

Mapping 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 presentation, 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

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
Large central (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
Large Fringe (suburban)	Counties in MSAs with a population of at least 1 million residents
Small Metro	Counties in MSAs with a population of less than 1 million residents
Micropolitan (large rural)	Counties with populations of 10,000 to 49,999
Non-core (small rural)	Remaining nonmetropolitan counties that are not in a micropolitan statistical area

Additional Notes on Maps

The HHS regions are as follows:

Region 1: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

Region 2: New York, New Jersey

Region 3: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia

Region 4: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

Region 5: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

Region 6: Arkansas, Louisiana, New Mexico, Oklahoma, Texas

Region 7: Iowa, Kansas, Missouri, Nebraska

Region 8: Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

Region 9: Arizona, California, Hawaii, Nevada

Region 10: Alaska, Idaho, Oregon, Washington

Additional Notes on the Maps

- Rates are age-adjusted for the children, working-age adult, and senior age groups.
- 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 represent deaths per 100,000 population.

Additional Notes on the Maps

- Each set of maps has a legend. The legend is divided into five uniform color bins. For example, if you had a range of values from 0 to 100, the color range would represent every 20 units. That means that all points between 0 and 20 would have the lightest color, all points between 21 and 40 would be a shade darker, and so on and so forth.
- Any rate that falls within the range for the bin color will display as the same color, even though the two values may not be identical.
- Suppressed and unreliable rates are not shown within each map and display as a white regions.
- Mortality rates for those under 25 years of age are lower thus, more suppressed and unreliable rates exist, limiting the visuals for all but the top causes of death.

Additional Notes on the Maps

- Light to dark colors represent lower to higher mortality rates.
- Although large differences may be present between one HHS region's mortality rate and another region's mortality rate, presentation of color variations does not imply that the differences in rates are statistically significant.
- Rates are colored by HHS region (not by individual state).
- The numbers on each state represent their corresponding HHS region.
- Maps are available for up to 10 causes of death for each age, sex, and region grouping.

Additional Notes on the Maps

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 Maps

- 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:

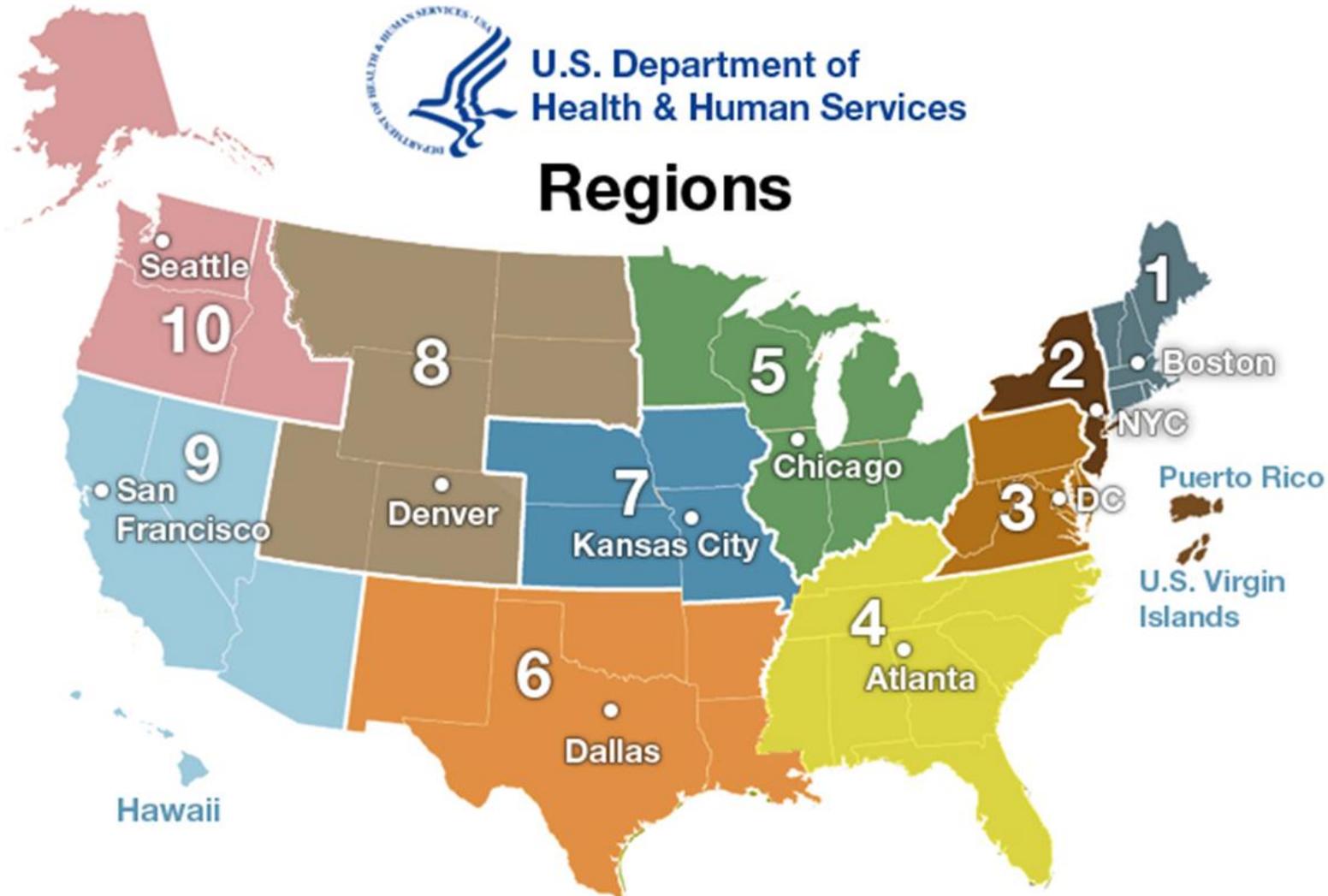
Exploring Rural and Urban Mortality Differences by HHS Region may be accessed from the Rural Health Research Gateway website at:

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

The graphs from this presentation may be accessed at: https://viz.norc.org/views/On-LineToolMortalityRates/Introduction?:embed=y&:display_count=no

Geographic Definitions

HHS Regions



Source: U.S. Department of Health & Human Services

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- [Senior Mortality Maps](#)

Infants

Under 1 Year Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011- 2013; Age: Under 1 Year

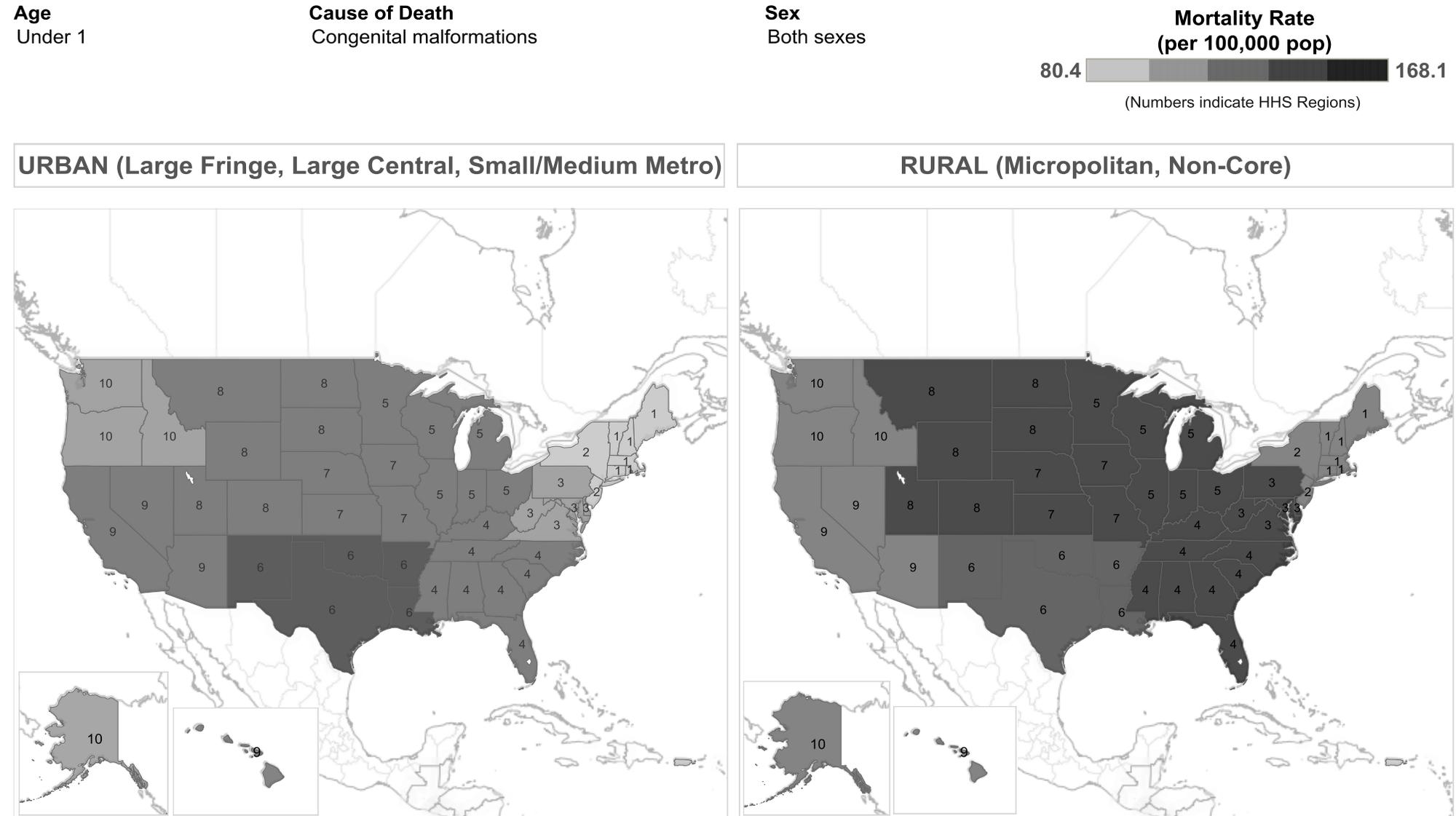
Cause of Death¹:

- [Figure 2: Congenital malformations, Both Sexes](#)
- [Figure 3: Short gestation and low birth weight, Both Sexes](#)
- [Figure 4: Sudden infant death syndrome, Both Sexes](#)
- [Figure 5: Maternal complications of pregnancy, Both Sexes](#)
- [Figure 6: Unintentional injuries, Both Sexes](#)
- [Figure 7: Placenta, cord and membrane complications, Both Sexes](#)
- [Figure 8: Bacterial sepsis, Both Sexes](#)
- [Figure 9: Respiratory distress, Both Sexes](#)
- [Figure 10: Circulatory system diseases, Both Sexes](#)
- [Figure 11: Neonatal hemorrhage, Both Sexes](#)

¹Cause of death of top 10 rankable causes of death in order from leading cause of death to 10th leading cause of death for this age group. Source: http://webappa.cdc.gov/sasweb/ncipc/leadcaus10_us.html

Figure 2

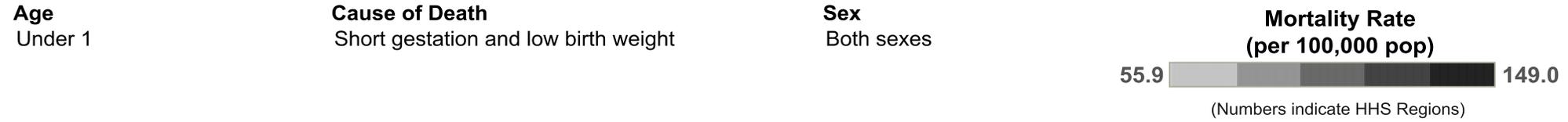
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: Under 1; Cause of Death: Congenital malformations; Sex: Both sexes



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.

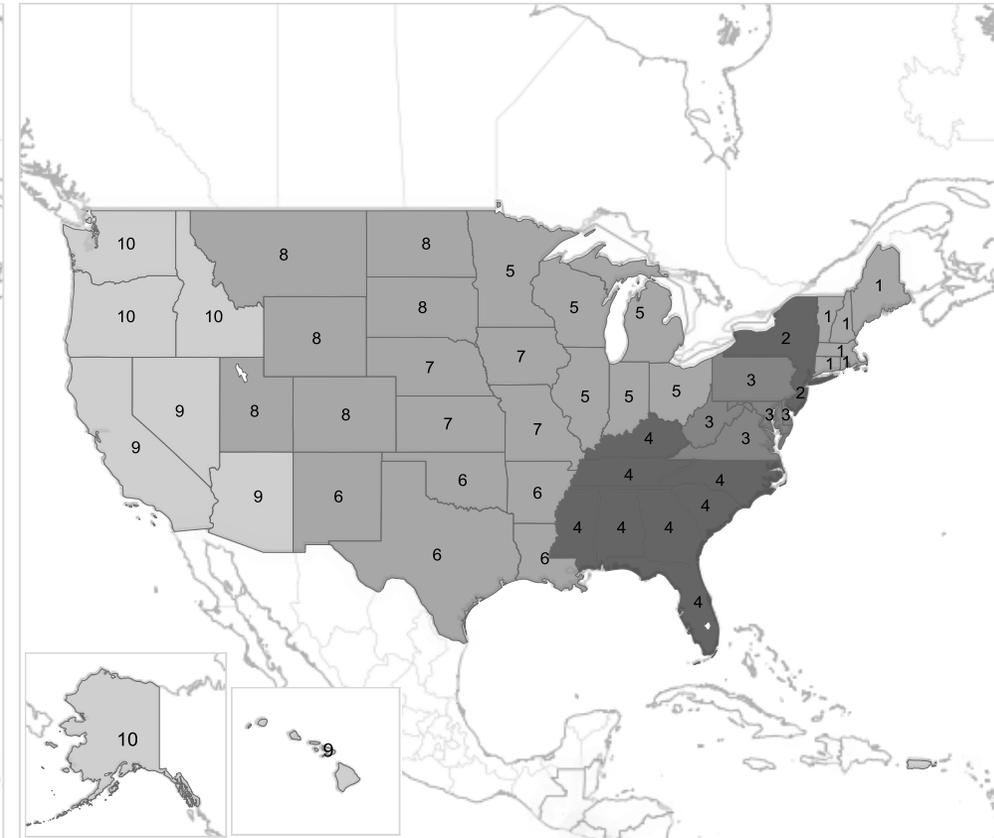
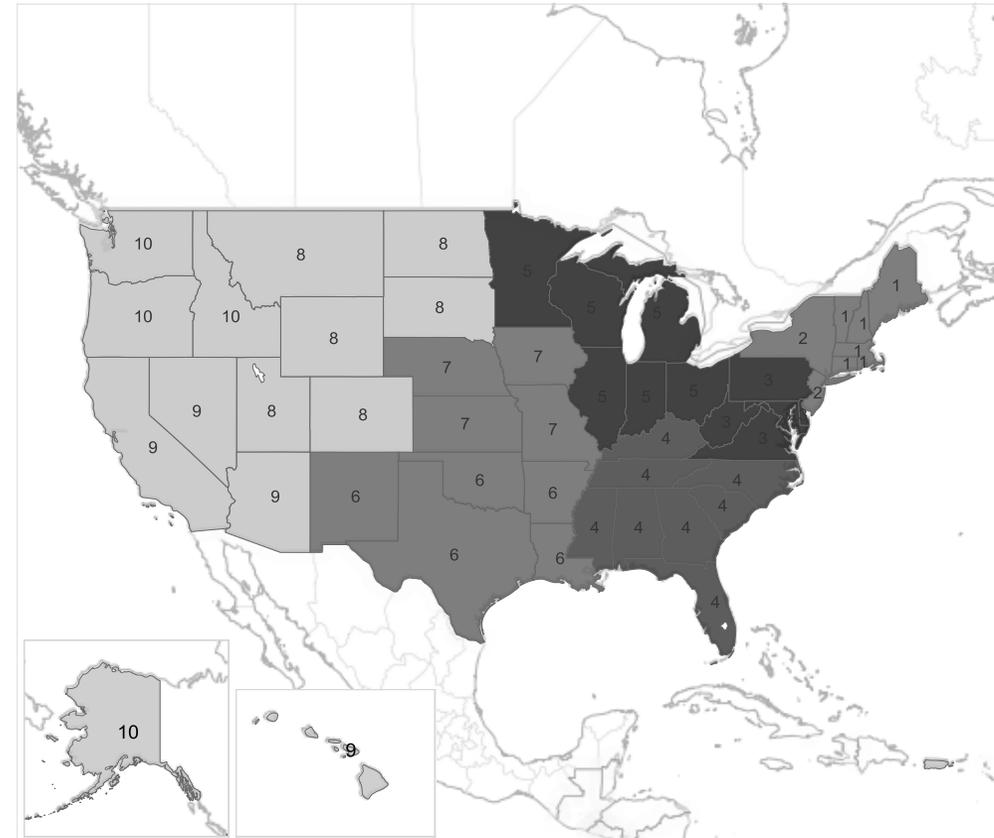
Figure 3

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: Under 1; Cause of Death: Short gestation and low birth weight; Sex: Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

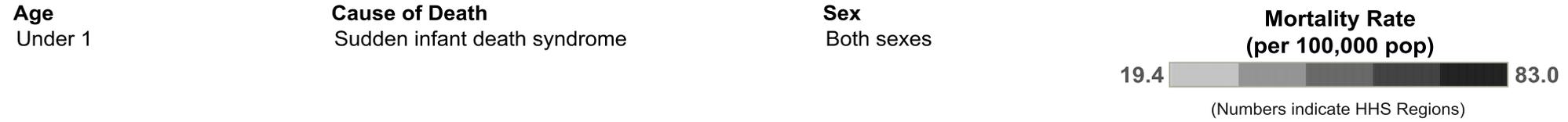
RURAL (Micropolitan, Non-Core)



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.

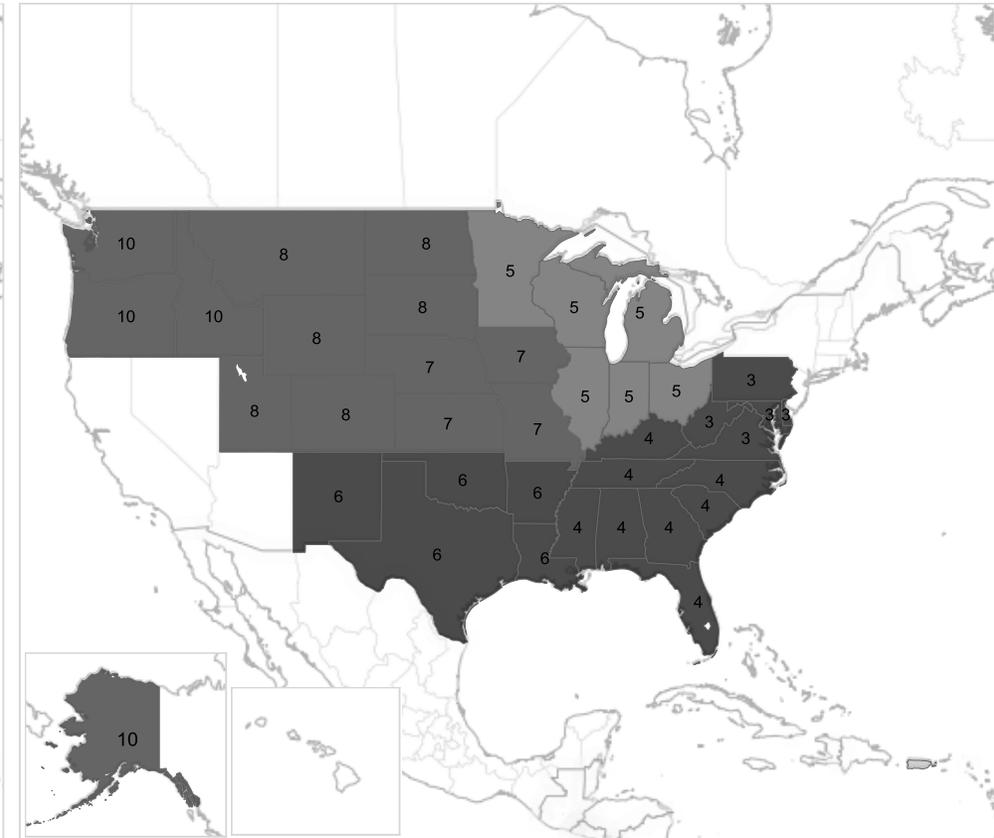
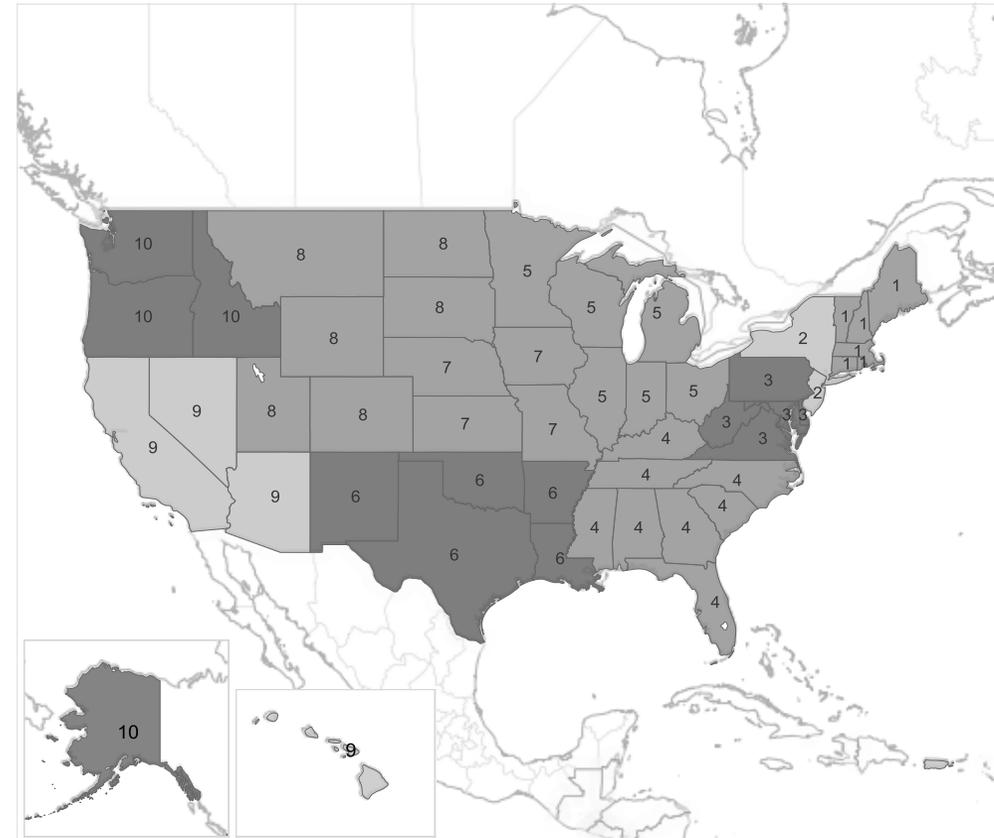
Figure 4

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: Under 1; Cause of Death: Sudden infant death syndrome; Sex: Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

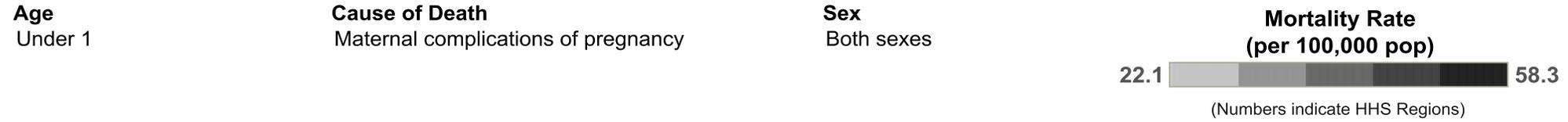
RURAL (Micropolitan, Non-Core)



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.

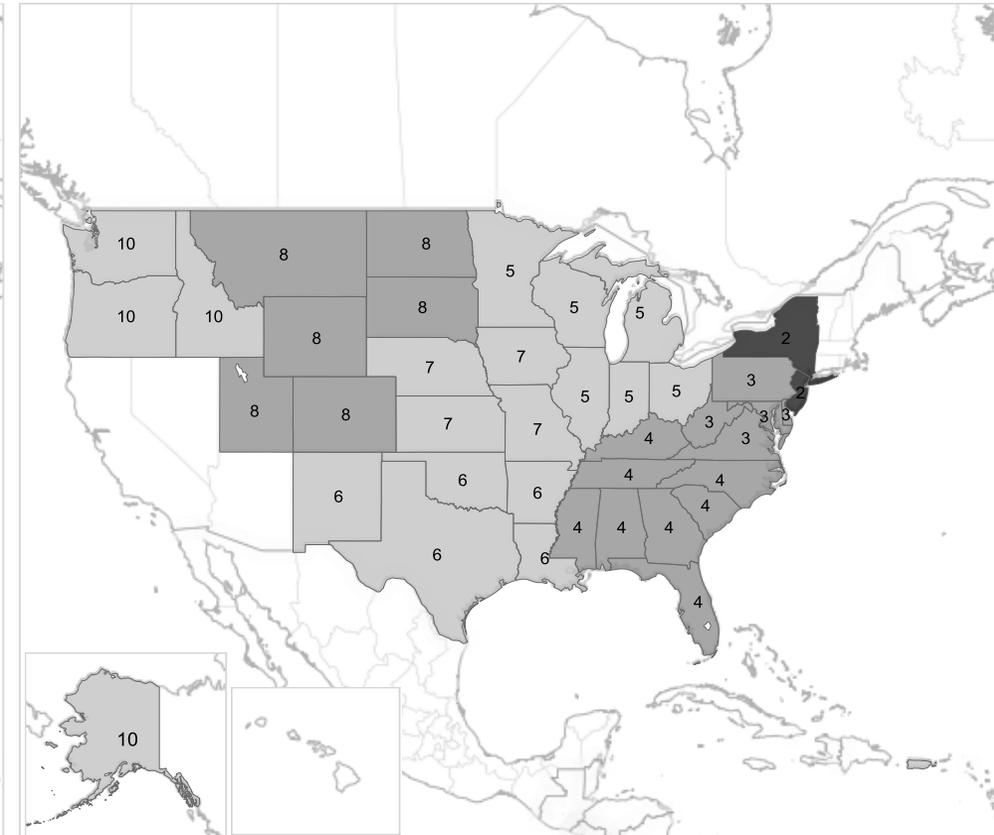
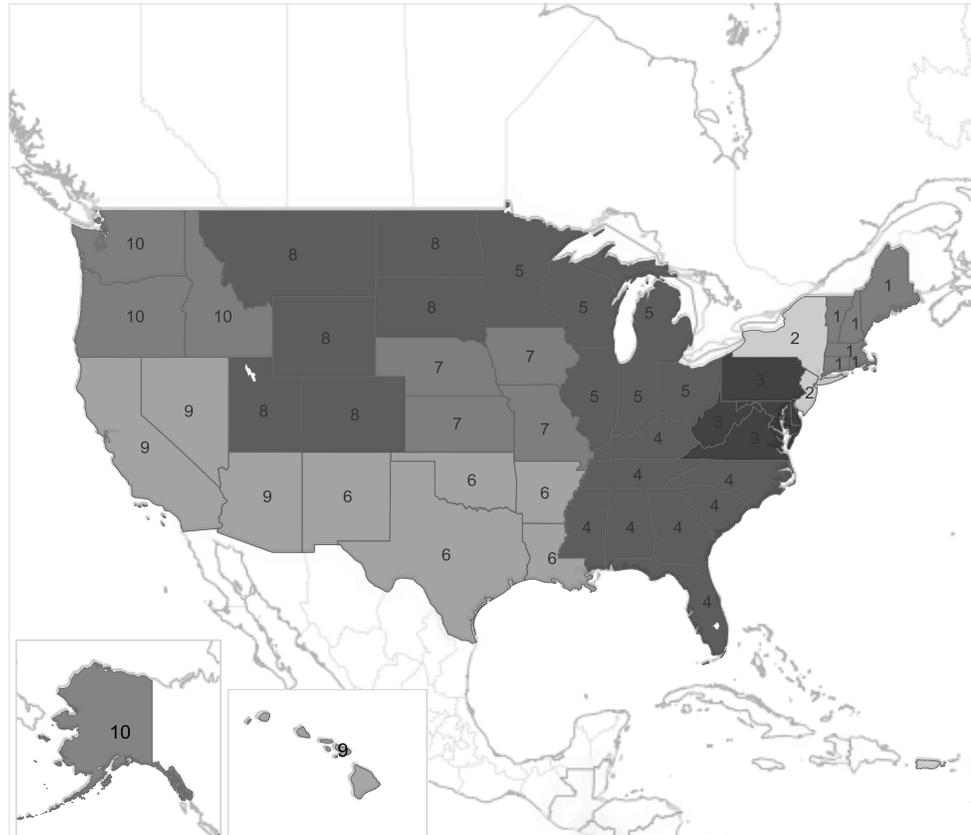
Figure 5

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: Under 1; Cause of Death: Maternal complications of pregnancy; Sex: Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

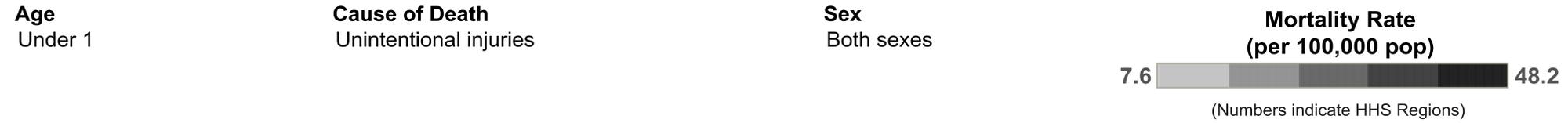
RURAL (Micropolitan, Non-Core)



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.

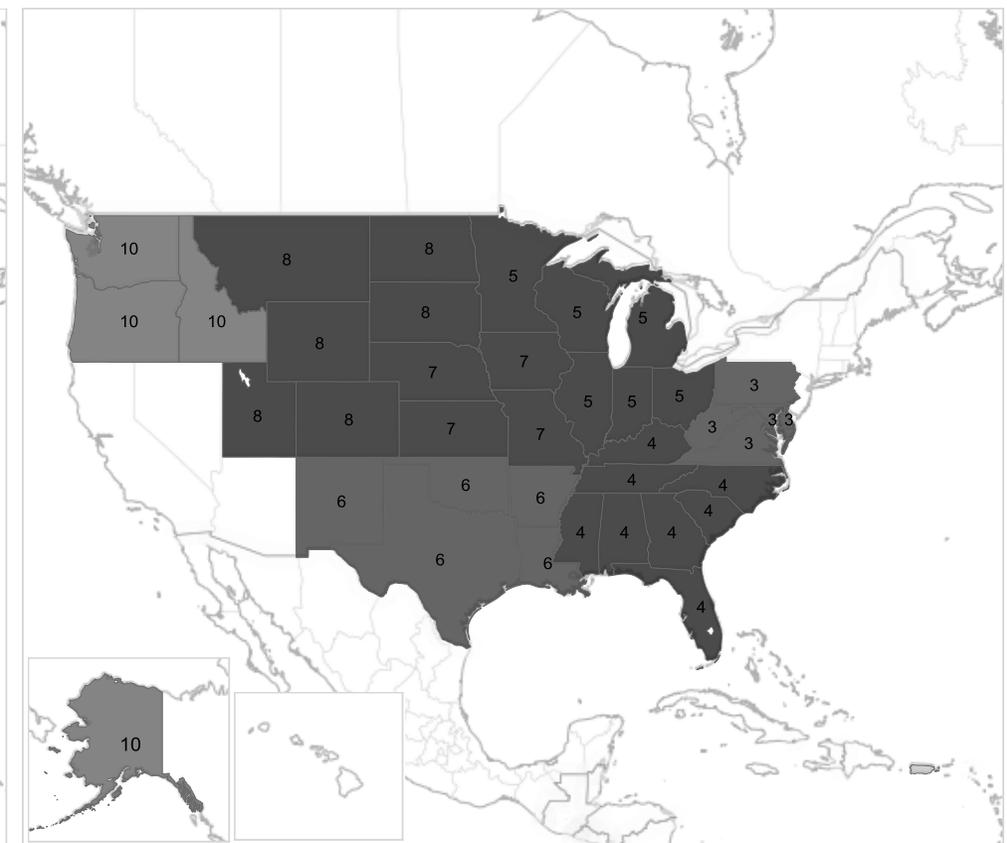
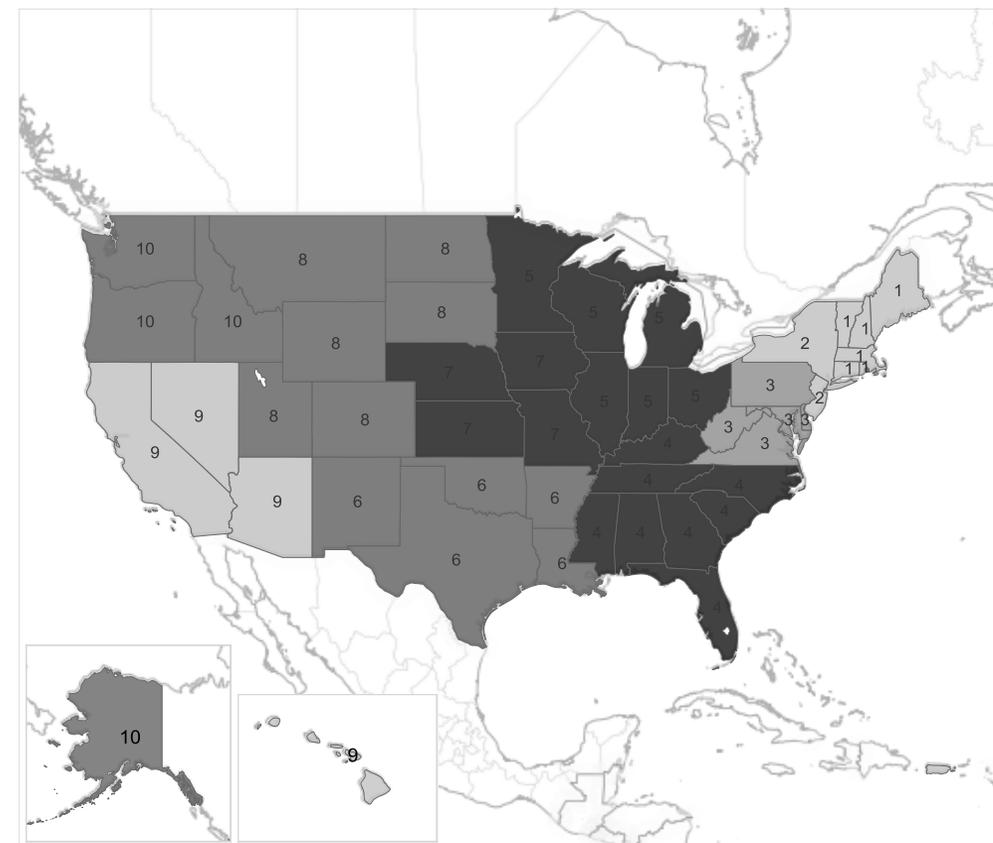
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: Under 1; Cause of Death: Unintentional injuries; Sex: Both sexes

Figure 6



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)

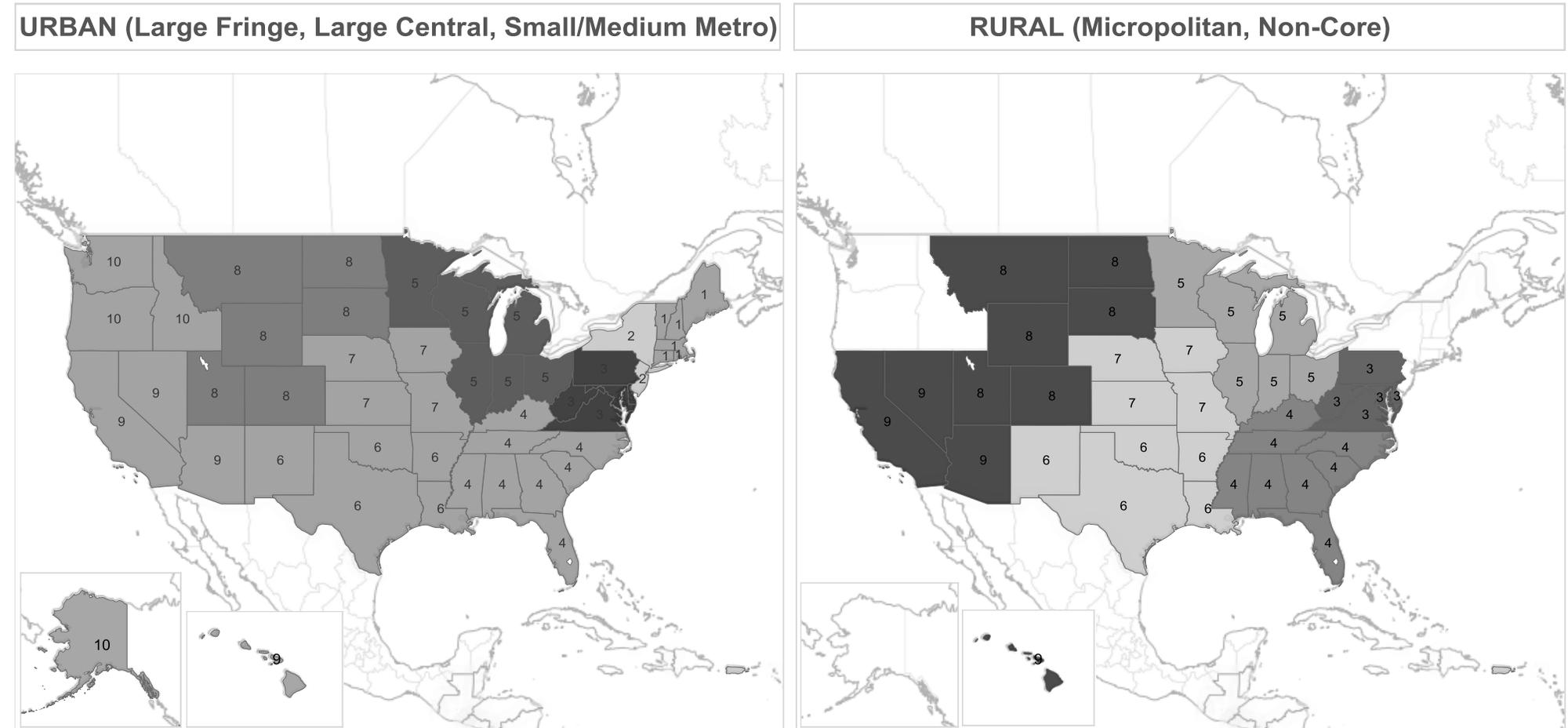


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Figure 7

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: Under 1; Cause of Death: Placenta, cord and membrane complications; Sex: Both sexes

Age
 Under 1
Cause of Death
 Placenta, cord and membrane complications
Sex
 Both sexes
Mortality Rate (per 100,000 pop)
 16.8  37.3
 (Numbers indicate HHS Regions)



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

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: Under 1; Cause of Death: Bacterial sepsis; Sex: Both sexes

Age
Under 1

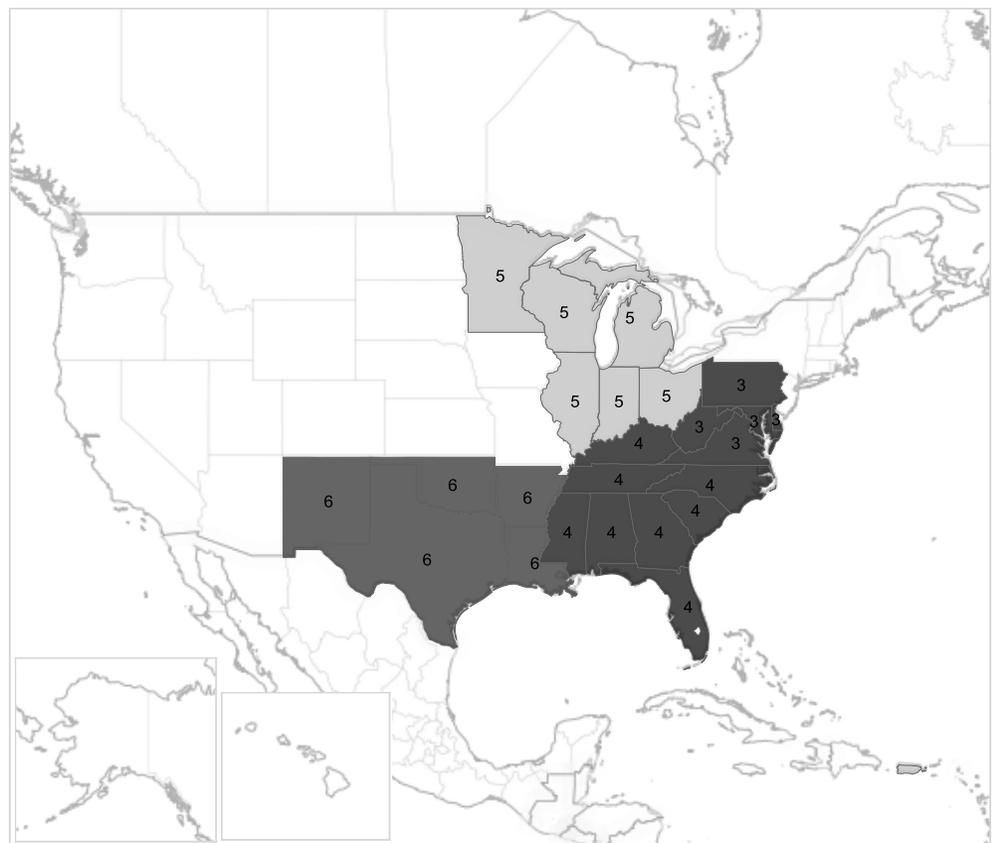
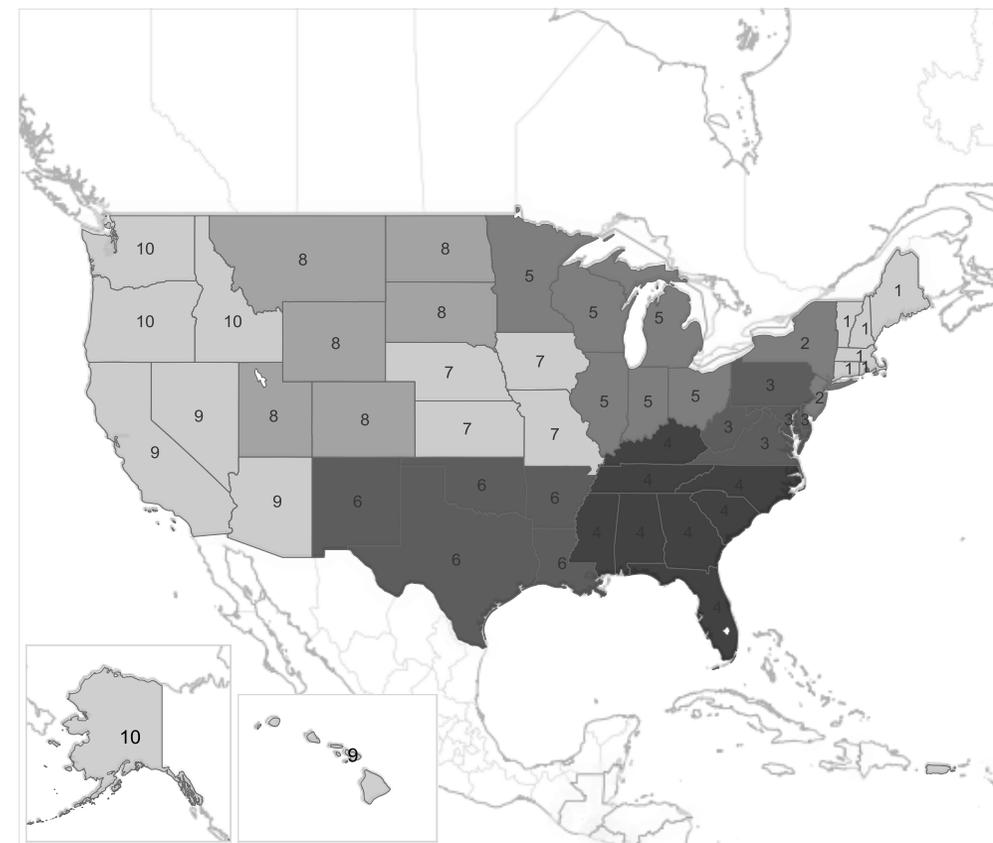
Cause of Death
Bacterial sepsis

Sex
Both sexes

Mortality Rate (per 100,000 pop)
8.1  19.8
(Numbers indicate HHS Regions)

URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

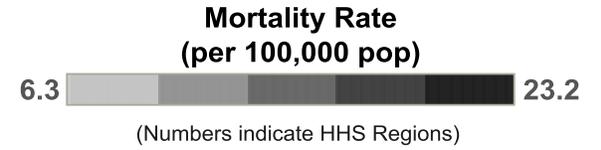
Figure 9

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: Under 1; Cause of Death: Respiratory distress; Sex: Both sexes

Age
Under 1

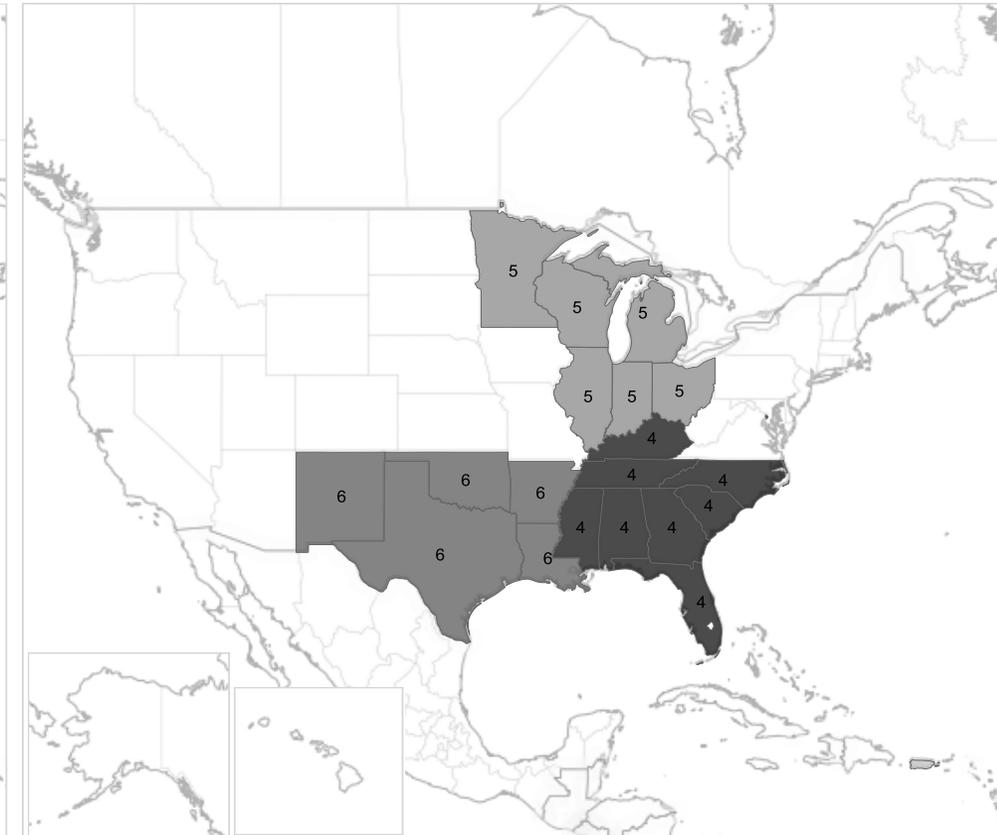
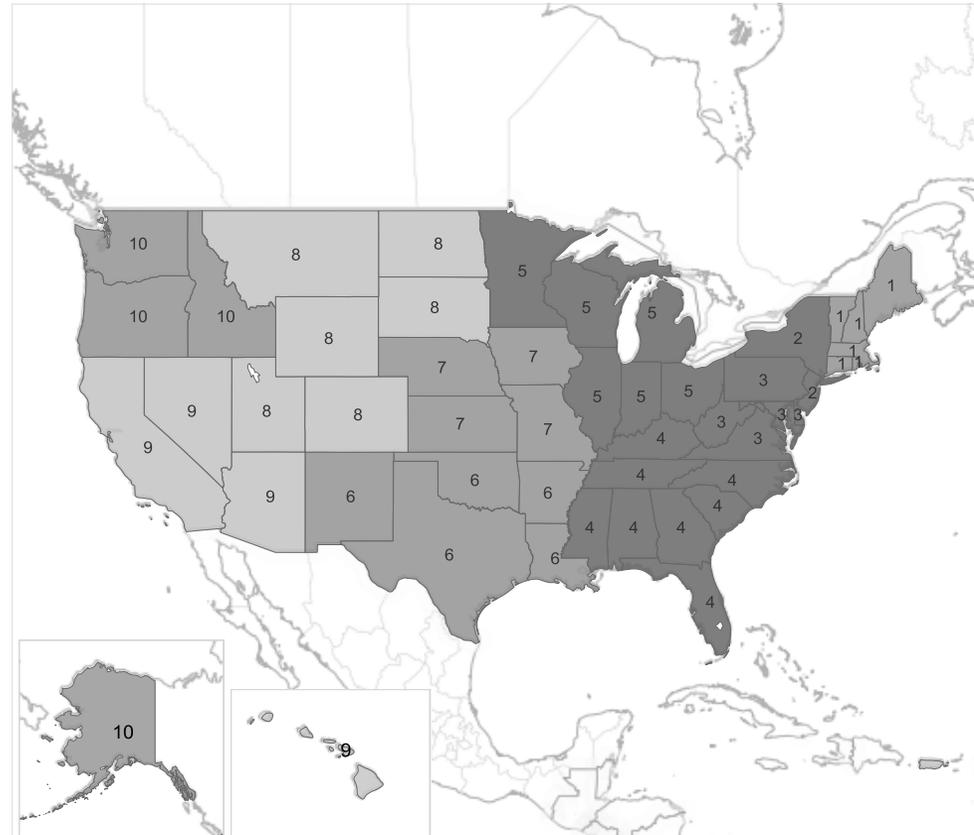
Cause of Death
Respiratory distress

Sex
Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
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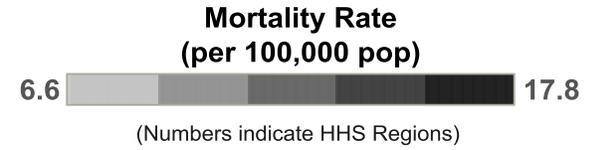
Figure 10

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: Under 1; Cause of Death: Circulatory system diseases; Sex: Both sexes

Age
Under 1

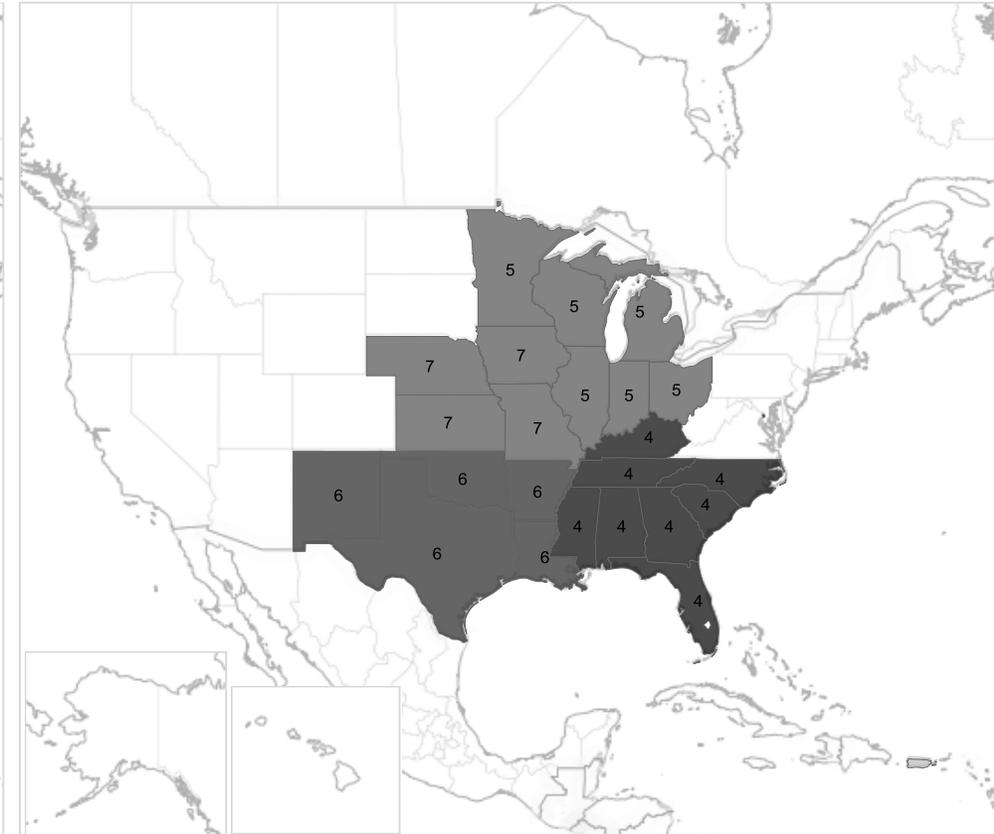
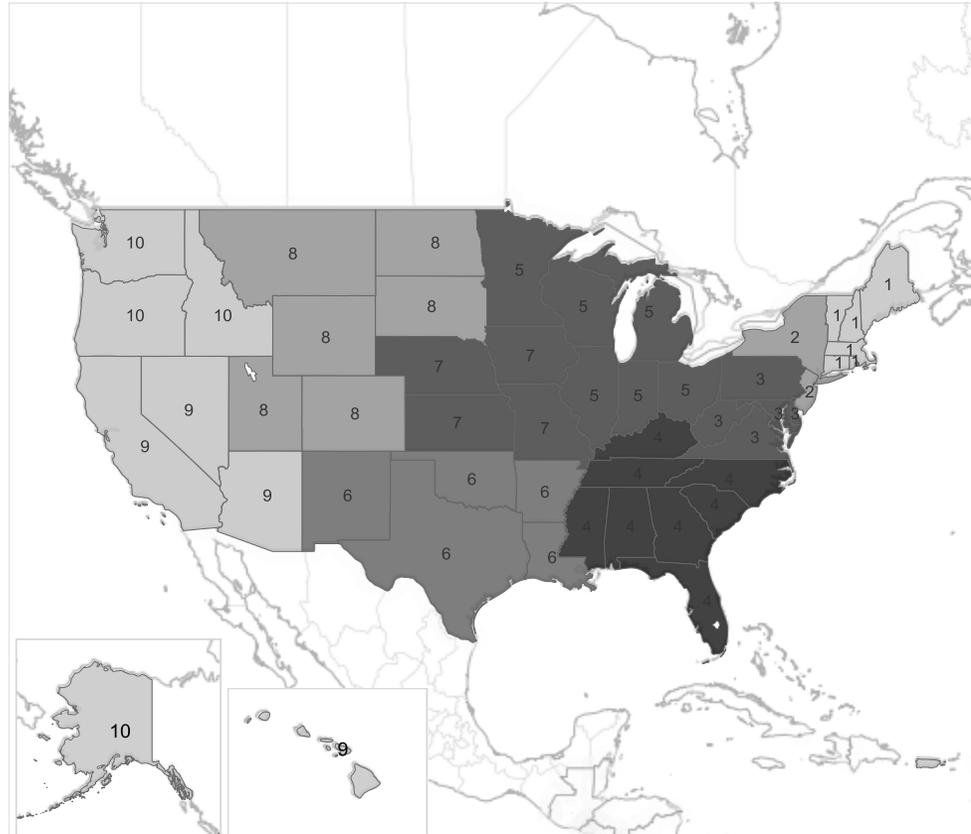
Cause of Death
Circulatory system diseases

Sex
Both sexes



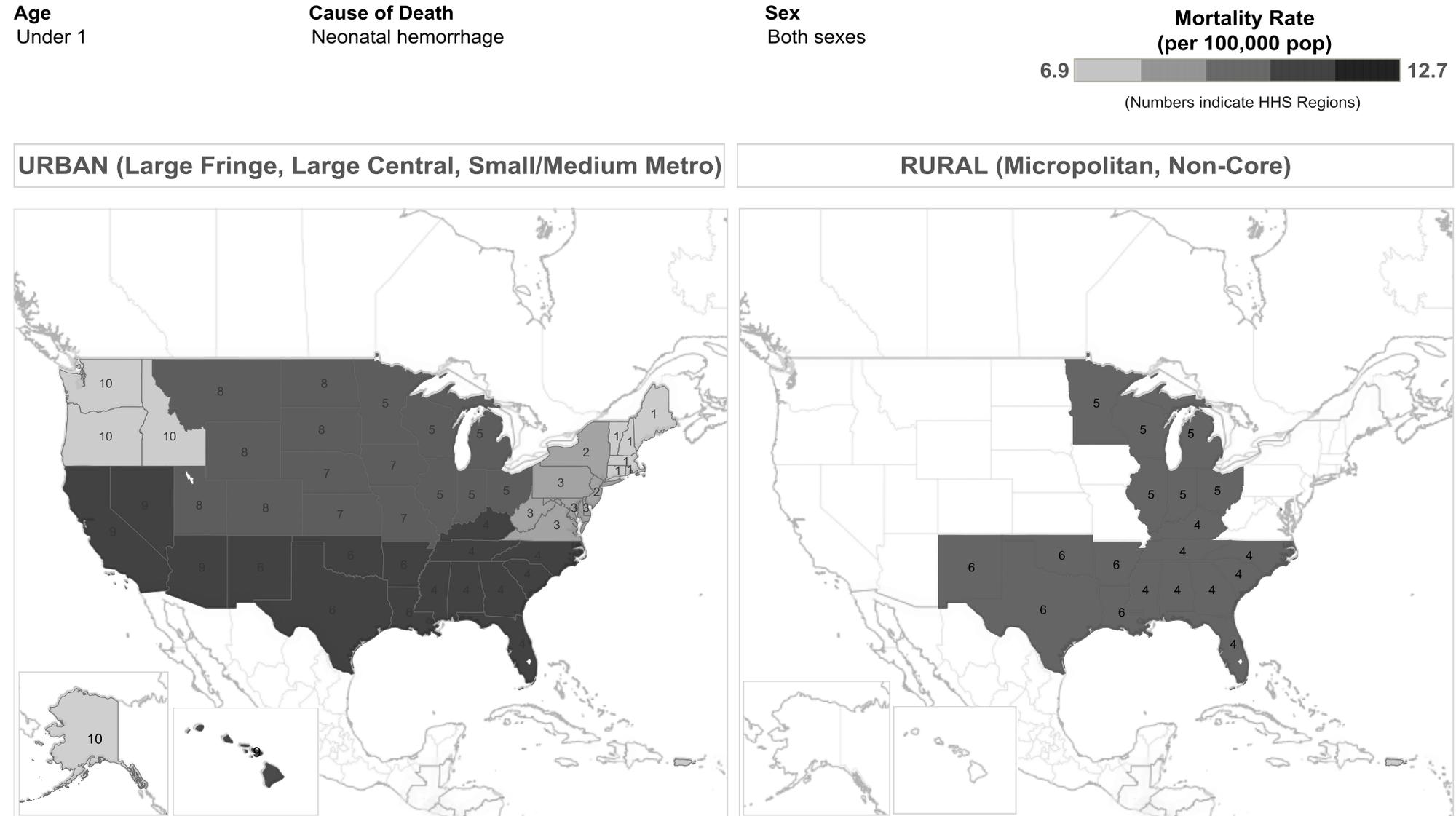
URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: Under 1; Cause of Death: Neonatal hemorrhage; Sex: Both sexes

Figure 11



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.

Children

Ages 1 to 14 Years Mortality Rates by HHS Region and Urban-Rural Status United States, 2011- 2013;

Cause of Death²:

- [Figure 12: Unintentional injuries, Both Sexes](#)
- [Figure 13: Malignant Neoplasms, Both Sexes](#)
- [Figure 14: Congenital Malformations, Both Sexes](#)
- [Figure 15: Homicide, Both Sexes](#)
- [Figure 16: Heart Disease, Both Sexes](#)
- [Figure 17: Suicide, Both Sexes](#)
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- [Figure 21: Cerebrovascular Disease, Both Sexes](#)

²Cause of death of top 10 rankable causes of death in order from leading cause of death to 10th leading cause of death for this age group. Source: http://webappa.cdc.gov/sasweb/ncipc/leadcaus10_us.html

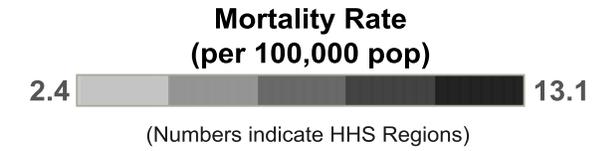
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 1 to 14; Cause of Death: Unintentional injuries; Sex: Both sexes

Figure 12

Age
1 to 14

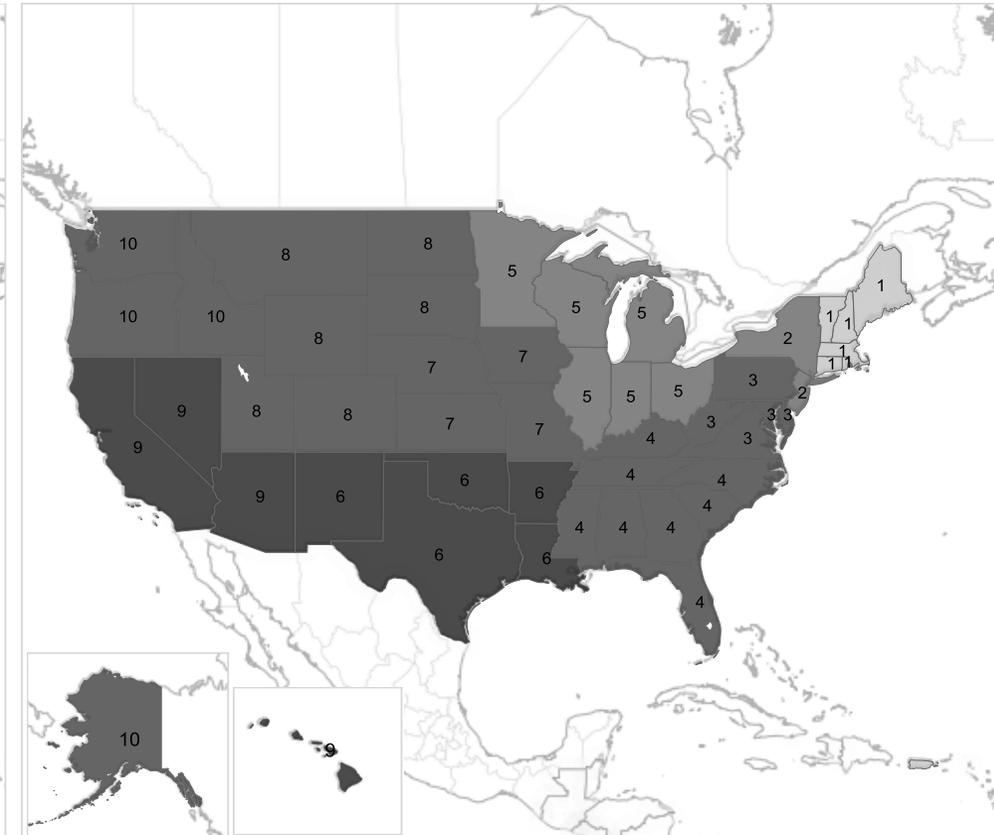
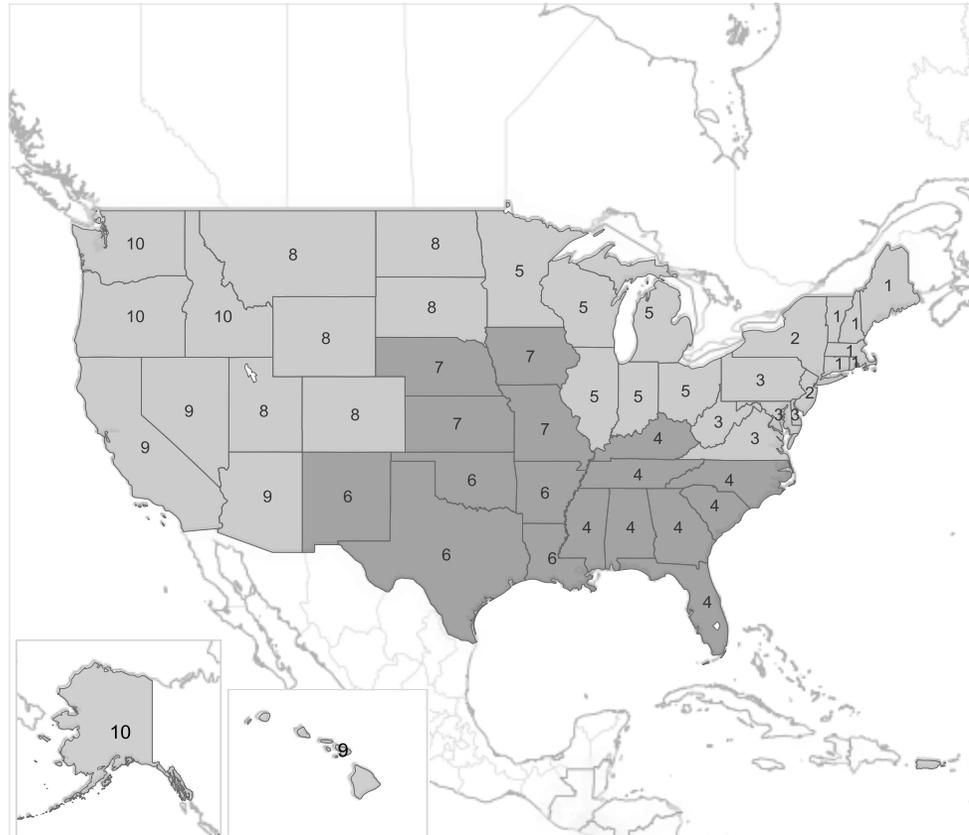
Cause of Death
Unintentional injuries

Sex
Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



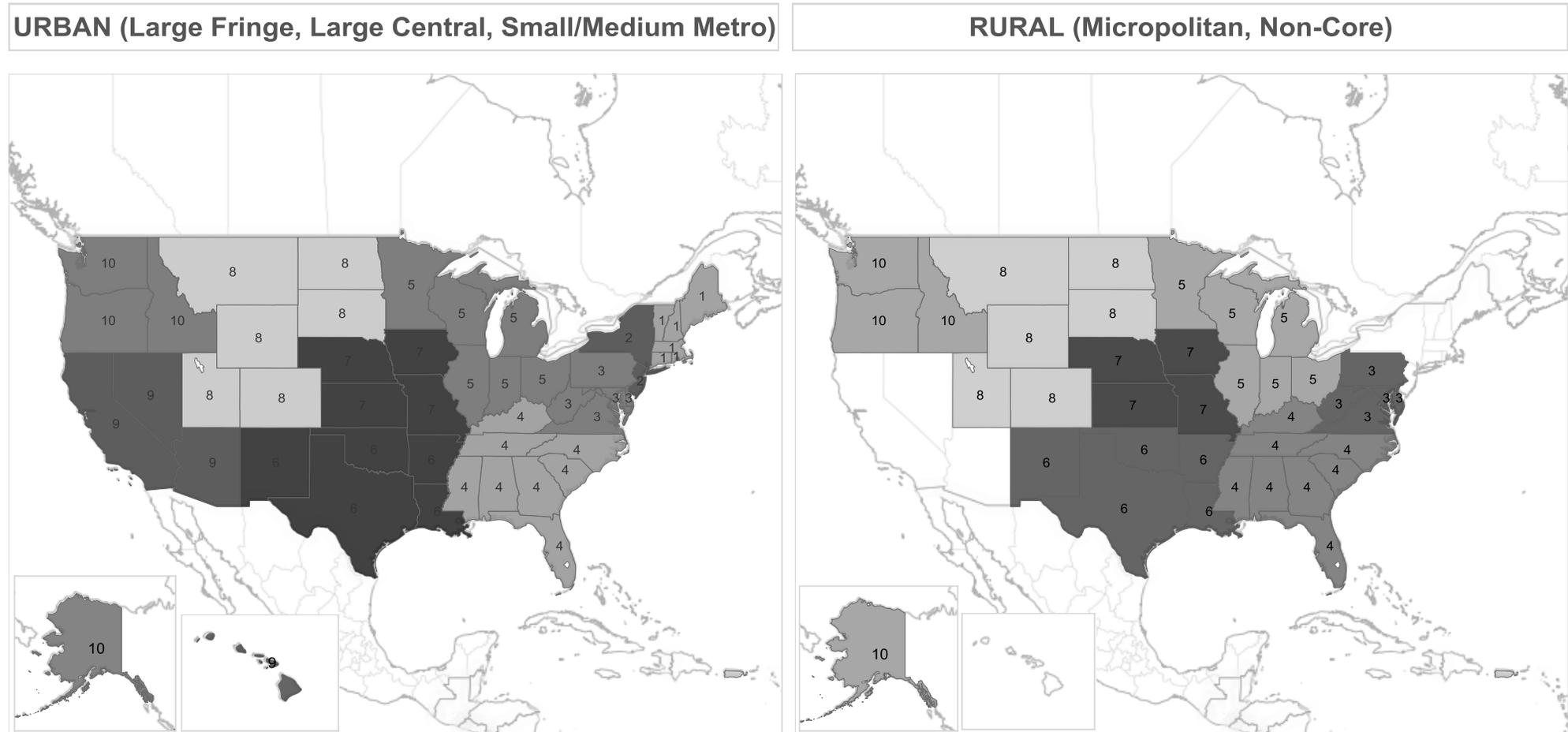
SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

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

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 1 to 14; Cause of Death: Malignant neoplasms; Sex: Both sexes

Figure 13

Age: 1 to 14
 Cause of Death: Malignant neoplasms
 Sex: Both sexes
 Mortality Rate (per 100,000 pop): 1.7 to 2.6
 (Numbers indicate HHS Regions)



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.

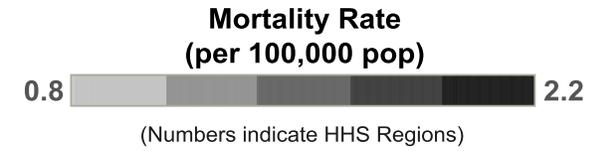
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 1 to 14; Cause of Death: Congenital malformations; Sex: Both sexes

Figure 14

Age
1 to 14

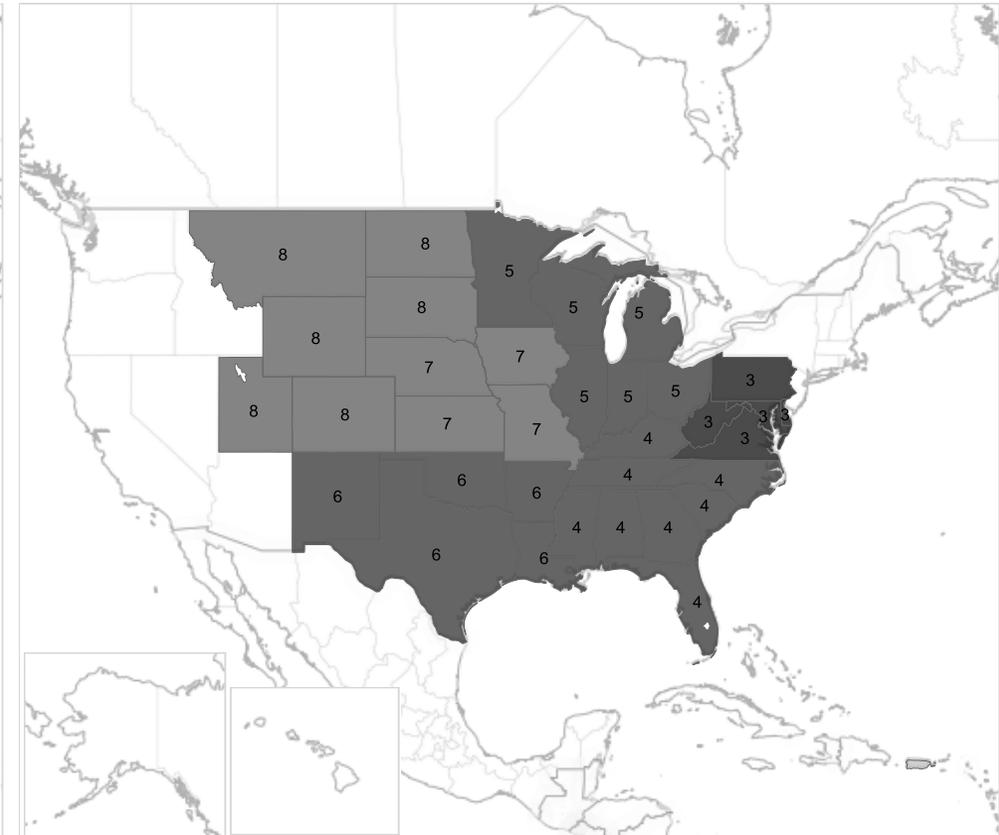
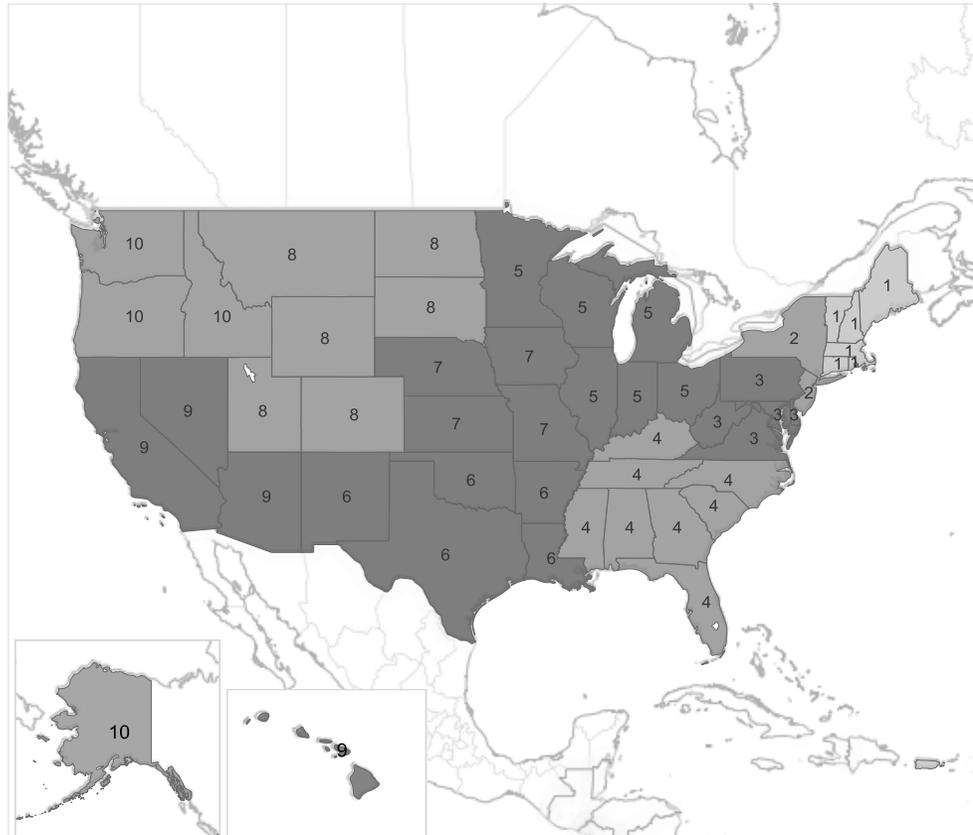
Cause of Death
Congenital malformations

Sex
Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

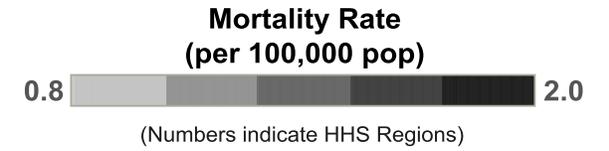
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 1 to 14; Cause of Death: Homicide; Sex: Both sexes

Figure 15

Age
1 to 14

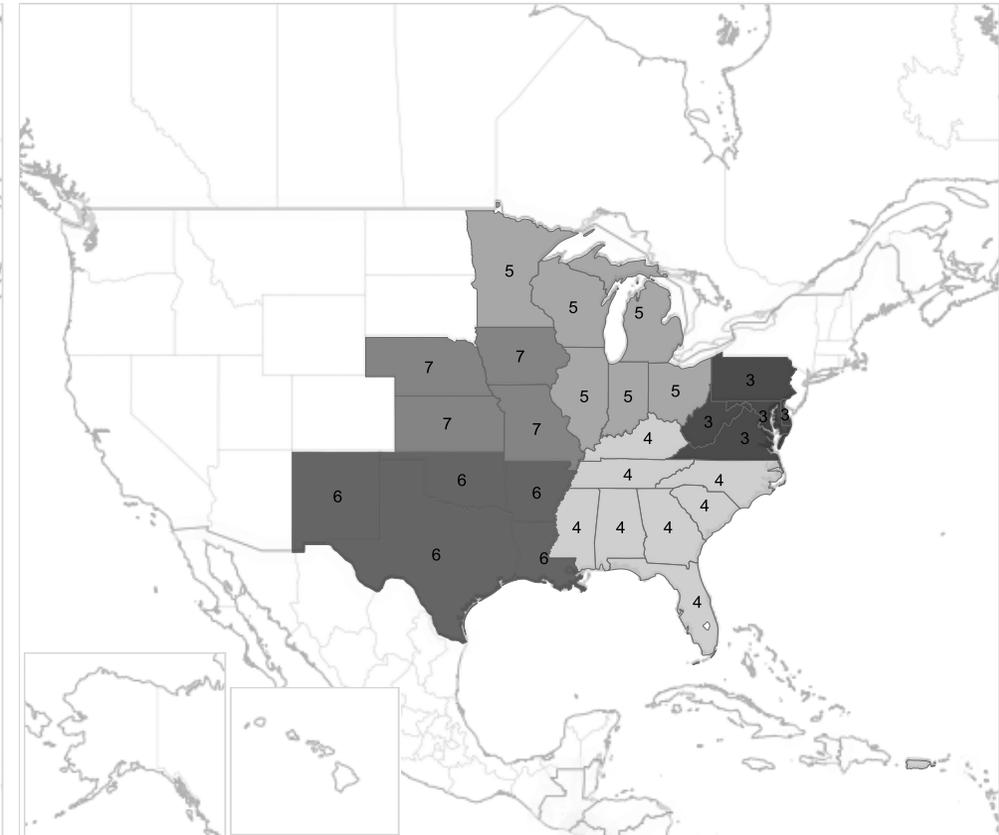
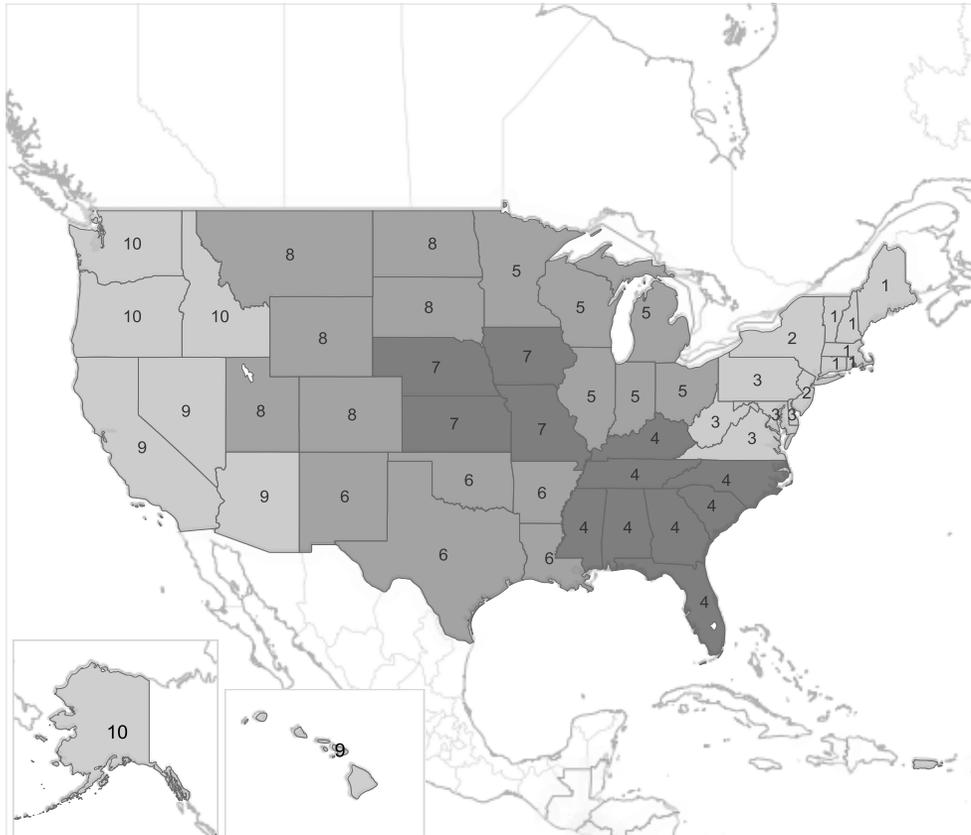
Cause of Death
Homicide

Sex
Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
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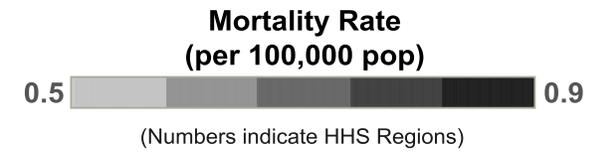
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 1 to 14; Cause of Death: Heart disease; Sex: Both sexes

Figure 16

Age
1 to 14

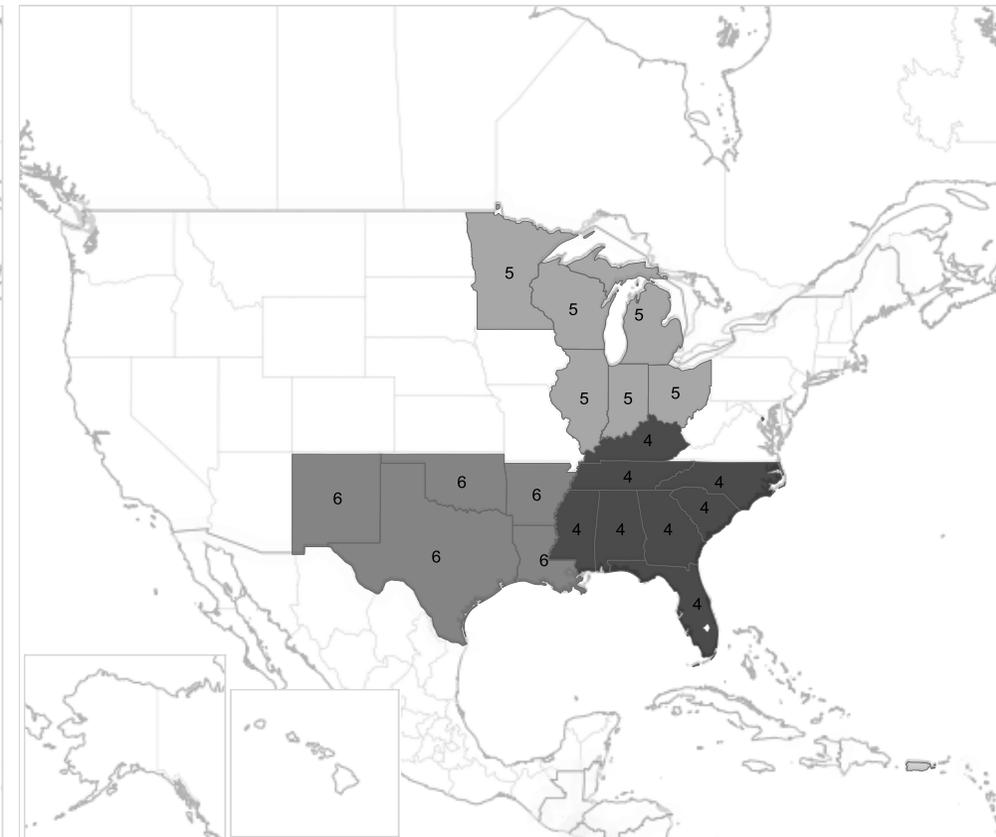
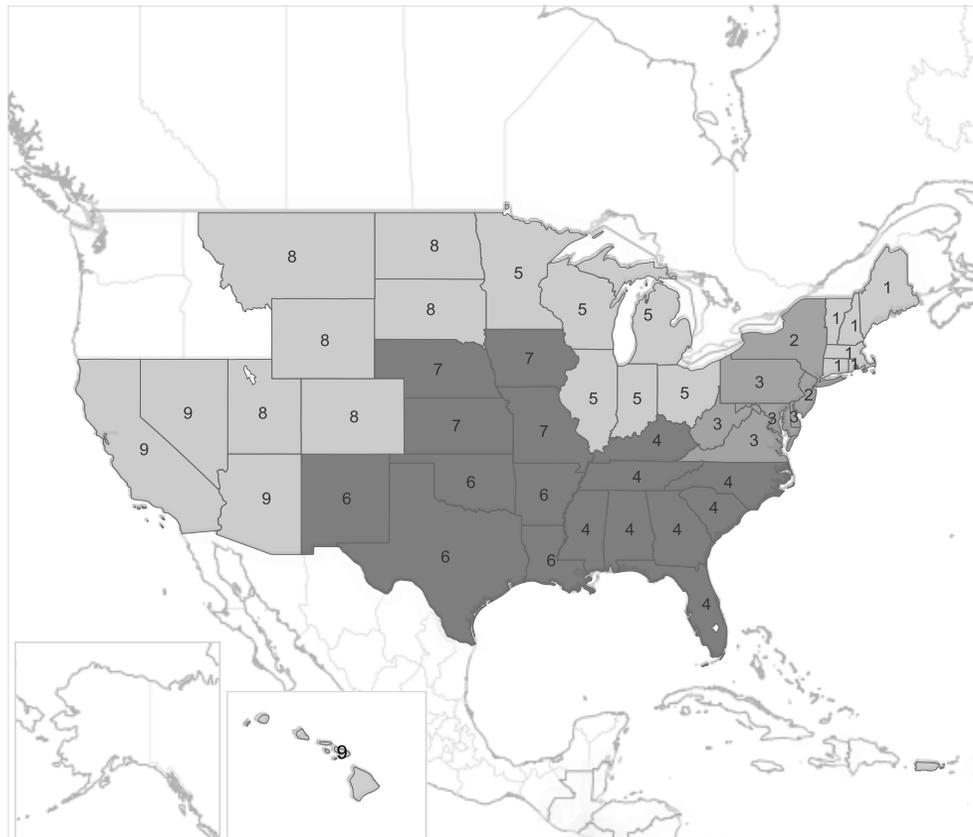
Cause of Death
Heart disease

Sex
Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

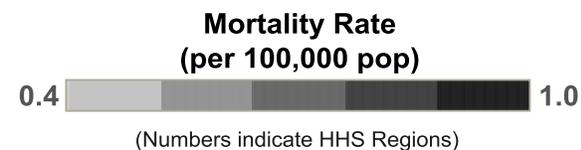
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 1 to 14; Cause of Death: Suicide; Sex: Both sexes

Figure 17

Age
1 to 14

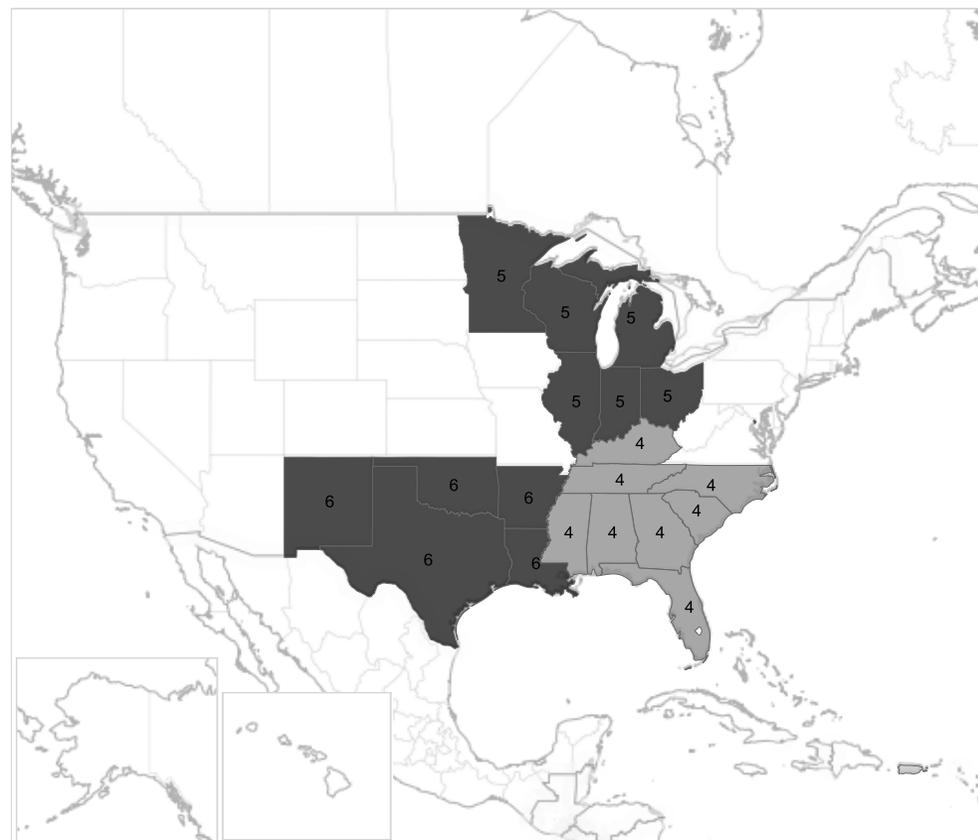
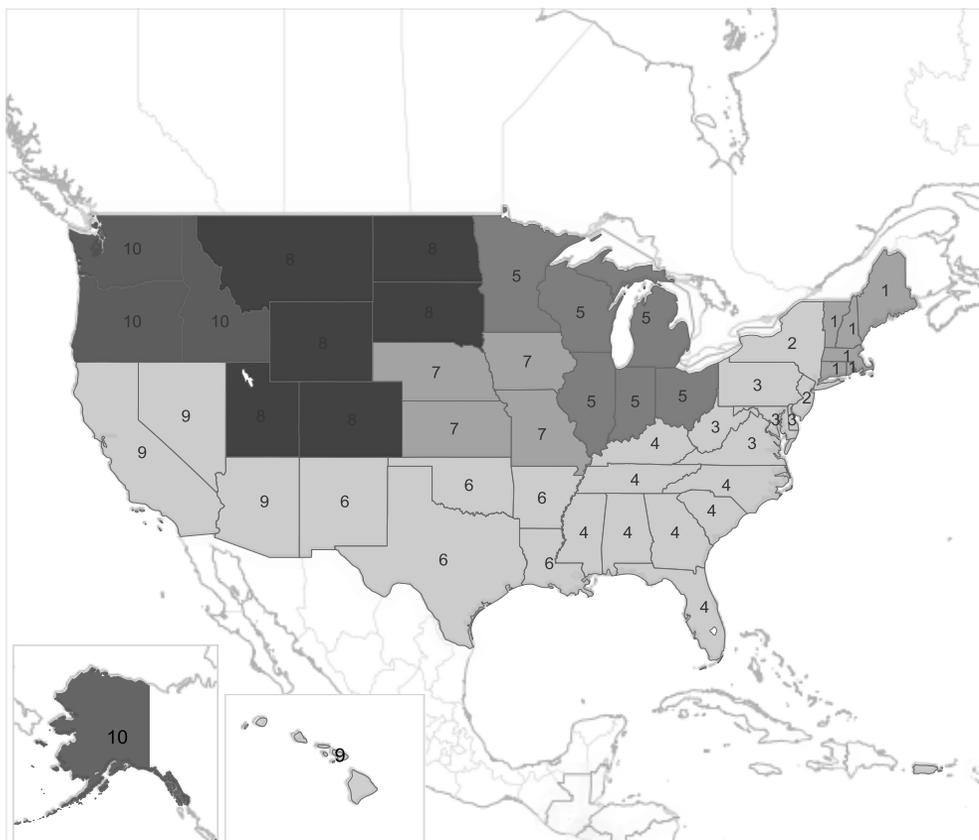
Cause of Death
Suicide

Sex
Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

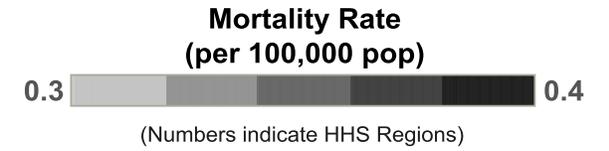
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 1 to 14; Cause of Death: Flu & pneumonia; Sex: Both sexes

Figure 18

Age
1 to 14

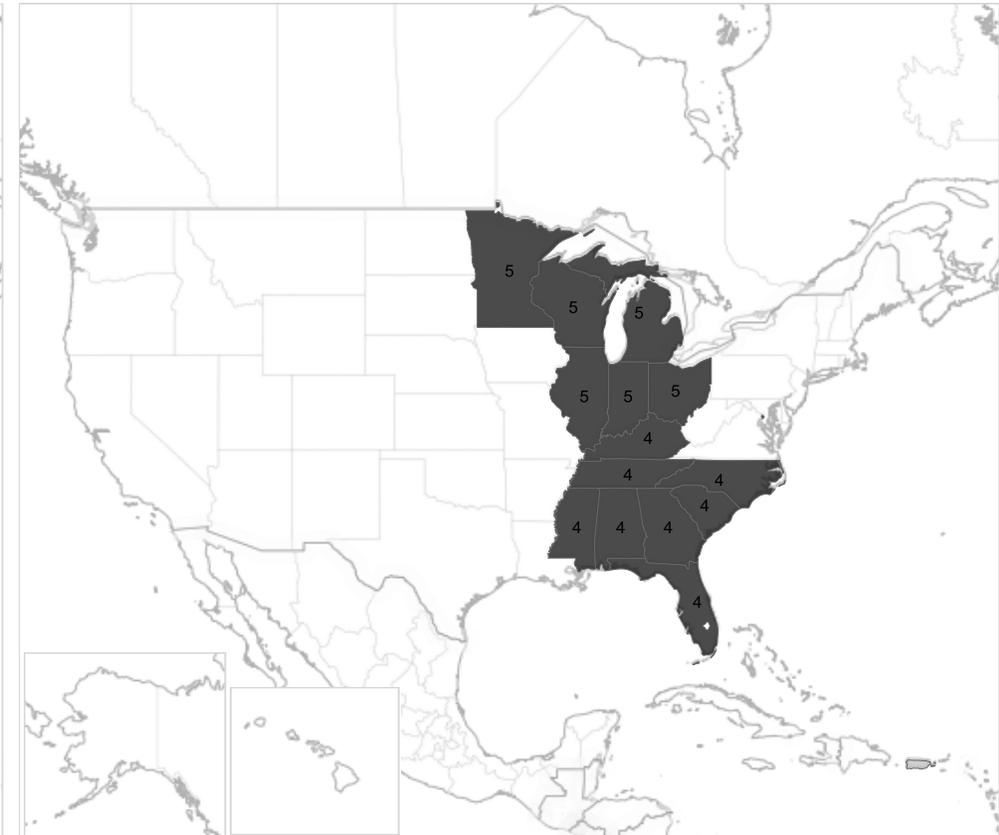
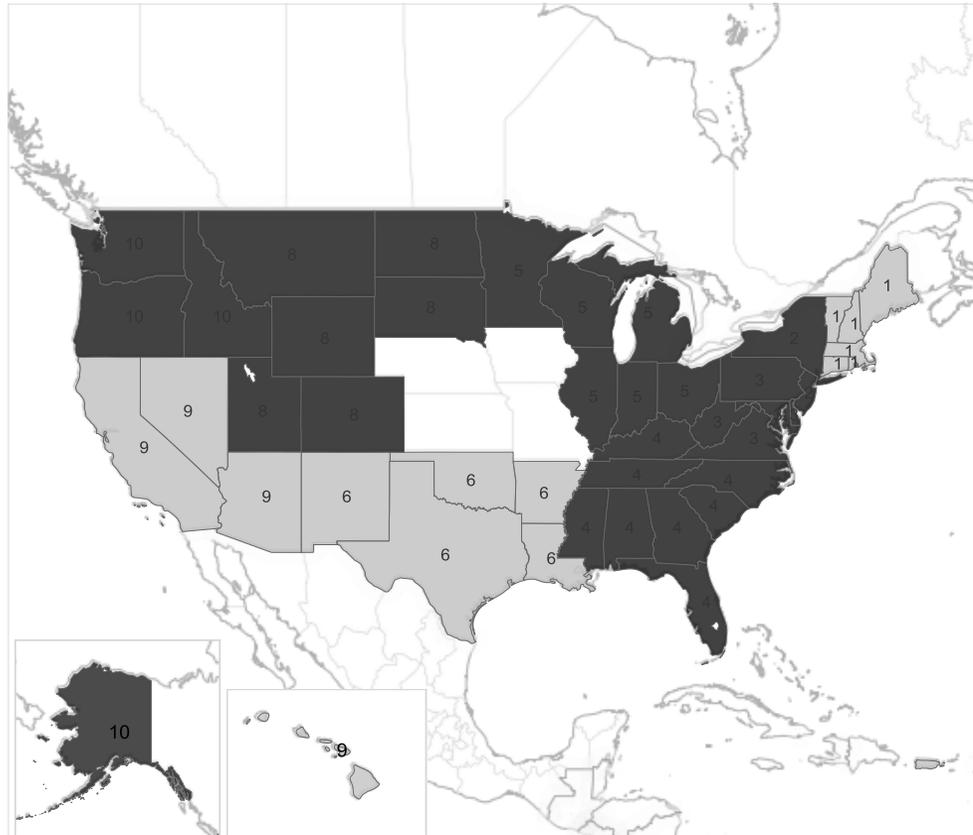
Cause of Death
Flu & pneumonia

Sex
Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

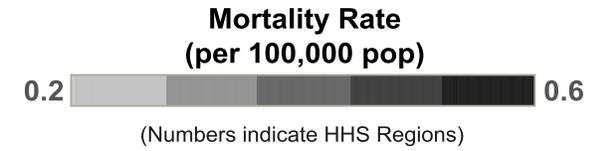
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 1 to 14; Cause of Death: Lower respiratory; Sex: Both sexes

Figure 19

Age
1 to 14

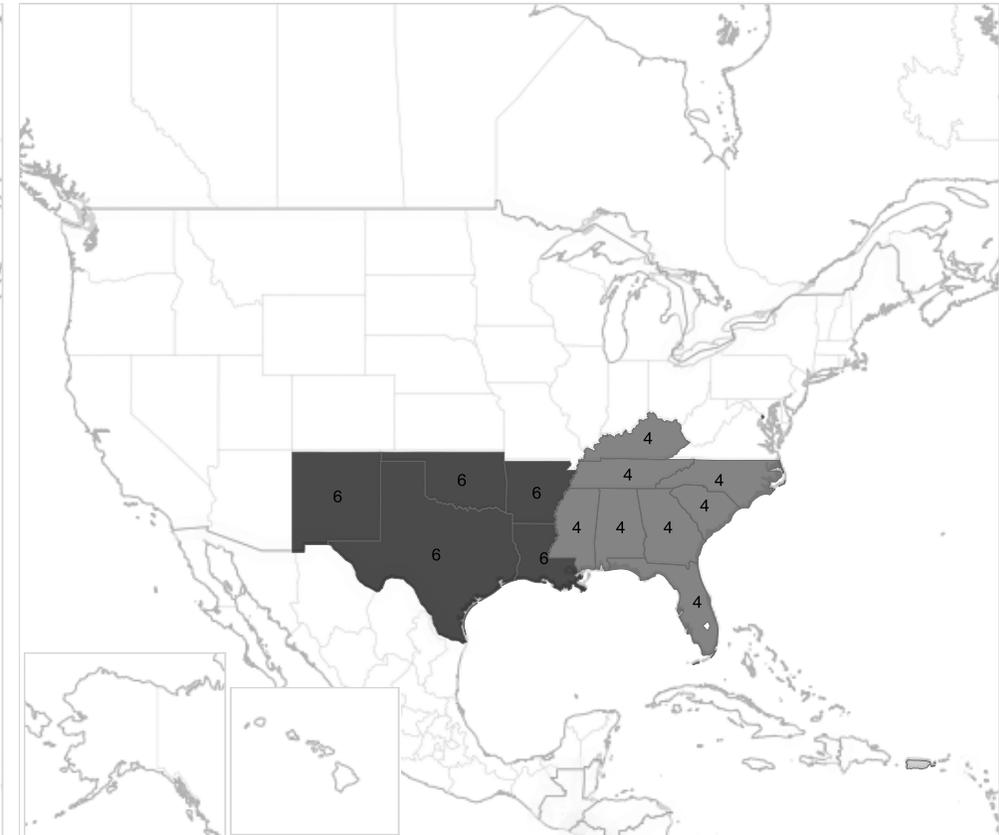
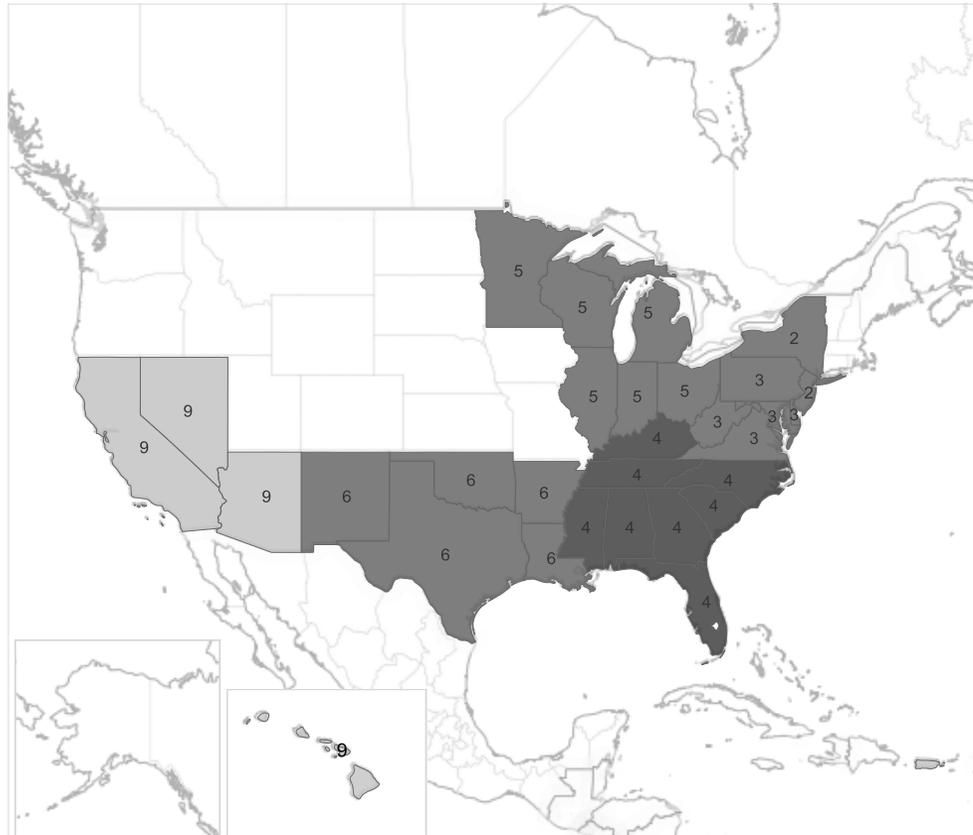
Cause of Death
Lower respiratory

Sex
Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

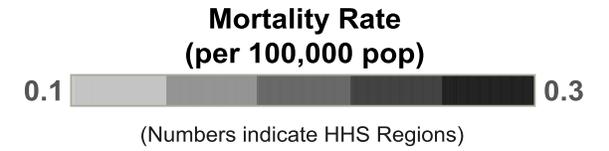
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 1 to 14; Cause of Death: Benign neoplasms; Sex: Both sexes

Figure 20

Age
1 to 14

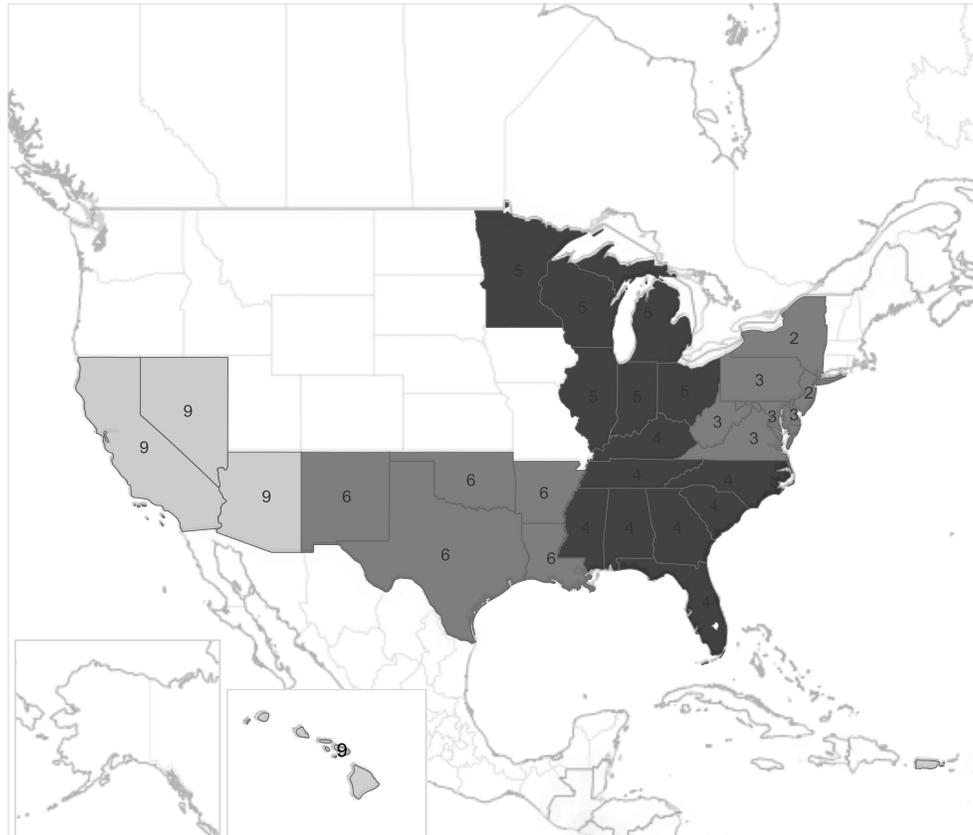
Cause of Death
Benign neoplasms

Sex
Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

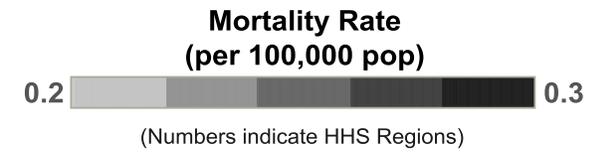
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 1 to 14; Cause of Death: Cerebrovascular diseases; Sex: Both sexes

Figure 21

Age
1 to 14

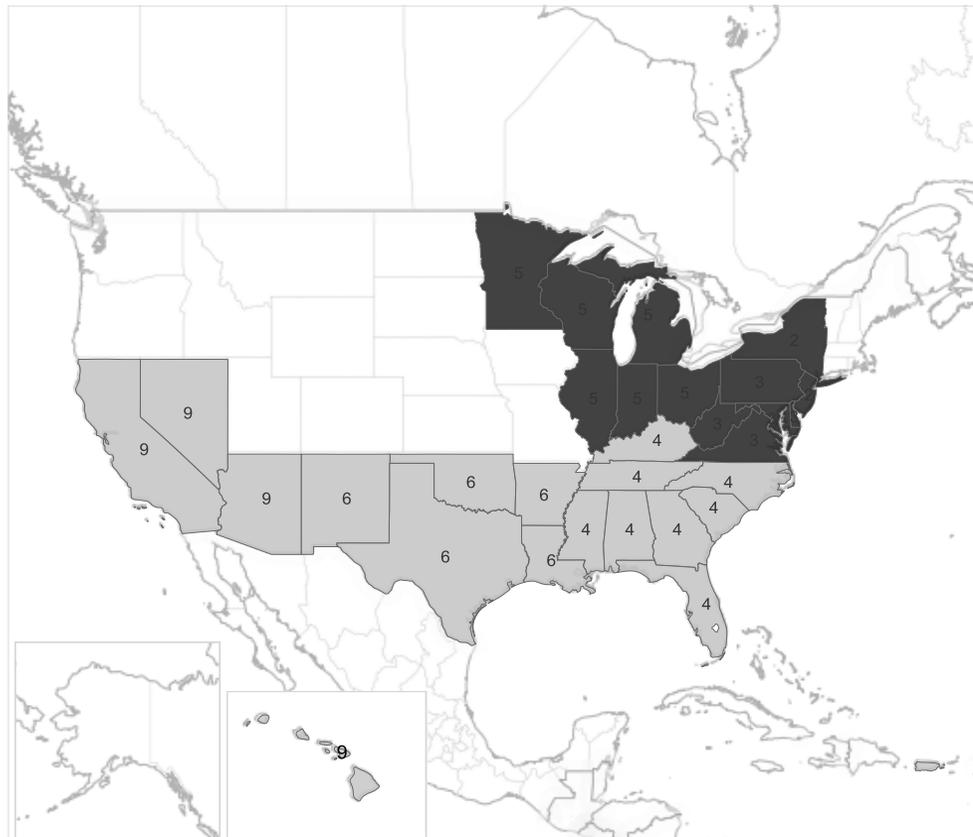
Cause of Death
Cerebrovascular diseases

Sex
Both sexes



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

Adolescents and Young Adults

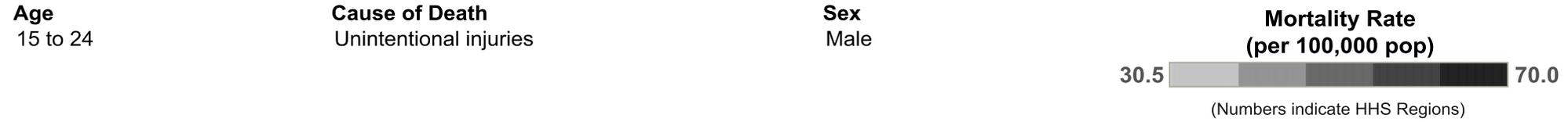
Ages 15 to 24 Years Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011- 2013; Age: 15 to 24

Cause of Death:

- [Figure 22: Unintentional injury, Male](#)
- [Figure 23: Unintentional injury, Female](#)
- [Figure 24: Suicide, Male](#)
- [Figure 25: Suicide, Female](#)
- [Figure 26: Homicide, Male](#)
- [Figure 27: Homicide, Female](#)
- [Figure 28: Malignant neoplasms, Male](#)
- [Figure 29: Malignant neoplasms, Female](#)
- [Figure 30: Heart disease, Male](#)
- [Figure 31: Heart disease, Female](#)
- [Figure 32: Congenital malformations, Male](#)
- [Figure 33: Congenital malformations, Female](#)
- [Figure 34: Diabetes, Male](#)
- [Figure 35: Diabetes, Female](#)
- [Figure 36: Cerebrovascular diseases, Male](#)
- [Figure 37: Cerebrovascular diseases, Female](#)
- [Figure 38: Pregnancy or childbirth, Female](#)
- [Figure 39: Flu & Pneumonia, Male](#)
- [Figure 40: Flu &Pneumonia, Female](#)

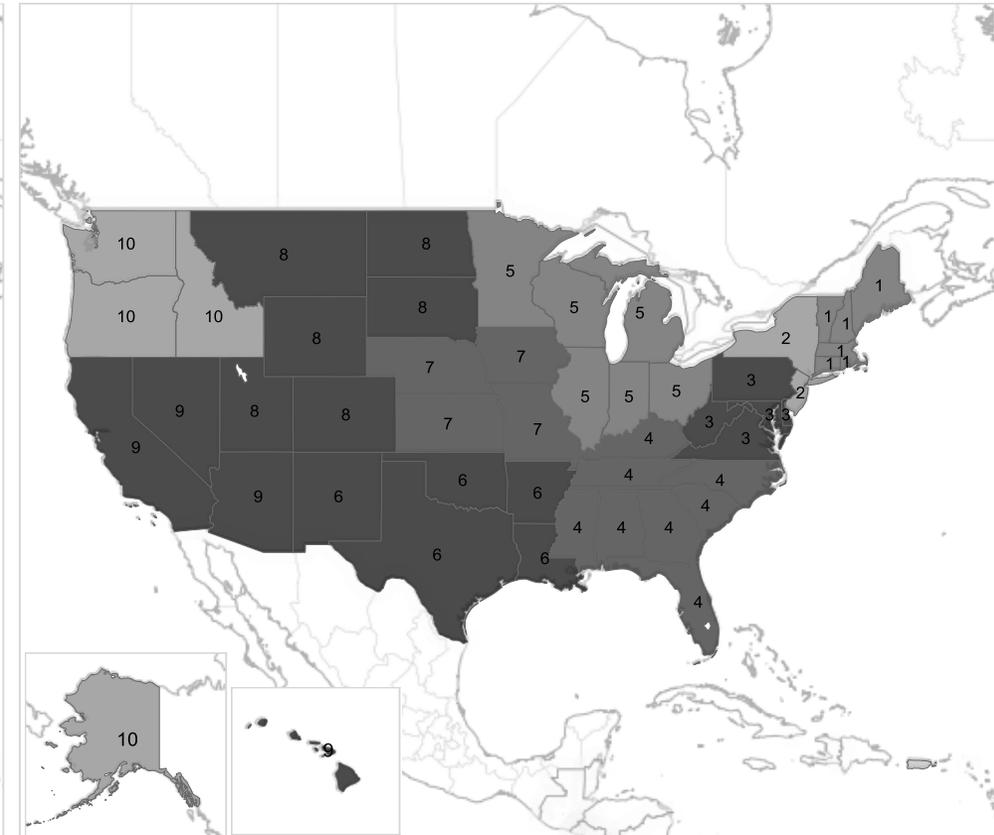
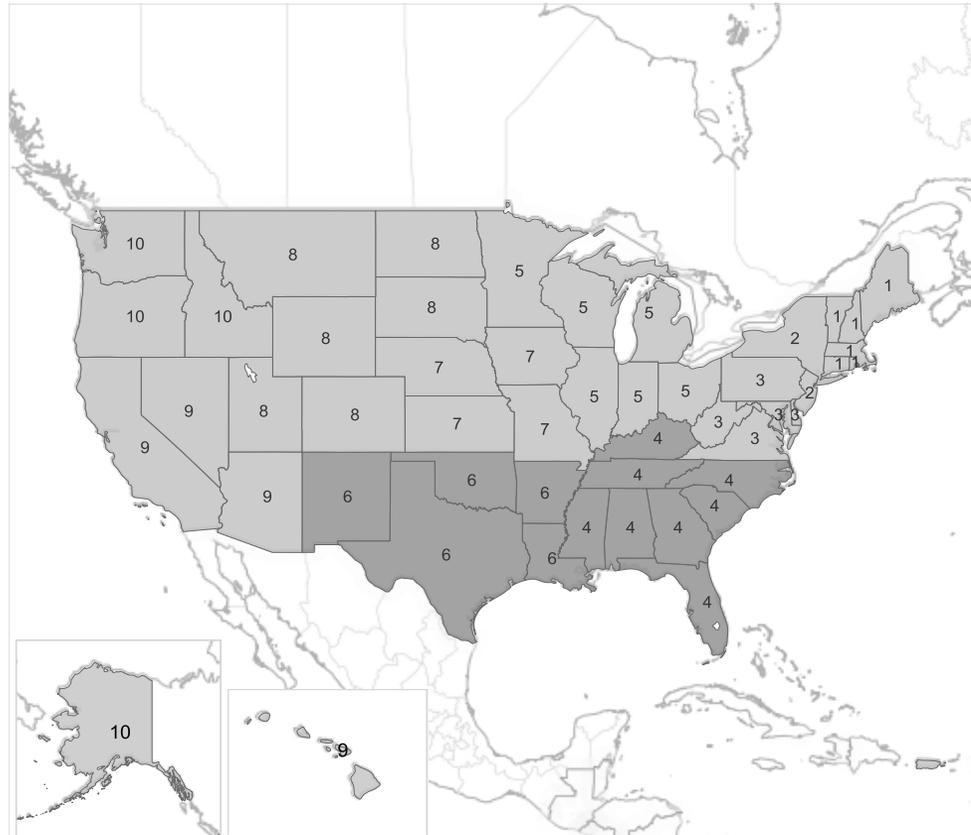
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Unintentional injuries; Sex: Male

Figure 22



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

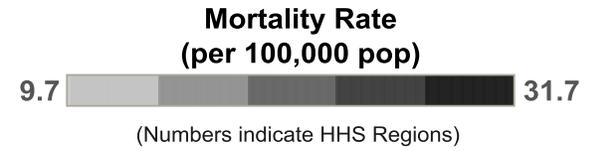
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Unintentional injuries; Sex: Female

Figure 23

Age
15 to 24

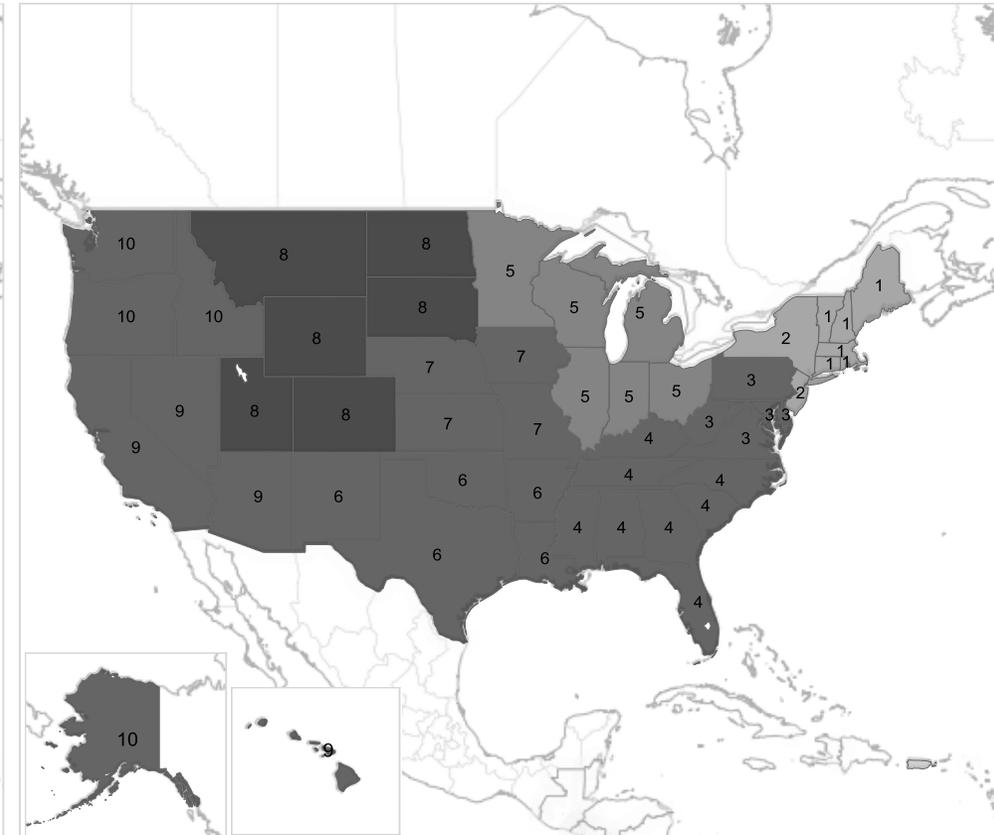
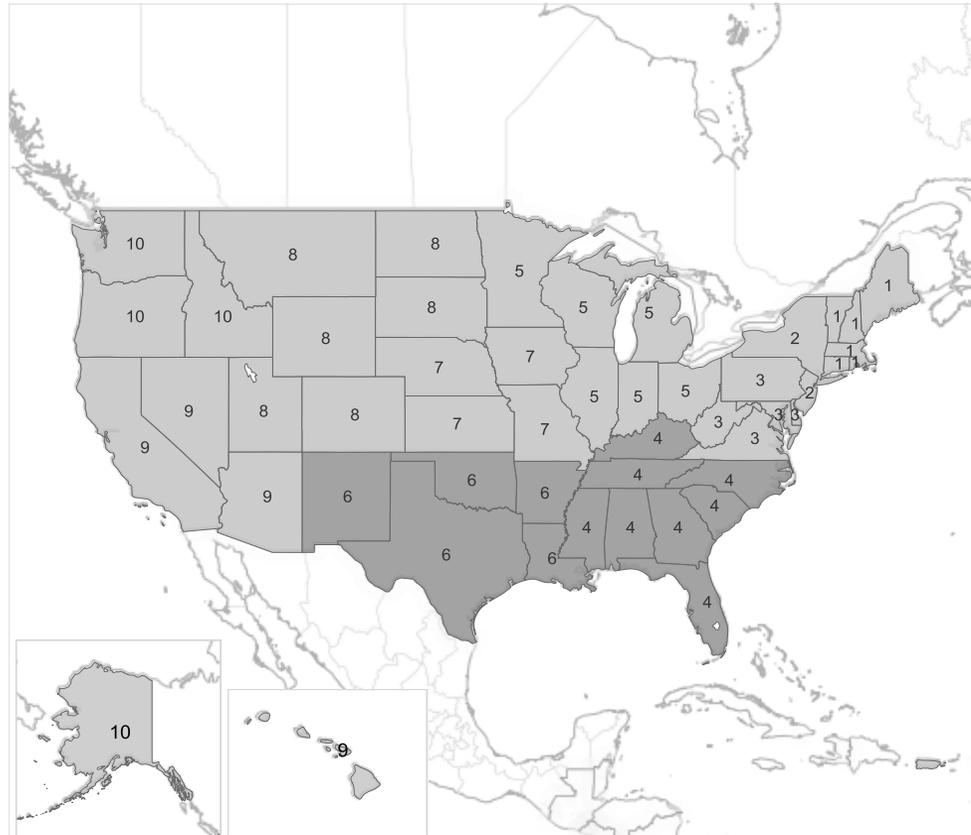
Cause of Death
Unintentional injuries

Sex
Female



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

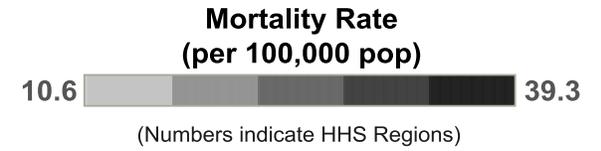
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Suicide; Sex: Male

Figure 24

Age
15 to 24

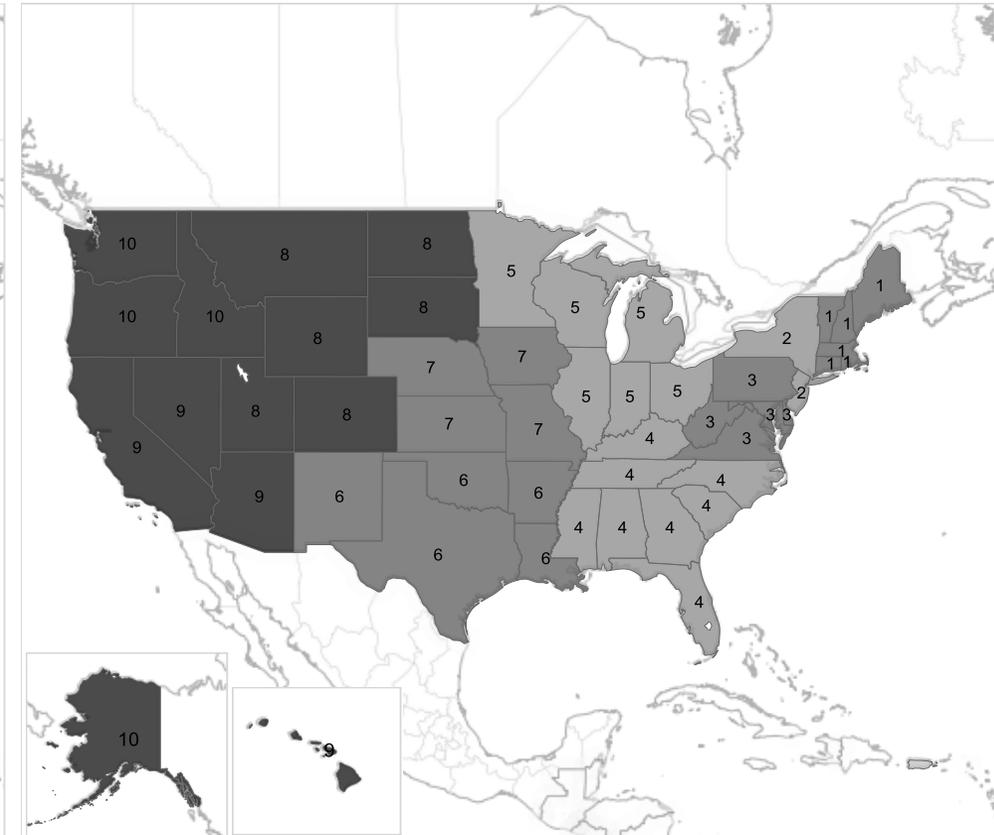
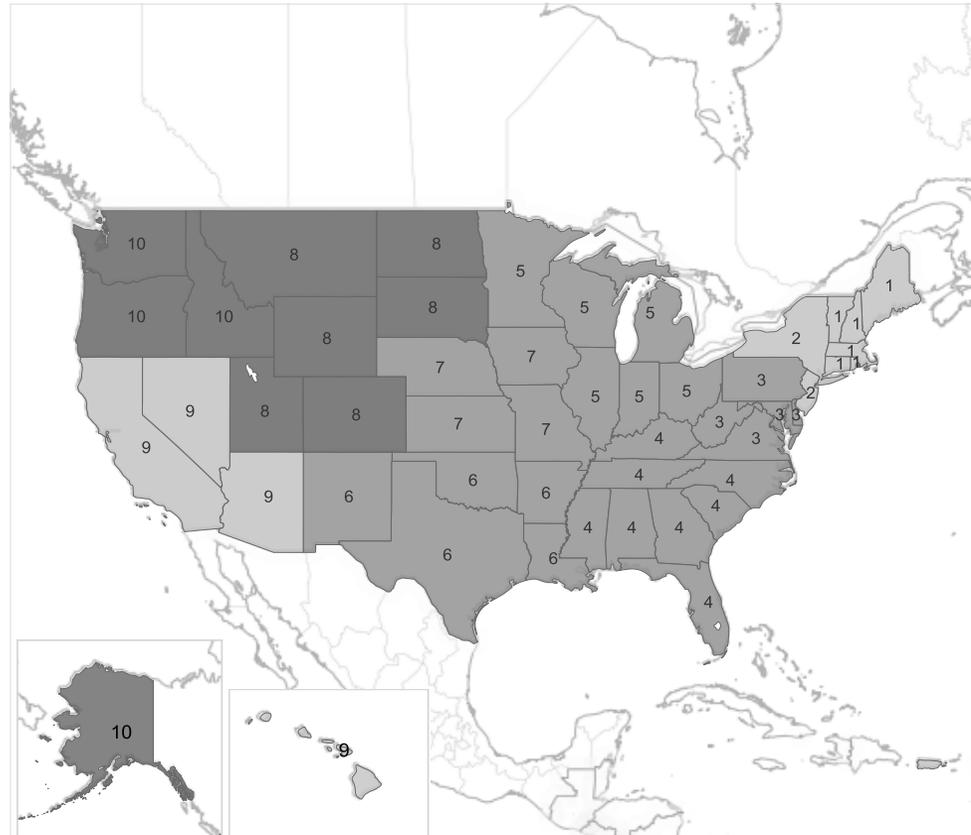
Cause of Death
Suicide

Sex
Male



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)

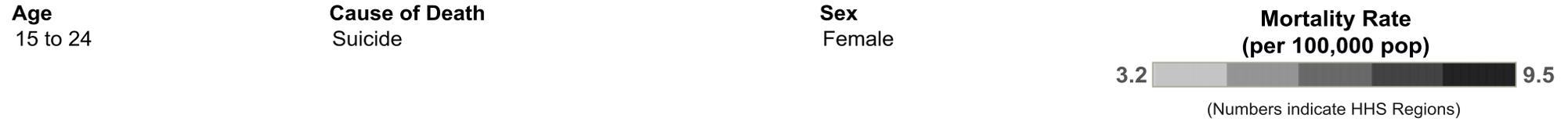


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.

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

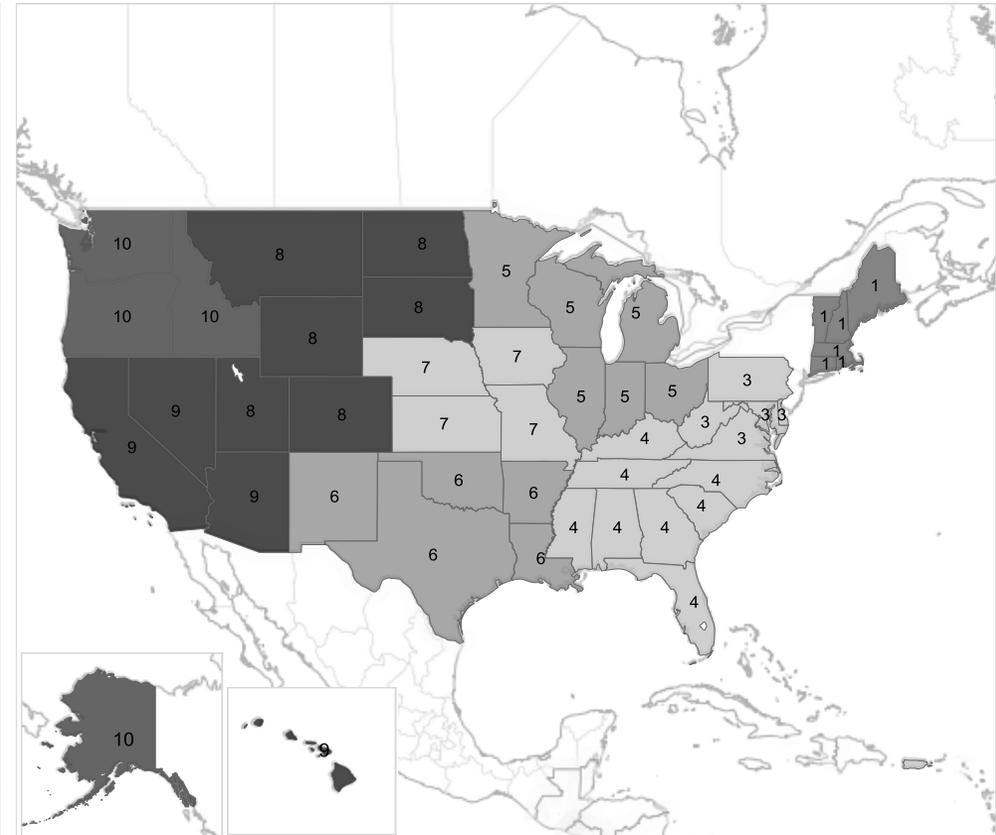
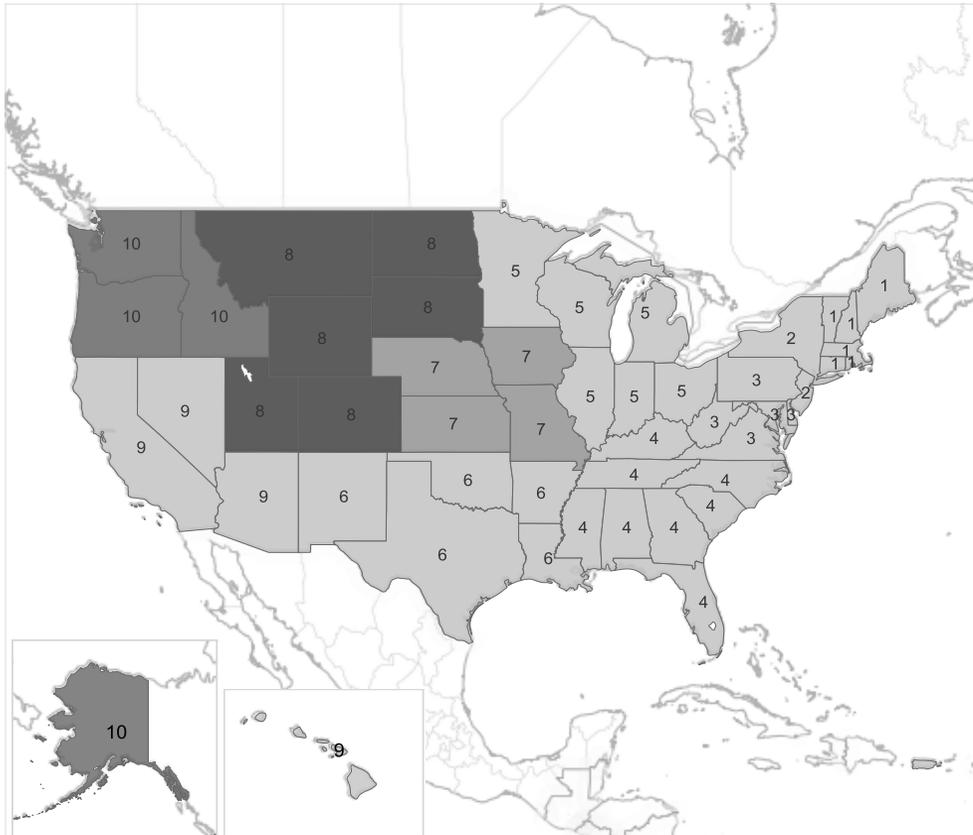
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Suicide; Sex: Female

Figure 25



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

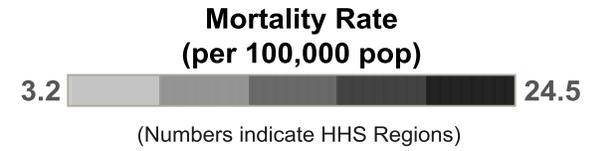
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Homicide; Sex: Male

Figure 26

Age
15 to 24

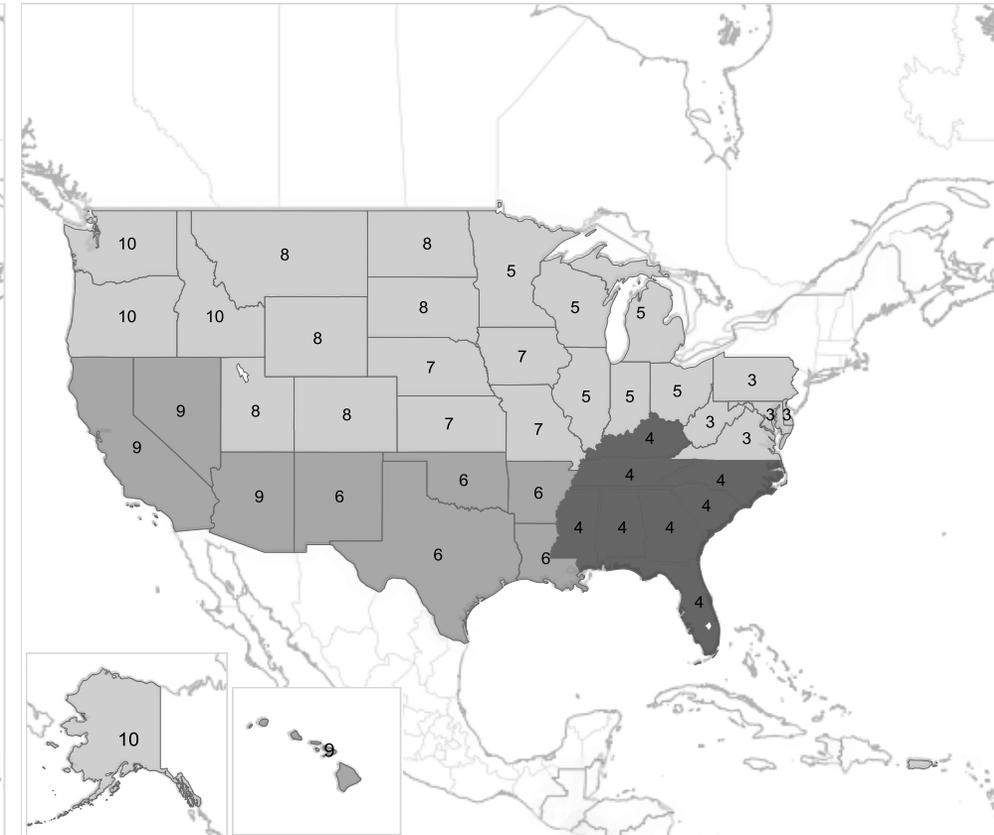
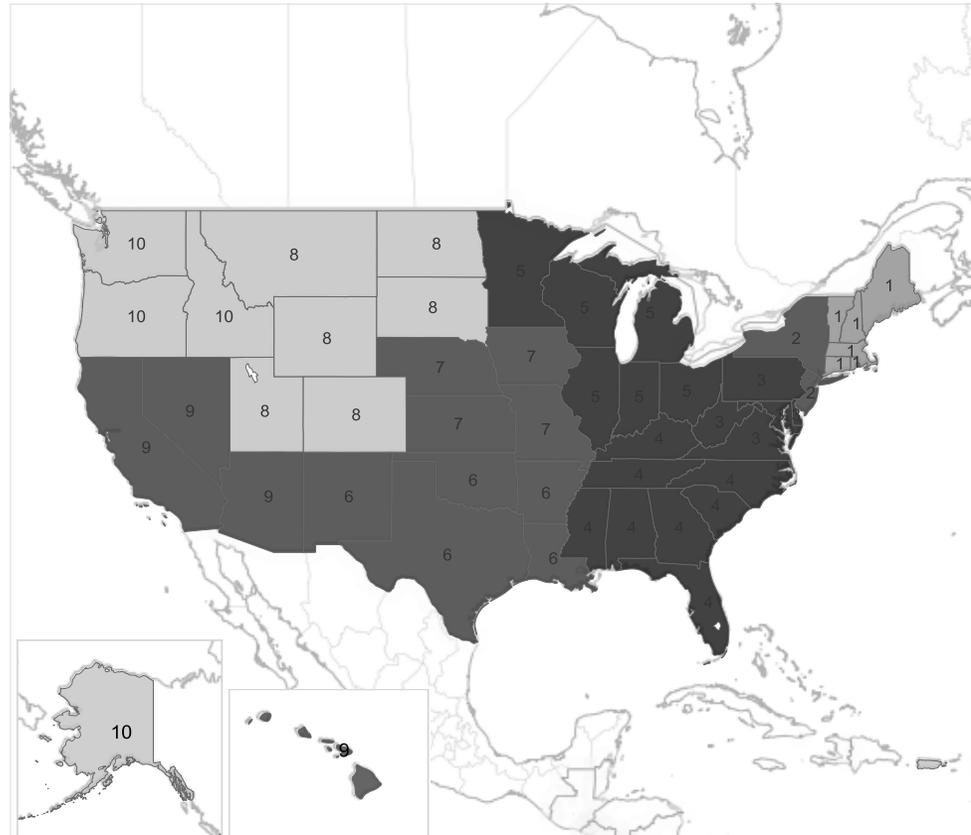
Cause of Death
Homicide

Sex
Male



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

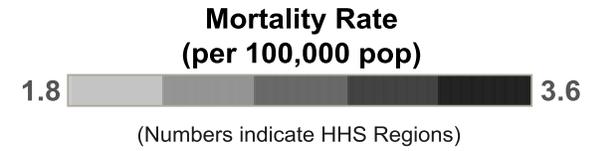
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Homicide; Sex: Female

Figure 27

Age
15 to 24

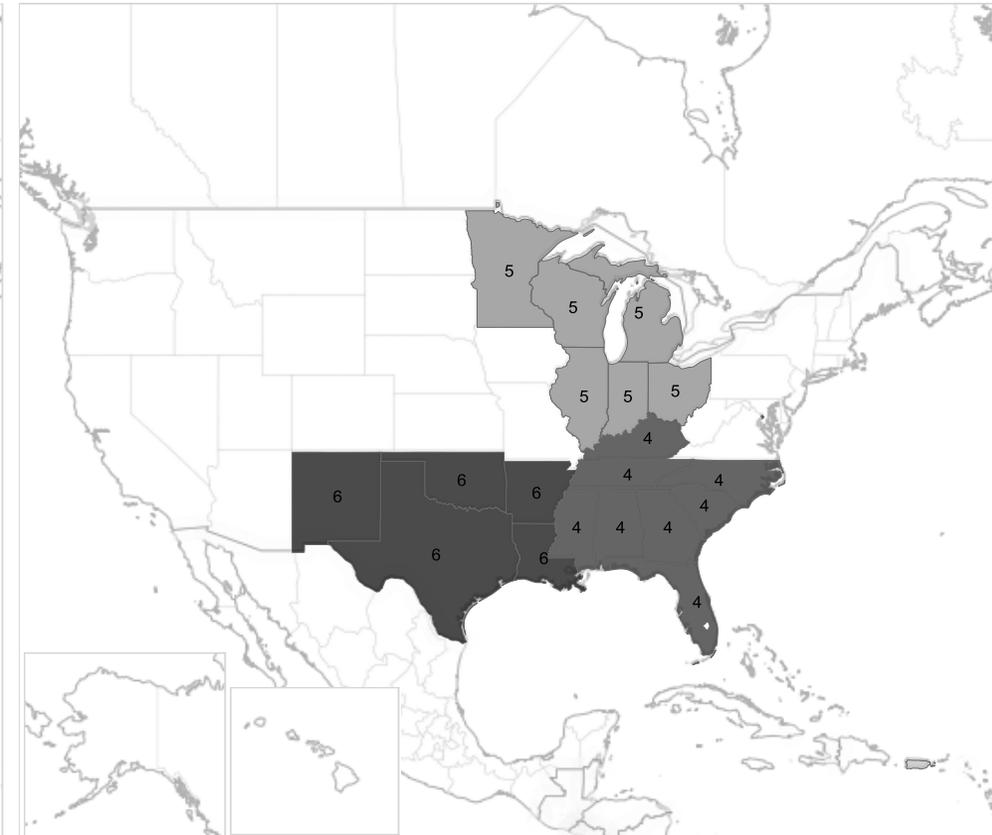
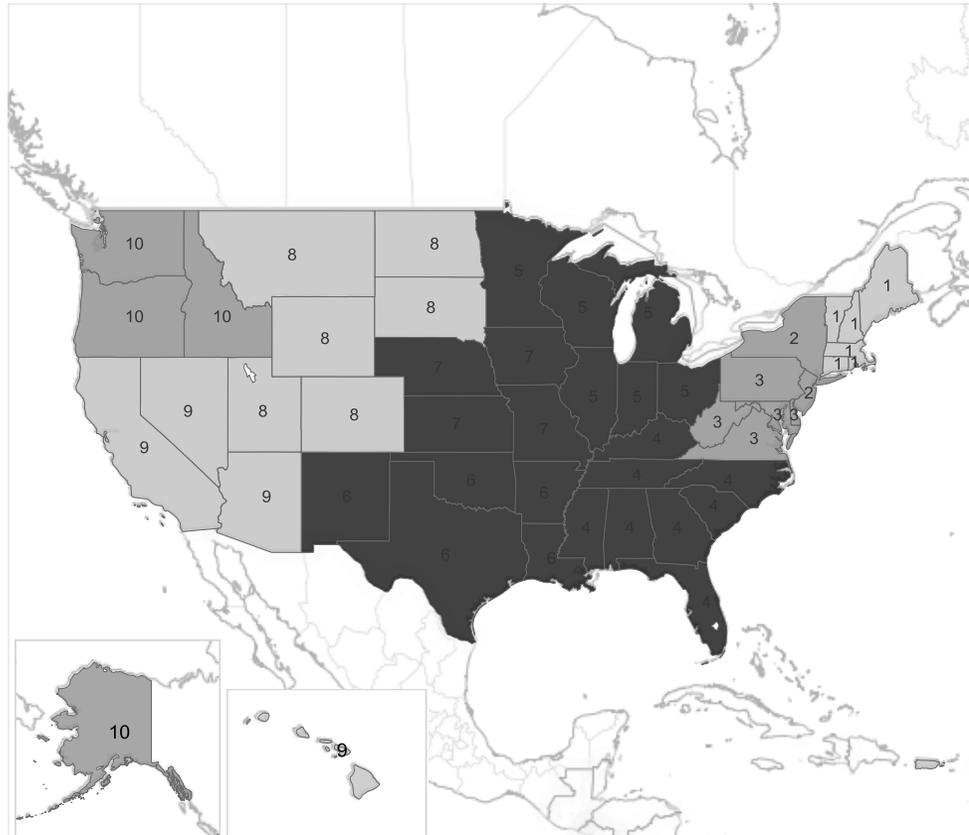
Cause of Death
Homicide

Sex
Female



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

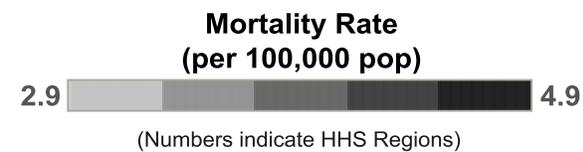
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Malignant neoplasms; Sex: Male

Figure 28

Age
15 to 24

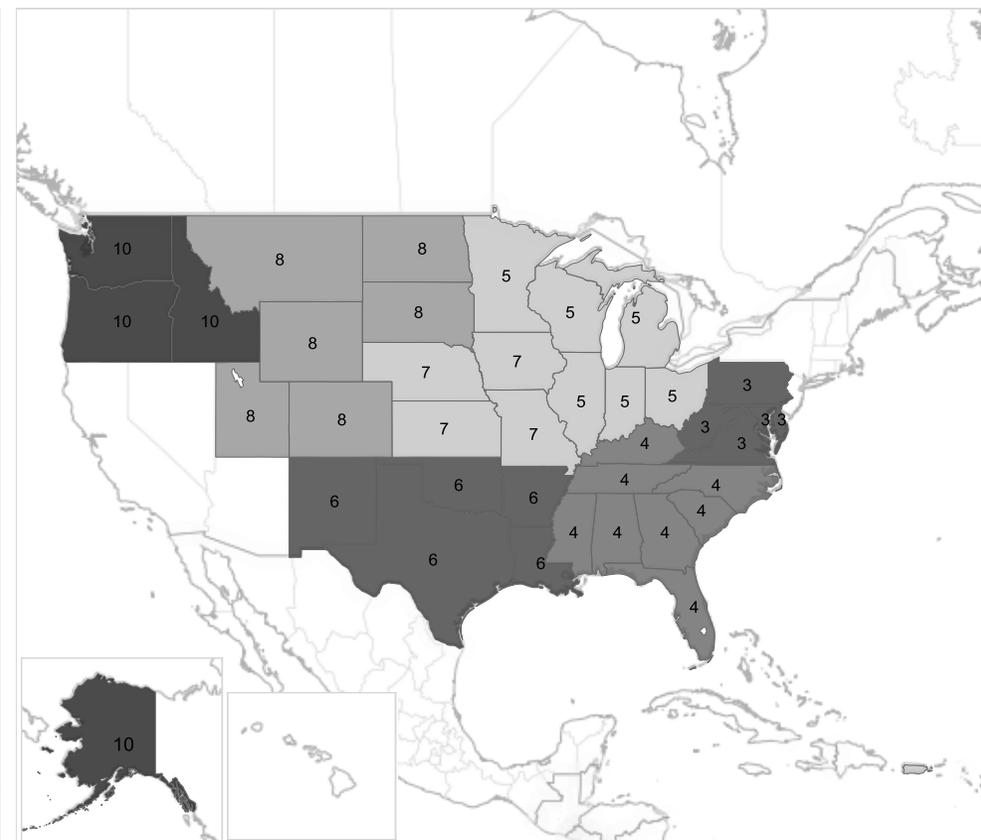
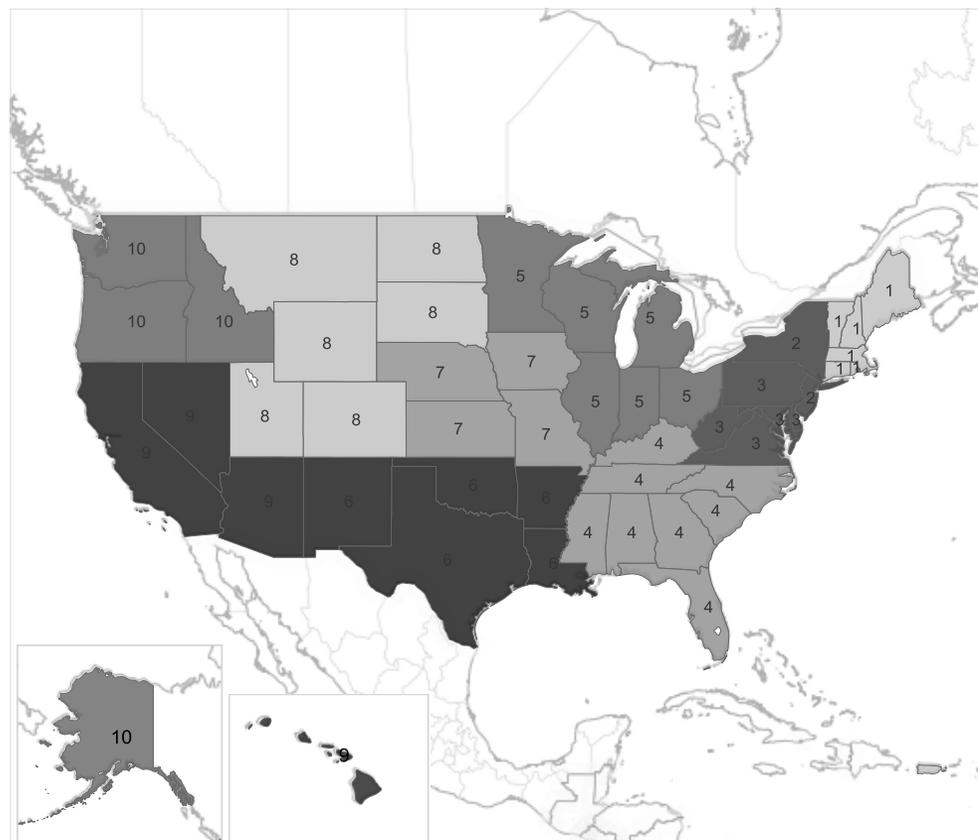
Cause of Death
Malignant neoplasms

Sex
Male



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

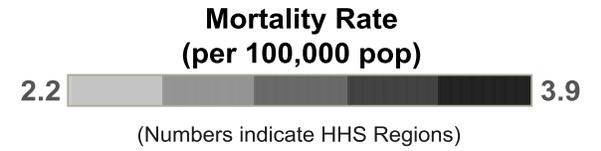
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Malignant neoplasms; Sex: Female

Figure 29

Age
15 to 24

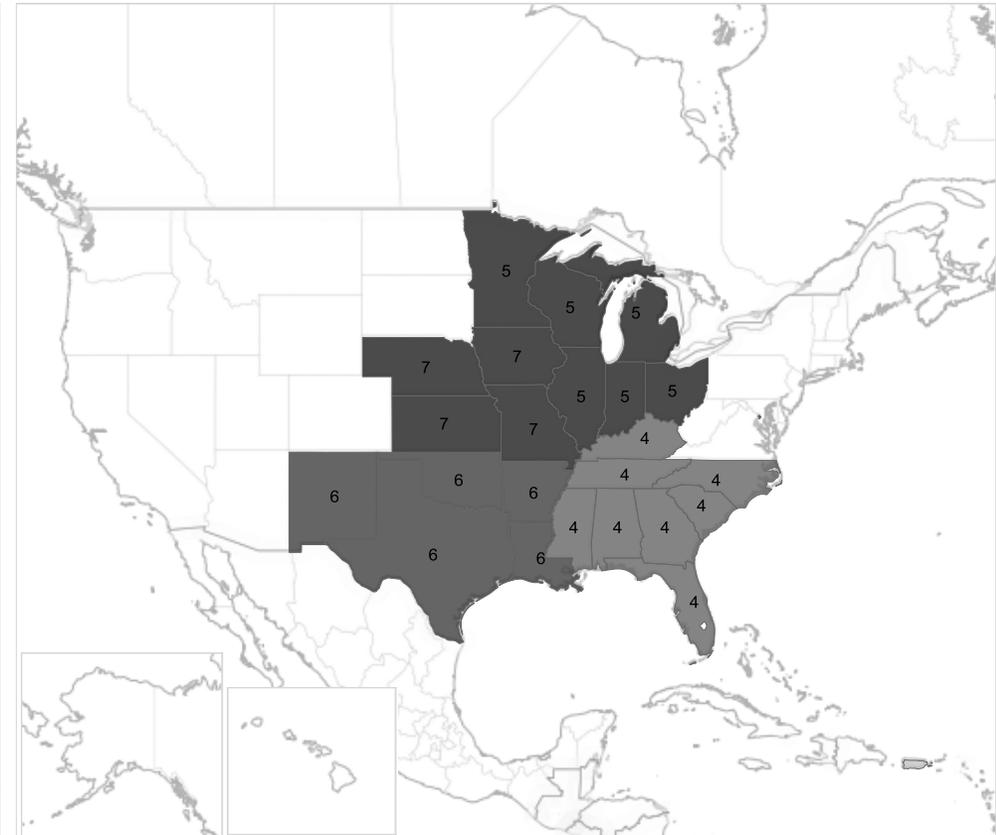
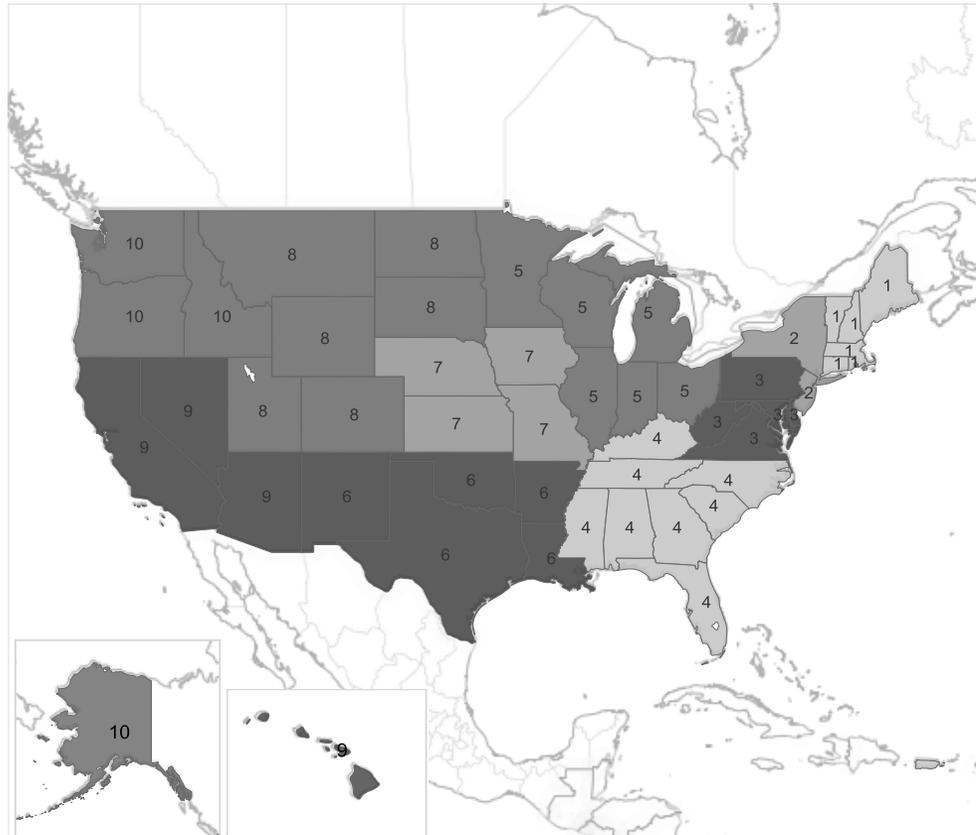
Cause of Death
Malignant neoplasms

Sex
Female



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

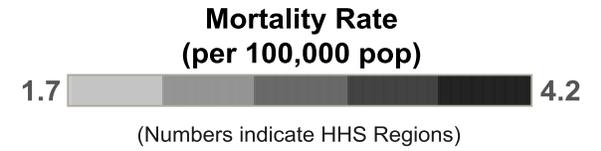
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Heart disease; Sex: Male

Figure 30

Age
15 to 24

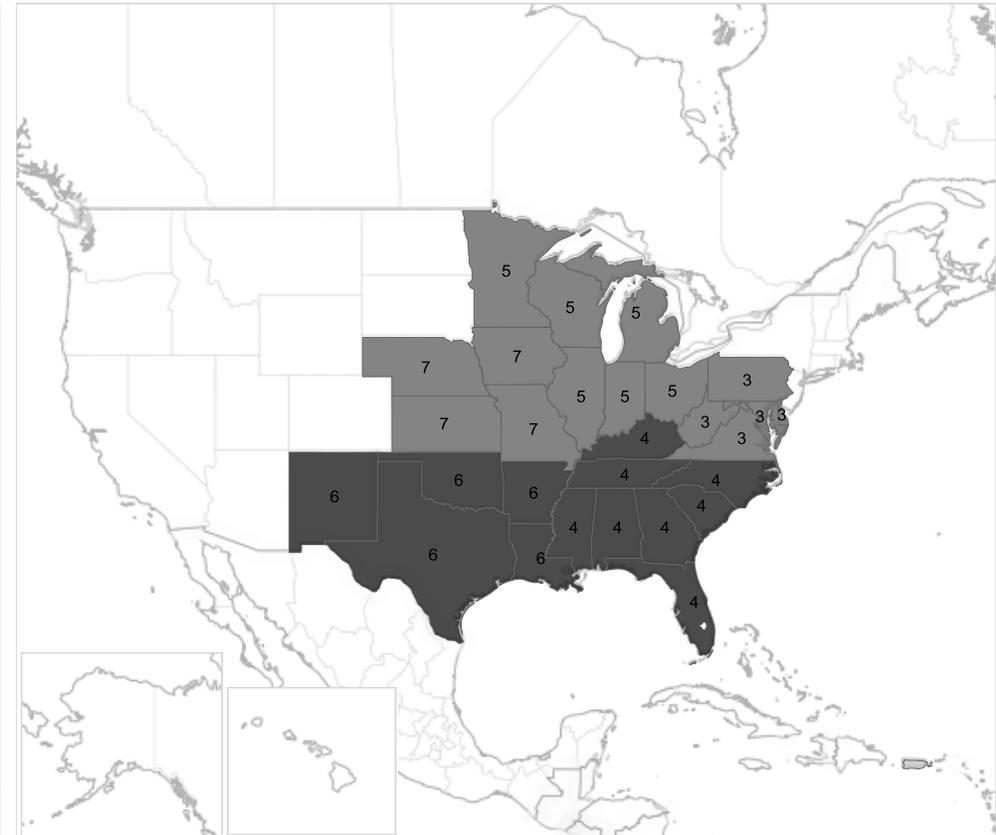
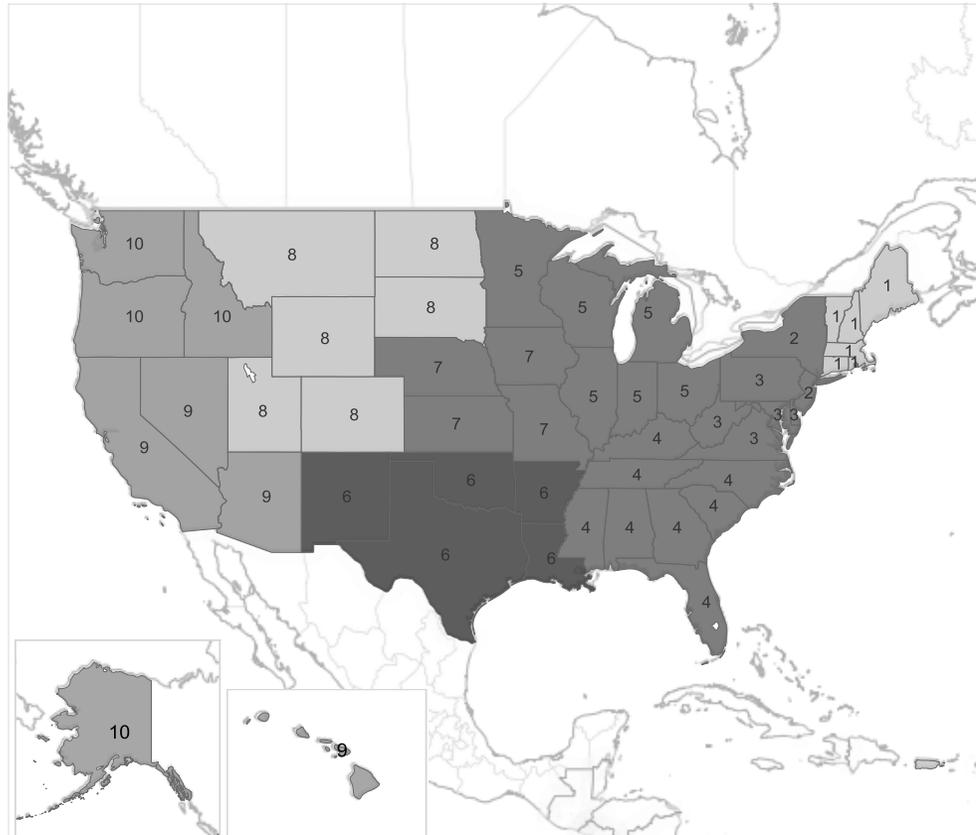
Cause of Death
Heart disease

Sex
Male



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

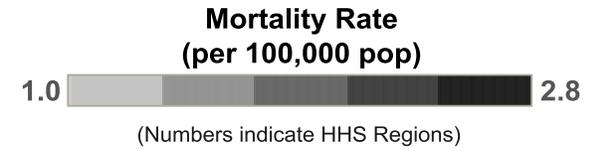
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Heart disease; Sex: Female

Figure 31

Age
15 to 24

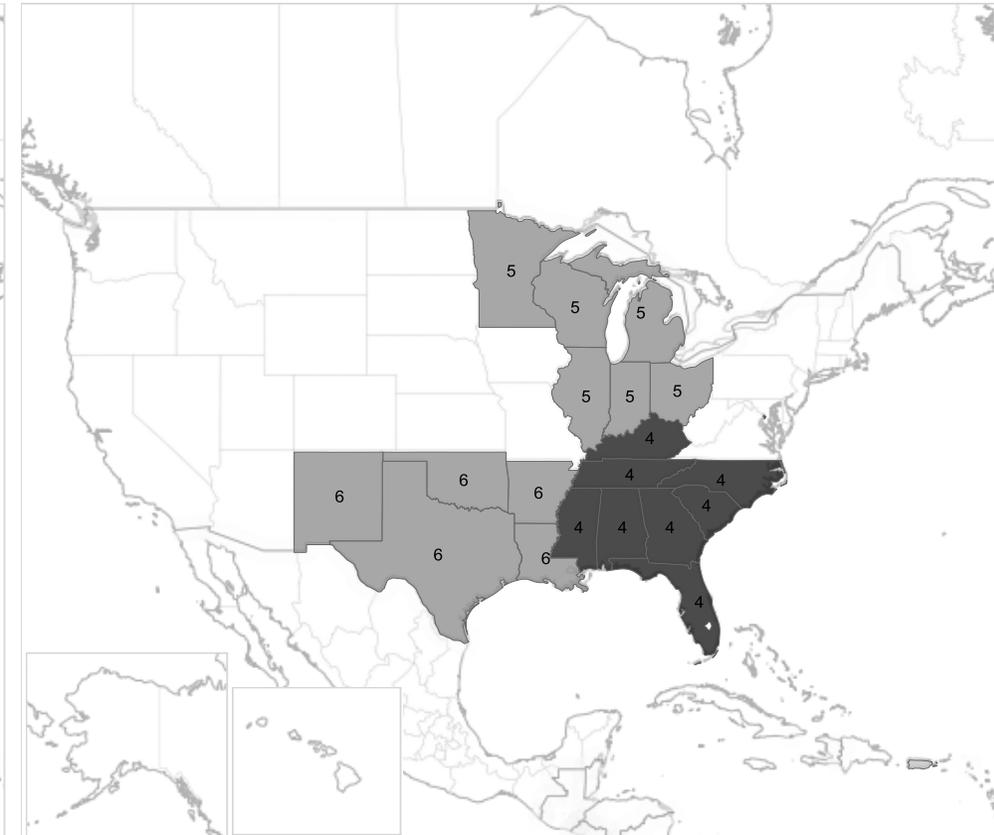
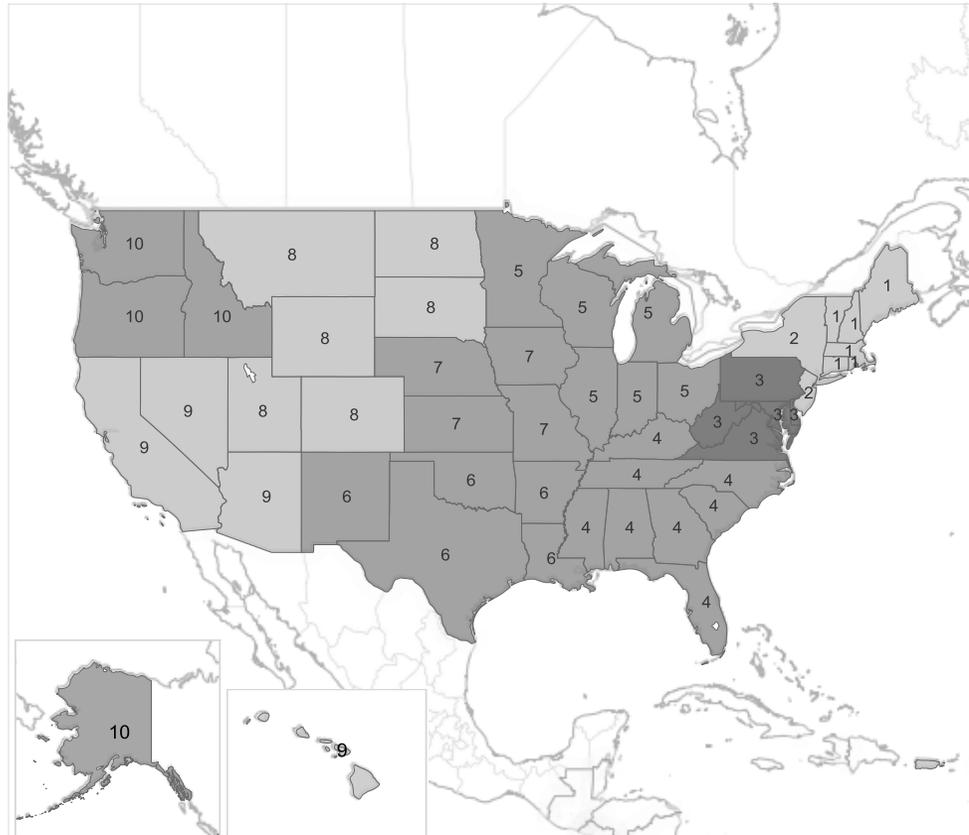
Cause of Death
Heart disease

Sex
Female



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

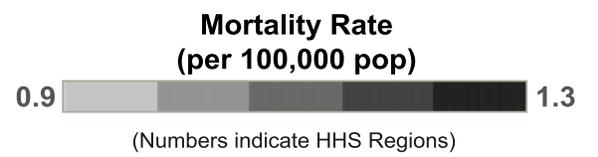
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Congenital malformations; Sex: Male

Figure 32

Age
15 to 24

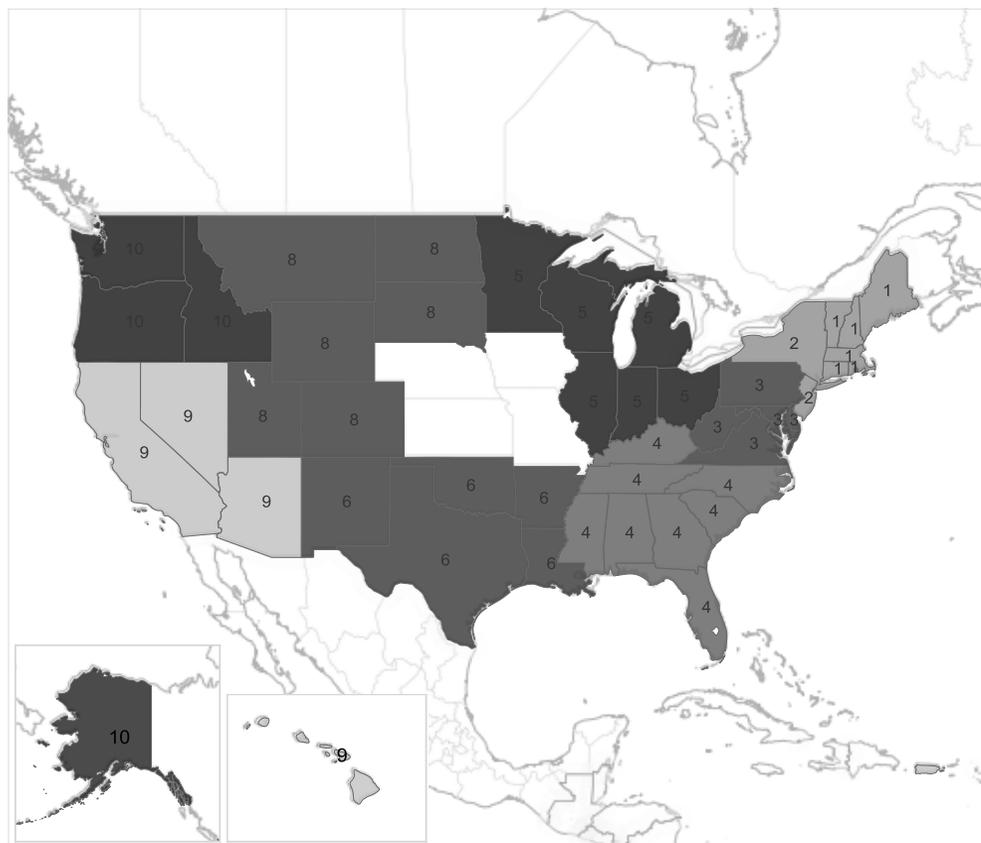
Cause of Death
Congenital malformations

Sex
Male



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

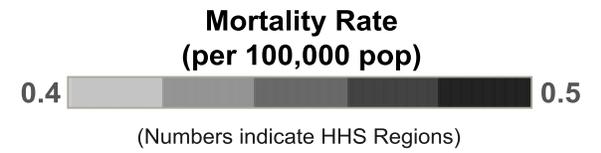
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Diabetes; Sex: Male

Figure 34

Age
15 to 24

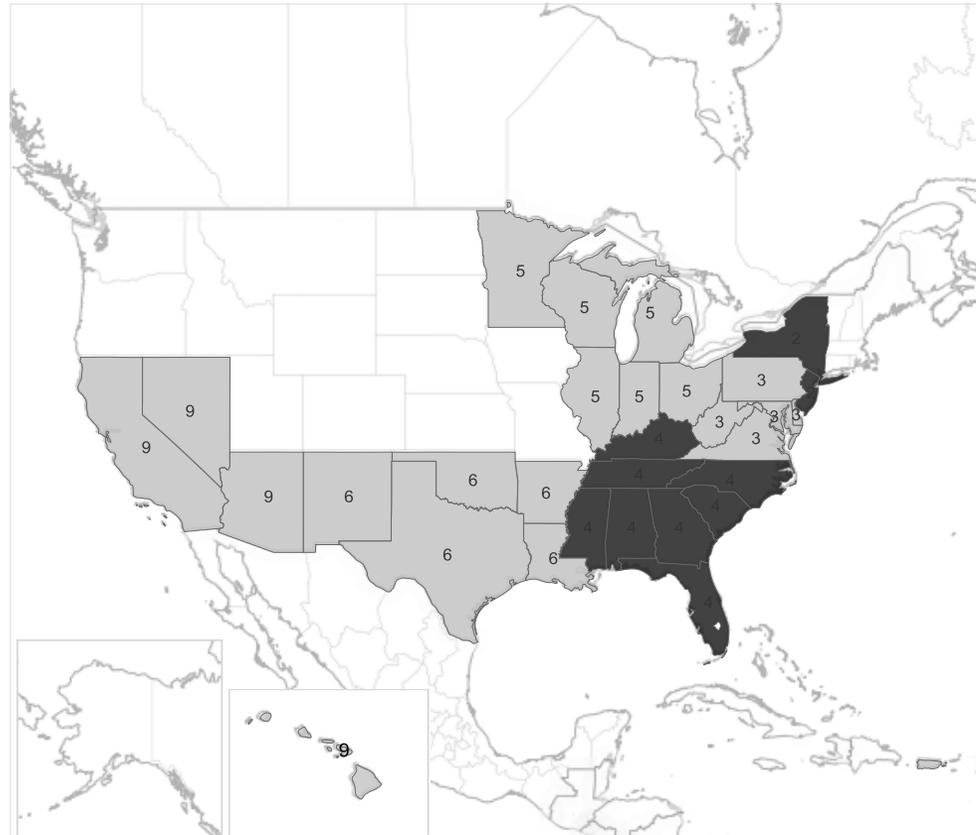
Cause of Death
Diabetes

Sex
Male



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

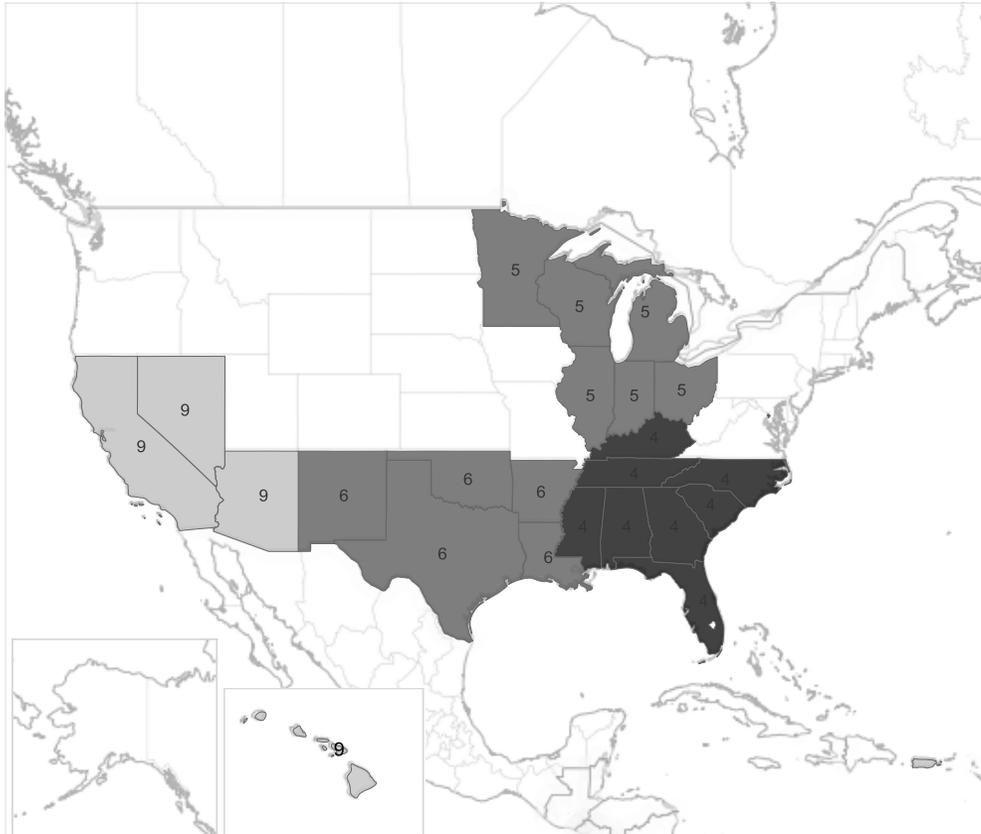
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Diabetes; Sex: Female

Figure 35

Age: 15 to 24
 Cause of Death: Diabetes
 Sex: Female
 Mortality Rate (per 100,000 pop): 0.3 to 0.5
 (Numbers indicate HHS Regions)

URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

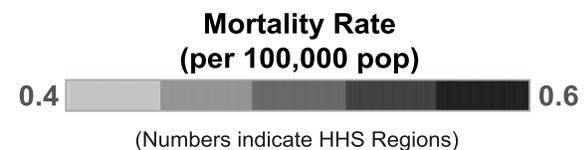
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Cerebrovascular diseases; Sex: Male

Figure 36

Age
15 to 24

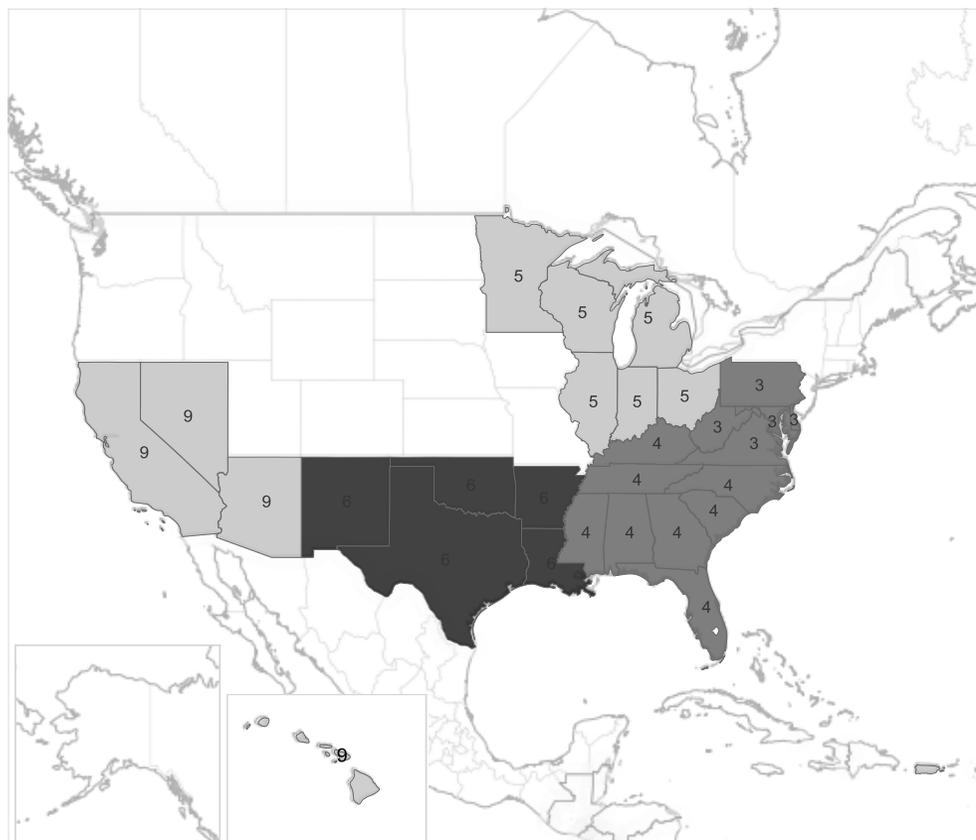
Cause of Death
Cerebrovascular diseases

Sex
Male



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)

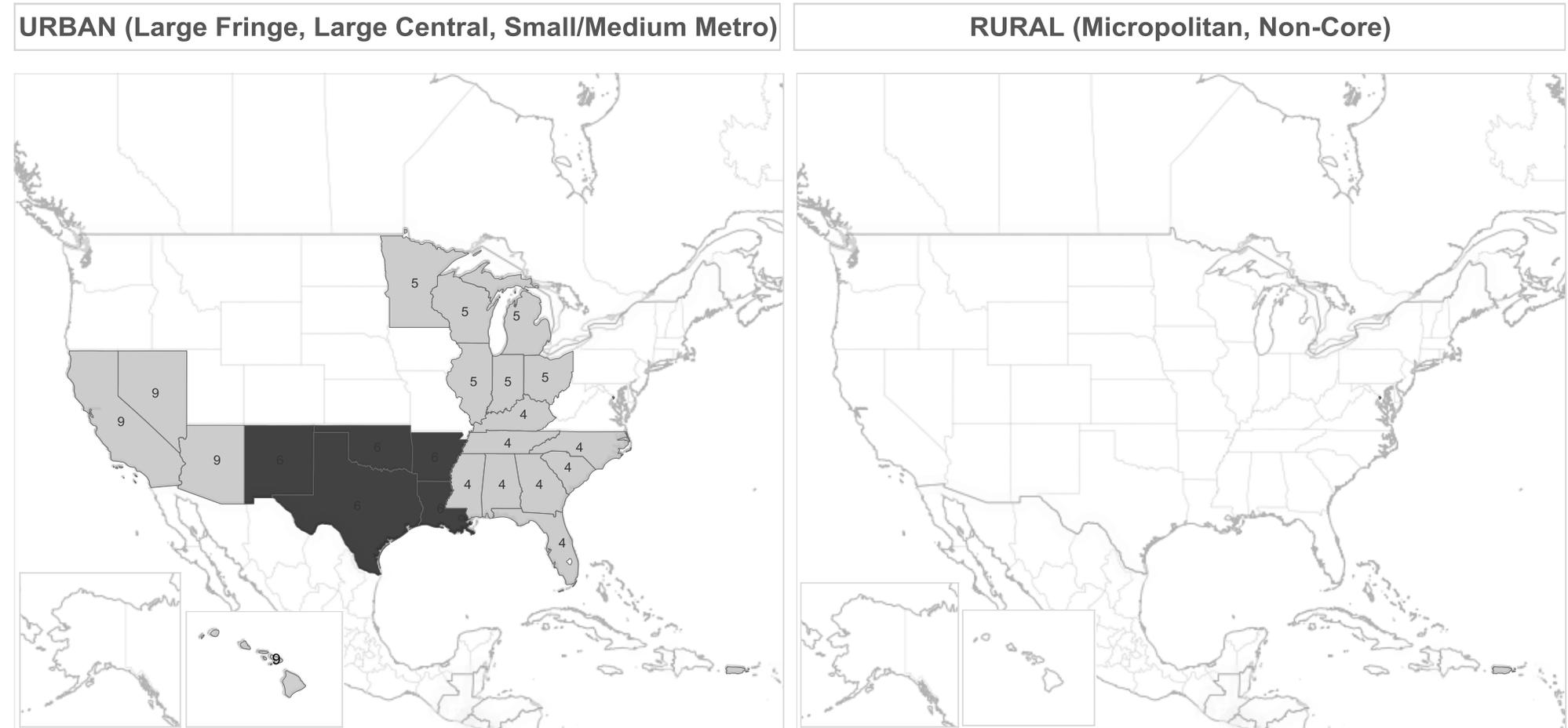


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015.

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Cerebrovascular diseases; Sex: Female

Figure 37

Age: 15 to 24
 Cause of Death: Cerebrovascular diseases
 Sex: Female
 Mortality Rate (per 100,000 pop): 0.4 to 0.5
 (Numbers indicate HHS Regions)



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.

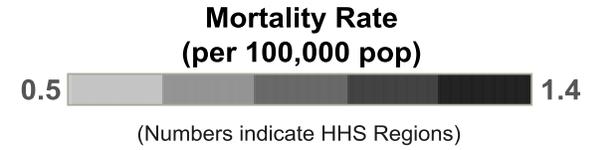
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Pregnancy or childbirth; Sex: Female

Figure 38

Age
15 to 24

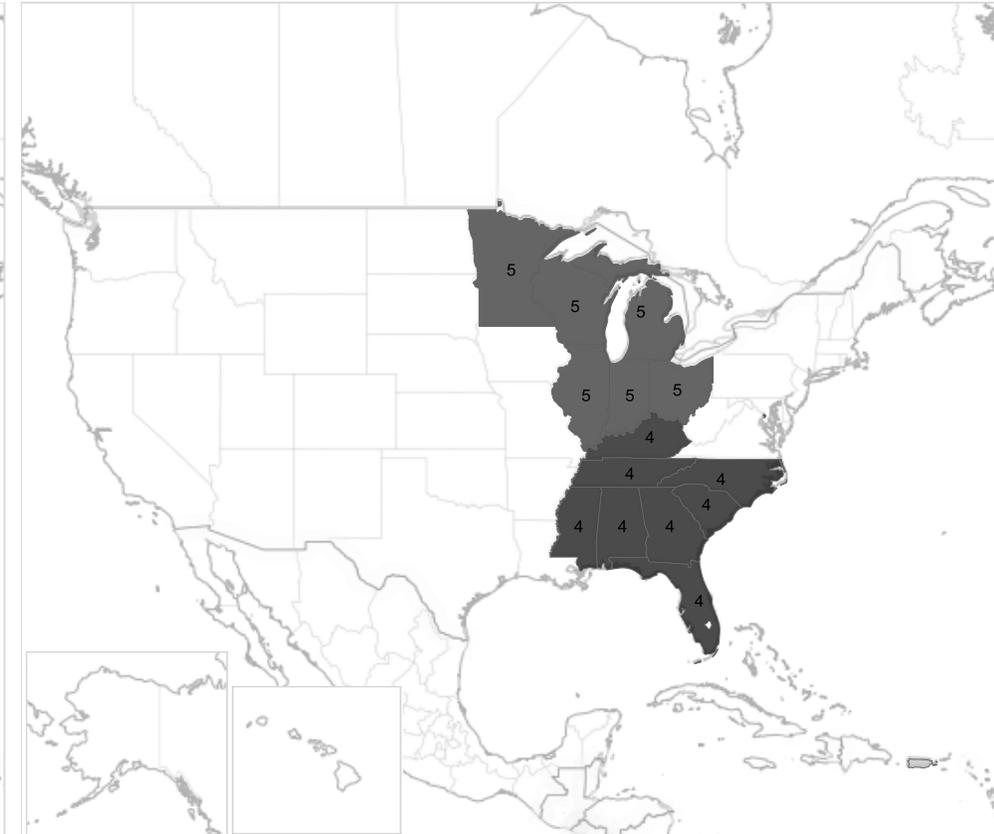
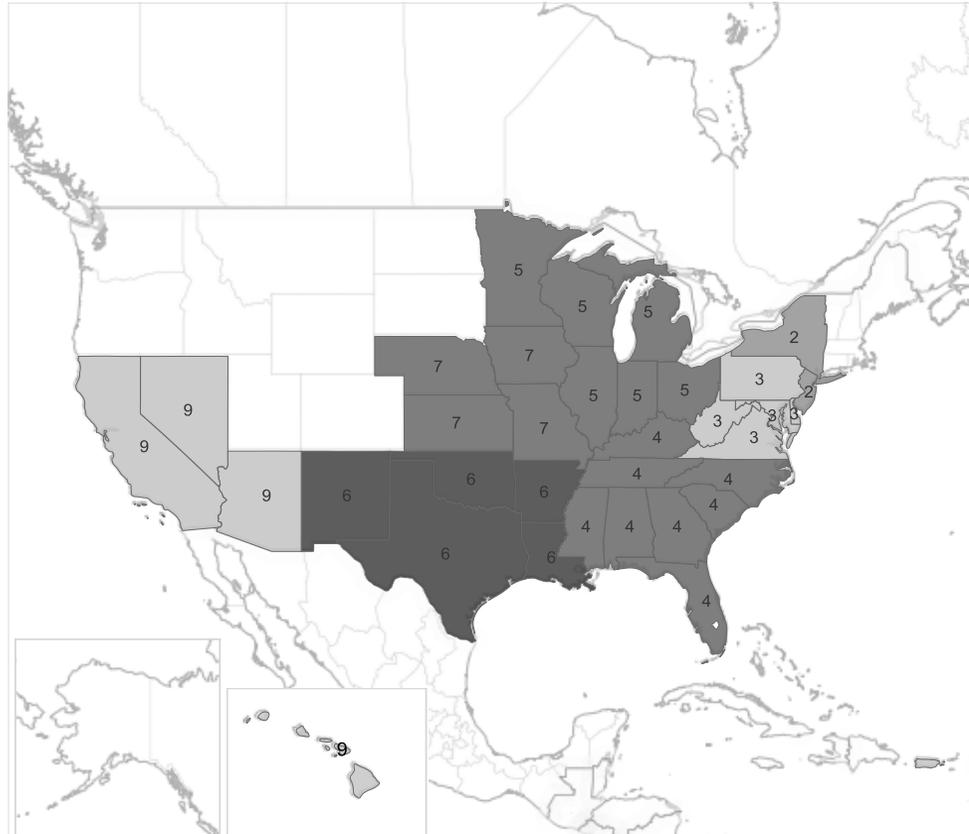
Cause of Death
Pregnancy or childbirth

Sex
Female



URBAN (Large Fringe, Large Central, Small/Medium Metro)

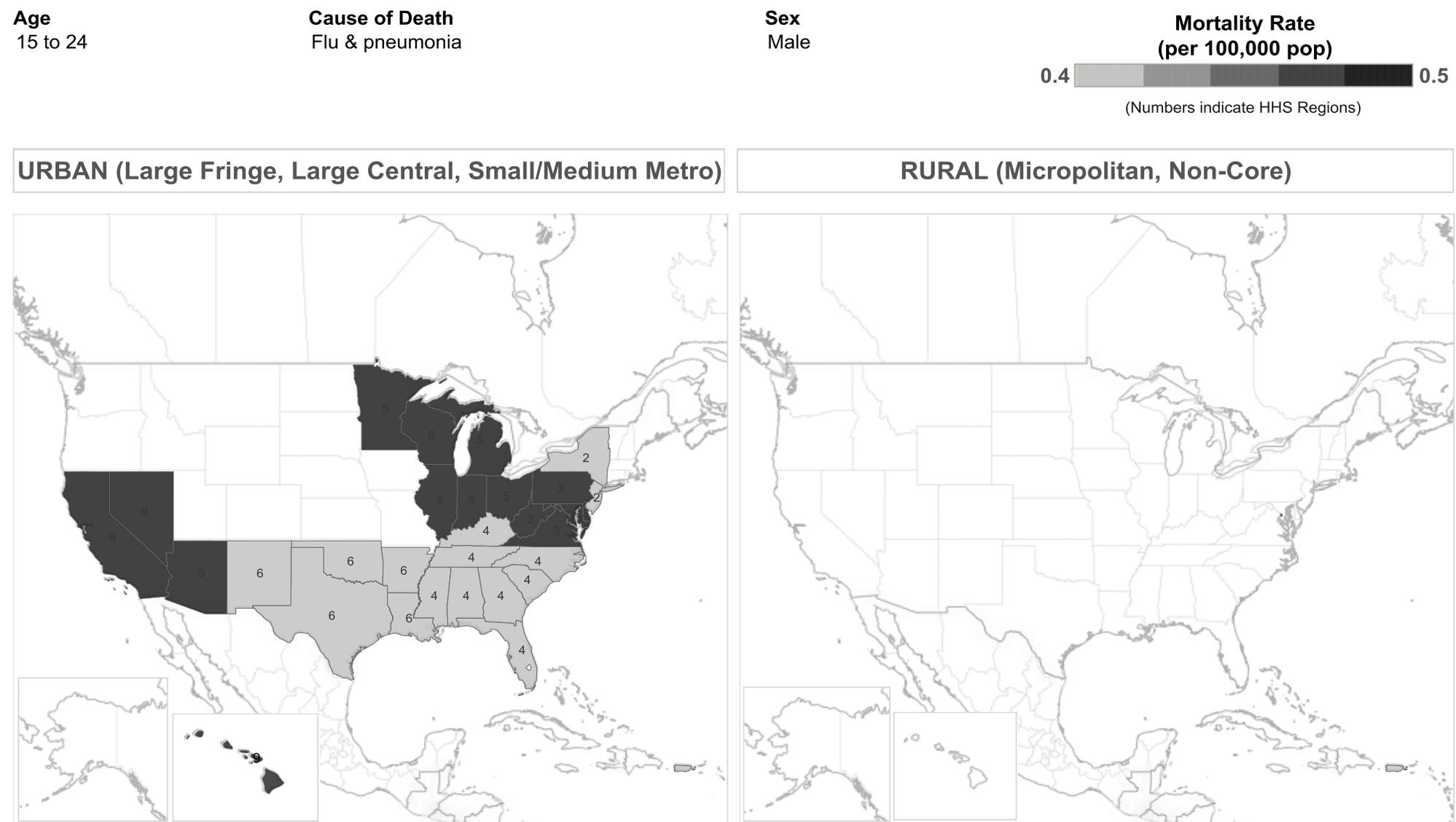
RURAL (Micropolitan, Non-Core)



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.

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Flu & pneumonia; Sex: Male

Figure 39



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.

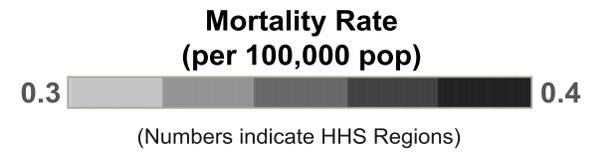
Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 15 to 24; Cause of Death: Flu & pneumonia; Sex: Female

Figure 40

Age
15 to 24

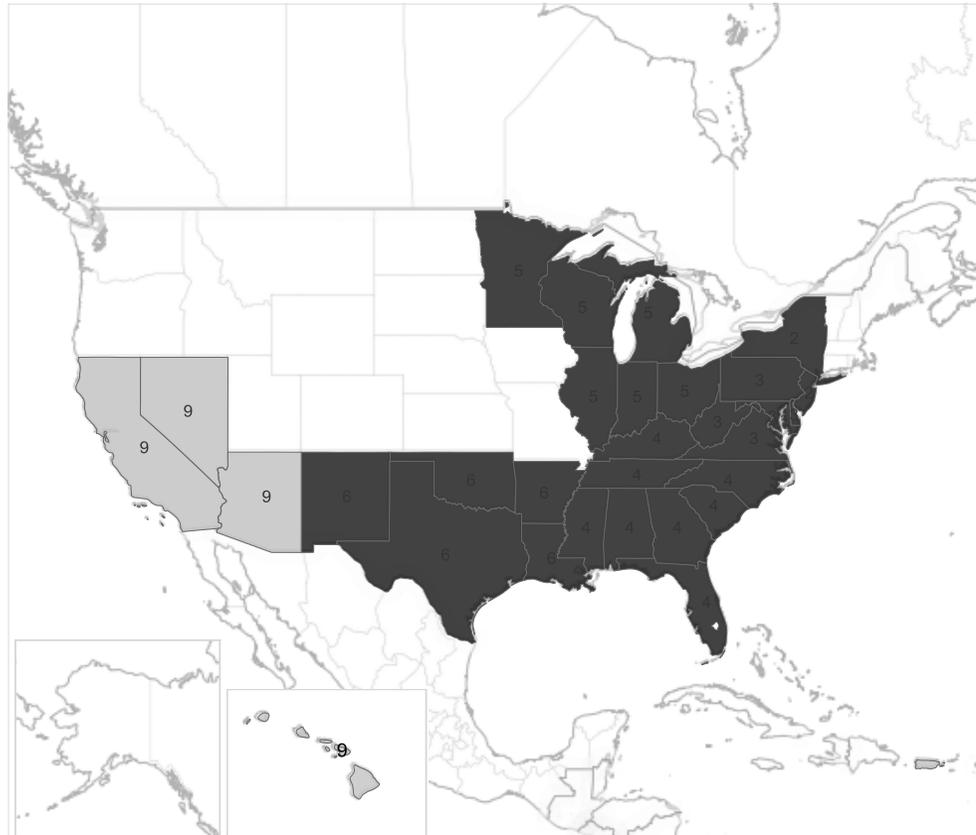
Cause of Death
Flu & pneumonia

Sex
Female



URBAN (Large Fringe, Large Central, Small/Medium Metro)

RURAL (Micropolitan, Non-Core)



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.

Working-Age Adults

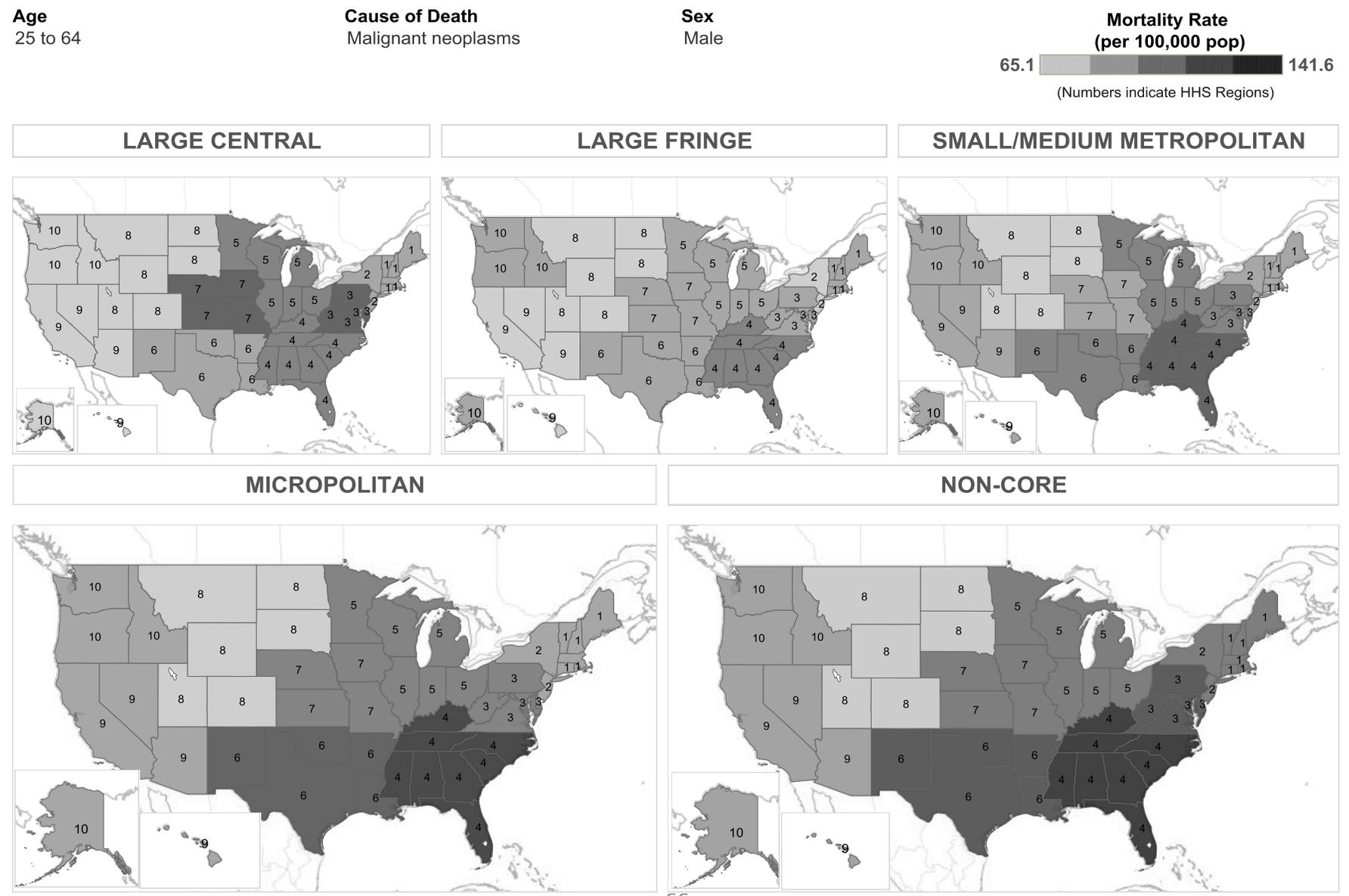
Age 25 to 64 Years Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011- 2013

Cause of Death:

- [Figure 41: Malignant neoplasms, Male](#)
- [Figure 42: Malignant neoplasms, Female](#)
- [Figure 43: Heart disease, Males](#)
- [Figure 44: Heart disease, Females](#)
- [Figure 45: Unintentional injuries, Males](#)
- [Figure 46: Unintentional injuries, Females](#)
- [Figure 47: Suicide, Male](#)
- [Figure 48: Suicide, Female](#)
- [Figure 49: Liver disease, Male](#)
- [Figure 50: Liver disease, Female](#)
- [Figure 51: Diabetes, Male](#)
- [Figure 52: Diabetes, Female](#)
- [Figure 53: Lower respiratory, Male](#)
- [Figure 54: Lower respiratory, Female](#)
- [Figure 55: Cerebrovascular diseases, Male](#)
- [Figure 56: Cerebrovascular diseases, Female](#)
- [Figure 57: Homicide, Male](#)
- [Figure 58: Homicide, Female](#)
- [Figure 59: Septicemia, Male](#)
- [Figure 60: Septicemia, Female](#)

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Malignant neoplasms; Sex: Male

Figure 41

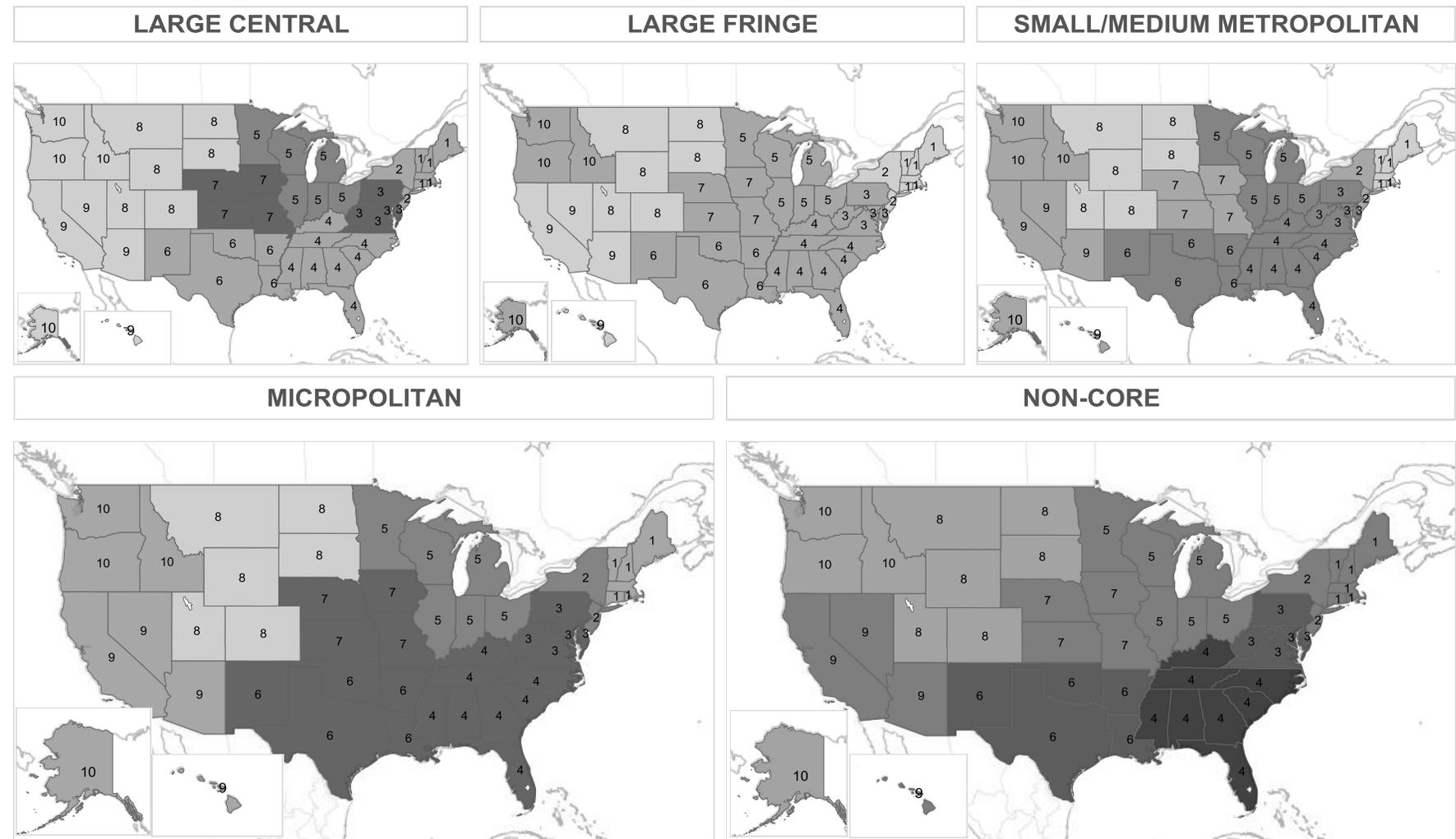


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Malignant neoplasms; Sex: Female

Figure 42

Age
 25 to 64
Cause of Death
 Malignant neoplasms
Sex
 Female
Mortality Rate
 (per 100,000 pop)
 63.8  113.4
 (Numbers indicate HHS Regions)

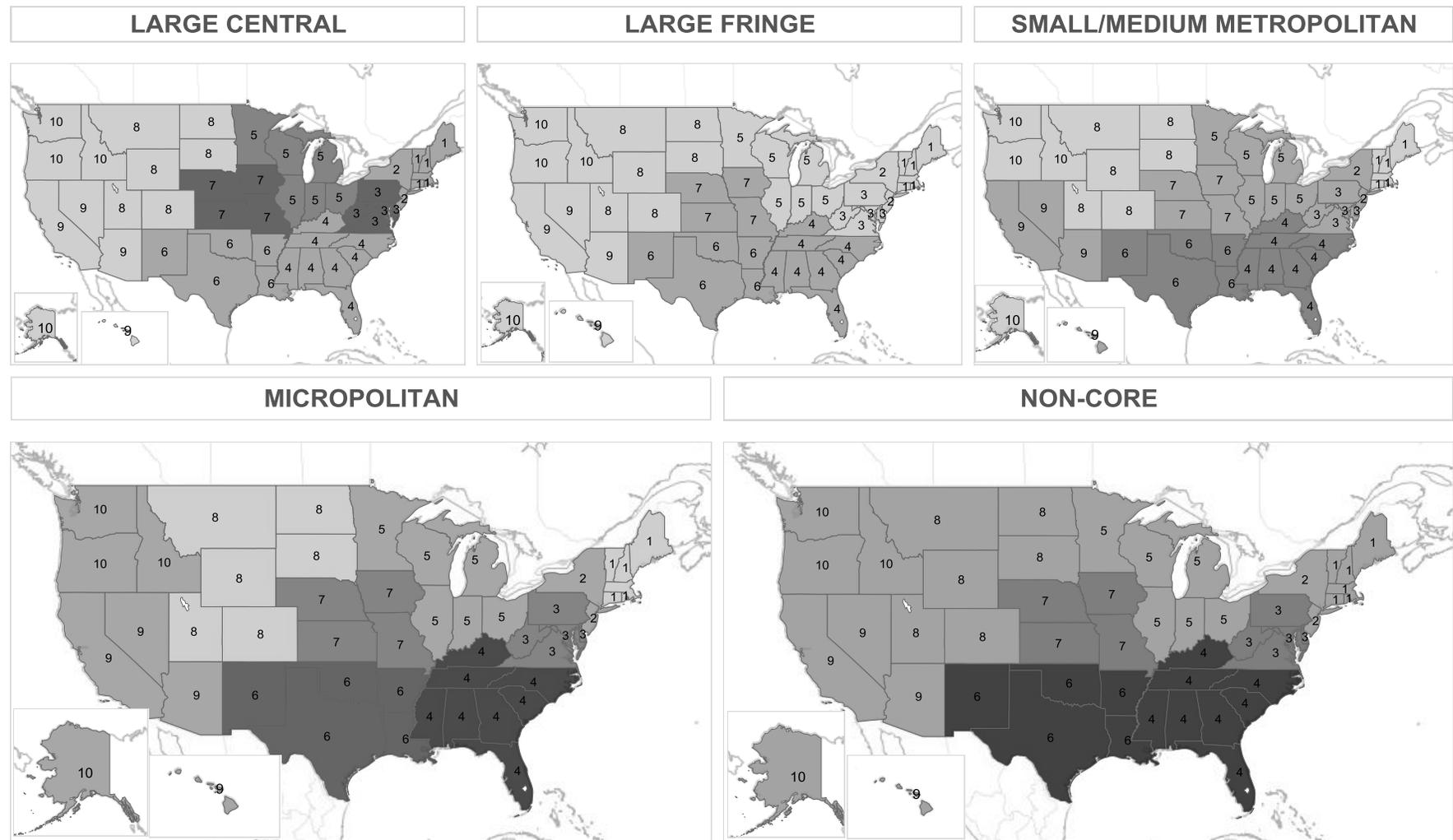


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Heart disease; Sex: Male

Figure 43

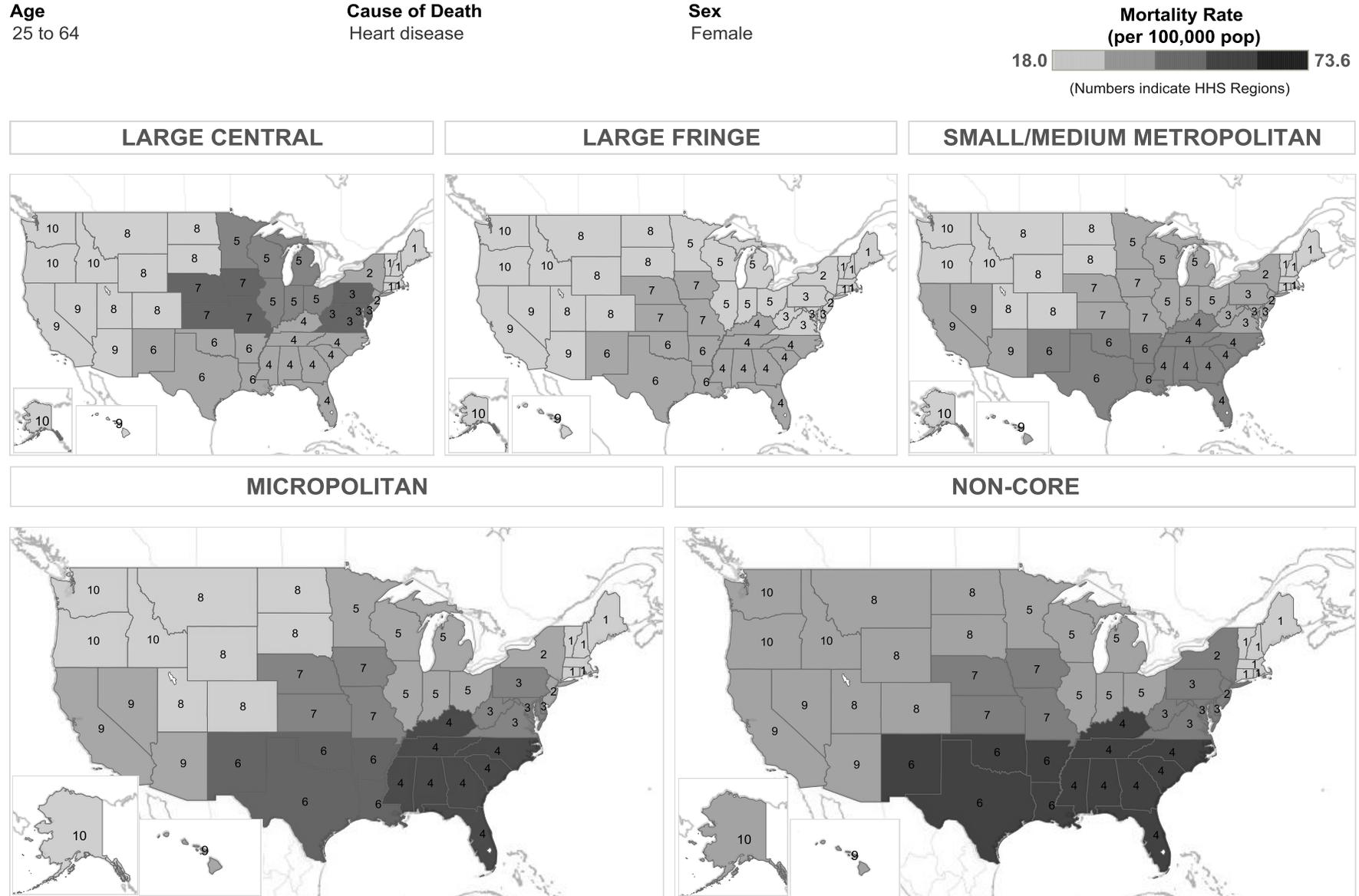
Age: 25 to 64
 Cause of Death: Heart disease
 Sex: Male
 Mortality Rate (per 100,000 pop): 53.3 to 154.2
 (Numbers indicate HHS Regions)



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Heart disease; Sex: Female

Figure 44

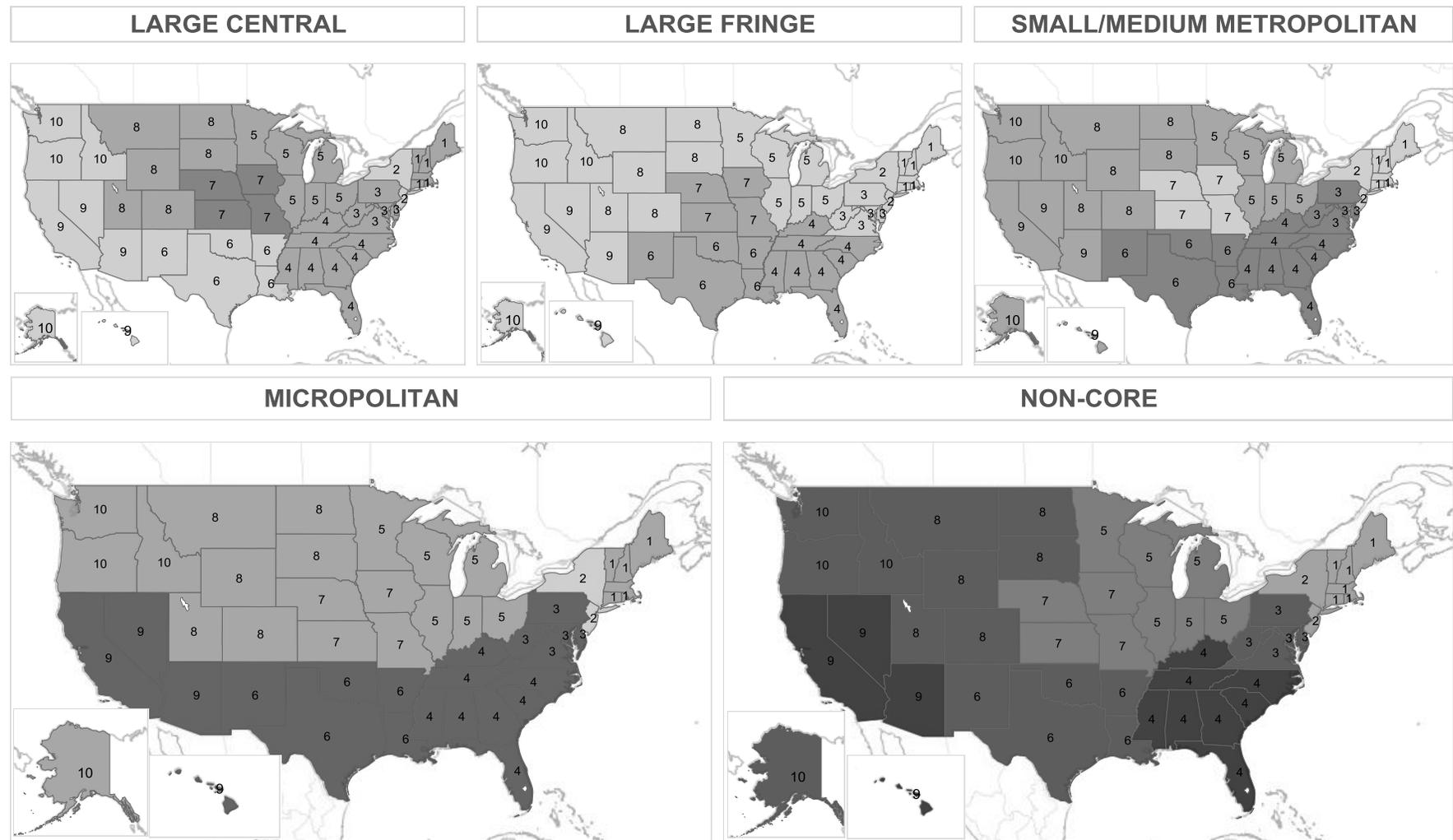


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Unintentional injuries; Sex: Male

Figure 45

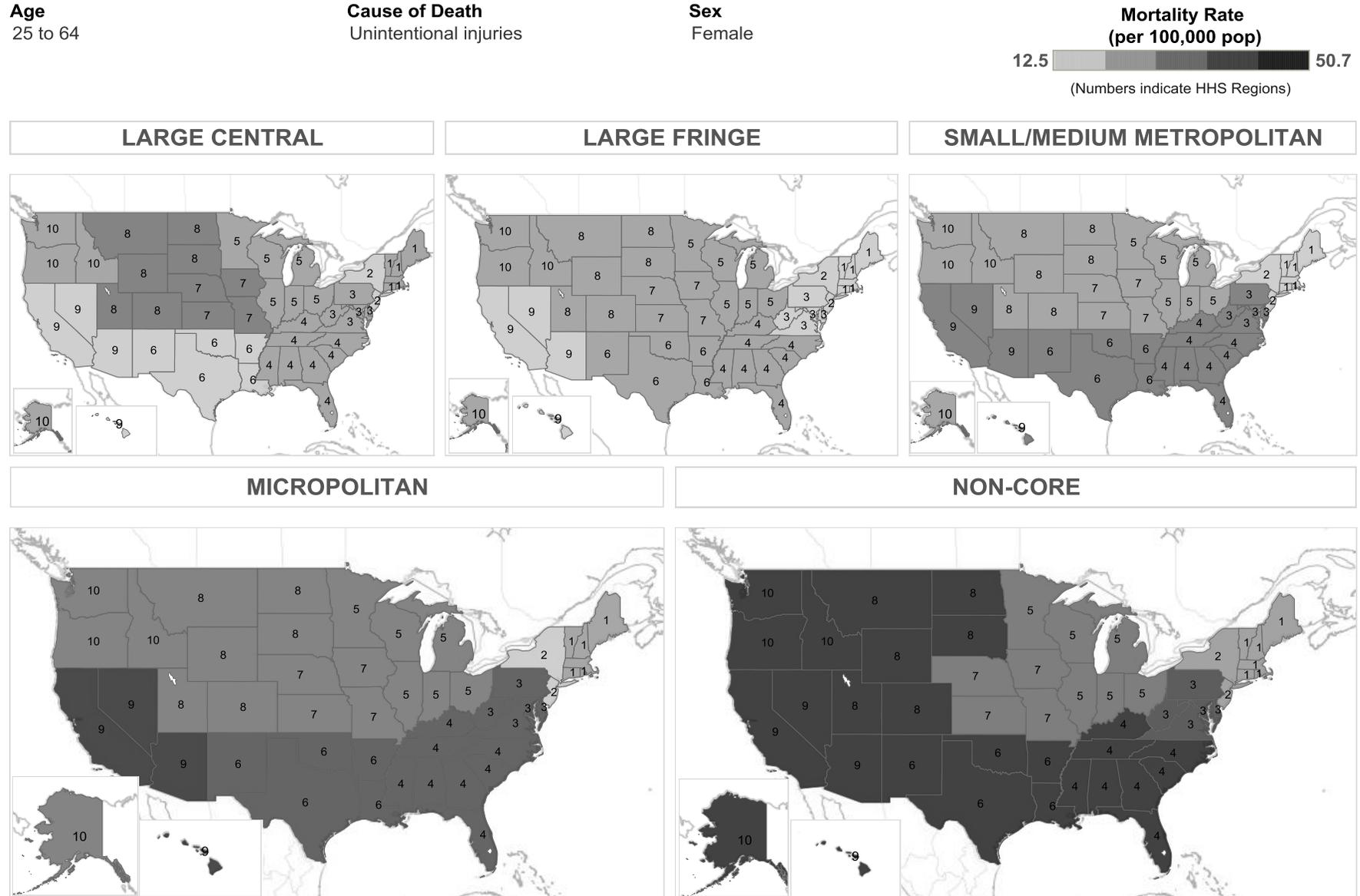
Age: 25 to 64
 Cause of Death: Unintentional injuries
 Sex: Male
 Mortality Rate (per 100,000 pop): 37.6 to 112.3
 (Numbers indicate HHS Regions)



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Unintentional injuries; Sex: Female

Figure 46

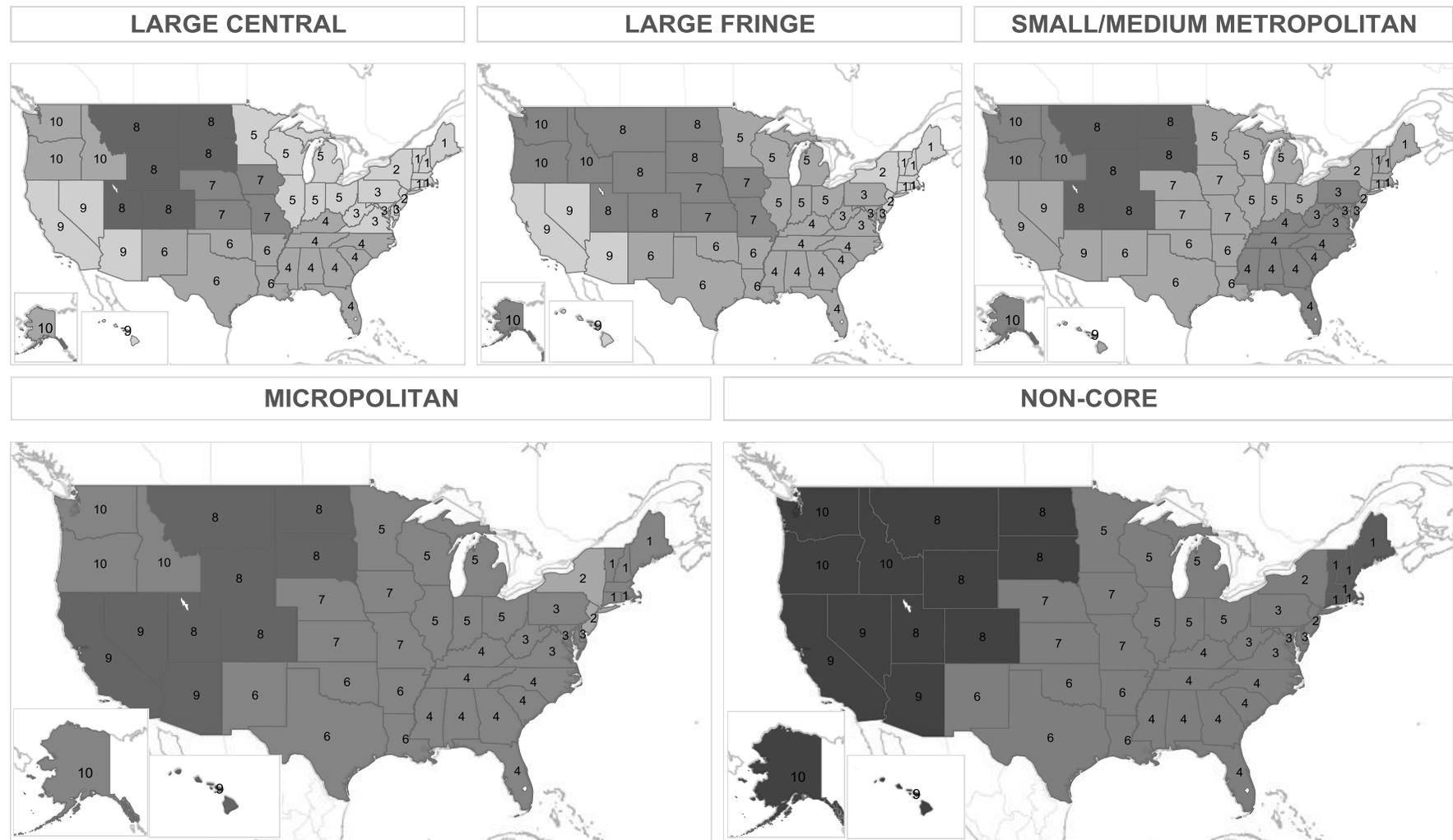


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Suicide; Sex: Male

Figure 47

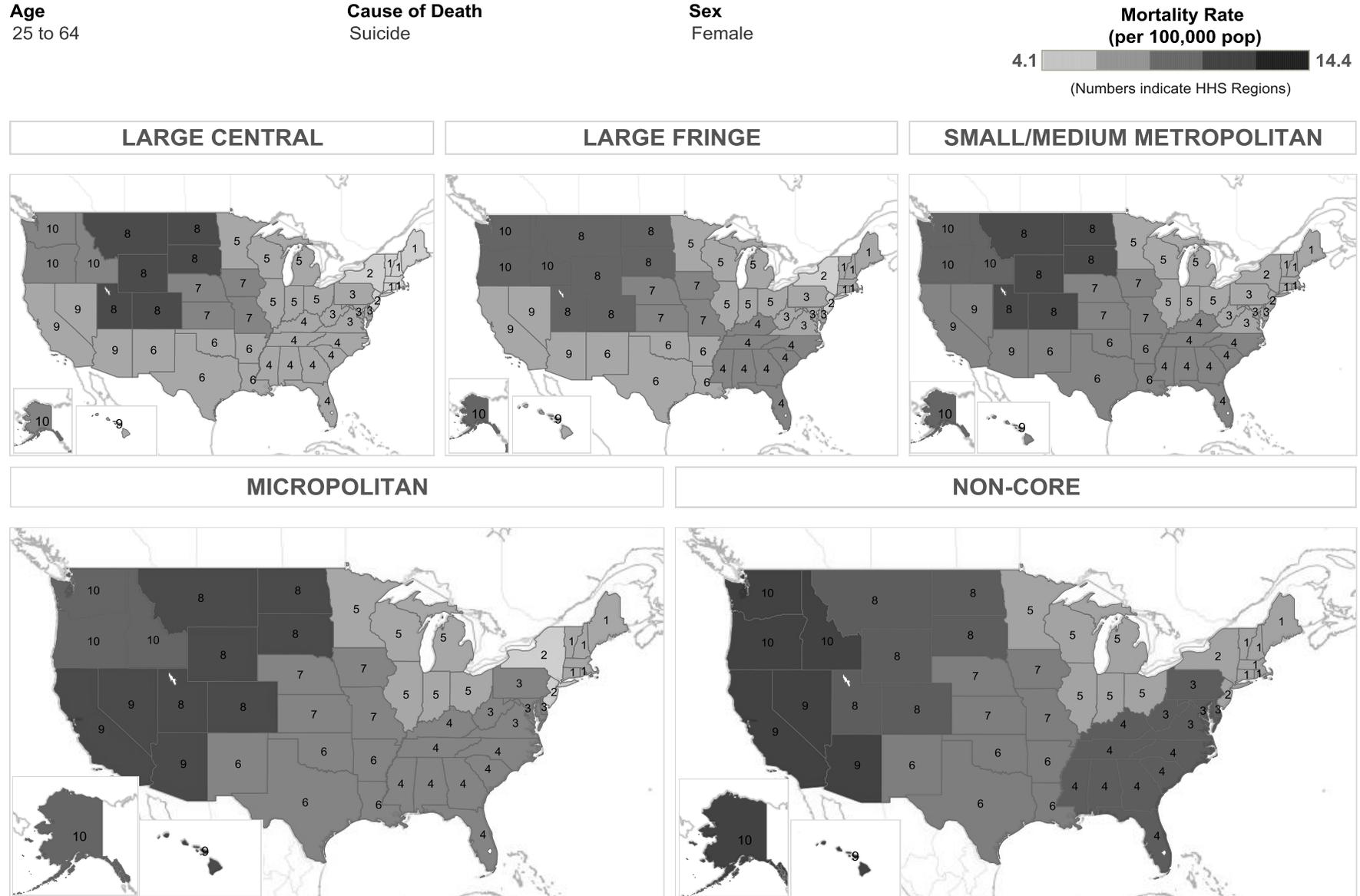
Age: 25 to 64
 Cause of Death: Suicide
 Sex: Male
 Mortality Rate (per 100,000 pop): 13.4 to 54.2
 (Numbers indicate HHS Regions)



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Suicide; Sex: Female

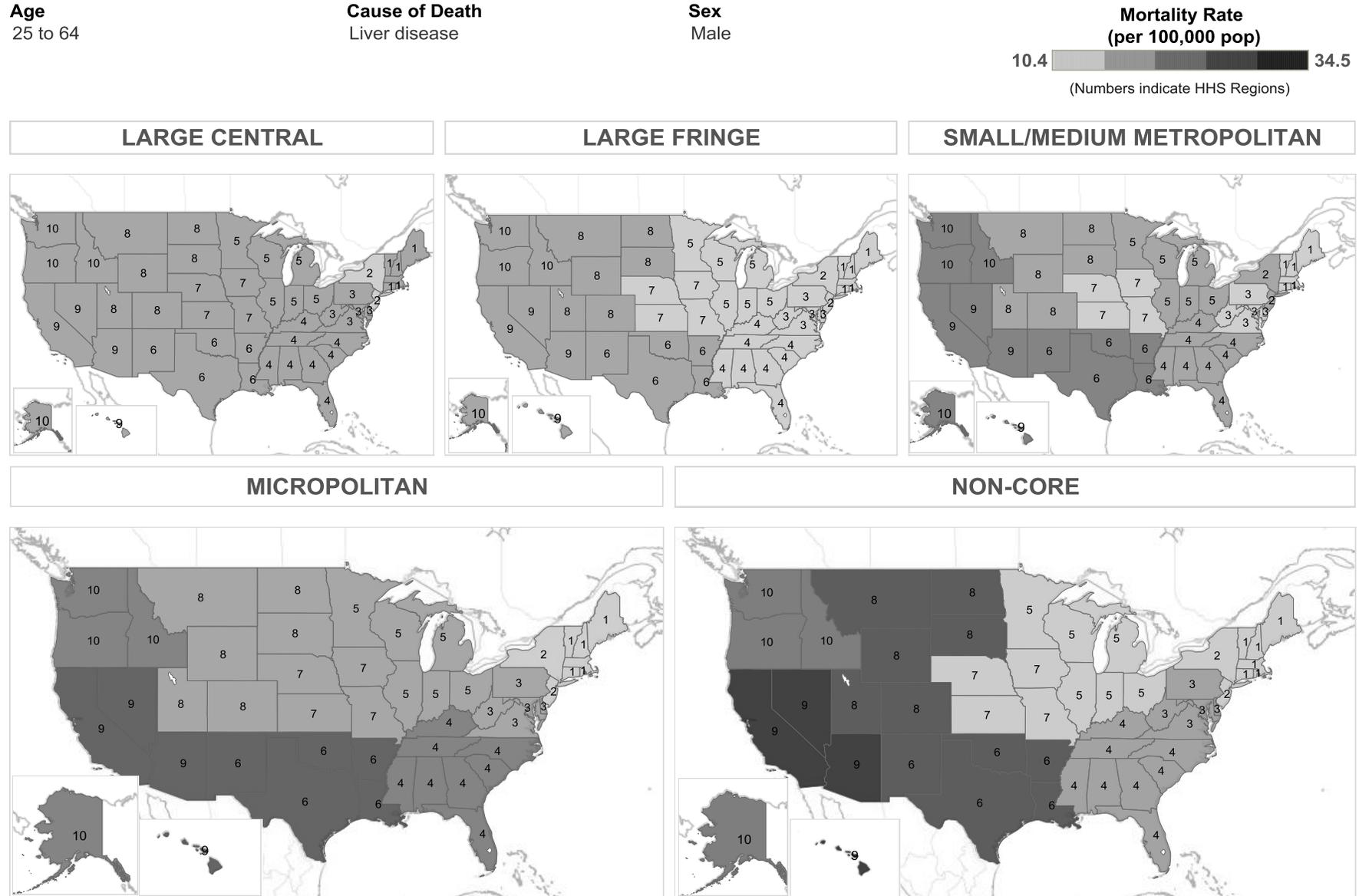
Figure 48



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Liver disease; Sex: Male

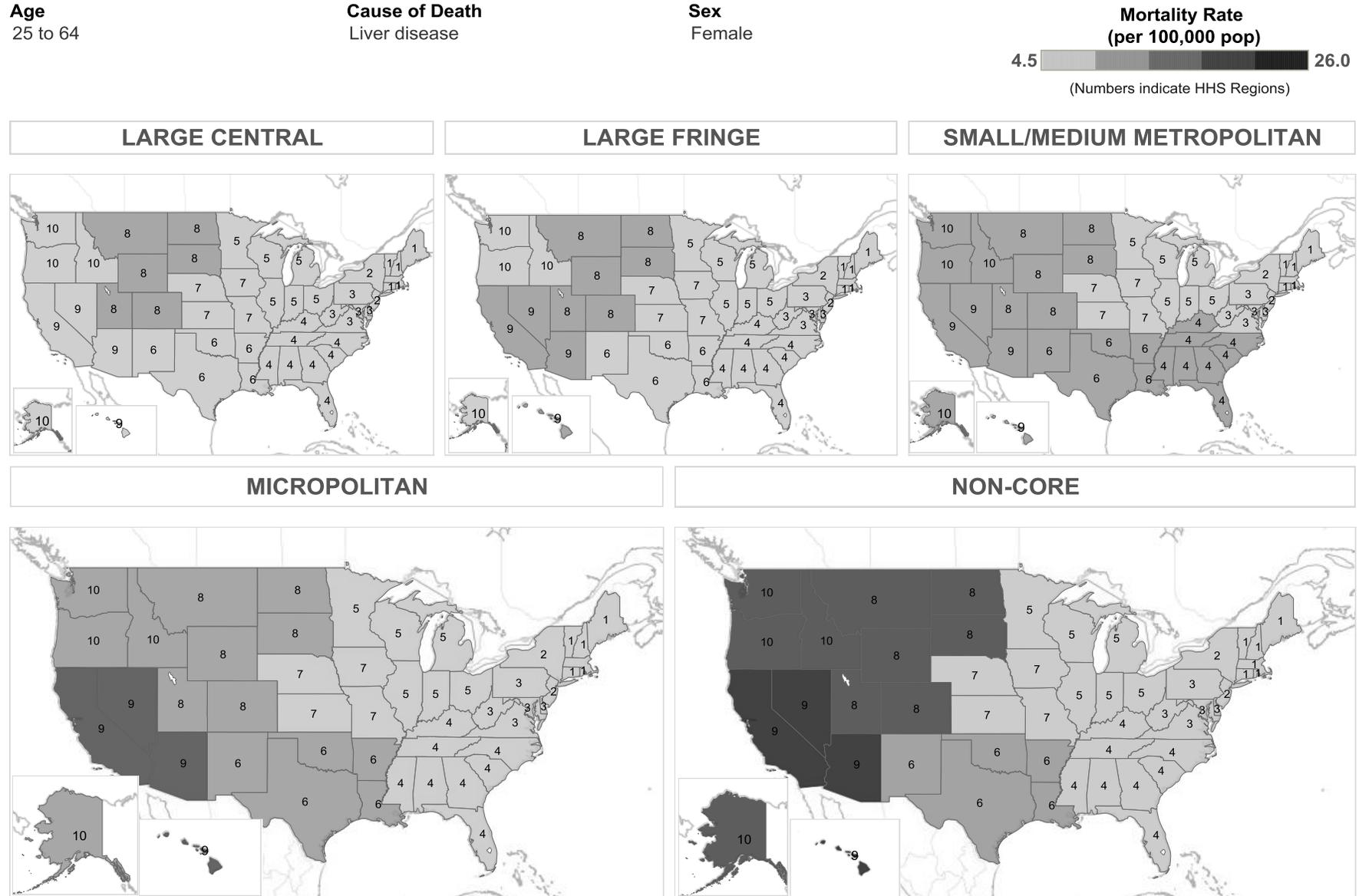
Figure 49



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Liver disease; Sex: Female

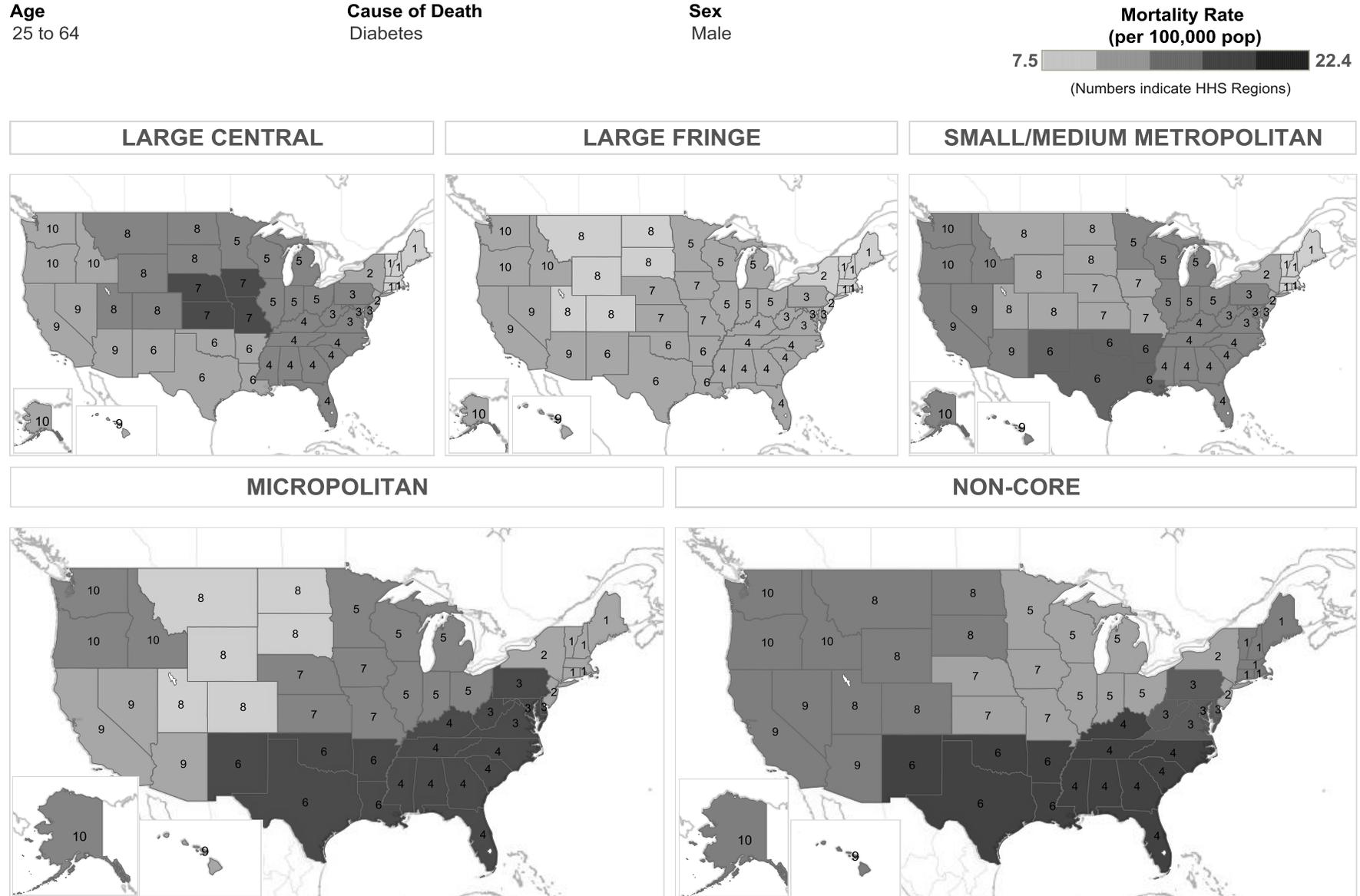
Figure 50



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Diabetes; Sex: Male

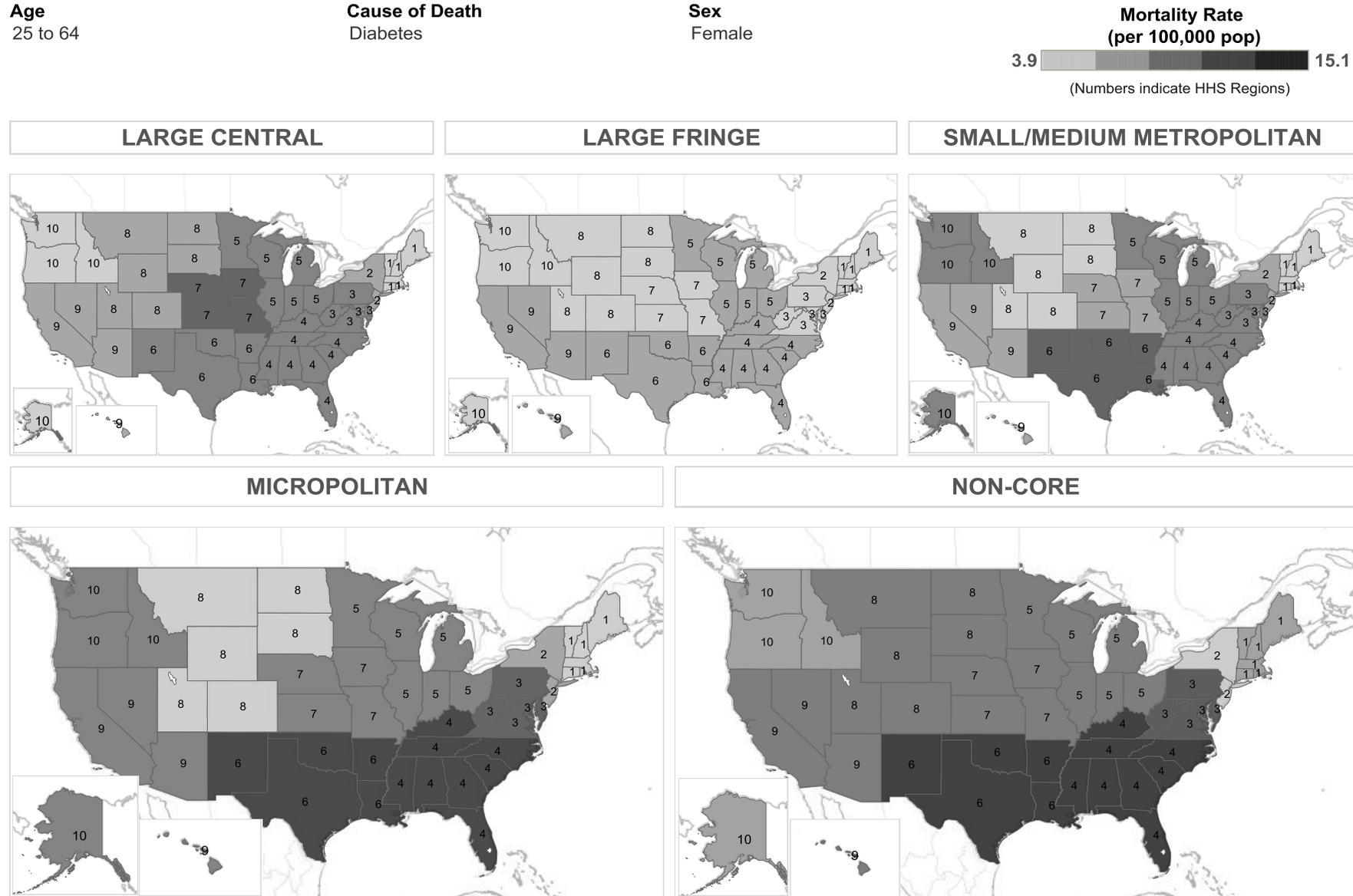
Figure 51



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Diabetes; Sex: Female

Figure 52

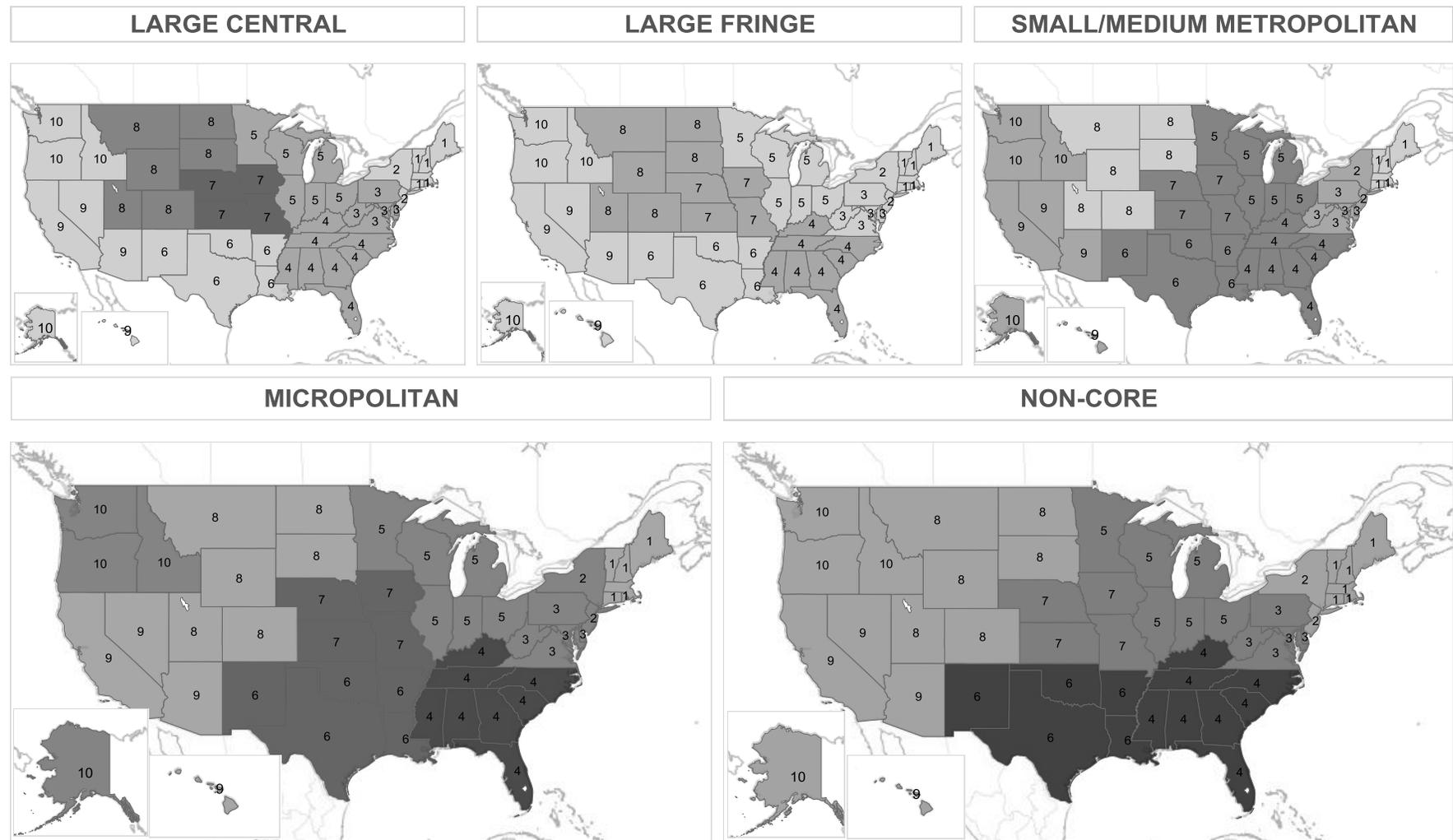


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Lower respiratory; Sex: Male

Figure 53

Age: 25 to 64
 Cause of Death: Lower respiratory
 Sex: Male
 Mortality Rate (per 100,000 pop): 5.7 to 21.8
 (Numbers indicate HHS Regions)

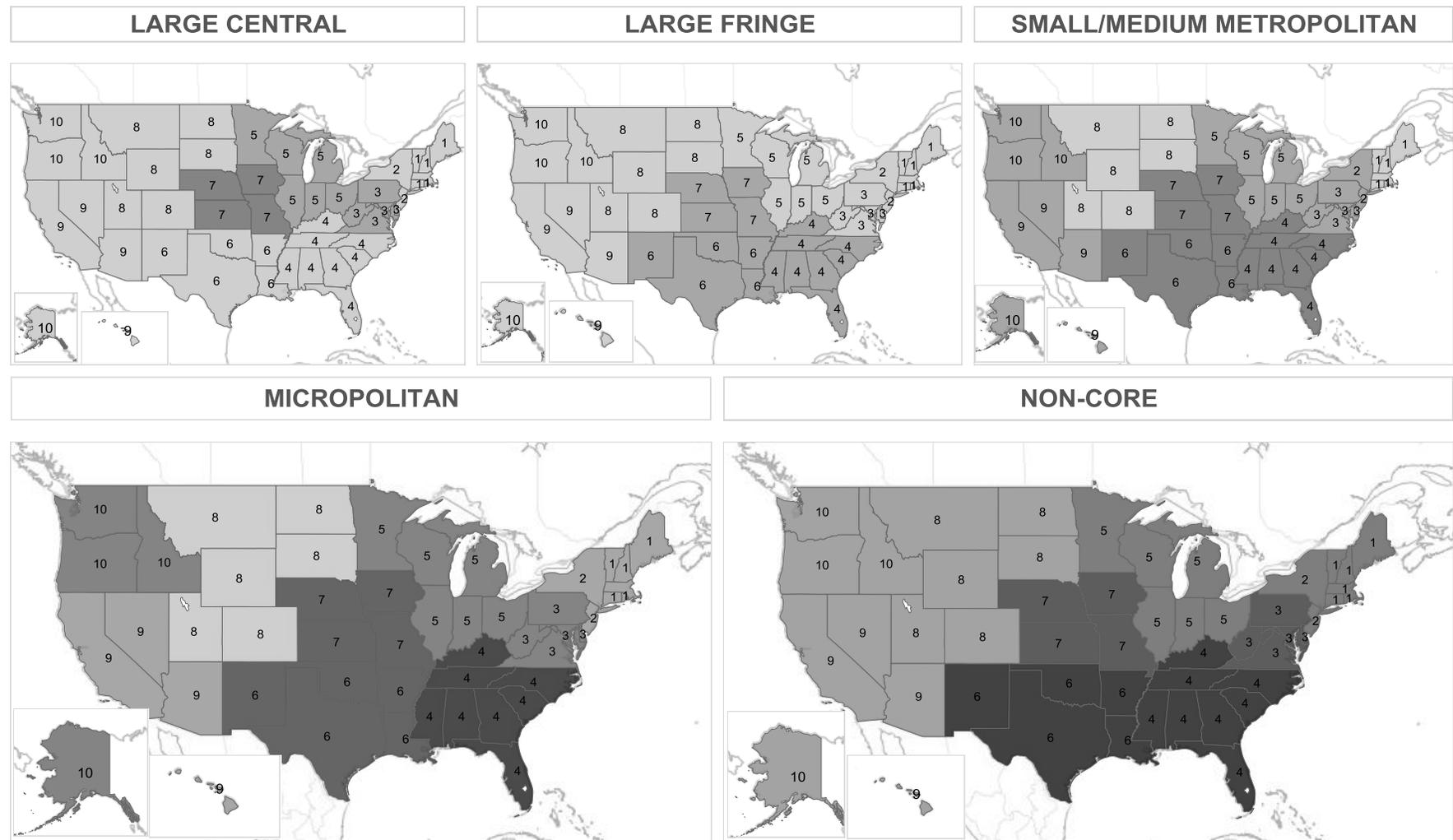


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Lower respiratory; Sex: Female

Figure 54

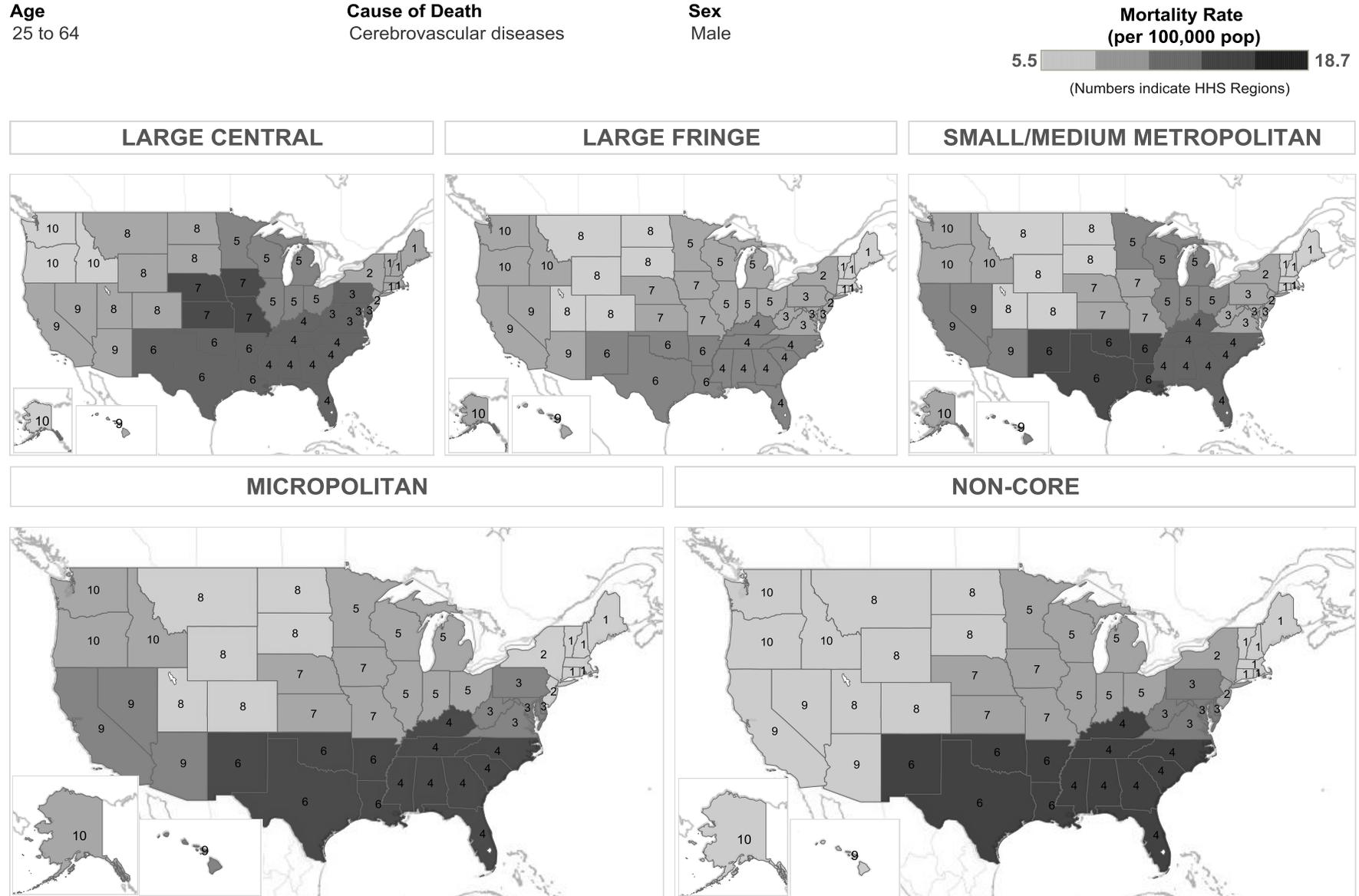
Age: 25 to 64
 Cause of Death: Lower respiratory
 Sex: Female
 Mortality Rate (per 100,000 pop): 5.0 to 22.1
 (Numbers indicate HHS Regions)



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Cerebrovascular diseases; Sex: Male

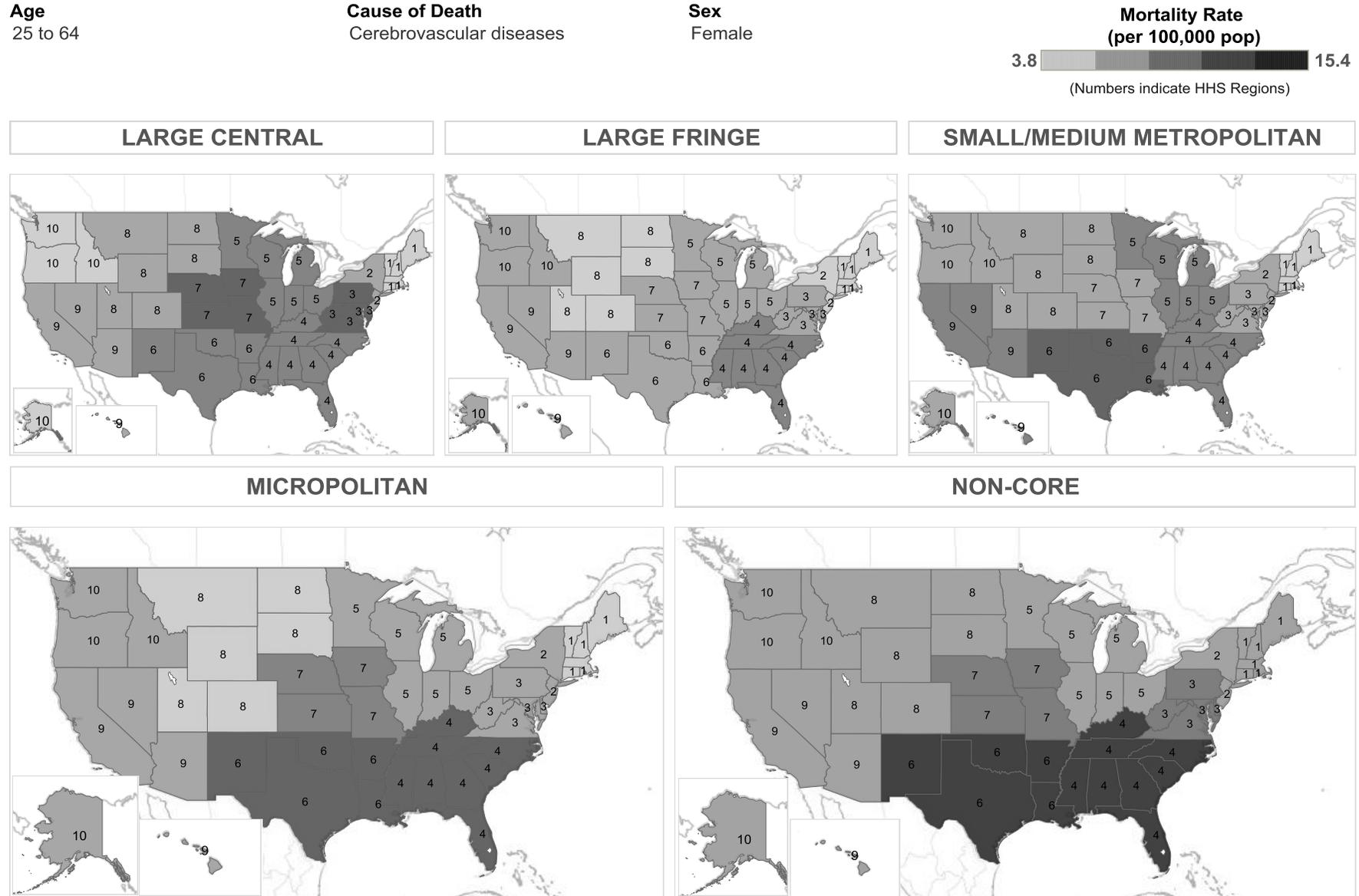
Figure 55



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Cerebrovascular diseases; Sex: Female

Figure 56

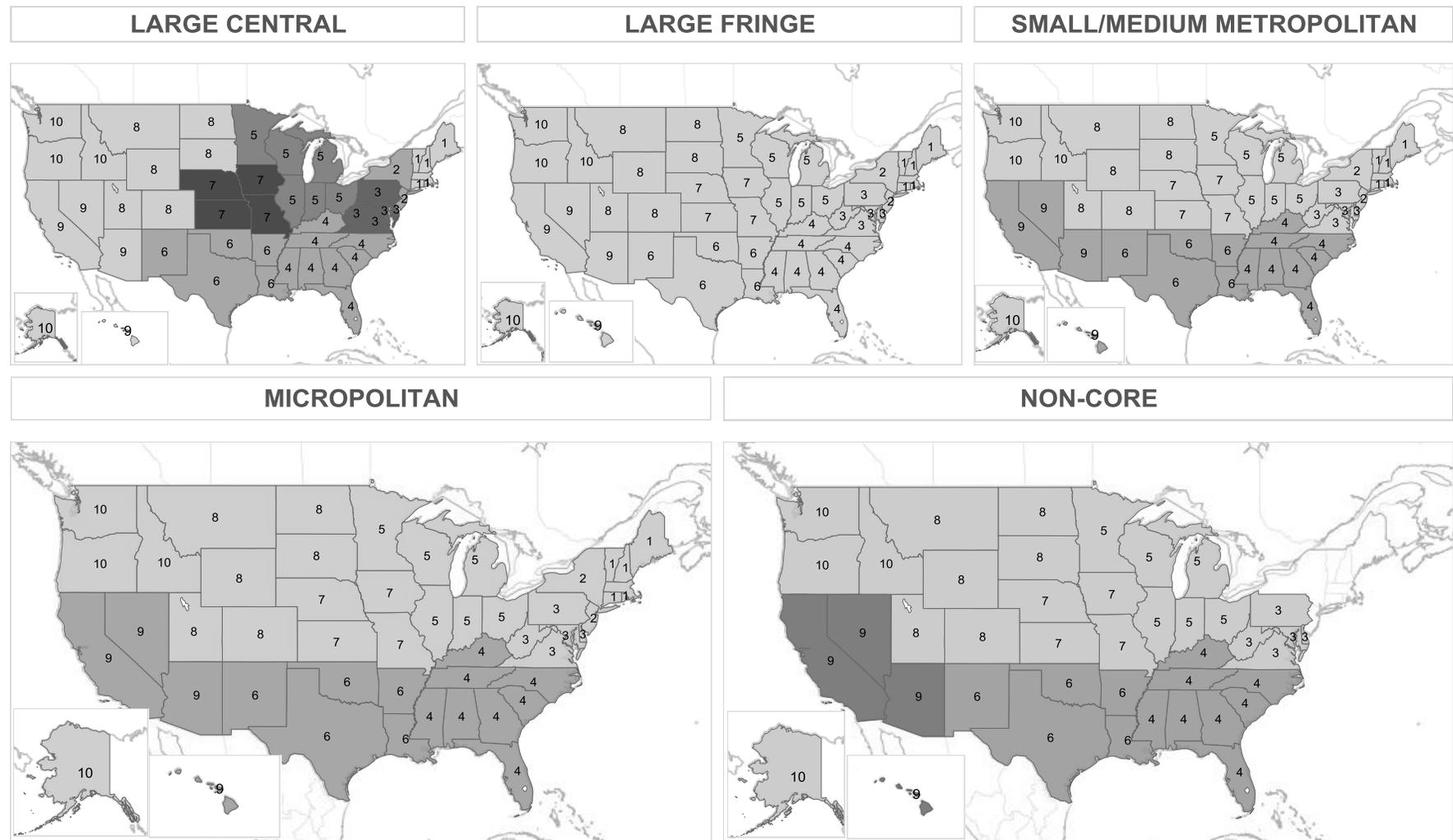


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Homicide; Sex: Male

Figure 57

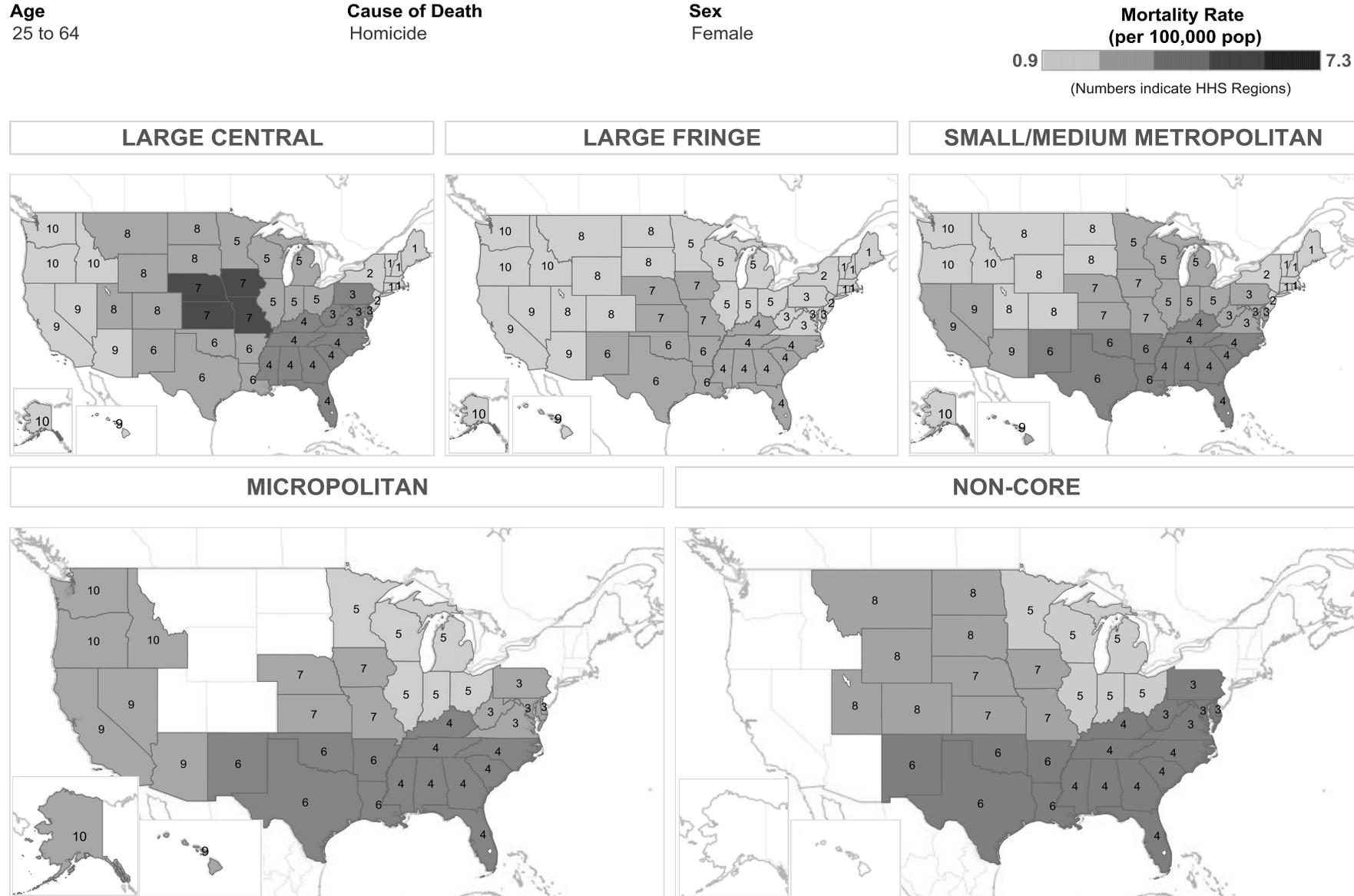
Age: 25 to 64
 Cause of Death: Homicide
 Sex: Male
 Mortality Rate (per 100,000 pop): 2.4 to 40.9
 (Numbers indicate HHS Regions)



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Homicide; Sex: Female

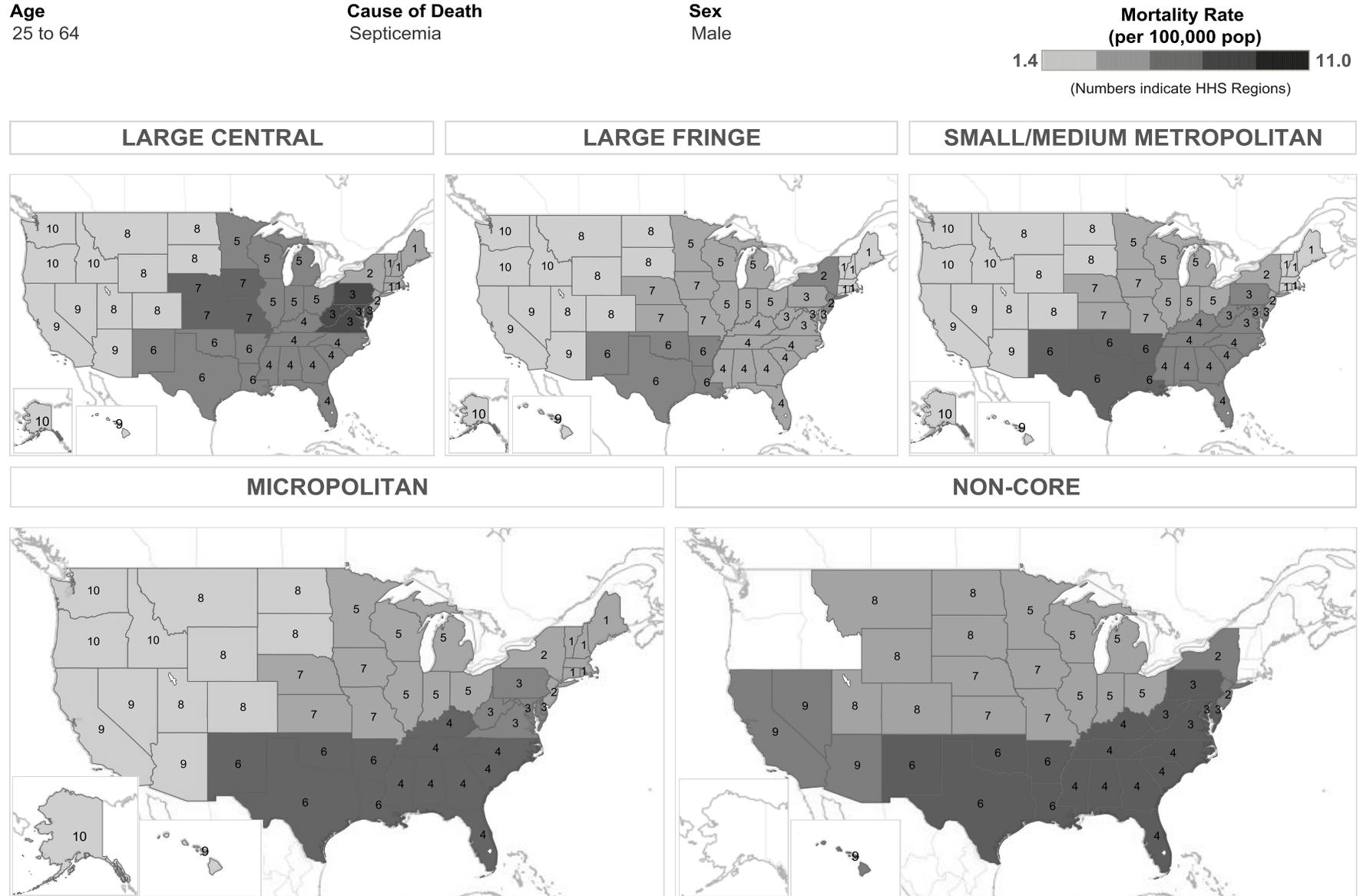
Figure 58



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Septicemia; Sex: Male

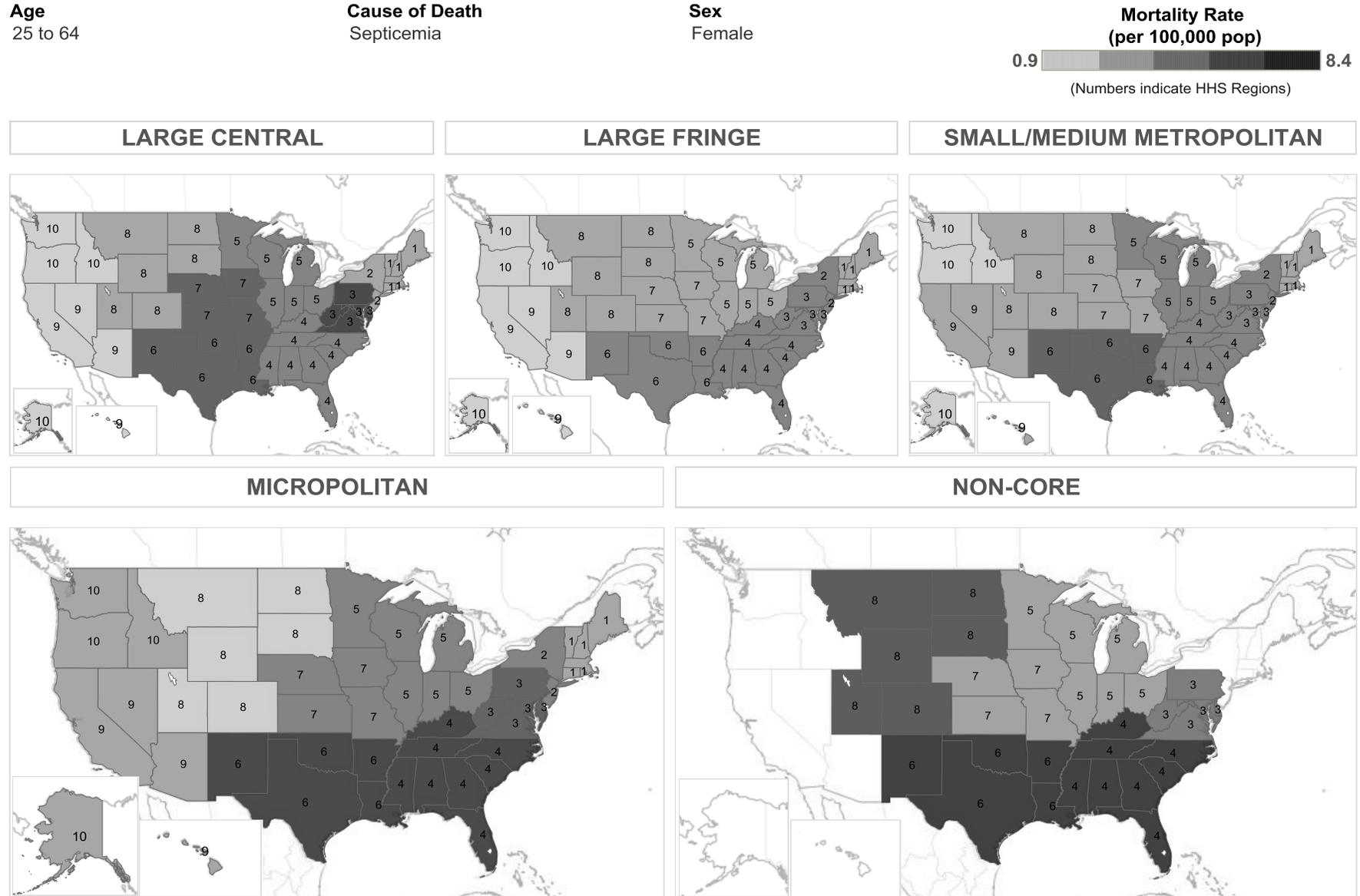
Figure 59



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 25 to 64; Cause of Death: Septicemia; Sex: Female

Figure 60



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. ...

Seniors

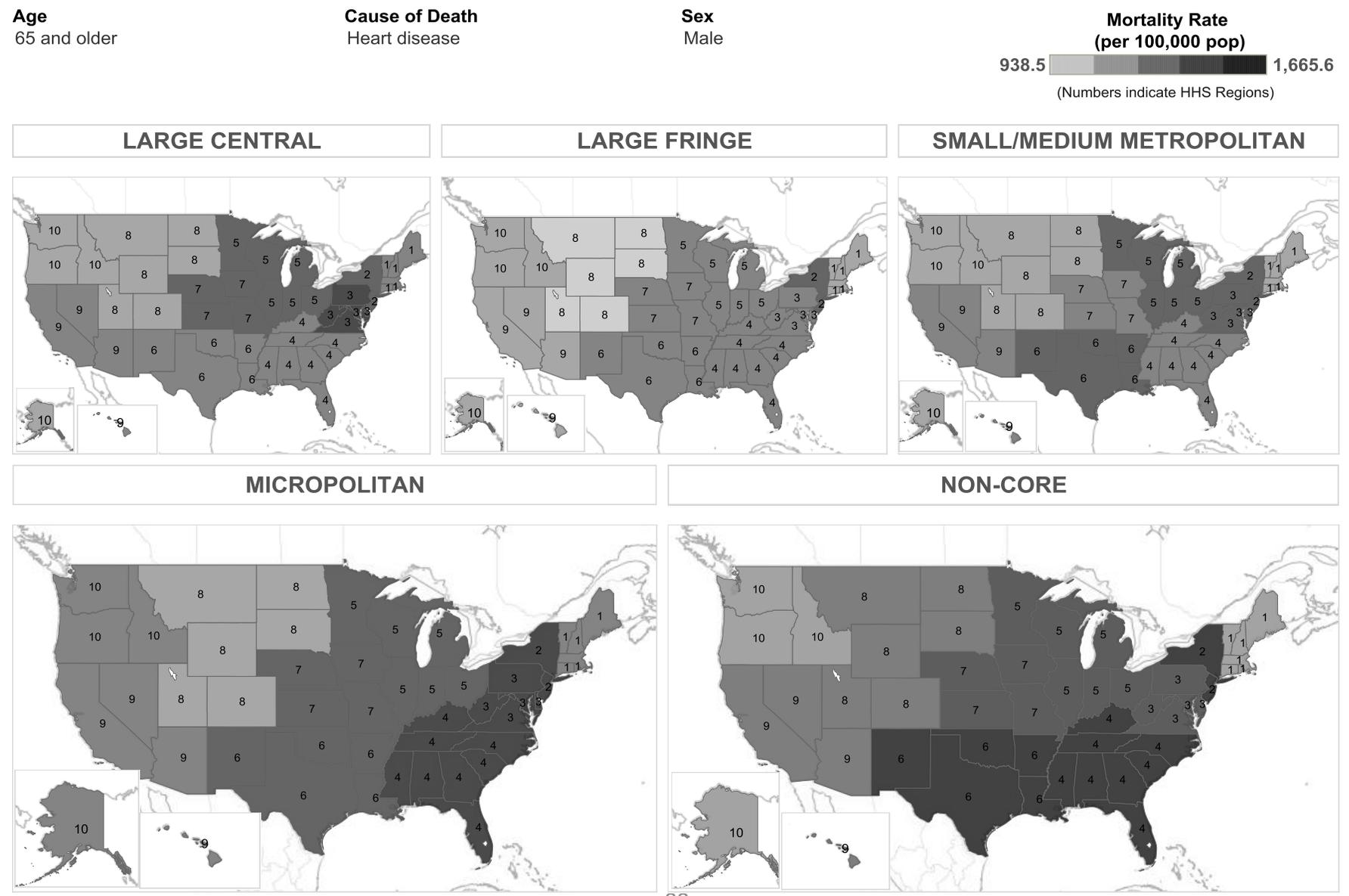
Ages 65 Years and Older Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011- 2013

Cause of Death:

- [Figure 61: Heart disease, Male](#)
- [Figure 62: Heart disease, Female](#)
- [Figure 63: Malignant neoplasms, Male](#)
- [Figure 64: Malignant neoplasms, Female](#)
- [Figure 65: Lower respiratory, Male](#)
- [Figure 66: Lower respiratory, Female](#)
- [Figure 67: Cerebrovascular diseases, Male](#)
- [Figure 68: Cerebrovascular diseases, Female](#)
- [Figure 69: Alzheimer's, Male](#)
- [Figure 70: Alzheimer's, Female](#)
- [Figure 71: Diabetes, Male](#)
- [Figure 72: Diabetes, Female](#)
- [Figure 73: Unintentional injuries, Male](#)
- [Figure 74: Unintentional injuries, Female](#)
- [Figure 75: Flu & pneumonia, Male](#)
- [Figure 76: Flu & pneumonia, Female](#)
- [Figure 77: Nephritis, Male](#)
- [Figure 78: Nephritis, Female](#)
- [Figure 79: Septicemia, Male](#)
- [Figure 80: Septicemia, Female](#)

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Heart disease; Sex: Male

Figure 61

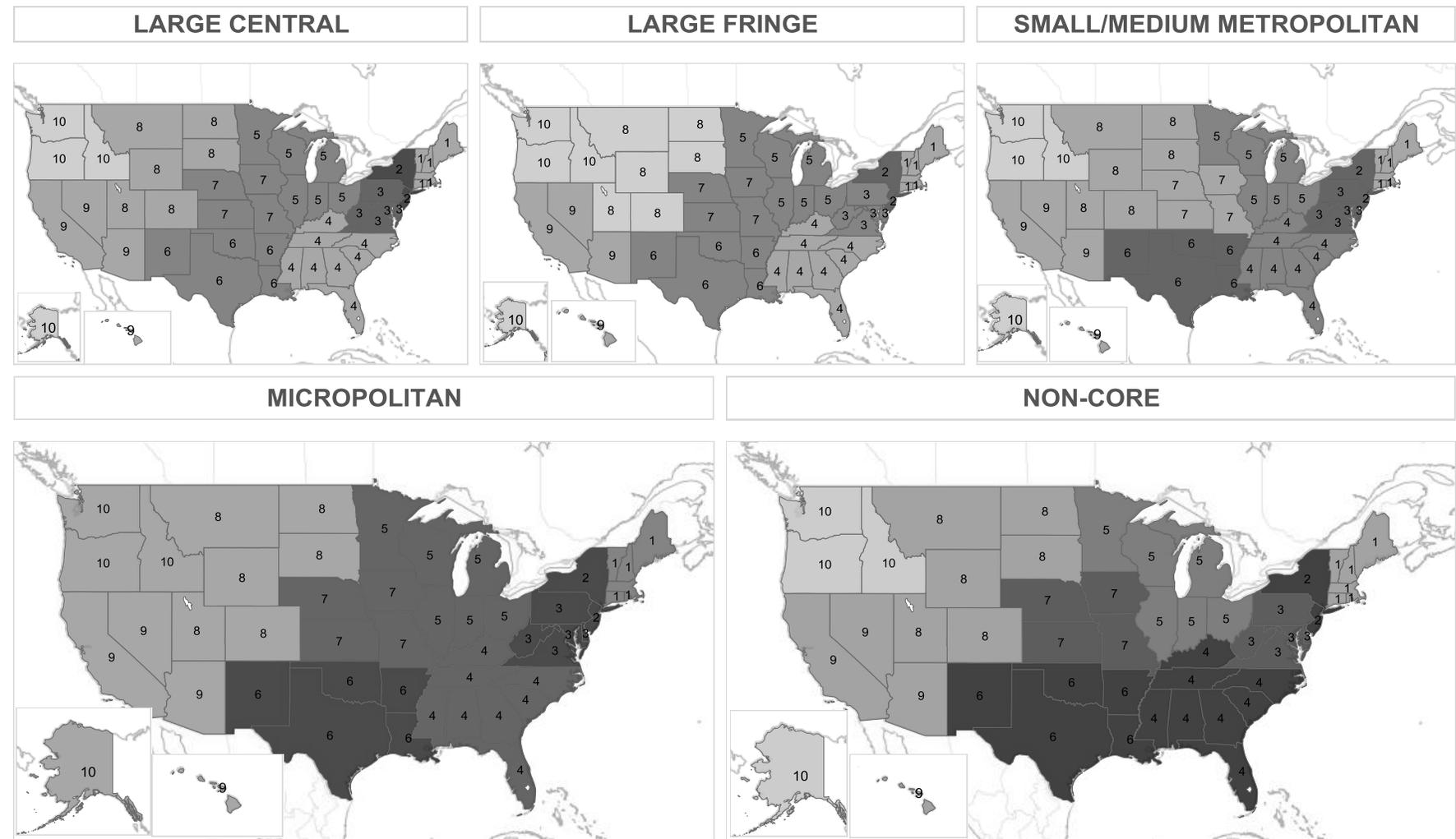


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Heart disease; Sex: Female

Figure 62

Age
 65 and older
Cause of Death
 Heart disease
Sex
 Female
Mortality Rate
 (per 100,000 pop)
 665.8  1,170.1
 (Numbers indicate HHS Regions)

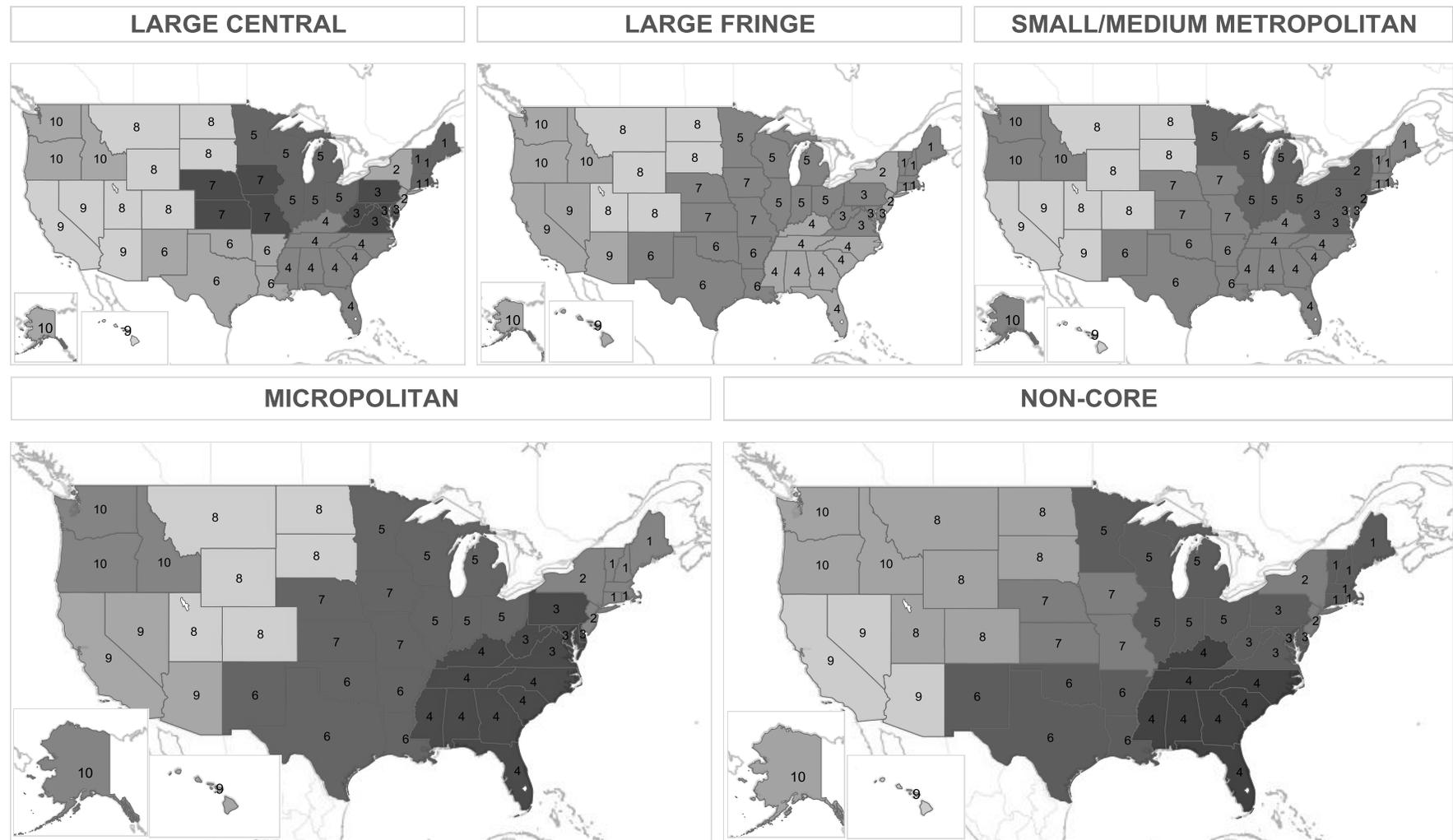


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Malignant neoplasms; Sex: Male

Figure 63

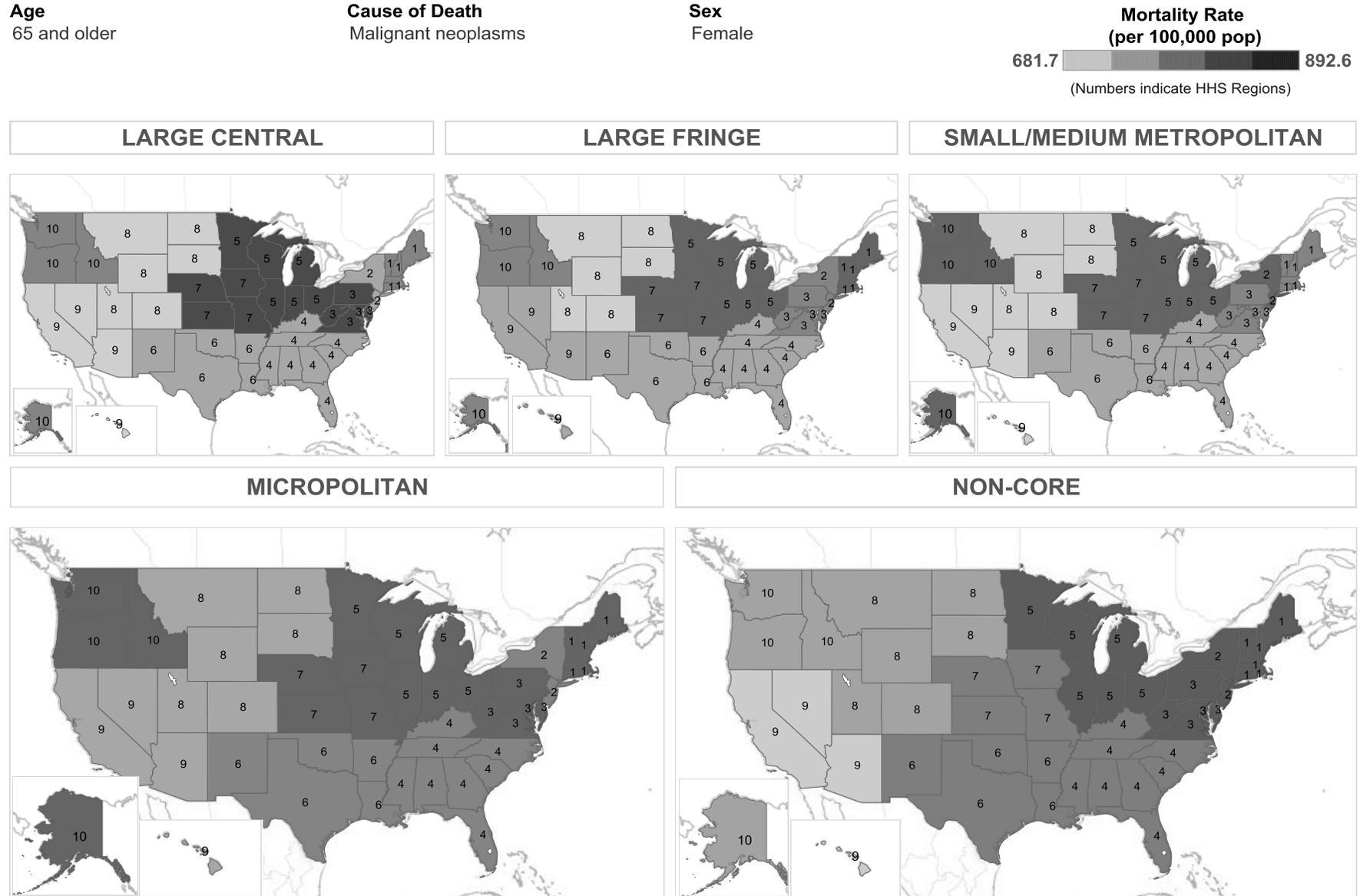
Age: 65 and older
 Cause of Death: Malignant neoplasms
 Sex: Male
 Mortality Rate (per 100,000 pop): 1,012.4 to 1,381.8
 (Numbers indicate HHS Regions)



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Malignant neoplasms; Sex: Female

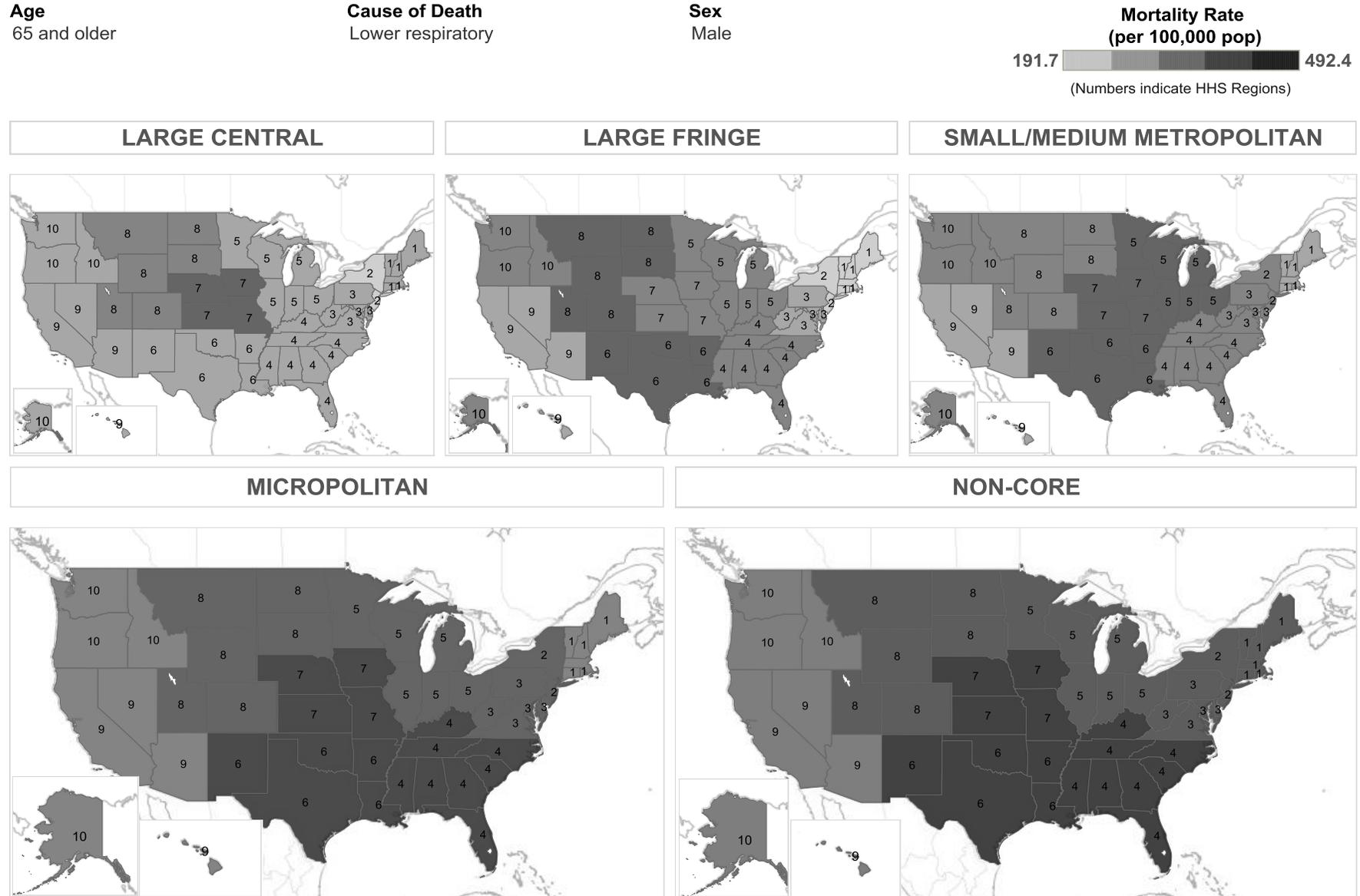
Figure 64



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Lower respiratory; Sex: Male

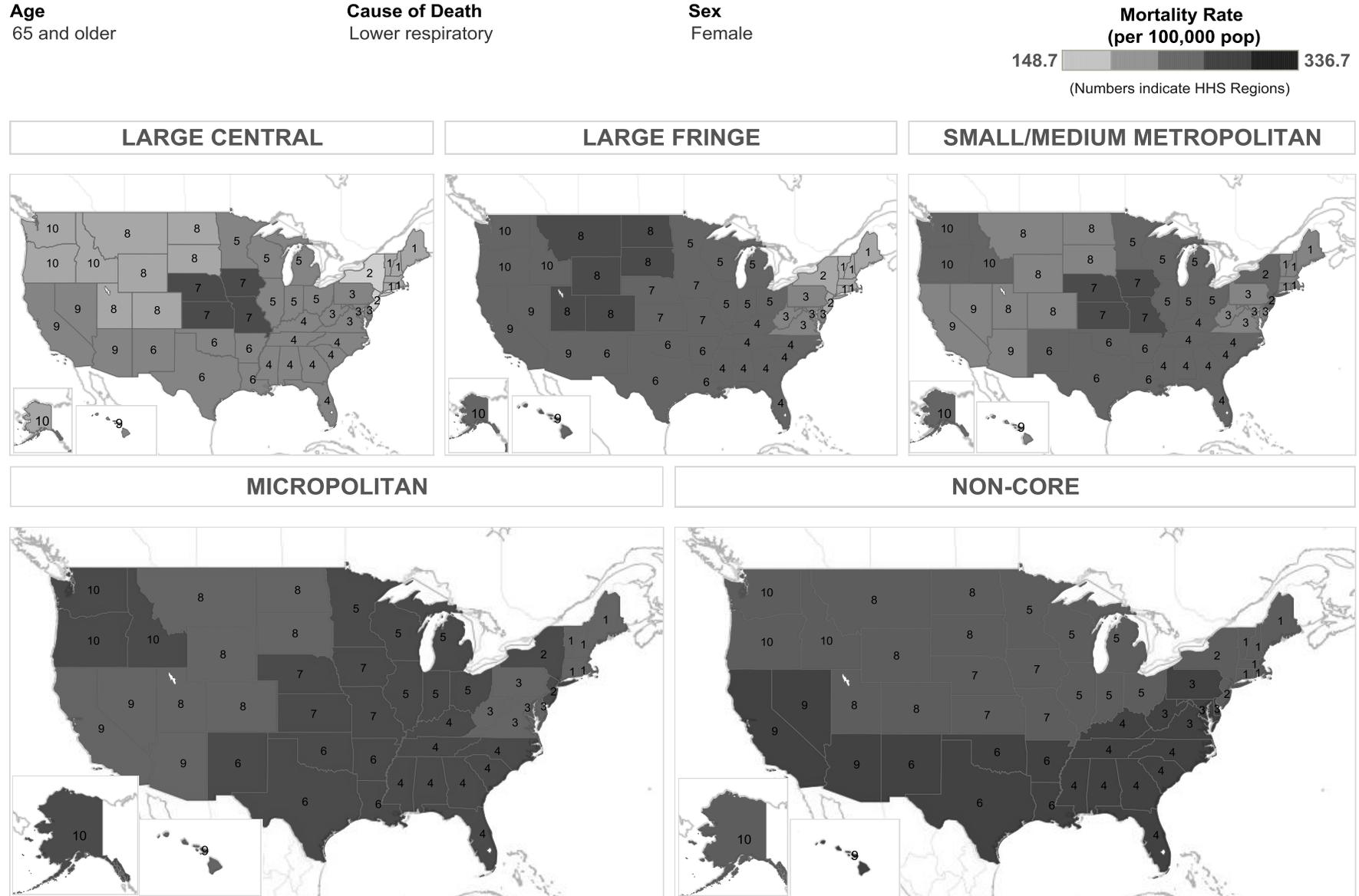
Figure 65



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Lower respiratory; Sex: Female

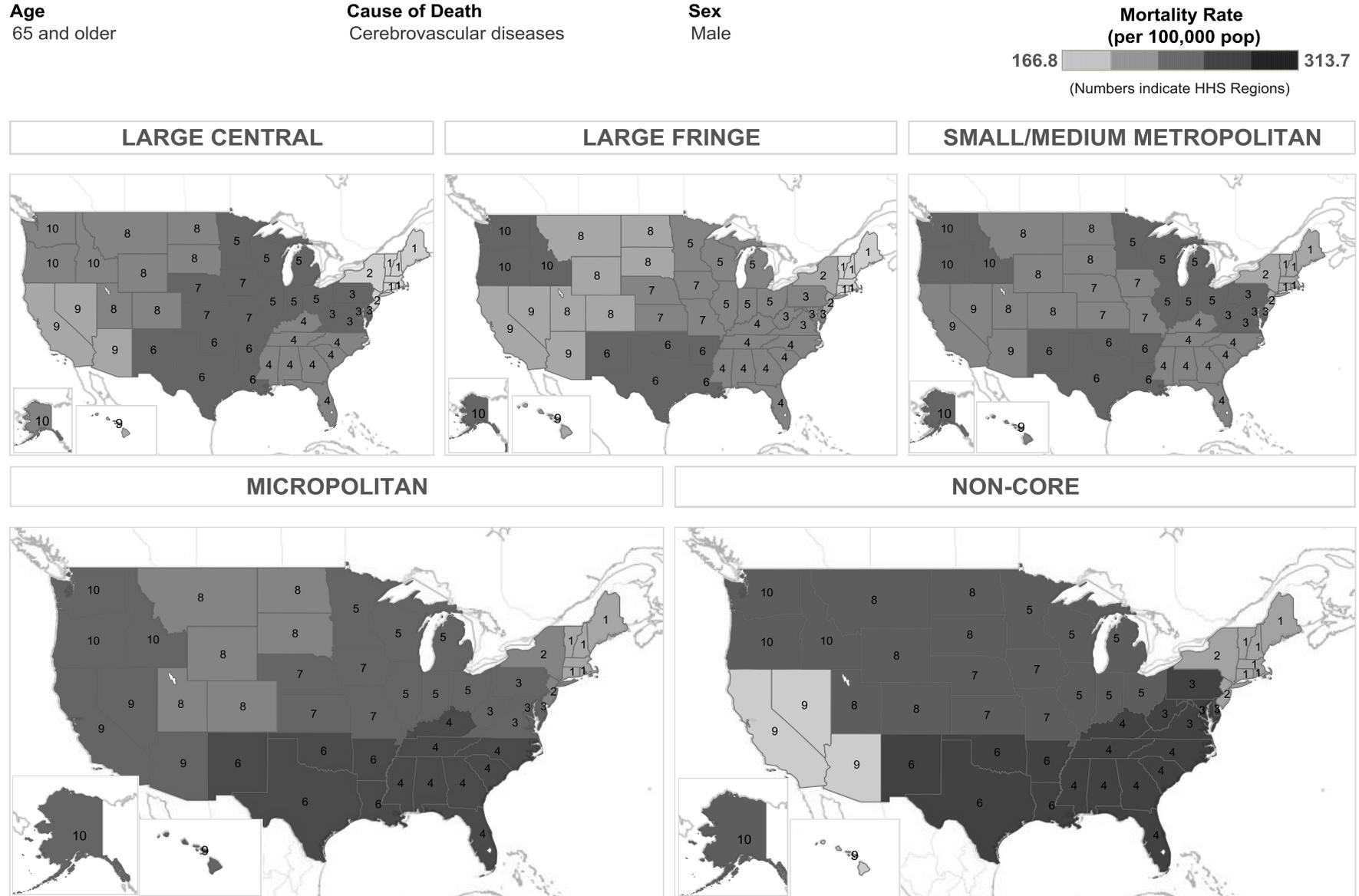
Figure 66



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Cerebrovascular diseases; Sex: Male

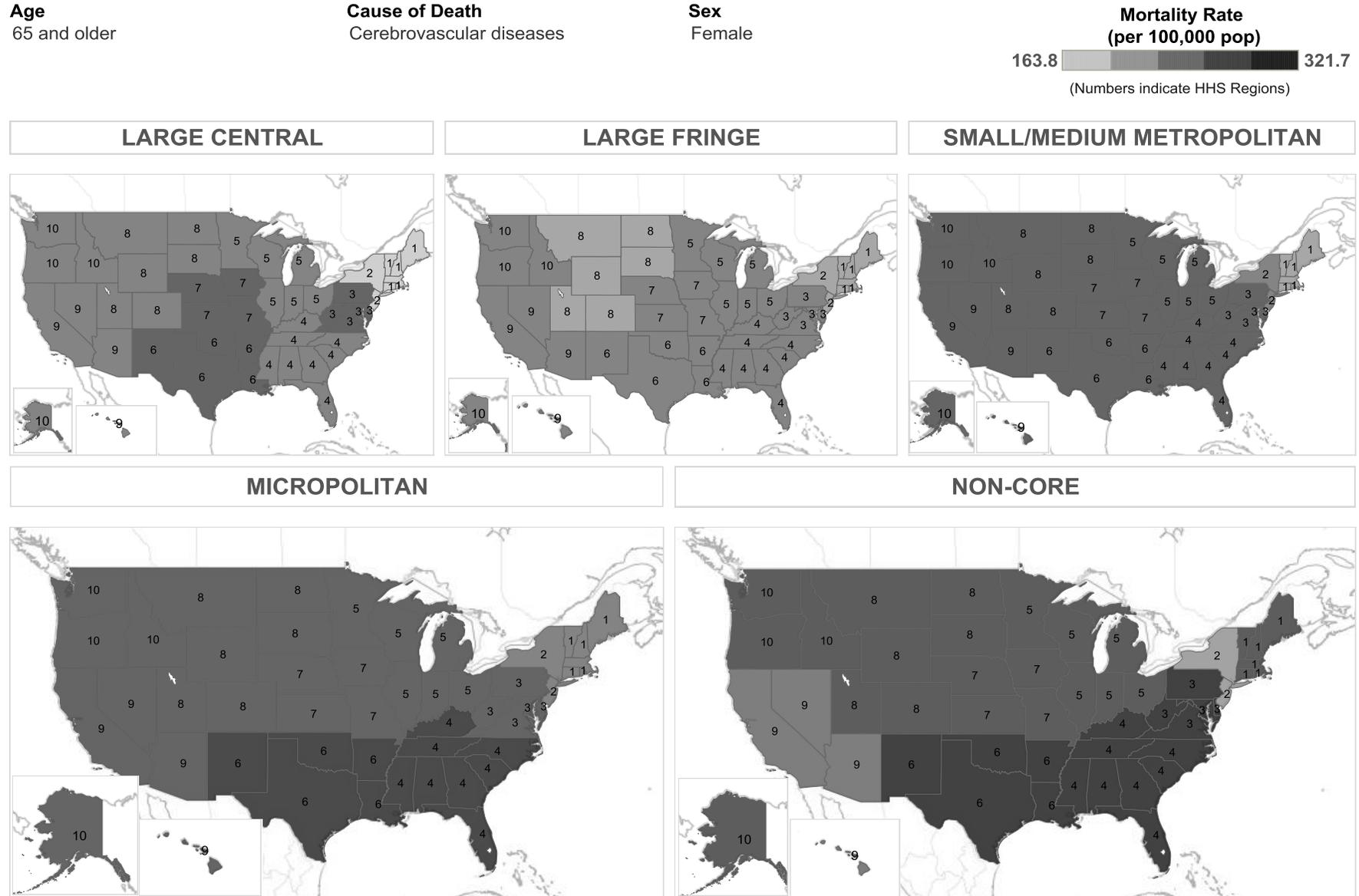
Figure 67



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Cerebrovascular diseases; Sex: Female

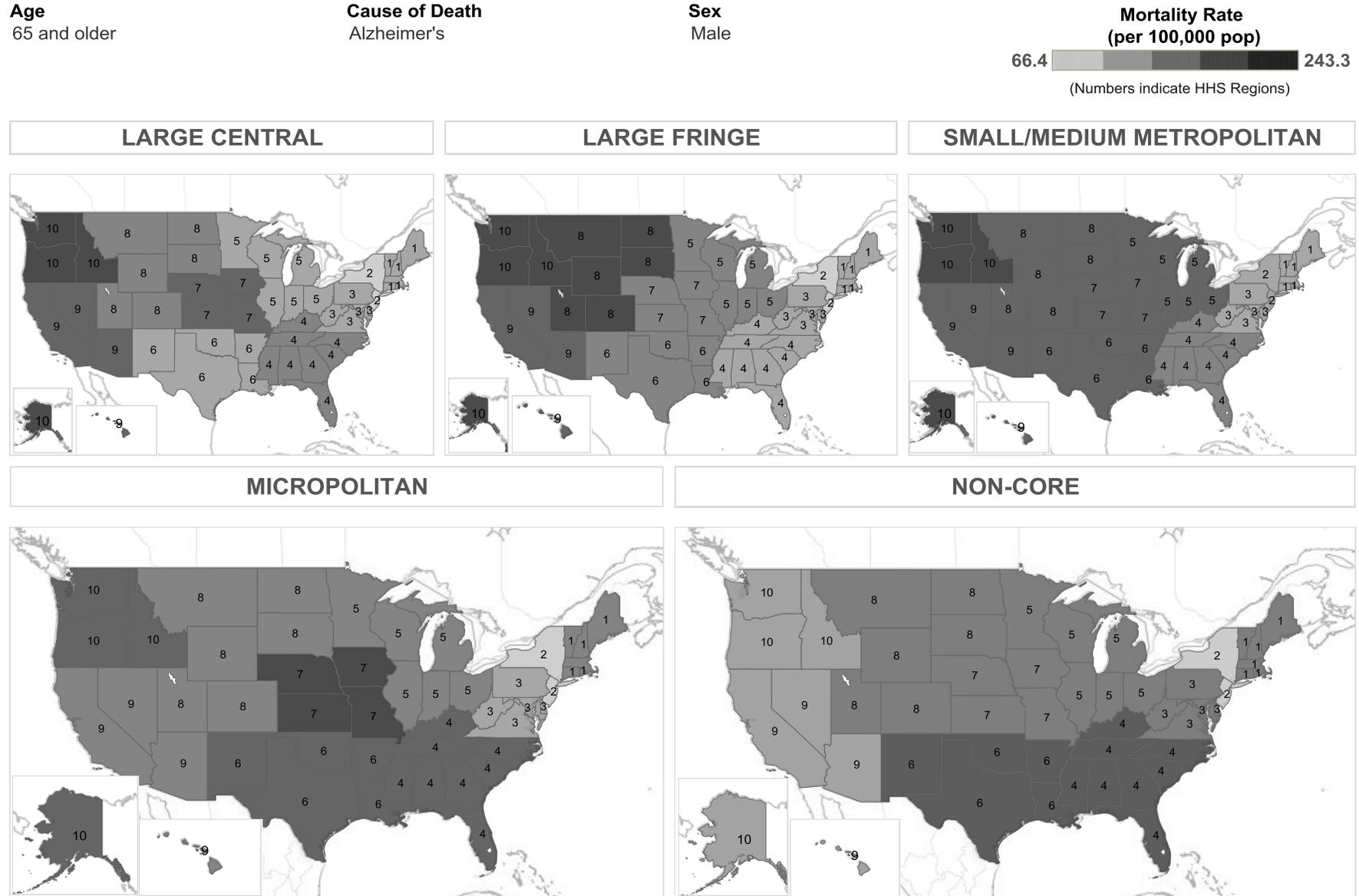
Figure 68



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Alzheimer's; Sex: Male

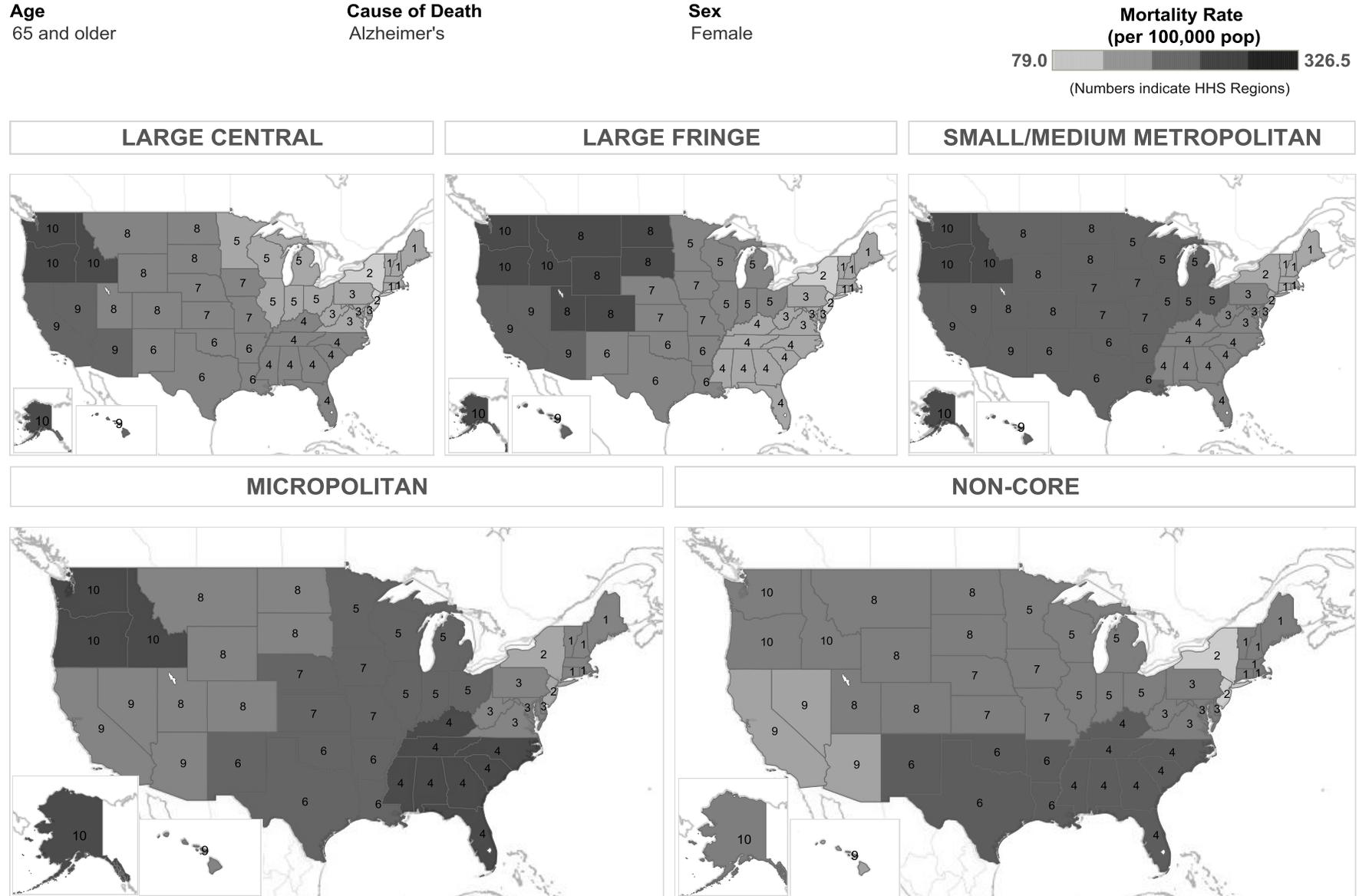
Figure 69



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Alzheimer's; Sex: Female

Figure 70

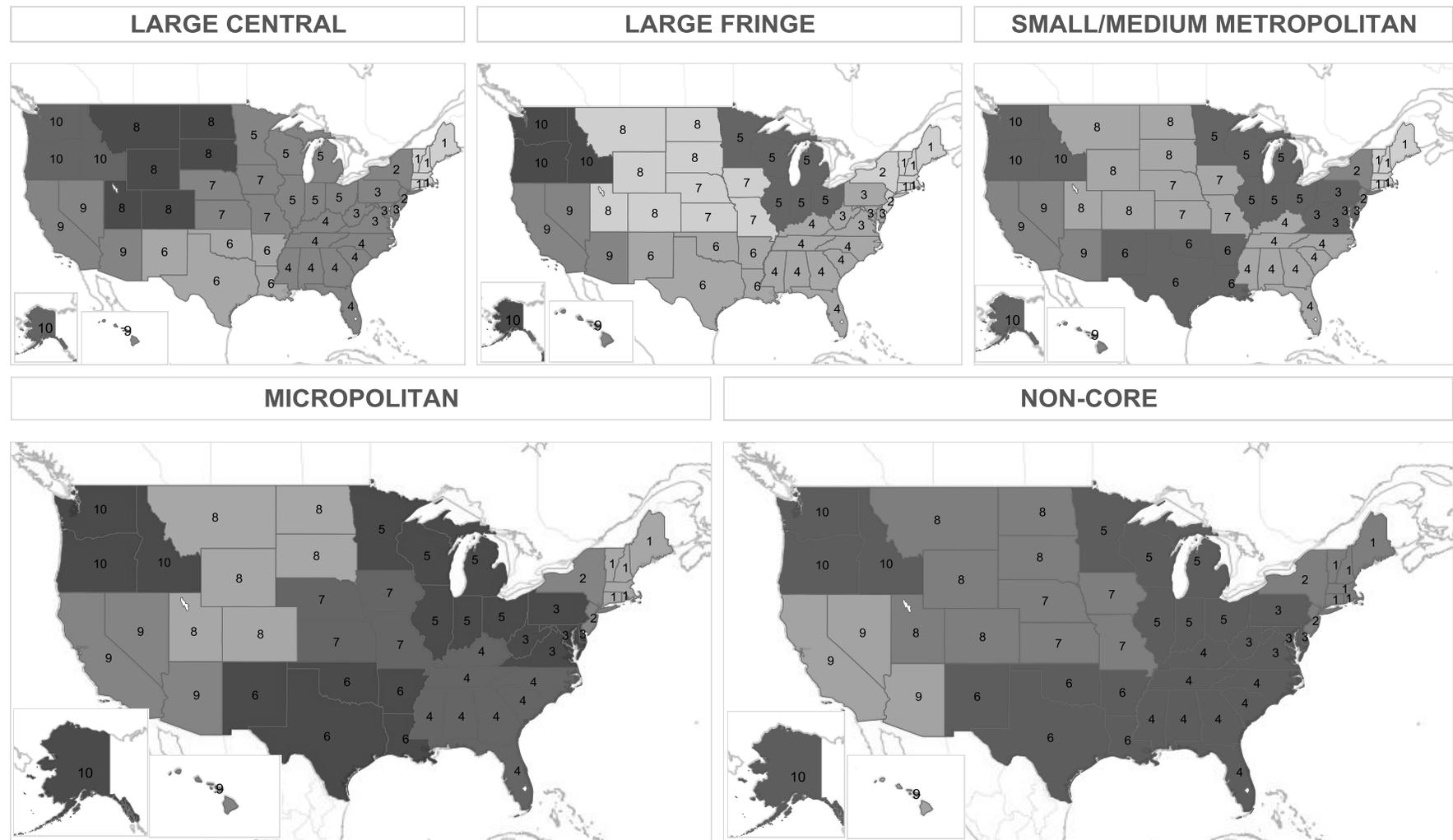


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Diabetes; Sex: Male

Figure 71

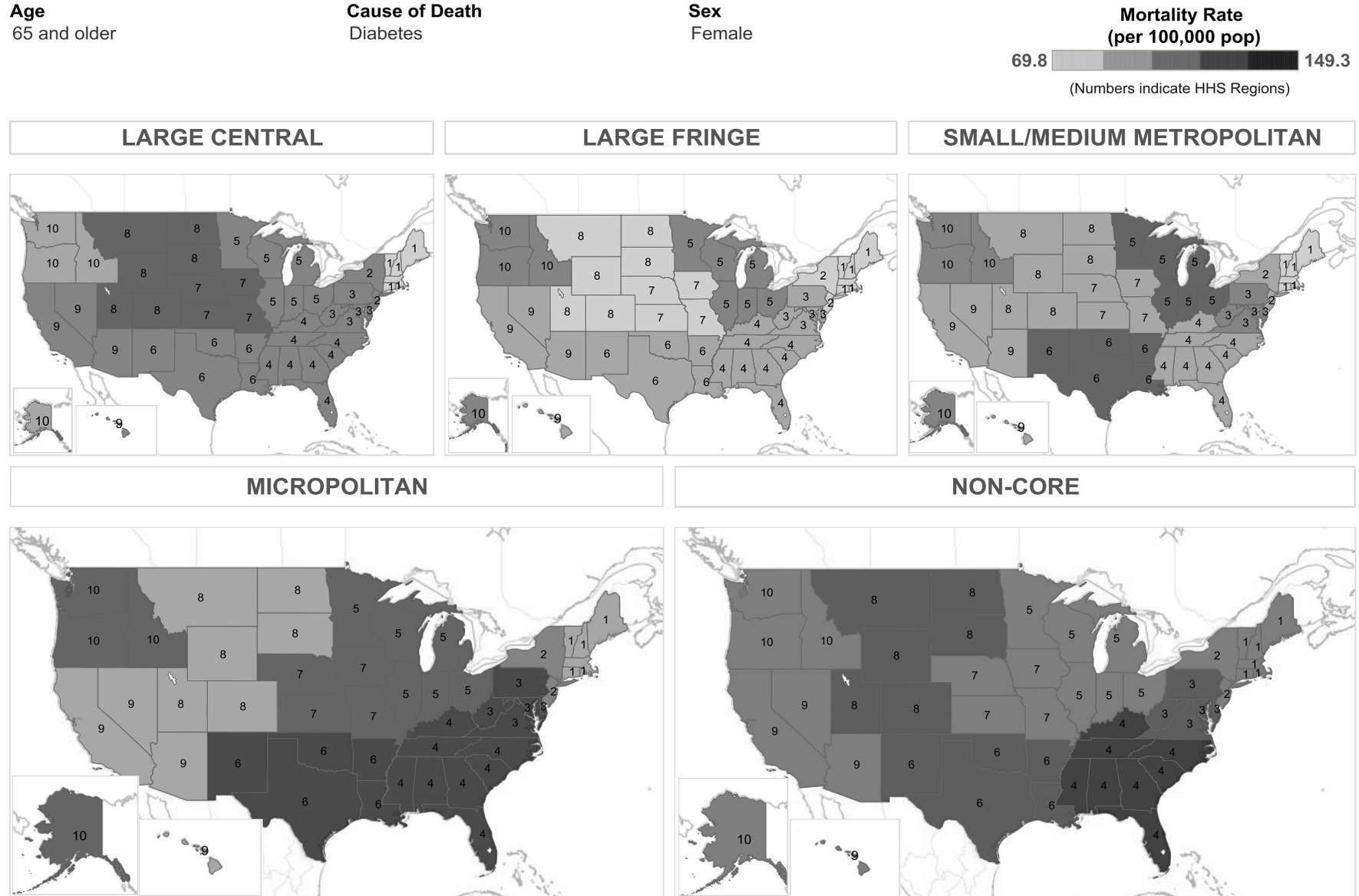
Age: 65 and older
 Cause of Death: Diabetes
 Sex: Male
 Mortality Rate (per 100,000 pop): 105.5 to 189.2
 (Numbers indicate HHS Regions)



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Diabetes; Sex: Female

Figure 72

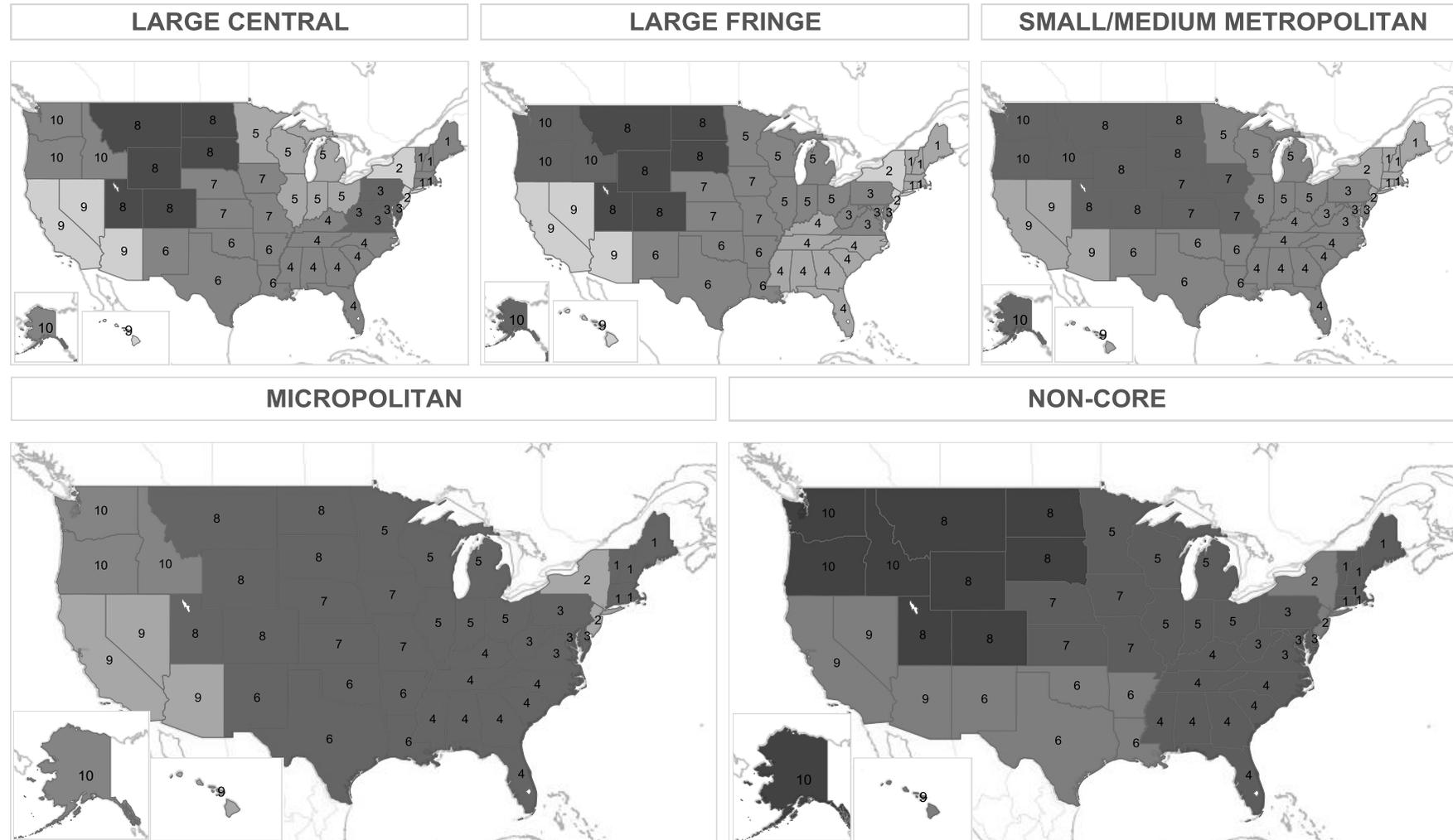


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Unintentional injuries; Sex: Male

Figure 73

Age: 65 and older
 Cause of Death: Unintentional injuries
 Sex: Male
 Mortality Rate (per 100,000 pop): 79.8 to 192.9
 (Numbers indicate HHS Regions)

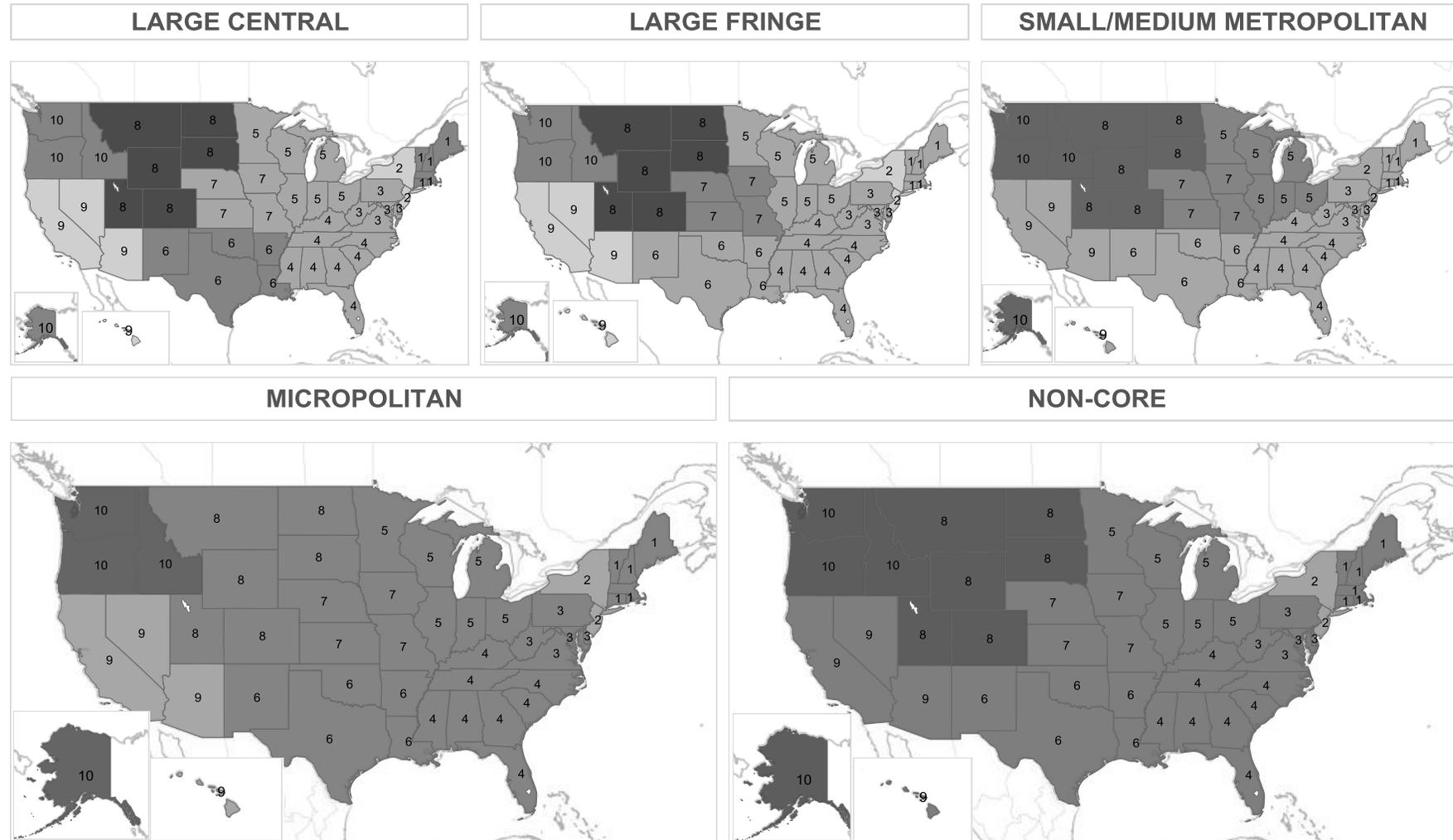


SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death.
 SUGGESTED CITATION: Rural Health Reform Policy Research Center. Exploring Rural and Urban Mortality Differences, August 2015 Bethesda, MD. 2015. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Unintentional injuries; Sex: Female

Figure 74

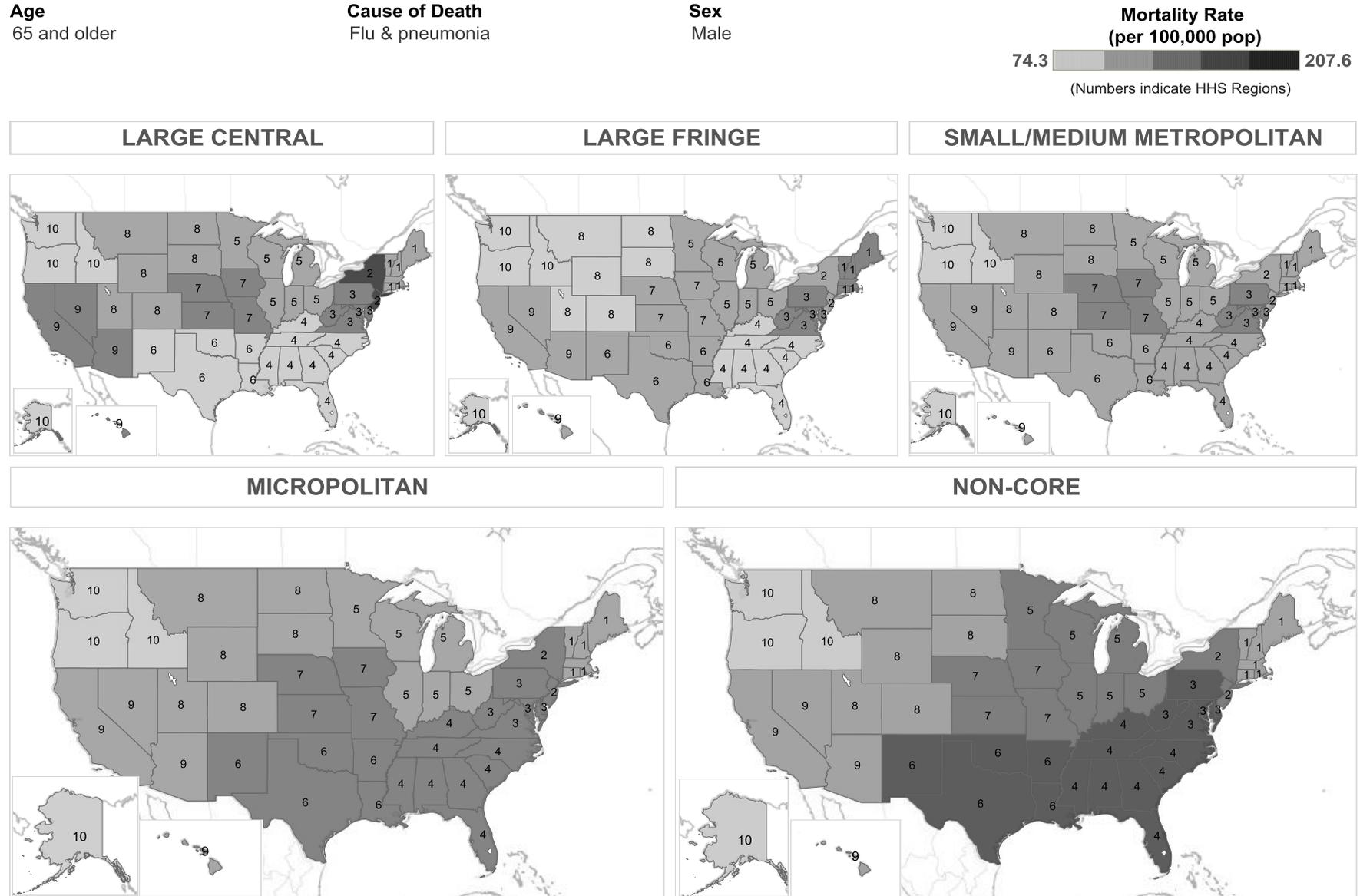
Age: 65 and older
 Cause of Death: Unintentional injuries
 Sex: Female
 Mortality Rate (per 100,000 pop): 44.9 to 155.4
 (Numbers indicate HHS Regions)



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Flu & pneumonia; Sex: Male

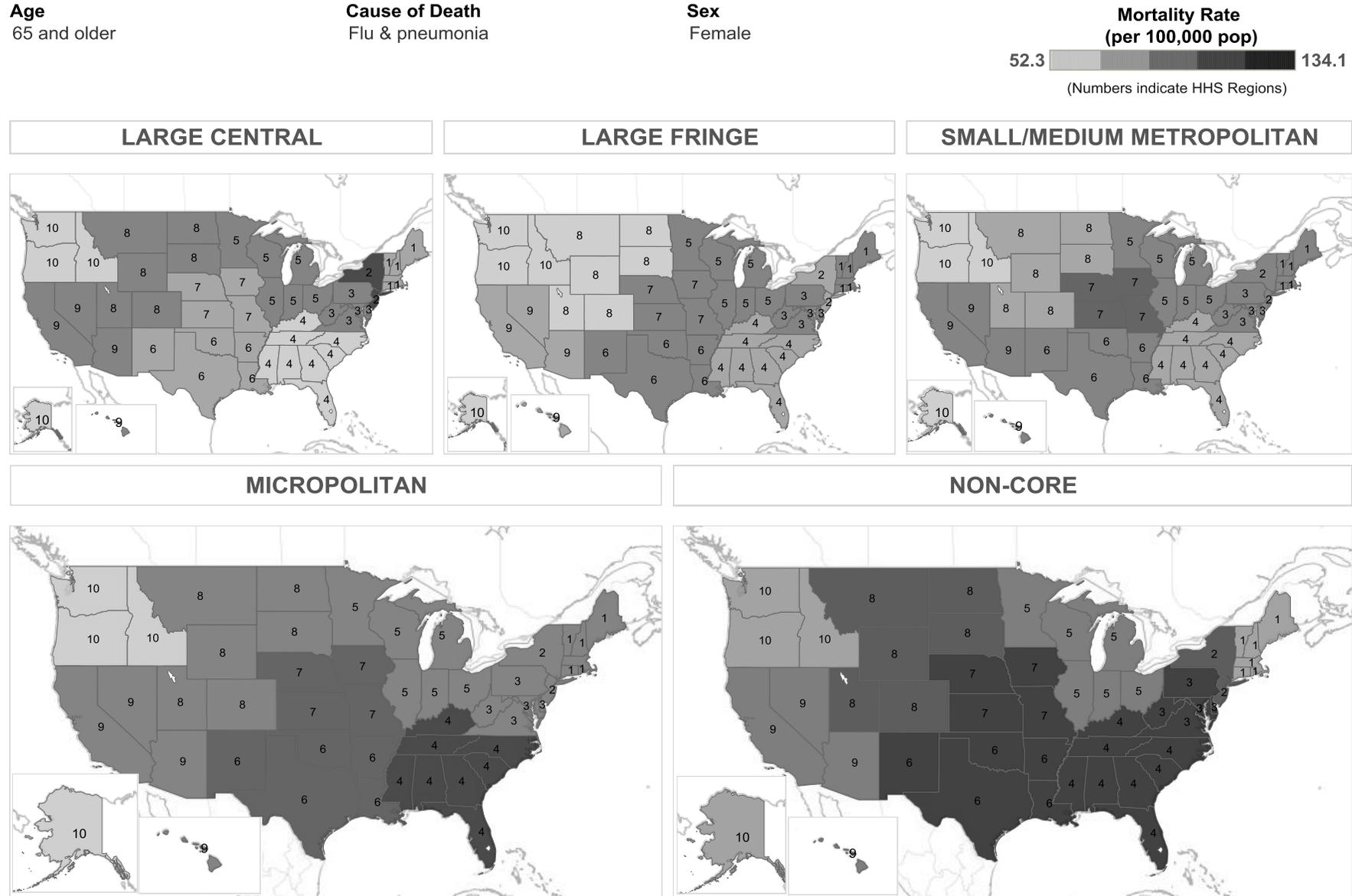
Figure 75



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Flu & pneumonia; Sex: Female

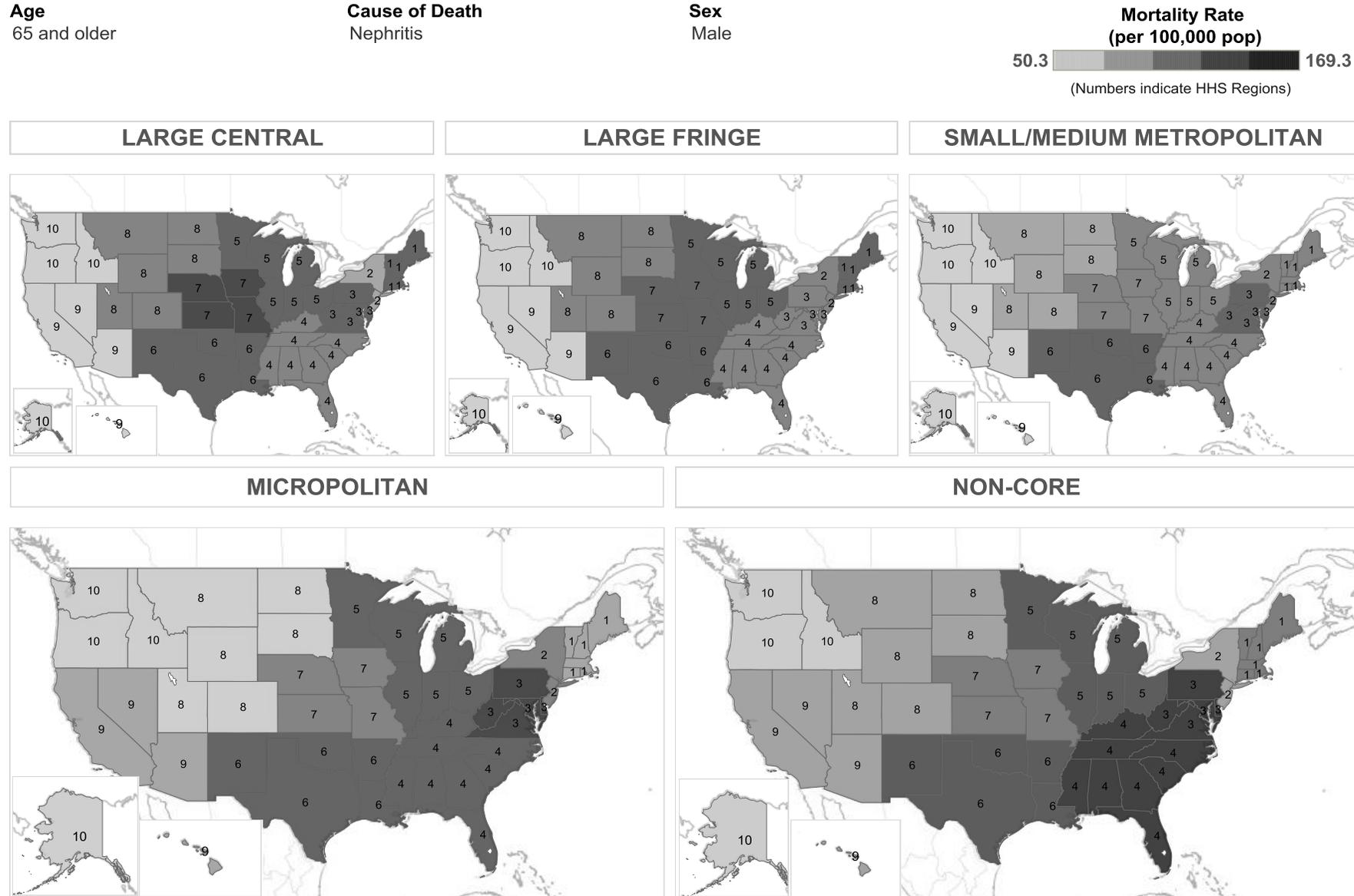
Figure 76



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Nephritis; Sex: Male

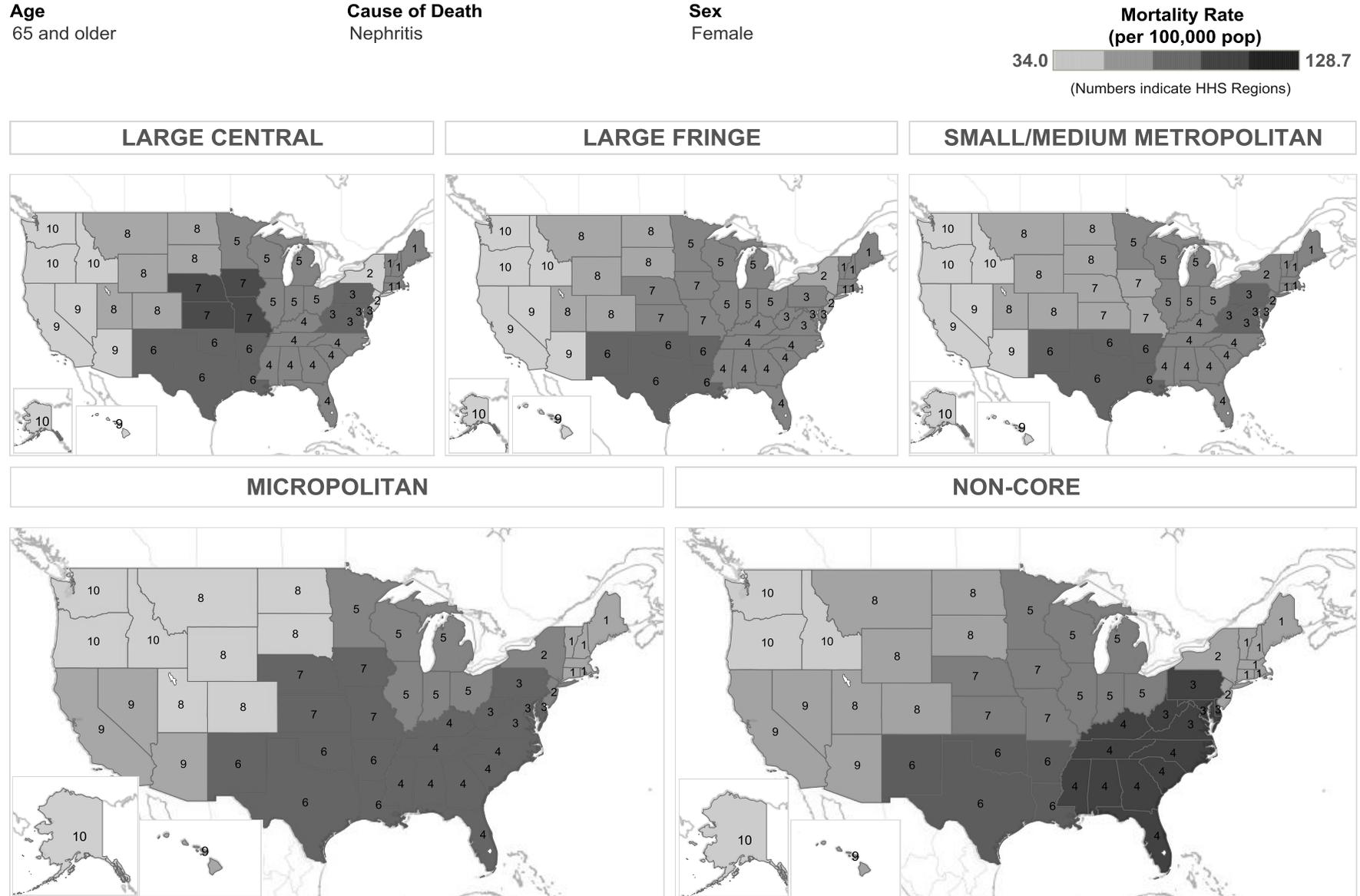
Figure 77



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Nephritis; Sex: Female

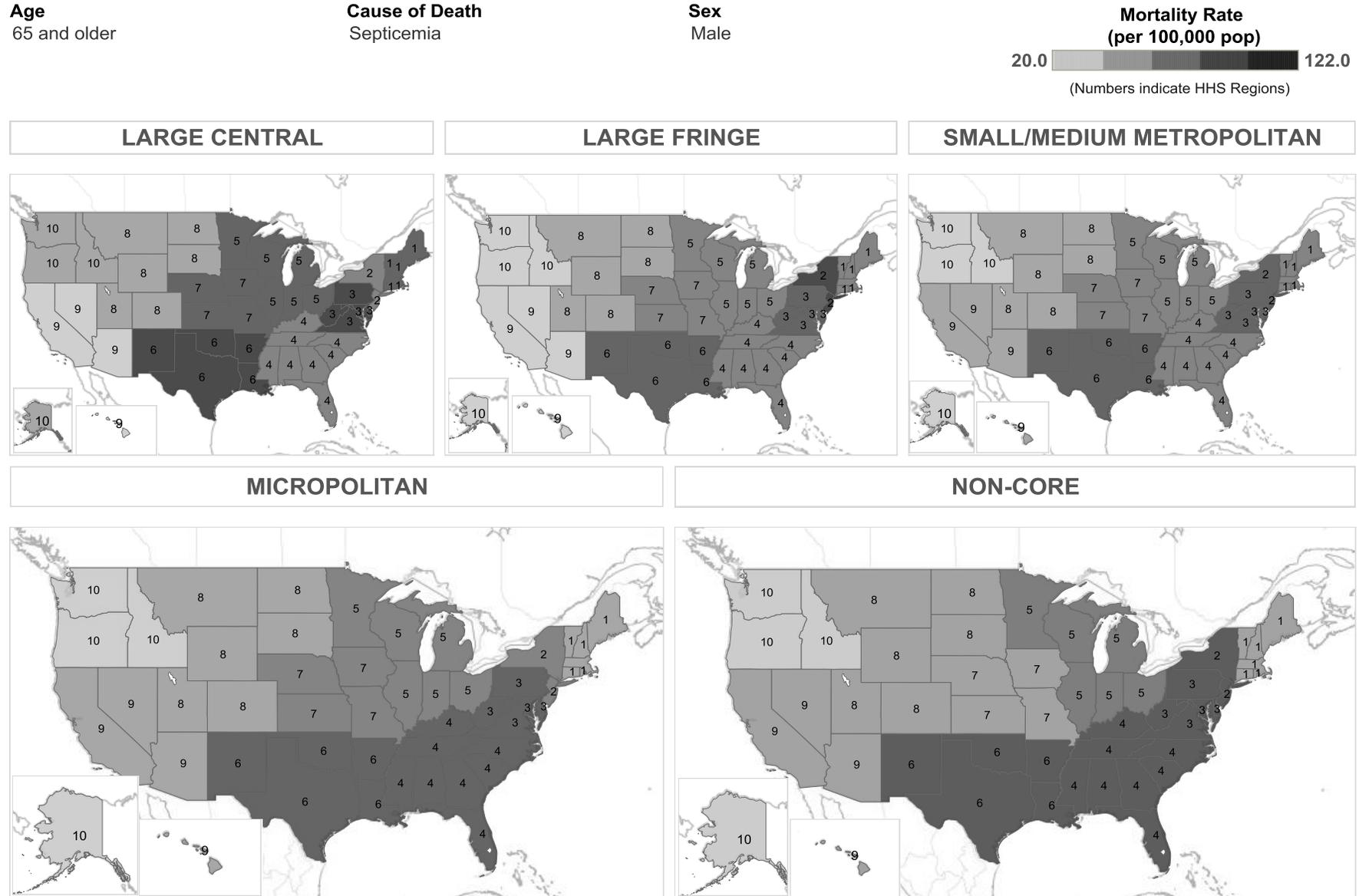
Figure 78



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Septicemia; Sex: Male

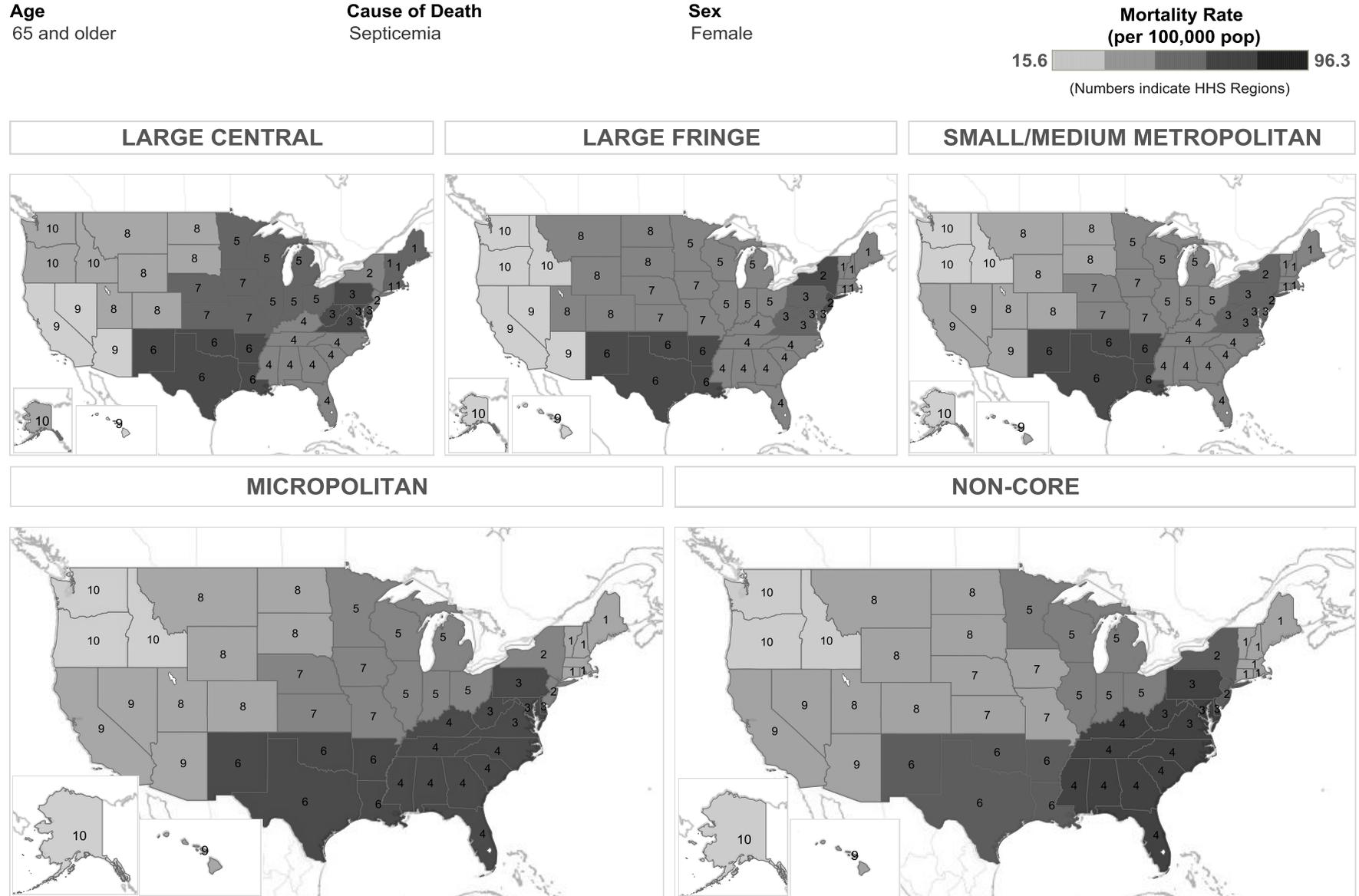
Figure 79



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. ...

Mortality Rates by HHS Region and Urban-Rural Status: United States, 2011-2013; Age: 65 and older; Cause of Death: Septicemia; Sex: Female

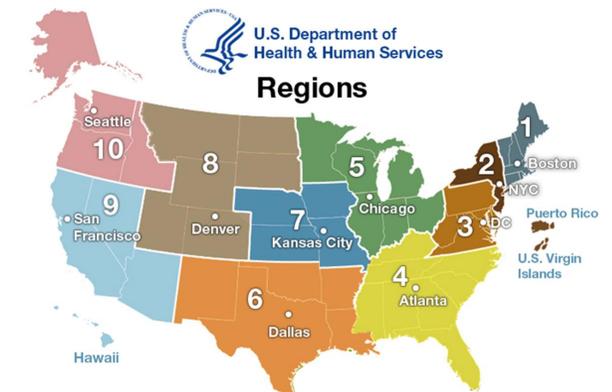
Figure 80



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. ...

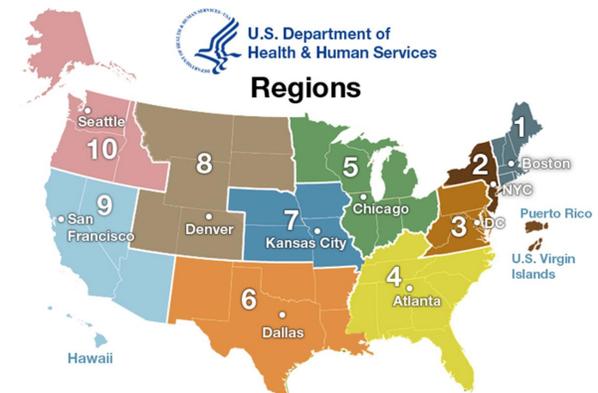
Summary: Infants

- Cause-specific, rural mortality rates worse than the nation in:
 - Congenital malformations, Regions 3, 4, 6, 7, 8 (Mid-Atlantic, South, Plains, and Rockies)
 - Sudden infant death syndrome, Regions 3, 4, 6, 7, 8, 10 (Mid-Atlantic, South, Plains, Rockies, and Northwest)
 - Unintentional Injuries, Region 5, 7, 8 (Midwest, Plains, and Rockies)
 - Respiratory distress, Region 4



Summary: Children (Age 1 to 14)

- Cause-specific, rural mortality rates worse than the nation in:
 - Unintentional injuries, Regions 2, 3, 4, 5, 6, 7, 8, 9, 10 (New England, Mid-Atlantic, Midwest, South, Plains, Rockies, and the West)
 - Congenital malformation, Region 3
 - Homicide, Region 3, 6
 - Heart disease, Region 4
 - Lower respiratory, Region 6



Summary: Children (Age 15 to 24)

- Cause-specific, rural mortality rates worse than the nation in:
 - Unintentional injuries, Region 3, 4, 5, 6, 7, 8, 9, 10
 - Suicide, Region 6, 8, 9, 10
 - Heart disease, Region 4



Summary: Working Adults (Age 25 to 64)

- Cause-specific, rural mortality rates worse than the nation in:
 - All top-ten causes of death, Region 4, 6 (the South)
 - Malignant neoplasms, Region 3, 4, 5, 6 7 (Mid-Atlantic, South, Mid-west, Plains)
 - Heart disease, Region 3, 4, 6, 7 (Mid-Atlantic, South, Plains)
 - Unintentional injuries, Region 3, 4, 5, 6, 7, 8, 9 (Mid-Atlantic, South, Midwest, Plains, Rockies, Southwest)
 - Suicide, Region 3, 4, 6, 7, 8, 9, 10 (Mid-Atlantic, South, Plains, Rockies, West)
 - Liver disease, Region 4, 6, 8, 9, 10 (South, Rockies, West)
 - Diabetes, Region 3, 4, 6 (Mid-Atlantic, South)
 - Lower respiratory disease, Region 2, 3, 4, 5, 6, 7, 10 (New England, Mid-Atlantic, South, Midwest, Plains, Northwest)

Summary: Seniors (Age 65+)

- Cause-specific, rural mortality rates worse than the nation in:
 - All top-ten causes of death, Region 4, 6 (the South)
 - Heart disease, Region 4, 6, 7 (South, Plains)
 - Malignant neoplasms, Region 4, 6, 7 (South, Plains)
 - Lower respiratory, Region 4, 6, 7, 8, 9 , 10 (South, Plains, Rockies, West)
 - Cerebrovascular disease & Alzheimer's, Region 4, 6, 7, 8, 10 (South, Plains, Rockies, Northwest)
 - Flu & pneumonia, Region 4, 6, 7 (South, Plains)
 - Unintentional injuries, Region 4, 6, 7, 8 (South, Plains, Rockies)
 - Nephritis, Region 4, 6, 7 (South, Plains)

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

For More Information

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