

The Atlas of Heart Disease and Stroke is a data-rich tool anyone can use to examine the cardiovascular disease burden in communities across the United States.

For those who receive funding from CDC’s Division for Heart Disease and Stroke Prevention, the maps in the Atlas can be used to support your work.

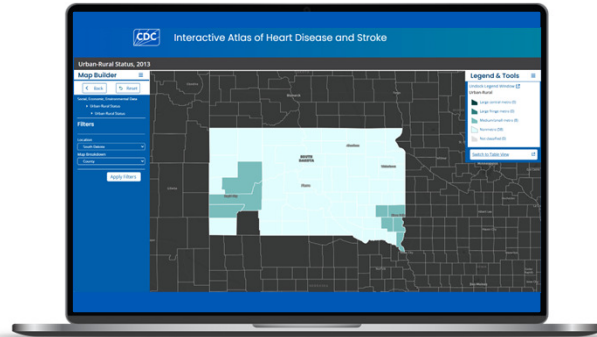
In this presentation, we will walk through examples of how you can use the Atlas to document rural-urban patterns and surrounding characteristics in your community.

For an overview of the Atlas or step-by-step instructions, go to www.CDC.gov and search “Atlas of Heart Disease and Stroke.”

Using the Atlas to Explore Rural-Urban Patterns in Your Communities

Easy access to high-quality local-level data on:

- Rural-urban patterns
- Cardiovascular disease mortality
- Cardiovascular disease hospitalizations
- Major highways
- Population count
- Air quality
- Number of hospitals
- Physicians and specialists

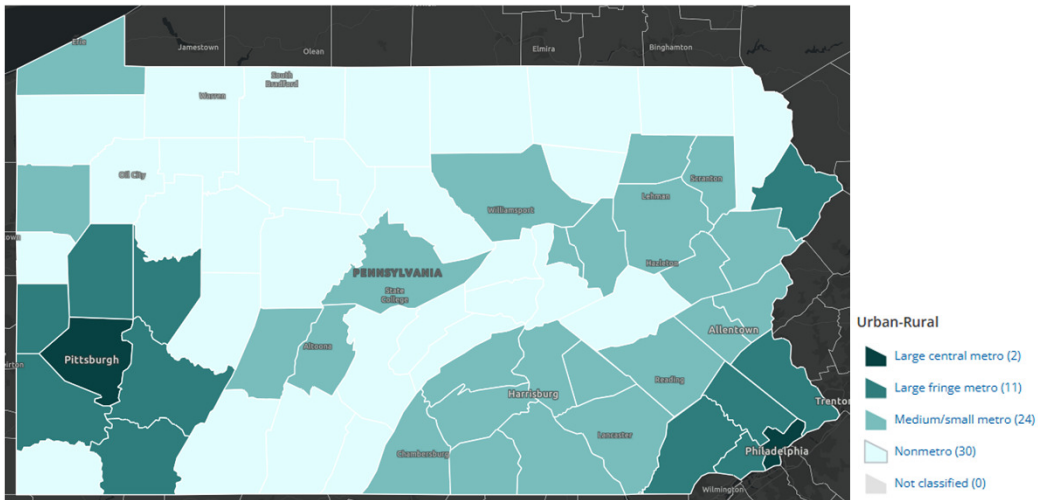


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The Atlas provides easy access to a wide range of high-quality, local-level data.

For this example, we'll be using data on rural-urban patterns, cardiovascular disease mortality and hospitalizations, major highways, population count, air quality, number of hospitals in an area, and physicians and specialists available in an area.

Rural Urban Patterns



Data Source: National Center for Health Statistics. Centers for Disease Control and Prevention. 2013.

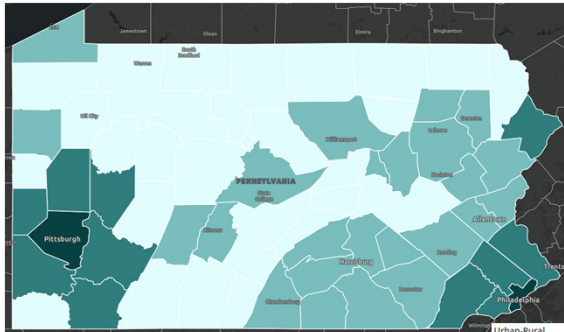
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Let's start by mapping rural-urban patterns. The Atlas uses the National Center for Health Statistics definition of rural-urban patterns, which they describe as metro or nonmetro.

Each county is designated as either large central metro (shown here in dark teal), large fringe metro, medium to small metro, or nonmetro (shown in light teal).

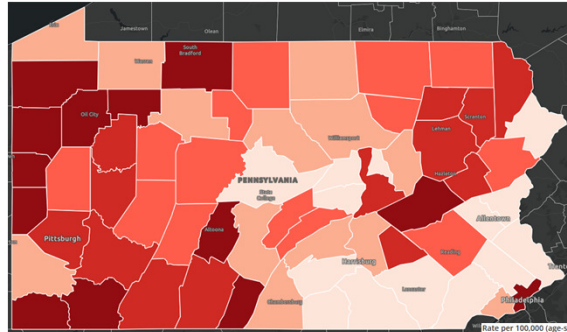
Rural Urban Patterns and Cardiovascular Disease Mortality

Rural-Urban Patterns



- Large central metro (2)
- Large fringe metro (1)
- Medium/small metro (24)
- Nonmetro (30)
- Not classified (0)

Total Cardiovascular Disease Mortality



- 483.5 - 592.0 (13)
- 481.6 - 493.4 (13)
- 430.9 - 461.5 (14)
- 400.5 - 430.8 (13)
- 353.9 - 400.4 (14)
- Insufficient Data (0)

Data Sources:

Rural-Urban Patterns: Data source: National Center for Health Statistics. Centers for Disease Control and Prevention. 2013.

Mortality: National Vital Statistics System. National Center for Health Statistics. 2020-2022.

Population Estimates (Ages standardized to Census 2000 population): U.S. Census Bureau. 2020-2022.

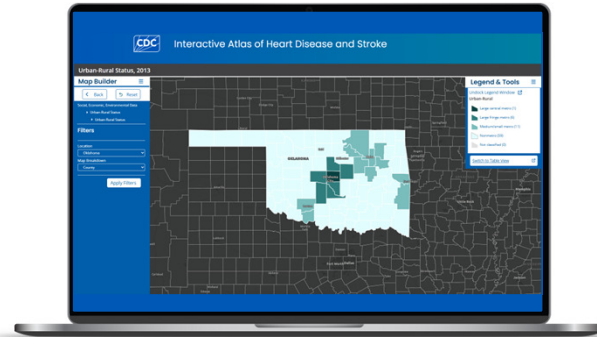
Notes: Data are displayed for ages 35+.

Knowing an area's rural-urban patterns can be informative when addressing the burden of cardiovascular disease. Here we have added a county-level map of total cardiovascular disease mortality.

A Note on Using the Atlas

Maps from the Atlas of Heart Disease and Stroke provide important contextual information but they do not indicate causation.

Now let's continue by exploring additional maps.



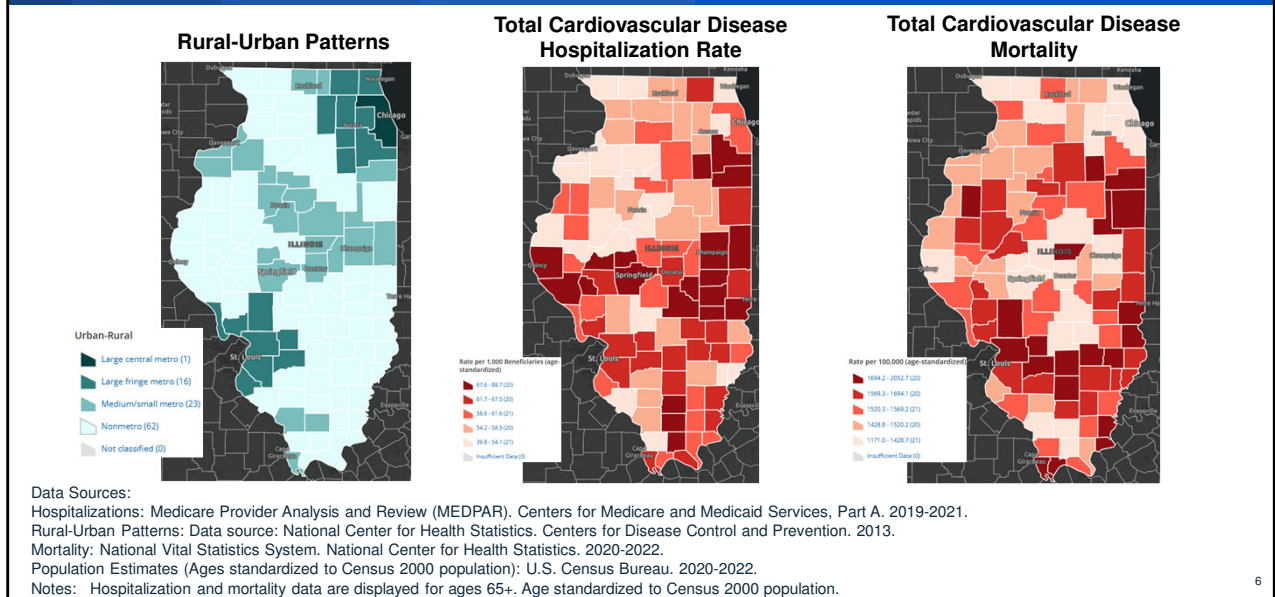
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Before we take a look at additional maps, it's important to note that maps from the Atlas of Heart Disease and Stroke provide important contextual information but they do not indicate causation.

Rather than drawing conclusions about causal relationships between health outcomes and rural-urban patterns, we can use these maps to understand the characteristics of communities within the context of their rural-urban patterns. This context informs program decisions that are tailored to the needs of each community.

Now let's continue by exploring additional maps.

Rural Urban Patterns, CVD Hospitalizations and Mortality



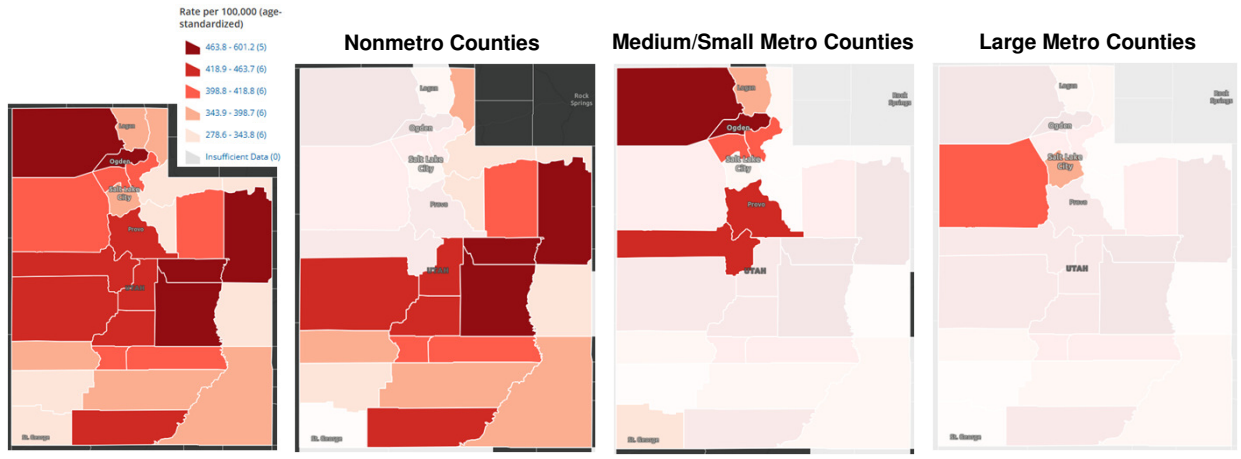
With the Atlas it is possible to compare maps of rural-urban patterns, cardiovascular disease hospitalizations, and cardiovascular disease mortality.

With this map of rural-urban patterns as a reference, we see that the rural-urban patterns are different for hospitalizations versus mortality. For example, we can see that hospitalizations are somewhat concentrated in the center of this state in mostly nonmetro to small or medium metro counties. For mortality we see that the highest rates are often in the top third and bottom third of the state, which has a broader mix of rural-urban patterns.

These maps of hospitalizations and mortality are both for adults

ages 65 and up, and you can also map mortality among other age groups using the Atlas.

CVD Mortality Filtered by Nonmetro/Metro Counties



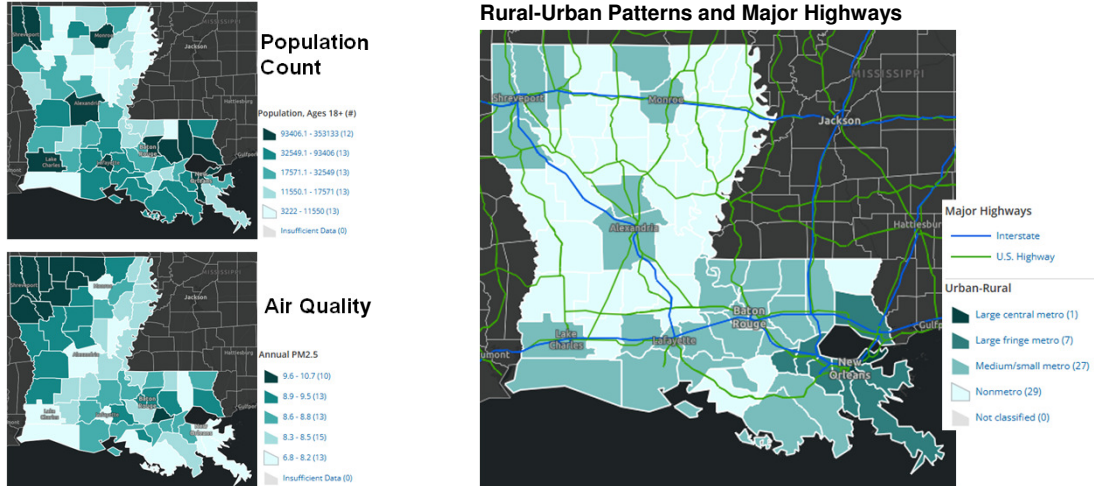
Data Sources:
Mortality: National Vital Statistics System, National Center for Health Statistics, 2020-2022.
Population Estimates (Ages standardized to Census 2000 population): U.S. Census Bureau, 2020-2022.
Metro Categories: National Center for Health Statistics, Centers for Disease Control and Prevention, 2013.
Notes: Data are displayed for ages 35+.

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In addition to viewing side-by-side maps of rural-urban patterns and health outcomes, the Atlas also provides an opportunity to display maps filtered for only specified rural-urban categories.

For instance, while the map on the left shows CVD mortality for all counties, we can also view CVD mortality just for nonmetro counties, filtering out all other counties. In addition, we can display just medium/small metro counties or just large metro counties.

Population Count and Air Quality Alongside Rural Urban Patterns and Major Highways

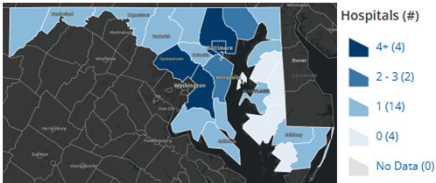


Data Sources:
 Population Count: American Community Survey, U.S. Census Bureau, 2018-2022.
 Rural-Urban Patterns: National Center for Health Statistics, Centers for Disease Control and Prevention, 2013.
 Air Quality: Environmental Protection Agency, 2019.
 Notes: Population count data are displayed for ages 18+.

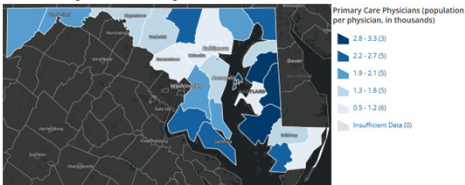
Here we see maps of population count and air quality alongside rural-urban patterns and major highways. These maps can be insightful for questions about isolation, geographic proximity to available resources, and risk factors.

Number of Hospitals and Primary Care Physicians Alongside Rural Urban Patterns

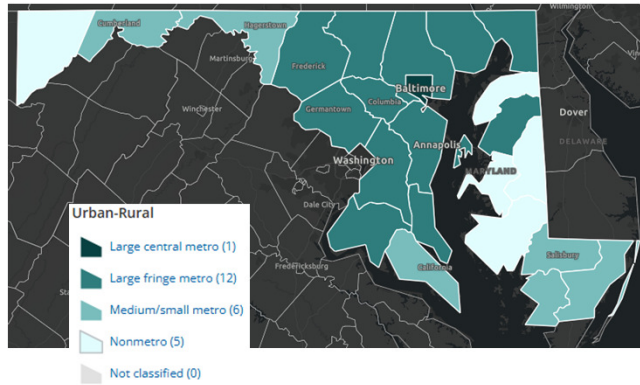
Number of Hospitals



Primary Care Physicians



Rural-Urban Patterns



Data Sources:

Hospitals and Primary Care Physicians: Health Resources and Services Administration, 2021.

Rural-Urban Patterns: National Center for Health Statistics, Centers for Disease Control and Prevention, 2013.

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In this next example we can see maps of the number of hospitals per county and population per primary care physician alongside a map of rural-urban patterns. Maps like these could be used to tailor programs to the needs of your community.

Sharing Your Maps

Ways to Share

- Create a link to share your map
- Download maps as PDFs for slides or reports
- Download the data to make your own maps and graphs
- Download county profiles for counties of interest
- View the data in table form

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The Atlas has numerous features you can use to make and share data and maps. Once you have created the maps you want, you can...

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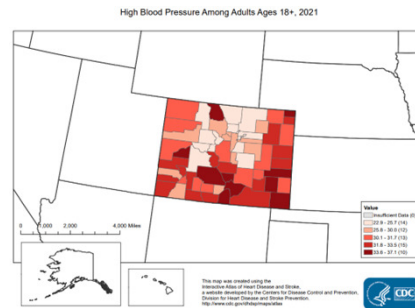
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Create a link to share each map,

Sharing Your Maps

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Download your maps as PDFs,

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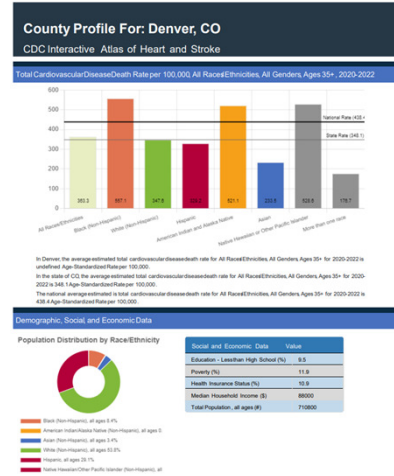
	A	B	C	D	E	F	G
1	FIPS	Name	Value	Range	High Blood Pressure (%)		
2	8007	Archuleta	33.5	31.8 - 33.5	33.5		
3	8029	Delta	35	33.6 - 37.1	35		
4	8033	Dolores	33.4	31.8 - 33.5	33.4		
5	8045	Garfield	27.5	25.8 - 30.0	27.5		
6	8051	Gunnison	24.1	22.9 - 25.7	24.1		
7	8053	Hinsdale	32.2	31.8 - 33.5	32.2		
8	8067	La Plata	27.9	25.8 - 30.0	27.9		
9	8077	Mesa	30.5	30.1 - 31.7	30.5		
10	8079	Mineral	30.8	30.1 - 31.7	30.8		
11	8081	Moffat	30.6	30.1 - 31.7	30.6		
12	8083	Montezun	33.5	31.8 - 33.5	33.5		
13	8085	Montrose	32.3	31.8 - 33.5	32.3		
14	8091	Ouray	32.5	31.8 - 33.5	32.5		
15	8097	Pitkin	25.7	22.9 - 25.7	25.7		
16	8103	Rio Blanco	30.1	30.1 - 31.7	30.1		
17	8107	Routt	25.7	22.9 - 25.7	25.7		
18	8111	San Juan	31.6	30.1 - 31.7	31.6		
19	8113	San Migue	26.9	25.8 - 30.0	26.9		
20	8001	Adams	24.6	22.9 - 25.7	24.6		
21	8003	Alamosa	27.4	25.8 - 30.0	27.4		

Download the data used to make the maps,

Sharing Your Maps

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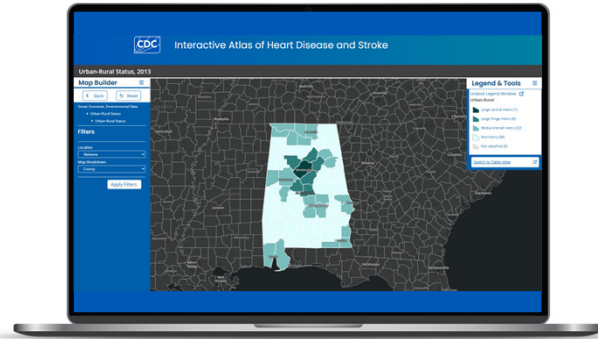


Create downloadable county profiles,

Recap

We used the **Atlas** to make maps providing context for rural-urban patterns and cardiovascular disease using data on:

- Rural-urban patterns
- Cardiovascular disease mortality
- Cardiovascular disease hospitalizations
- Major highways
- Population count
- Air quality
- Number of hospitals
- Physicians and specialists



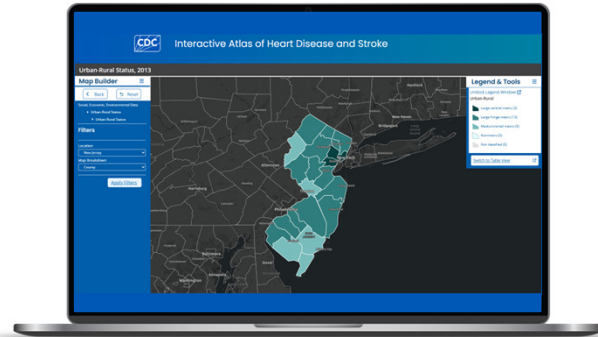
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To recap, using the Atlas, we made maps showing rural-urban patterns, cardiovascular disease mortality and hospitalizations, major highways, population count, air quality, number of hospitals in an area, and physicians and specialists available in an area.

Recap

These maps offer unique opportunities to:

- Document geographic differences
- Enhance partnerships
- Tailor program planning to the needs of communities



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With these maps, you can document geographic differences, enhance partnerships, and tailor program planning to the needs of communities.

To find:

- The Atlas of Heart Disease and Stroke
- Atlas Instructions

Visit www.CDC.gov and search “Atlas of Heart Disease and Stroke”

Questions? Contact:
GISXmoderator@cdc.gov



U.S. Centers for Disease Control and Prevention

National Center for Chronic Disease Prevention and Health Promotion

Division for Heart Disease and Stroke Prevention

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Thank you for watching! You can find the Atlas of Heart Disease and Stroke and instructions on how to use the Atlas by visiting www.CDC.gov and searching “Atlas of Heart Disease and Stroke.”