden infant death, <1 year of age (region 7 & 8).
  - Suicide, 15 to 24 years of age, males (region 7 & 8), females (region 8).
  - Region 7, IA, KS, MO, NE
    - Malignant neoplasms, heart disease, suicide, lower respiratory, 25 to 64 years of age.
    - Heart disease, malignant neoplasms, lower respiratory, cerebrovascular diseases, Alzheimer's, flu & pneumonia, nephritis, 65 years or more.
  - Region 8, CO, MT, ND, SD, UT, WY
    - Suicide, liver disease, 25 to 64 years of age.
    - Lower respiratory, cerebrovascular diseases, Alzheimer's, 65 years of age or more.

## Summary: The West Coast

- Cause-specific, rural mortality rates worse than the nation in:
  - Suicide, 15 to 24, 25 to 64 years of age (region 9 & 10).
  - Lower respiratory, 65 years or more of age (region 9 & 10).
  - Region 9, AZ, CA, HI, NV
    - Unintentional injuries, 1 to 14, 15 to 24, and 25 to 64 years of age.
    - Liver disease, 25 to 64 years of age.
  - Region 10, AK, ID, OR, WA
    - Sudden infant death syndrome, <1 year of age.
    - Unintentional injuries, age 1 or more.
    - Liver disease, lower respiratory, 25 to 64 years of age.
    - Cerebrovascular diseases, Alzheimer's, 65 years or more of age.



## Summary

- Place matters
  - Cause-specific mortality varies by region
  - Regional differences that may impact mortality include:
    - Culture
    - Demographics
    - Health behaviors
    - Morbidity
- Sparsely populated areas have high mortality rates

## Appendix A: Overlapping Point

- Graphs with less than two (0 to 24 years of age) or five points (25+ years of age) indicate either 1) overlapping data or 2) suppressed or unreliable data.
- Appendix A lists all overlapping points allowing users to ascertain the suppressed and unreliable estimates.
- Overlapping points do not imply equality between two mortality rates. Please see the data tables for exact rates.
- Numbers are used to indicate overlap as more than one overlap may be present within an Age, Sex, Region, Disease combination.

## Appendix A: Overlapping Points by Region and Disease, Under 1 Year of Age

Region	Disease	Rural-Urban Status	
		Urban	Rural
HHS 6	Bacteria Septicemia	1	1

Bacterial Septicemia, Age <1, Region 6 values are relatively close and almost appear to overlap. As such, we indicate the overlap with a value of 1 across the row.



## Appendix A: Overlapping Points by Region and Disease, 1 to 14 Years of Age

Region	Disease	Rural-Urban Status	
		Urban	Rural
HHS 4	Benign Neoplasms	1	1
HHS 4	Flu and Pneumonia	1	1
HHS 5	Homicide	1	1
HHS 5	Flu and Pneumonia	1	1
HHS 6	Heart Disease	1	1
HHS 7	Congenital Malformations	1	1

Overlapping points are represented across the rows, not the columns. For example, Region 4 has an overlapping point at Benign Neoplasms.

## Appendix A: Overlapping Points by Region, Sex, Disease, 15 to 24 Years of Age

Region	Sex	Disease	Rural-Urban Status	
			Urban	Rural
HHS 5	Males	Heart Disease	1	1
HHS 5	Females	Heart Disease	1	1
HHS 6	Females	Malignant Neoplasms	1	1

Overlapping points are represented across the rows, not the columns. For example, Region 5, Males has an overlapping point at Heart Disease.

# Appendix A: Overlapping Points by Region, Sex, Disease, 25 to 64 years of age, Region 1 to 5

Region	Sex	Disease	Rural-Urban Status				
			Large Central	Large Fringe	Medium/Small Metro	Micropolitan	Non-core
HHS 1	Males	Heart Disease			1	1	
HHS 1	Males	Suicide	1	1			
HHS 1	Females	Homicide	1		1		
HHS 2	Males	Cerebrovascular diseases		1			1
HHS 2	Males	Heart Disease	1		1		
HHS 2	Males	Suicide			1	1	
HHS 2	Females	Unintentional injuries		1	1		
HHS 3	Males	Homicide		1	1	1	
HHS 3	Males	Liver disease	1		1	1	
HHS 3	Females	Lower respiratory disease	1		1		
HHS 3	Females	Septicemia			1		1
HHS 4	Females	Malignant Neoplasms	1	1			
HHS 4	Females	Septicemia	1	1			
HHS 5	Males	Diabetes	1		1		
HHS 5	Males	Heart Disease			1	1	
HHS 5	Males	Liver disease	1		1		
HHS 5	Males	Lower respiratory disease				1	1
HHS 5	Males	Malignant Neoplasms	1		1	1	
HHS 5	Females	Diabetes	1		1		
HHS 5	Females	Lower respiratory disease				1	1
HHS 5	Females	Septicemia		1			1

Overlapping points are represented across the rows, not the columns. For example, Region 1, Males has an overlapping point at Heart Disease.

## Appendix A: Overlapping Points by Region, Sex, Disease, 25 to 64 years of age, Region 6 to 7

Region	Sex	Disease	Rural-Urban Status				
			Large Central	Large Fringe	Medium/Small Metro	Micropolitan	Non-core
HHS 6	Males	Cerebrovascular diseases				1	1
HHS 6	Females	Malignant Neoplasms	1	1			
HHS 7	Males	Cerebrovascular diseases		1	1	1	1
HHS 7	Males	Heart Disease		1	1		
HHS 7	Males	Homicide				1	1
HHS 7	Males	Liver disease	1			1	
HHS 7	Males	Septicemia		1	1	2	2
HHS 7	Males	Suicide	1			1	1
HHS 7	Females	Cerebrovascular diseases				1	1
HHS 7	Females	Heart Disease					
HHS 7	Females	Malignant Neoplasms		1	1		
HHS 7	Females	Suicide		1	1	2	2

Overlapping points are represented across the rows, not the columns. For example, Region 6, Males has an overlapping point at Cerebrovascular diseases. Numbers are used to indicate overlap as more than one overlap may be present within an Age, Sex, Region, Disease combination.

# Appendix A: Overlapping Points by Region, Sex, Disease, 25 to 64 years of age, Region 8 to 10

Region	Sex	Disease	Rural-Urban Status				
			Large Central	Large Fringe	Medium/Small Metro	Micropolitan	Non-core
HHS 8	Males	Heart Disease	1			1	
HHS 8	Males	Lower respiratory disease		1	1	1	
HHS 8	Females	Heart Disease	1		1	1	
HHS 8	Females	Homicide		1	1		
HHS 8	Females	Liver disease		1	1		
HHS 8	Females	Lower respiratory disease	1		1	1	
HHS 8	Females	Malignant Neoplasms	1	1	1		
HHS 8	Females	Suicide		1	1		1
HHS 9	Males	Diabetes		1		1	
HHS 9	Males	Malignant Neoplasms	2	2		1	1
HHS 9	Males	Suicide	1	1			
HHS 9	Females	Cerebrovascular diseases	1			1	1
HHS 9	Females	Heart Disease	1	1			
HHS 9	Females	Malignant Neoplasms	1	1			
HHS 9	Females	Unintentional injuries	1	1			
HHS 10	Males	Diabetes	1	1			
HHS 10	Males	Lower respiratory disease	1	1			
HHS 10	Males	Septicemia		1	1		
HHS 10	Females	Cerebrovascular diseases		1	1		1
HHS 10	Females	Homicide		1	1		
HHS 10	Females	Liver disease	1	1			
HHS 10	Females	Septicemia		1	1		
HHS 10	Females	Suicide		1	1		

# Appendix A: Overlapping Points by Region, Sex, Disease, 65+ years of age, Region 1 to 3

Region	Sex	Disease	Rural-Urban Status				
			Large Central	Large Fringe	Medium/Small Metro	Micropolitan	Non-core
HHS 1	Males	Flu and Pneumonia	1		1		
HHS 1	Males	Malignant Neoplasms		1	1		
HHS 1	Males	Unintentional injuries		2	2	1	1
HHS 1	Females	Heart Disease		1			1
HHS 1	Females	Lower respiratory disease				1	1
HHS 1	Females	Malignant Neoplasms		1	1	1	
HHS 1	Females	Nephritis				1	1
HHS 2	Males	Diabetes			1	1	
HHS 2	Males	Heart Disease		1	1		
HHS 2	Males	Nephritis		1	1		
HHS 2	Females	Cerebrovascular diseases			1	1	
HHS 2	Females	Malignant Neoplasms			1		1
HHS 3	Males	Cerebrovascular diseases		1	1		
HHS 3	Males	Flu and Pneumonia		1	1		
HHS 3	Males	Heart Disease	2		1	2	1
HHS 3	Males	Lower respiratory disease				1	1
HHS 3	Males	Unintentional injuries	1			1	1
HHS 3	Females	Cerebrovascular diseases	1		1		
HHS 3	Females	Diabetes	1		1		
HHS 3	Females	Flu and Pneumonia	1		1		
HHS 3	Females	Lower respiratory disease	1	1			
HHS 3	Females	Malignant Neoplasms		1	1		

# Appendix A: Overlapping Points by Region, Sex, Disease, 65+ years of age, Region 4 to 6

Region	Sex	Disease	Rural-Urban Status				
			Large Central	Large Fringe	Medium/Small Metro	Micropolitan	Non-core
HHS 4	Males	Heart Disease	1		1		
HHS 4	Females	Heart Disease	1	1			
HHS 4	Females	Malignant Neoplasms		1	1	2	2
HHS 4	Females	Nephritis	1	1			
HHS 5	Males	Heart Disease	1		1		1
HHS 5	Males	Malignant Neoplasms				1	1
HHS 5	Males	Septicemia		1	1		
HHS 5	Females	Cerebrovascular diseases	1	1			
HHS 5	Females	Flu and Pneumonia	1	1			
HHS 5	Females	Malignant Neoplasms		1		1	1
HHS 6	Males	Heart Disease	1	1			
HHS 6	Males	Malignant Neoplasms				1	1
HHS 6	Males	Nephritis		1	1		
HHS 6	Females	Cerebrovascular diseases	1		1		
HHS 6	Females	Diabetes			1		1
HHS 6	Females	Malignant Neoplasms	1		1		
HHS 6	Females	Nephritis	1		1		

Overlapping points are represented across the rows, not the columns. For example, Region 4, Males has an overlapping point at Heart Disease. Numbers are used to indicate overlap as more than one overlap may be present within an Age, Sex, Region, Disease combination.

## Appendix A: Overlapping Points by Region, Sex, Disease, 65+ years of age, Region 7 to 8

Region	Sex	Disease	Rural-Urban Status				
			Large Central	Large Fringe	Medium/Small Metro	Micropolitan	Non-core
HHS 7	Males	Cerebrovascular diseases	2	1	1	2	
HHS 7	Males	Flu and Pneumonia	1		1		
HHS 7	Males	Heart Disease	1			1	1
HHS 7	Males	Nephritis				1	1
HHS 7	Females	Cerebrovascular diseases	1				1
HHS 7	Females	Diabetes	1			1	
HHS 7	Females	Heart Disease				1	1
HHS 7	Females	Lower respiratory disease		1			1
HHS 7	Females	Lower respiratory disease	1		1		
HHS 7	Females	Malignant Neoplasms		1	1	1	
HHS 7	Females	Unintentional injuries		1	1	1	
HHS 8	Males	Cerebrovascular diseases				1	1
HHS 8	Males	Diabetes			1	1	
HHS 8	Males	Malignant Neoplasms	1	1	1	1	
HHS 8	Females	Diabetes	1				1
HHS 8	Females	Malignant Neoplasms				1	1
HHS 8	Females	Septicemia	1				1

Overlapping points are represented across the rows, not the columns. For example, Region 7, Males has an overlapping point at Cerebrovascular diseases (Large Fringe and Medium/Small Metro). Numbers are used to indicate overlap as more than one overlap may be present within an Age, Sex, Region, Disease combination.



# Appendix A: Overlapping Points by Region, Sex, Disease, 65+ years of age, Region 9 to 10

Region	Sex	Disease	Rural-Urban Status				
			Large Central	Large Fringe	Medium/Small Metro	Micropolitan	Non-core
HHS 9	Males	Diabetes	2	1	1	2	
HHS 9	Males	Flu and Pneumonia		1			1
HHS 9	Males	Heart Disease			1	1	1
HHS 9	Males	Lower respiratory disease		1	1		
HHS 9	Males	Malignant Neoplasms	1	1	1		1
HHS 9	Males	Unintentional injuries	1	1			
HHS 9	Females	Cerebrovascular diseases	1	1			
HHS 9	Females	Diabetes	2		1	1	2
HHS 9	Females	Heart Disease	1	1		1	1
HHS 9	Females	Malignant Neoplasms	1	2	1	2	
HHS 9	Females	Nephritis				1	1
HHS 10	Males	Diabetes			1		1
HHS 10	Males	Flu and Pneumonia	1	1			
HHS 10	Males	Lower respiratory disease			1	1	1
HHS 10	Males	Malignant Neoplasms		1	1		1
HHS 10	Females	Cerebrovascular diseases				1	1
HHS 10	Females	Flu and Pneumonia			1	1	
HHS 10	Females	Heart Disease		1	1		1
HHS 10	Females	Malignant Neoplasms		1	1	1	
HHS 10	Females	Unintentional injuries			1	1	1

Overlapping points are represented across the rows, not the columns. For example, Region 9, Males has an overlapping point at Diabetes(Large Fringe and Medium/Small Metro). Numbers are used to indicate overlap as more than one overlap may be present within an Age, Sex, Region, Disease combination.

## For More Information

For state specific mortality rates, contact the state health department's vital records department.