

# Indicators of Health Status in Alabama



## HEART DISEASES MORTALITY

Jointly produced to assist those seeking to improve health care in rural Alabama

by

The Office of Primary Care and Rural Health,  
Alabama Department of Public Health

and

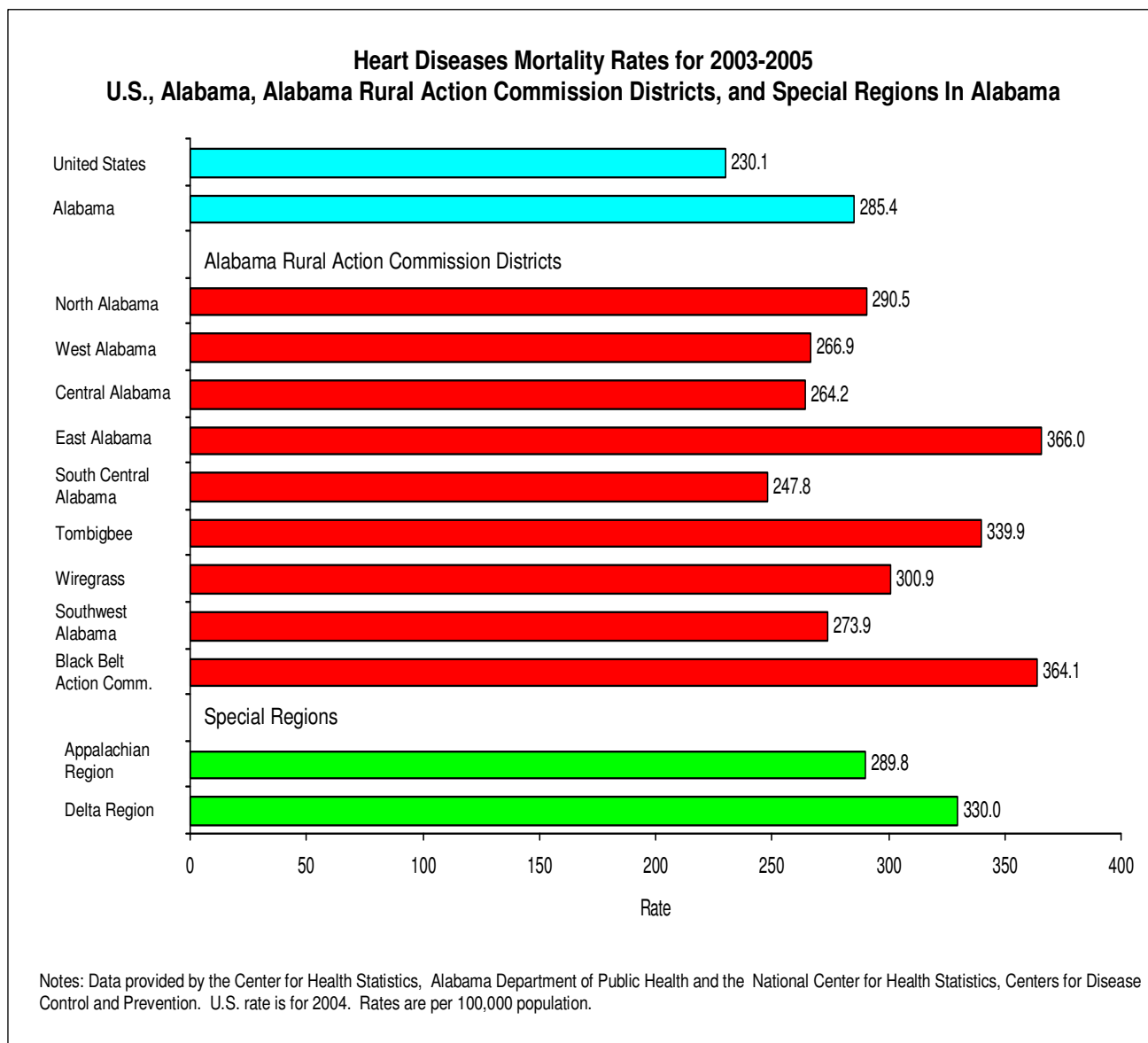
The Alabama Rural Health Association





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This and other reports in this series can be referenced on-line by visiting the “Reports” section of the Office of Primary Care and Rural Health Web site at <http://adph.org/ruralhealth/> or the “Rural/Urban Comparisons” section of the Alabama Rural Health Association Web site at [www.arhaonline.org](http://www.arhaonline.org)

**October 2007**

## Indicators of Health Status in Alabama: **HEART DISEASES MORTALITY**



-  Heart Diseases have been the leading cause of death in Alabama since 1926.
-  Alabama currently has the 5<sup>th</sup> highest heart disease mortality rate among all 50 states. Alabamians aged 35-54 years have the 2<sup>nd</sup> highest heart disease mortality rate among all 50 states.
-  Alabama lost 38,683 residents to heart diseases during 2003-2005.
-  47 of the 50 Alabama counties with the highest heart disease mortality rates are rural counties.

Heart disease usually occurs in individuals who:

- have high blood pressure.
- have high blood cholesterol.
- are physically inactive.
- smoke or are exposed to environmental tobacco smoke.
- are obese.
- have high low density (LDL) cholesterol.
- have low high density (HDL) cholesterol.
- have a family history of early heart disease (before age 55).

To prevent or delay the complications of heart disease, persons with heart disease should:

- control high blood pressure.
- reduce dietary fat, saturated fat, trans fat, and cholesterol to lower blood levels of cholesterol.
- participate in moderate physical activity four to five times a week.
- avoid or eliminate cigarette smoking, including environmental tobacco smoke.
- maintain blood sugar levels within normal ranges.
- eat five or more servings of fruits and vegetables daily.
- eat 6 to 11 servings daily of breads, cereals, rice, pastas, and other grain products.
- manage diet and physical activity to maintain a healthy weight.
- lose excess weight, be physically active, and avoid smoking to increase blood HDL levels.
- lose excess weight and reduce dietary fat to reduce blood LDL levels.
- visit physician regularly and take medication as directed.

### **What Is Considered to be Rural In This Publication?**

There are several differing definitions for “rural” with most definitions being specific to programs or initiatives. “Rural” is not a concrete term. Opinions on what is considered as rural tend to change between geographical areas and over time. For additional information on what areas are considered as being “rural” for the various federal programs, visit the Rural Assistance Center at <http://maps.rupri.org/circ/racrural/amirural.asp> where an address can be entered to determine rural status for each program.

This publication considers entire counties as being “rural” or “urban” since most data of interest for studies is available at the county level, but not at sub-county levels. Counties are assigned a score using four major indicators of rurality in this definition. These are population per square mile, the size and number of cities in a county, percentage of total employment comprised by employment in public education, and per capita agricultural sales. For additional information on the determination of which counties are considered “rural,” please visit the “What Is Rural?” section at the Alabama Rural Health Association’s Web site, [www.arhaonline.org](http://www.arhaonline.org).

This publication also presents information on the eight regions established through the Alabama Rural Action Commission, the Black Belt Action Commission, Alabama’s Appalachian Region counties, Alabama’s Delta Region counties, Alabama’s “rural” counties, and Alabama’s “urban” counties. In addition, “rural” counties are further classified and presented as being “highly” or “moderately” rural according to their score. “Rural” counties are also classified and presented as being in “rural south” or “rural north” Alabama because of great demographic and health status variation in these portions of the state.

## **Counties in the Various Regions or Classifications Used in This Report:**

**North Alabama Action Commission** includes Colbert, Cullman, DeKalb, Franklin, Jackson, Lauderdale, Lawrence, Limestone, Madison, Marion, Marshall, Morgan, and Winston.

**West Alabama Action Commission** includes Bibb, Fayette, Greene, Hale, Lamar, Pickens, and Tuscaloosa.

**Central Alabama Action Commission** includes Blount, Chilton, Jefferson, St. Clair, Shelby, and Walker.

**East Alabama Action Commission** includes Calhoun, Chambers, Cherokee, Clay, Cleburne, Coosa, Etowah, Randolph, Talladega, and Tallapoosa.

**South Central Alabama Action Commission** includes Autauga, Bullock, Butler, Crenshaw, Elmore, Lee, Lowndes, Macon, Montgomery, Pike, and Russell.

**Tombigbee Action Commission** includes Choctaw, Clarke, Conecuh, Dallas, Marengo, Monroe, Perry, Sumter, Washington, and Wilcox.

**Wiregrass Action Commission** includes Barbour, Coffee, Covington, Dale, Geneva, Henry, and Houston.

**Southwest Alabama Action Commission** includes Baldwin, Escambia, and Mobile.

**Black Belt Action Commission** includes Bullock, Choctaw, Dallas, Greene, Hale, Lowndes, Macon, Marengo, Perry, Pickens, Sumter, and Wilcox counties.

**Rural Counties** include Autauga, Baldwin, Barbour, Bibb, Blount, Bullock, Butler, Chambers, Cherokee, Chilton, Choctaw, Clarke, Clay, Cleburne, Coffee, Colbert, Conecuh, Coosa, Covington, Crenshaw, Cullman, Dale, Dallas, DeKalb, Elmore, Escambia, Fayette, Franklin, Geneva, Greene, Hale, Henry, Jackson, Lamar, Lawrence, Limestone, Lowndes, Macon, Marengo, Marion, Marshall, Monroe, Perry, Pickens, Pike, Randolph, Russell, St. Clair, Sumter, Talladega, Tallapoosa, Walker, Washington, Wilcox, and Winston.

**Highly Rural Counties** include Barbour, Bibb, Blount, Bullock, Butler, Cherokee, Choctaw, Clarke, Clay, Cleburne, Coffee, Conecuh, Coosa, Covington, Crenshaw, Cullman, Dallas, DeKalb, Escambia, Fayette, Franklin, Geneva, Greene, Hale, Henry, Jackson, Lamar, Lawrence, Lowndes, Macon, Marengo, Marion, Marshall, Monroe, Perry, Pickens, Pike, Randolph, Sumter, Washington, Wilcox, and Winston.

**Moderately Rural Counties** include Autauga, Baldwin, Chambers, Chilton, Colbert, Dale, Elmore, Limestone, Russell, St. Clair, Talladega, Tallapoosa and Walker.

**Rural North Counties** include Bibb, Blount, Chambers, Cherokee, Chilton, Clay, Cleburne, Colbert, Coosa, Cullman, DeKalb, Elmore, Fayette, Franklin, Hale, Jackson, Lamar, Lawrence, Limestone, Macon, Marion, Marshall, Pickens, Randolph, St. Clair, Talladega, Tallapoosa, Walker, and Winston.

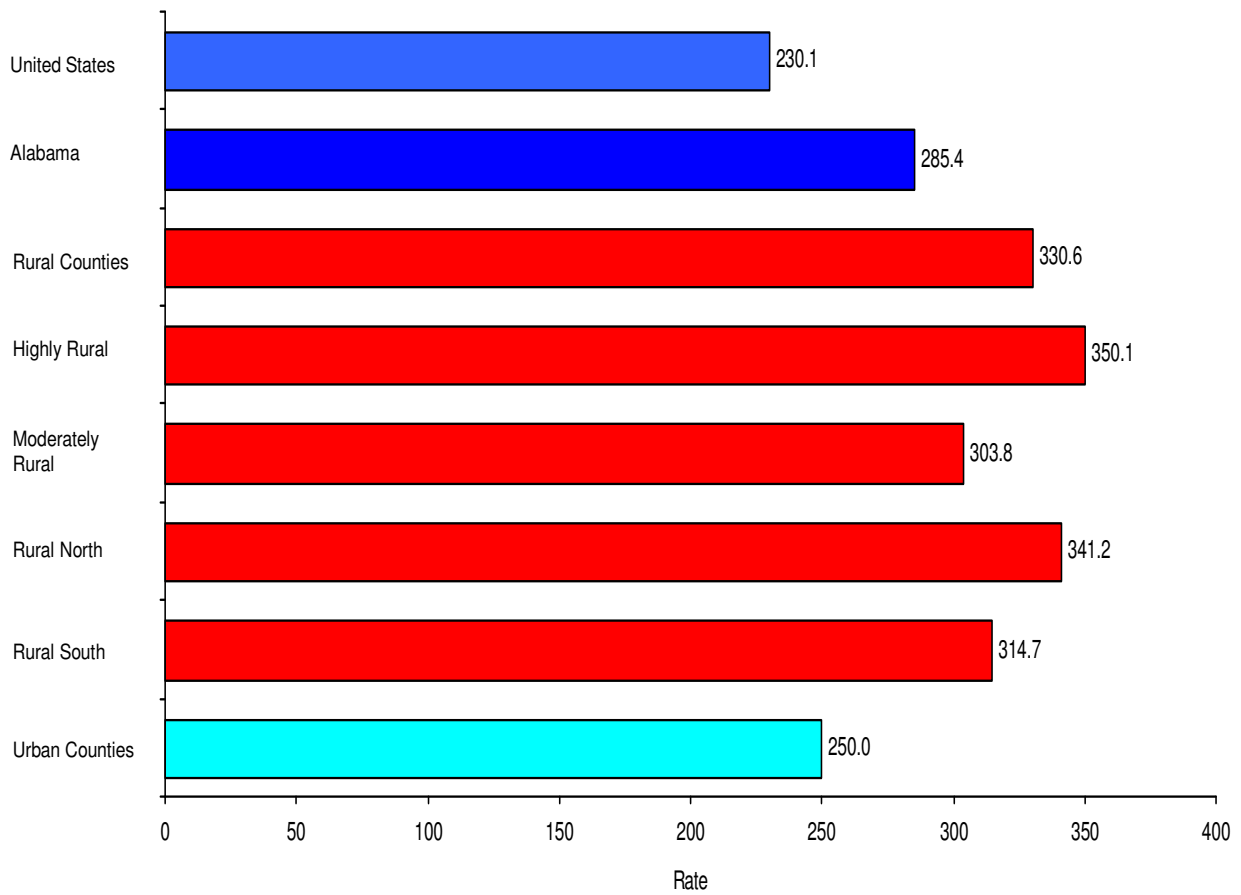
**Rural South Counties** include Autauga, Baldwin, Barbour, Bullock, Butler, Choctaw, Clarke, Coffee, Conecuh, Covington, Crenshaw, Dale, Dallas, Escambia, Geneva, Greene, Henry, Lowndes, Marengo, Monroe, Perry, Pike, Russell, Sumter, Washington, and Wilcox.

**Urban Counties** include Calhoun, Etowah, Houston, Jefferson, Lauderdale, Lee, Madison, Mobile, Montgomery, Morgan, Shelby, and Tuscaloosa.

**Appalachian Region** includes Bibb, Blount, Calhoun, Chambers, Cherokee, Chilton, Clay, Cleburne, Colbert, Coosa, Cullman, DeKalb, Elmore, Etowah, Fayette, Franklin, Hale, Jackson, Jefferson, Lamar, Lauderdale, Lawrence, Limestone, Macon, Madison, Marion, Marshall, Morgan, Pickens, Randolph, St. Clair, Shelby, Talladega, Tallapoosa, Tuscaloosa, Walker, and Winston counties.

**Delta Region** includes Barbour, Bullock, Butler, Choctaw, Clarke, Conecuh, Dallas, Escambia, Greene, Hale, Lowndes, Macon, Marengo, Monroe, Perry, Pickens, Russell, Sumter, Washington, and Wilcox counties.

### Heart Diseases Mortality Rates U.S. and Selected Alabama Areas, 2003-2005

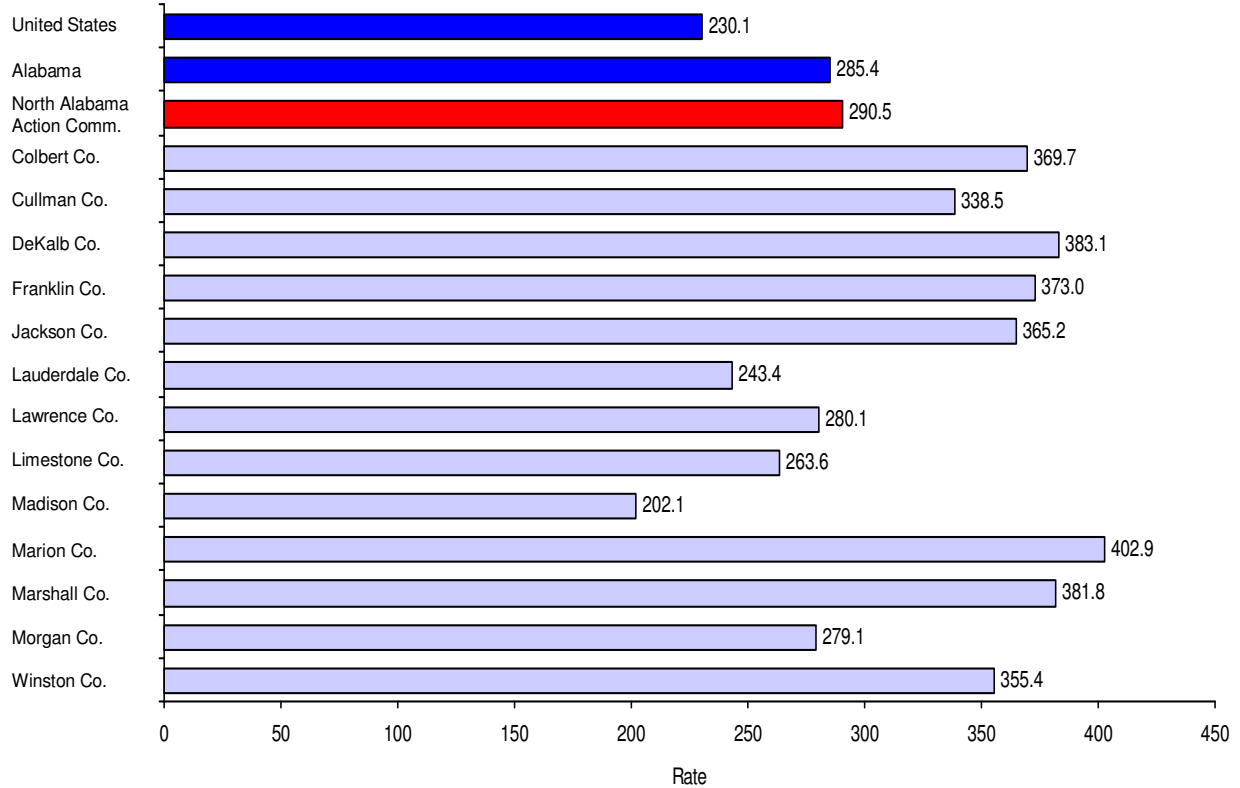


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

### Heart Disease Mortality and Mortality Rates U.S. and Selected Alabama Areas, 2003 – 2005

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>United States</b>	<b>Not Applicable</b>	<b>675,562</b>	<b>230.1</b>
<b>Alabama</b>	<b>Not Applicable</b>	<b>38,683</b>	<b>285.4</b>
<b>Rural Alabama Counties</b>	<b>Not Applicable</b>	<b>19,704</b>	<b>330.6</b>
<b>Highly Rural Alabama Counties</b>	<b>Not Applicable</b>	<b>12,093</b>	<b>350.1</b>
<b>Moderately Rural Alabama Counties</b>	<b>Not Applicable</b>	<b>7,611</b>	<b>303.8</b>
<b>Rural North Alabama Counties</b>	<b>Not Applicable</b>	<b>12,225</b>	<b>341.2</b>
<b>Rural South Alabama Counties</b>	<b>Not Applicable</b>	<b>7,479</b>	<b>314.7</b>
<b>Urban Alabama Counties</b>	<b>Not Applicable</b>	<b>18,979</b>	<b>250.0</b>

**Heart Diseases Mortality Rates  
U.S. Alabama, and the North Alabama Action Commission Counties, 2003-2005**

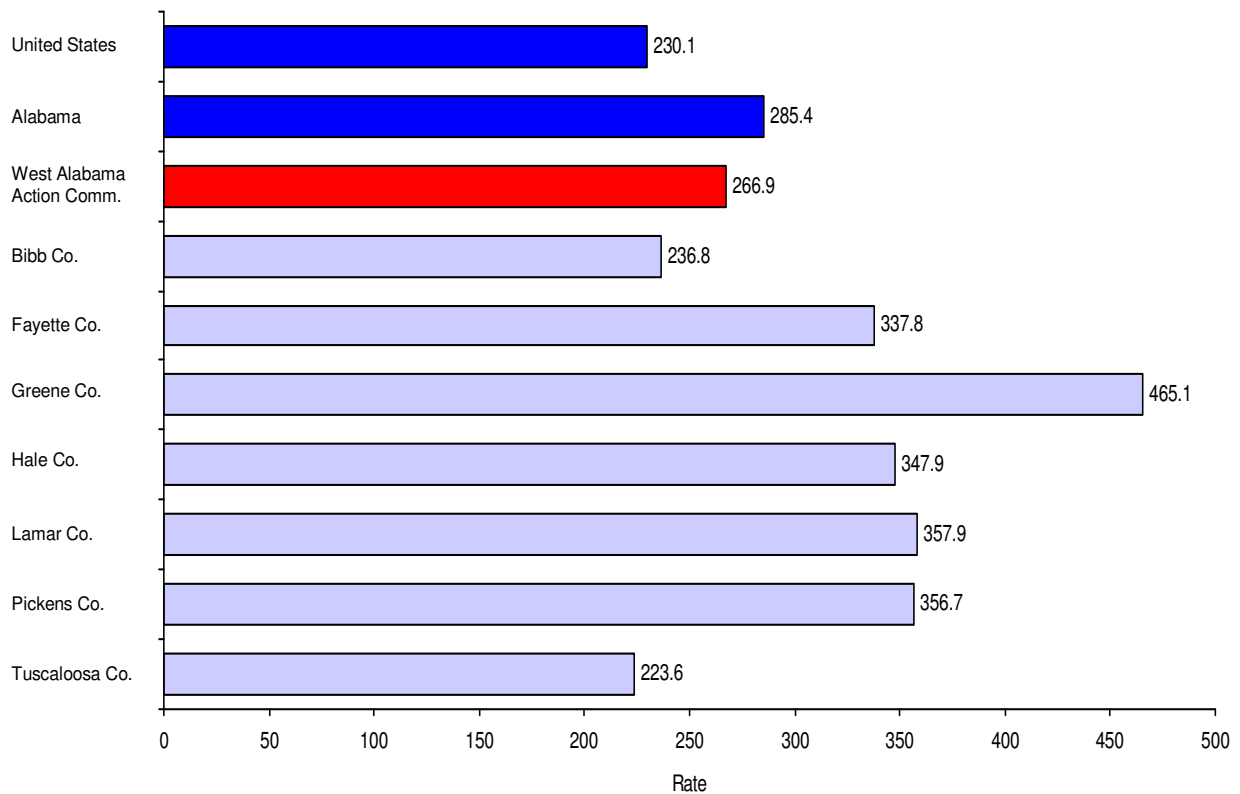


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Heart Disease Mortality and Mortality Rates  
North Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>North Alabama Action Commission</b>	<b>Not Applicable</b>	<b>8,903</b>	<b>290.5</b>
District's Rural Counties Combined	Not Applicable	5,541	349.9
District's Urban Counties Combined	Not Applicable	3,362	227.0
Colbert County	Yes	606	369.7
Cullman County	Yes	803	338.5
DeKalb County	Yes	769	383.1
Franklin County	Yes	343	373.0
Jackson County	Yes	588	365.2
Lauderdale County	No	638	243.4
Lawrence County	Yes	289	280.1
Limestone County	Yes	547	263.6
Madison County	No	1,779	202.1
Marion County	Yes	364	402.9
Marshall County	Yes	971	381.8
Morgan County	No	945	279.1
Winston County	Yes	261	355.4

**Heart Diseases Mortality Rates  
U.S. Alabama, and the West Alabama Action Commission Counties, 2003-2005**

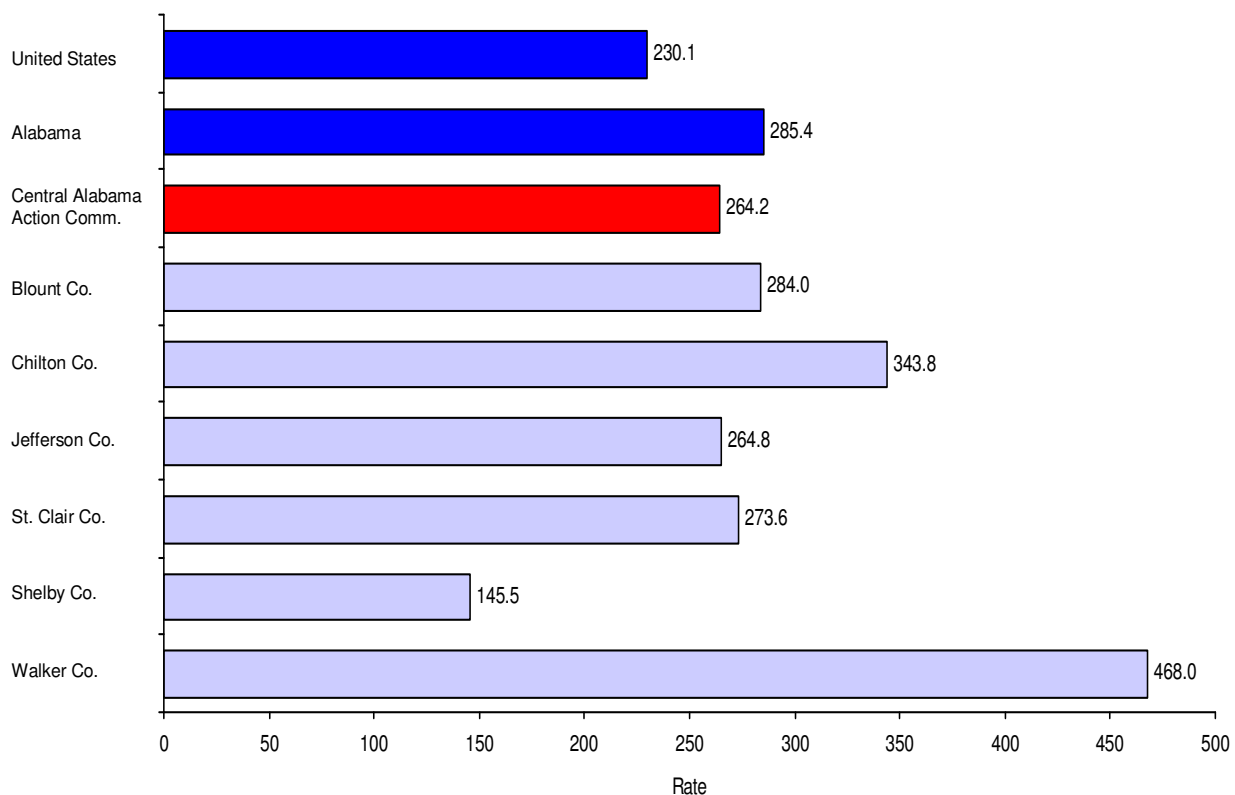


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Heart Disease Mortality and Mortality Rates  
West Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>West Alabama Action Commission</b>	<b>Not Applicable</b>	<b>2,156</b>	<b>266.9</b>
District's Rural Counties Combined	Not Applicable	1,037	337.3
District's Urban Counties Combined	Not Applicable	1,119	223.6
Bibb County	Yes	151	236.8
Fayette County	Yes	184	337.8
Greene County	Yes	135	465.1
Hale County	Yes	189	347.9
Lamar County	Yes	161	357.9
Pickens County	Yes	217	356.7
Tuscaloosa County	No	1,119	223.6

**Heart Diseases Mortality Rates  
U.S. Alabama, and the Central Alabama Action Commission Counties, 2003-2005**



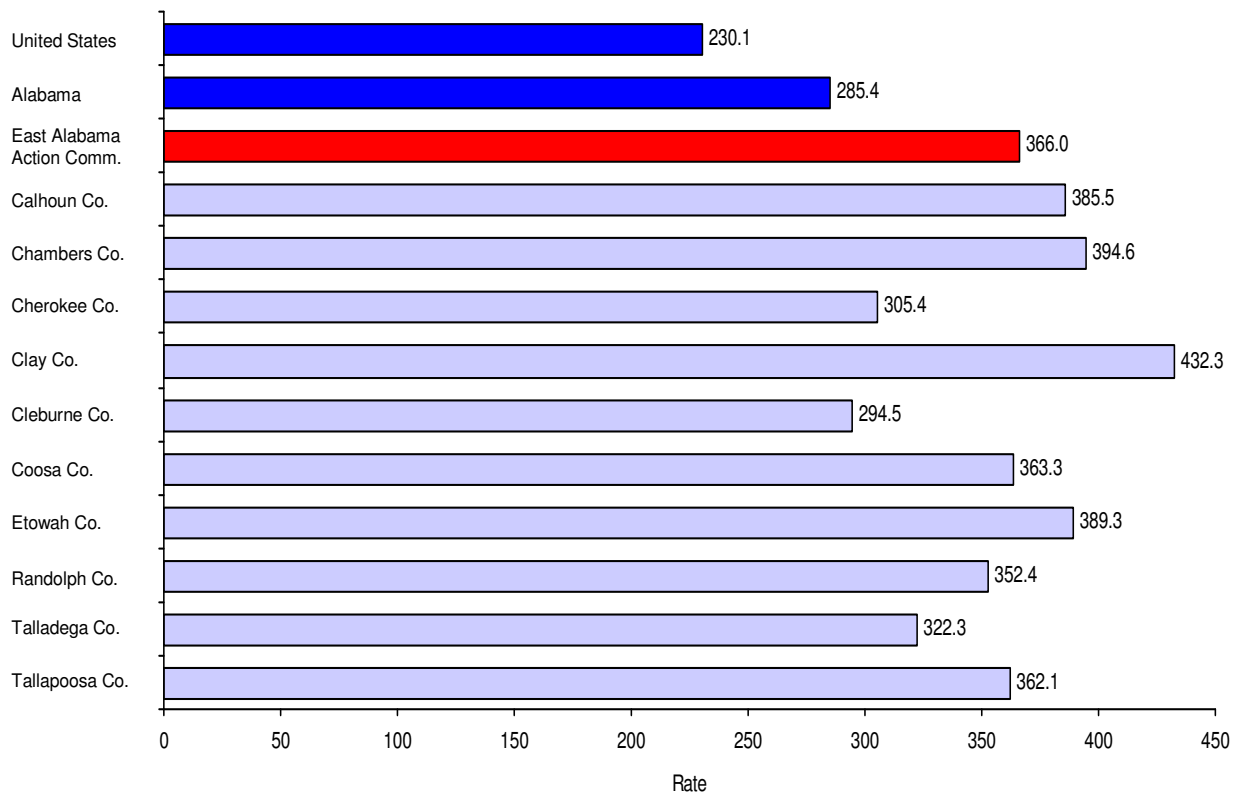
Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Heart Disease Mortality and Mortality Rates  
Central Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>Central Alabama Action Commission</b>	<b>Not Applicable</b>	<b>8,394</b>	<b>264.2</b>
District's Rural Counties Combined	Not Applicable	2,450	345.7
District's Urban Counties Combined	Not Applicable	5,944	240.8
Blount County	Yes	468	284.0
Chilton County	Yes	426	343.8
Jefferson County	No	5,222	264.8
St. Clair County	Yes	576	273.6
Shelby County	No	722	145.5
Walker County	Yes	980	468.0



**Heart Diseases Mortality Rates  
U.S. Alabama, and the East Alabama Action Commission Counties, 2003-2005**

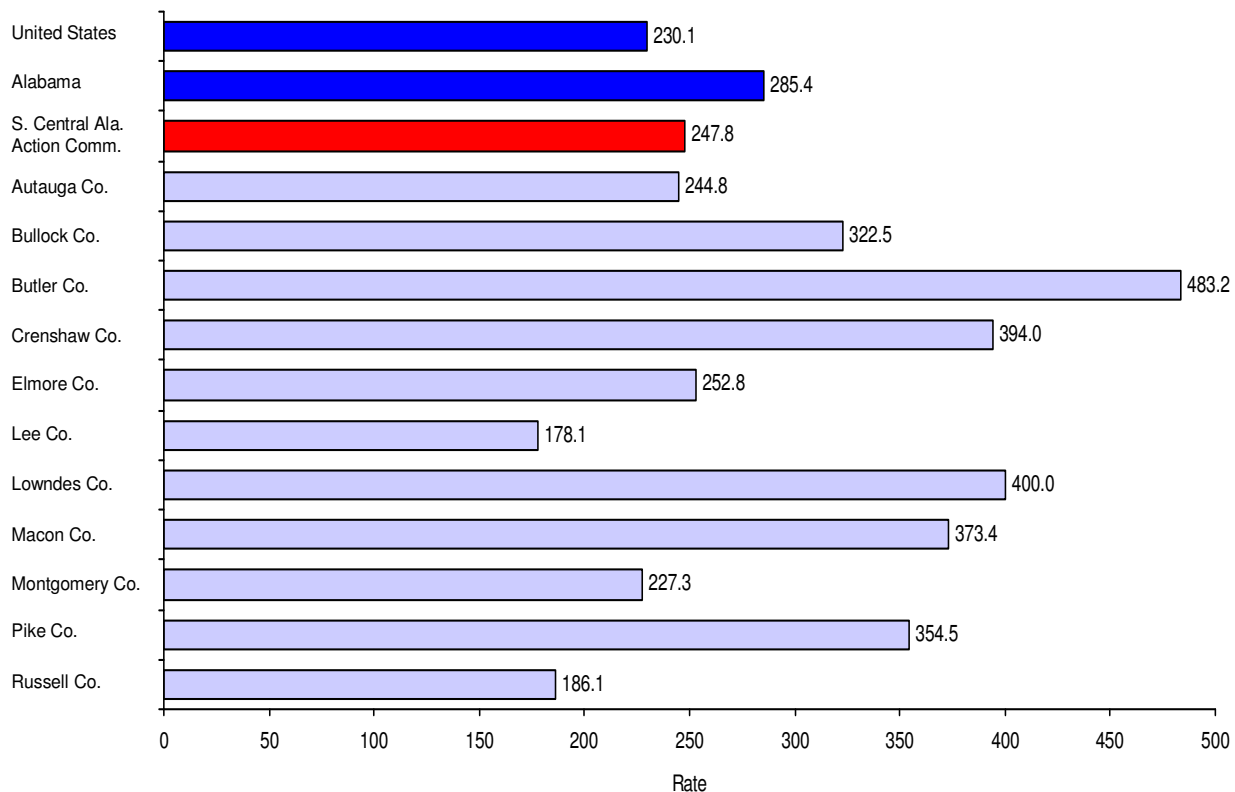


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Heart Disease Mortality and Mortality Rates  
East Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>East Alabama Action Commission</b>	<b>Not Applicable</b>	<b>5,026</b>	<b>366.0</b>
District's Rural Counties Combined	Not Applicable	2,530	347.2
District's Urban Counties Combined	Not Applicable	2,496	387.3
Calhoun County	No	1,294	385.5
Chambers County	Yes	420	394.6
Cherokee County	Yes	224	305.4
Clay County	Yes	182	432.3
Cleburne County	Yes	128	294.5
Coosa County	Yes	123	363.3
Etowah County	No	1,202	389.3
Randolph County	Yes	238	352.4
Talladega County	Yes	773	322.3
Tallapoosa County	Yes	442	362.1

### Heart Diseases Mortality Rates U.S. Alabama, and the South Central Alabama Action Commission Counties, 2003-2005

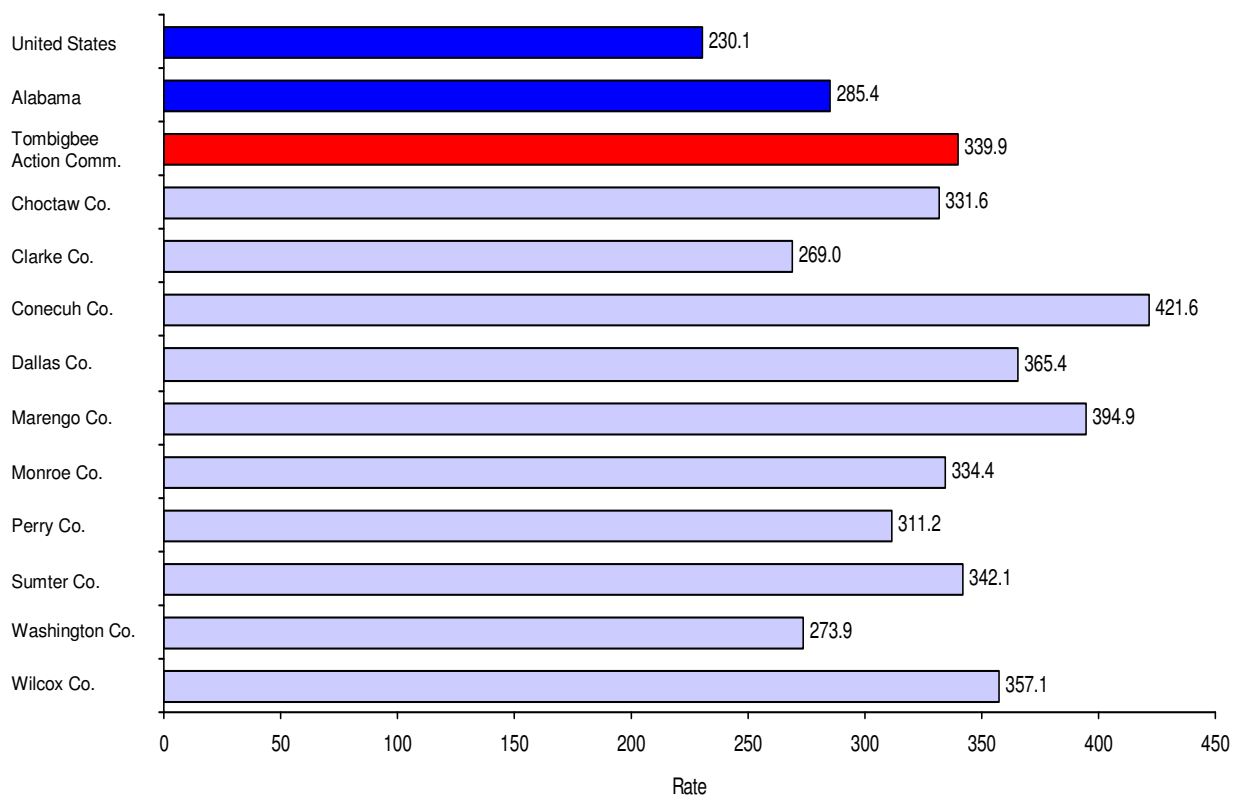


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

### Heart Disease Mortality and Mortality Rates South Central Alabama Action Commission Counties, 2003 – 2005

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>South Central Alabama Action Commission</b>	<b>Not Applicable</b>	<b>4,611</b>	<b>247.8</b>
District's Rural Counties Combined	Not Applicable	2,461	294.0
District's Urban Counties Combined	Not Applicable	2,150	210.0
Autauga County	Yes	348	244.8
Bullock County	Yes	108	322.5
Butler County	Yes	299	483.2
Crenshaw County	Yes	161	394.0
Elmore County	Yes	544	252.8
Lee County	No	643	178.1
Lowndes County	Yes	157	400.0
Macon County	Yes	258	373.4
Montgomery County	No	1,507	227.3
Pike County	Yes	312	354.5
Russell County	Yes	274	186.1

**Heart Diseases Mortality Rates  
U.S. Alabama, and the Tombigbee Action Commission Counties, 2003-2005**

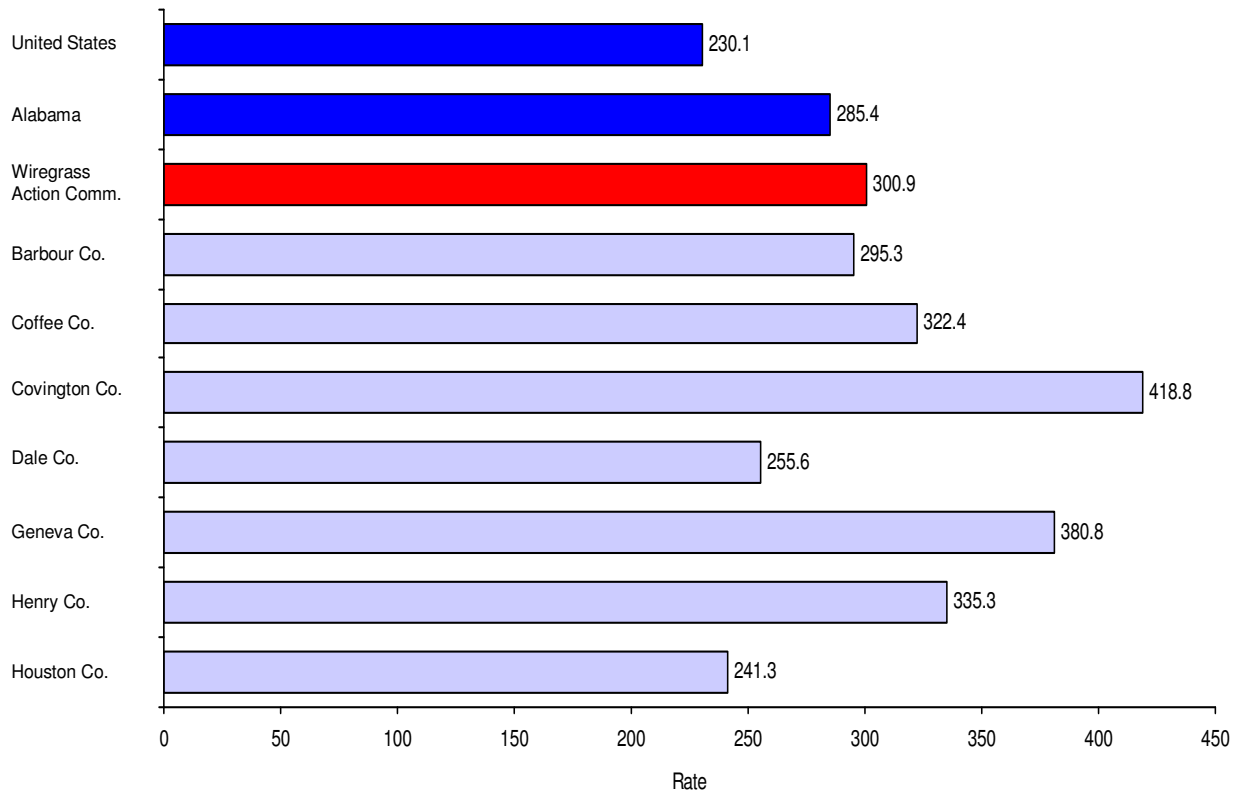


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Heart Disease Mortality and Mortality Rates  
Tombigbee Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>Tombigbee Action Commission</b>	<b>Not Applicable</b>	<b>2,059</b>	<b>339.9</b>
District's Rural Counties Combined	Not Applicable	2,059	339.9
District's Urban Counties Combined	Not Applicable	No Urban Counties in District	
Choctaw County	Yes	150	331.6
Clarke County	Yes	220	269.0
Conecuh County	Yes	169	421.6
Dallas County	Yes	488	365.4
Marengo County	Yes	260	394.9
Monroe County	Yes	237	334.4
Perry County	Yes	107	311.2
Sumter County	Yes	144	342.1
Washington County	Yes	146	273.9
Wilcox County	Yes	138	357.1

**Heart Diseases Mortality Rates  
U.S. Alabama, and the Wiregrass Action Commission Counties, 2003-2005**

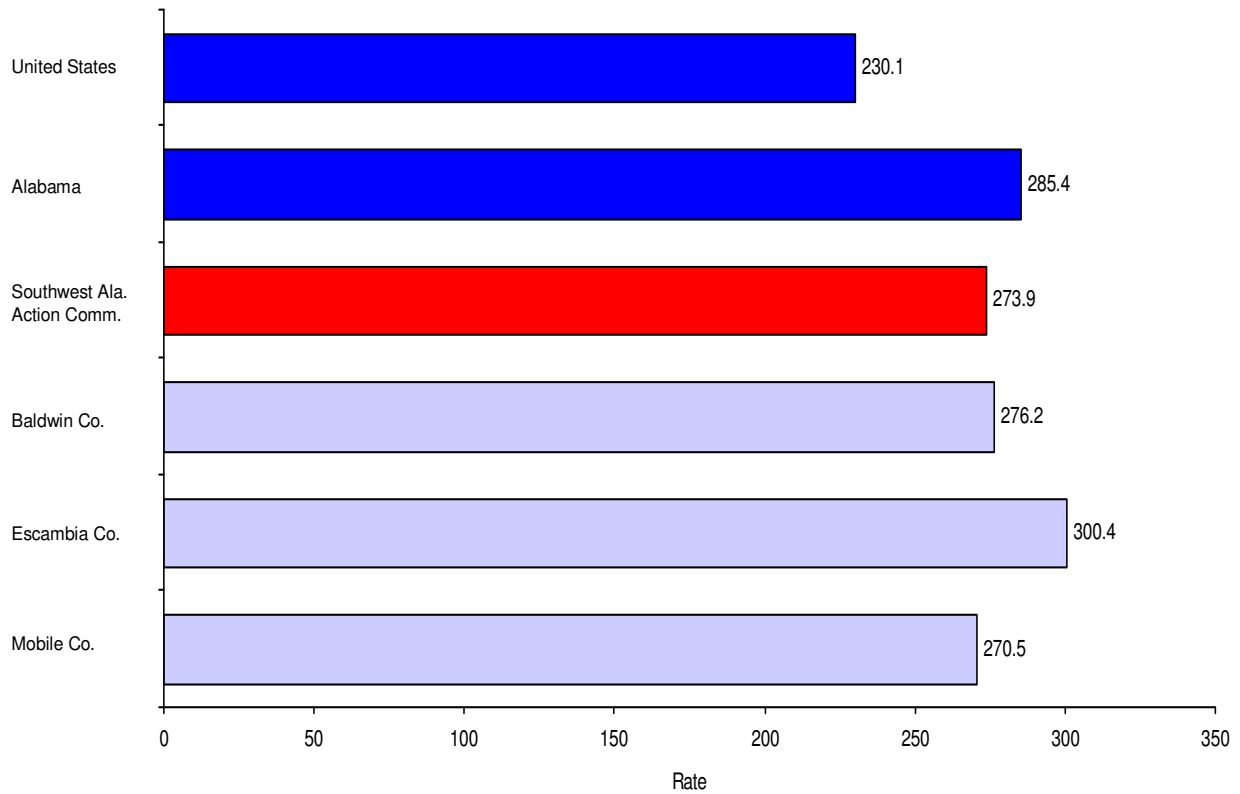


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Heart Disease Mortality and Mortality Rates  
Wiregrass Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>Wiregrass Action Commission</b>	<b>Not Applicable</b>	<b>2,653</b>	<b>300.9</b>
District's Rural Counties Combined	Not Applicable	1,982	328.4
District's Urban Counties Combined	Not Applicable	671	241.3
Barbour County	Yes	252	295.3
Coffee County	Yes	435	322.4
Covington County	Yes	462	418.8
Dale County	Yes	375	255.6
Geneva County	Yes	292	380.8
Henry County	Yes	166	335.3
Houston County	No	671	241.3

**Heart Diseases Mortality Rates  
U.S. Alabama, and the Southwest Alabama Action Commission Counties, 2003-2005**

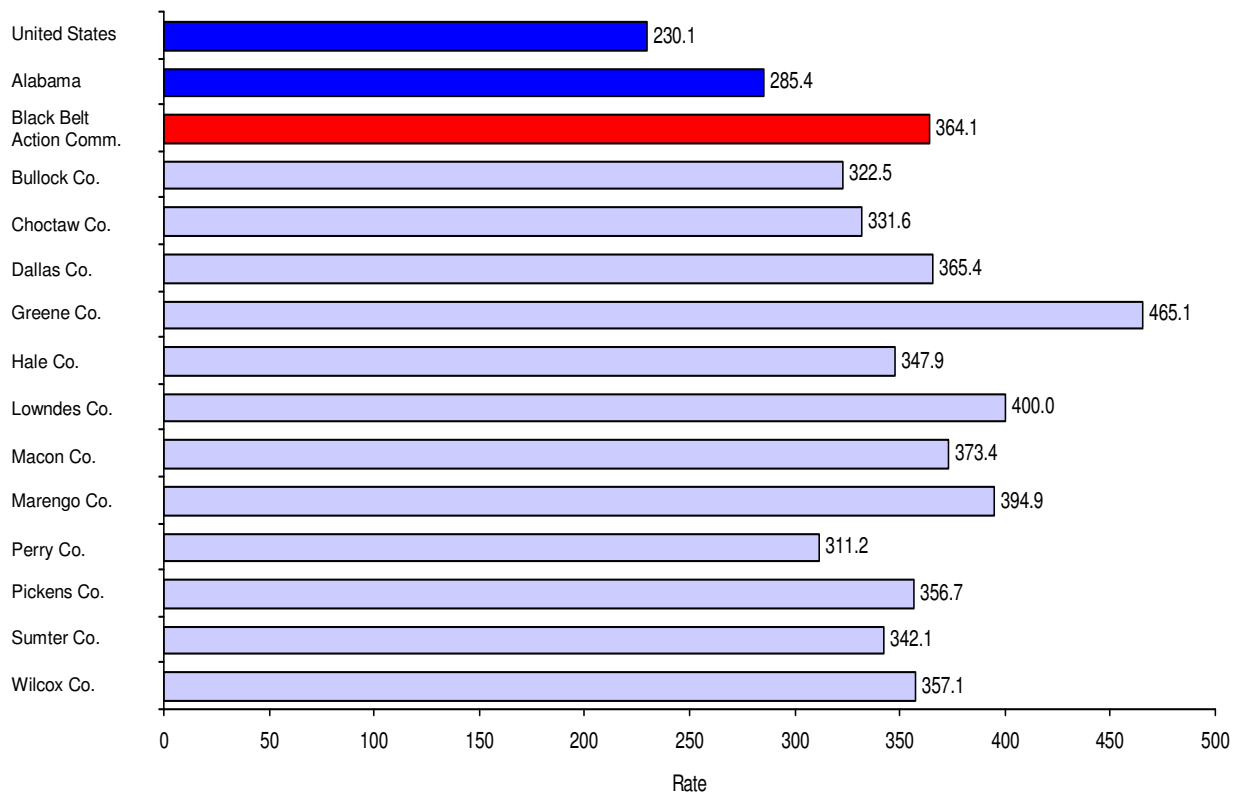


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Heart Disease Mortality and Mortality Rates  
Southwest Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>Southwest Alabama Action Commission</b>	<b>Not Applicable</b>	<b>4,881</b>	<b>273.9</b>
District's Rural Counties Combined	Not Applicable	1,644	280.9
District's Urban Counties Combined	Not Applicable	3,237	270.5
Baldwin County	Yes	1,300	276.2
Escambia County	Yes	344	300.4
Mobile County	No	3,237	270.5

### Heart Diseases Mortality Rates U.S. Alabama, and the Black Belt Action Commission Counties, 2003-2005



Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

### Heart Disease Mortality and Mortality Rates Black Belt Action Commission Counties, 2003 – 2005

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>Black Belt Action Commission</b>	<b>Not Applicable</b>	<b>2,351</b>	<b>364.1</b>
District's Rural Counties Combined	Not Applicable	2,351	364.1
District's Urban Counties Combined	Not Applicable	No Urban Counties in District	
Bullock County	Yes	108	322.5
Choctaw County	Yes	150	331.6
Dallas County	Yes	488	365.4
Greene County	Yes	135	465.1
Hale County	Yes	189	347.9
Lowndes County	Yes	157	400.0
Macon County	Yes	258	373.4
Marengo County	Yes	260	394.9
Perry County	Yes	107	311.2
Pickens County	Yes	217	356.7
Sumter County	Yes	144	342.1
Wilcox County	Yes	138	357.1

**Heart Disease Mortality and Mortality Rates  
Alabama's Appalachian Region Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>Alabama's Appalachian Region</b>	<b>Not Applicable</b>	<b>25,146</b>	<b>289.8</b>
Region's Rural Counties Combined	Not Applicable	12,225	341.2
Region's Urban Counties Combined	Not Applicable	12,921	353.7
Bibb County	Yes	151	236.8
Blount County	Yes	468	284.0
Calhoun County	No	1,294	385.5
Chambers County	Yes	420	394.6
Cherokee County	Yes	224	305.4
Chilton County	Yes	426	343.8
Clay County	Yes	182	432.3
Cleburne County	Yes	128	294.5
Colbert County	Yes	606	369.7
Coosa County	Yes	123	363.3
Cullman County	Yes	803	338.5
DeKalb County	Yes	769	383.1
Elmore County	Yes	544	252.8
Etowah County	No	1,202	389.3
Fayette County	Yes	184	337.8
Franklin County	Yes	343	373.0
Hale County	Yes	189	347.9
Jackson County	Yes	588	365.2
Jefferson County	No	5,222	264.8
Lamar County	Yes	161	357.9
Lauderdale County	No	638	243.4
Lawrence County	Yes	289	280.1
Limestone County	Yes	547	263.6
Macon County	Yes	258	373.4
Madison County	No	1,779	202.1
Marion County	Yes	364	402.9
Marshall County	Yes	971	381.8
Morgan County	No	945	279.1
Pickens County	Yes	217	356.7
Randolph County	Yes	238	352.4
St. Clair County	Yes	576	273.6
Shelby County	No	722	145.5
Talladega County	Yes	773	322.3
Tallapoosa County	Yes	442	362.1
Tuscaloosa County	No	1,119	223.6
Walker County	Yes	980	468.0
Winston County	Yes	261	355.4

For additional information on the Appalachian Region, visit the Appalachian Regional Commission's Web site at <http://www.arc.gov/index.jsp>; the Appalachian Regional Commission – Alabama Programs Office Web site at <http://www.adeca.alabama.gov/default.aspx>; or contact Bonnie Durham, Alabama Program Manager at (256) 845-3472.

**Heart Disease Mortality and Mortality Rates  
Alabama's Delta Region Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
<b>Alabama's Delta Region</b>	<b>Not Applicable</b>	<b>4,292</b>	<b>330.3</b>
Region's Rural Counties Combined	Not Applicable	<b>4,292</b>	<b>330.3</b>
Region's Urban Counties Combined	Not Applicable	No Urban Counties in Region	
Barbour County	Yes	252	295.3
Bullock County	Yes	108	322.5
Butler County	Yes	299	483.2
Choctaw County	Yes	150	331.6
Clarke County	Yes	220	269.0
Conecuh County	Yes	169	421.6
Dallas County	Yes	488	365.4
Escambia County	Yes	344	300.4
Greene County	Yes	135	465.1
Hale County	Yes	189	347.9
Lowndes County	Yes	157	400.0
Macon County	Yes	258	373.4
Marengo County	Yes	260	394.9
Monroe County	Yes	237	334.4
Perry County	Yes	107	311.2
Pickens County	Yes	217	356.7
Russell County	Yes	274	186.1
Sumter County	Yes	144	342.1
Washington County	Yes	146	273.9
Wilcox County	Yes	138	357.1

For additional information on the Delta Region, visit the Delta Regional Authority's Web site at <http://www.dra.gov/> or contact one of the Delta Regional Authority – Local Development District Offices as follows:

Alabama – Tombigbee Regional Commission, (334) 682-4234 (Choctaw, Clarke, Conecuh, Dallas, Marengo, Monroe, Perry, Sumter, Washington, and Wilcox counties)

Lee – Russell Council of Governments, (334) 749-5264 (Russell County)

South Alabama Regional Planning Commission, (251) 433-6541 (Escambia County)

South Central Alabama Development Commission (334) 244-6903 (Bullock, Butler, Lowndes, and Macon counties)

Southeast Alabama Regional Planning and Development Commission, (334) 794-4093 (Barbour County)

West Alabama Planning and Development Council, (205) 333-2990 (Greene, Hale, and Pickens counties)

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THIS REPORT**

For additional information please contact the Office of Primary Care and Rural Health Development at (334) 206-5396 or the Alabama Rural Health Association at (334) 281-3866.