

Indicators of Health Status in Alabama



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

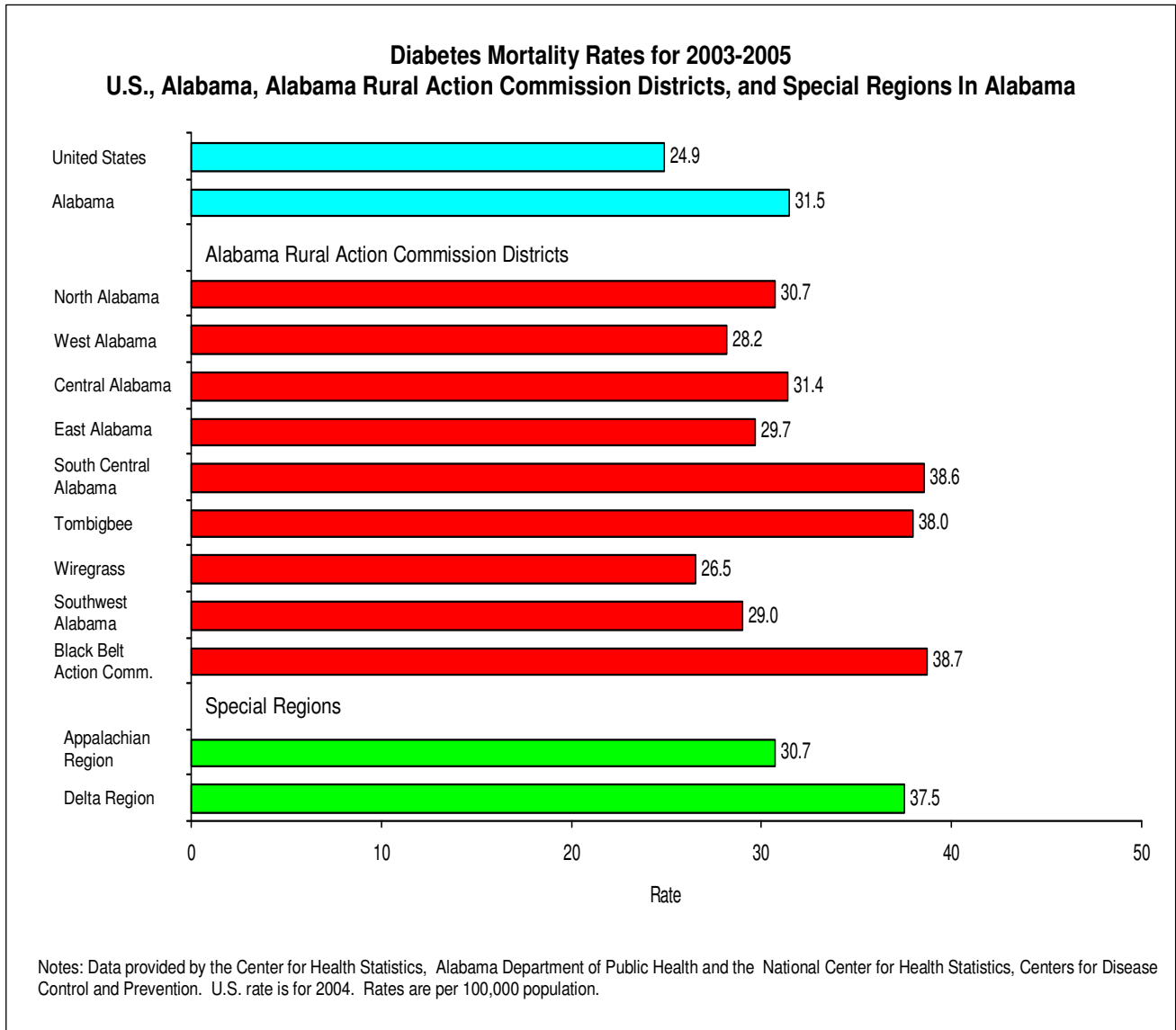
The Alabama Rural Health Association





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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

October 2007

Indicators of Health Status in Alabama: **DIABETES MORTALITY**



-  Diabetes mortality in Alabama is consistently over 50 percent higher among Alabama's African American population than among its White population.
-  Alabama currently has the 5th highest diabetes mortality rate among all 50 states. Alabamians aged 25-64 years have the 2nd highest diabetes mortality rate among all 50 states.
-  Alabama lost 4,273 residents to diabetes during 2003-2005.
-  29 of the 32 Alabama counties with the highest diabetes mortality rates are rural counties.

People who are most likely to get diabetes:

- are overweight.
- are 40 years of age or older.
- have a family history of diabetes.
- do not perform physical activity regularly.
- have had a baby weighing more than 9 pounds at birth.
- have had diabetes during pregnancy.
- have high blood pressure.
- are African American, Hispanic American, or Native American.

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

- maintain optimal blood sugar control through diet, physical activity, and medication.
- test blood sugar daily and have dilated eye exams.
- visit a physician frequently and have foot exam on each visit.
- check their own feet frequently, preferably daily.
- maintain ideal body weight, normal blood pressure, blood sugar, and cholesterol.
- avoid tobacco and alcohol.
- have an annual microalbumin and assessment of chronic kidney disease with estimated glomerular filtration rate (eGFR).
- have a Hemoglobin A1c test performed at home or in a physician's office at least every 6 months.
- check blood cholesterol and other blood lipids at least once a year.

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.

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.

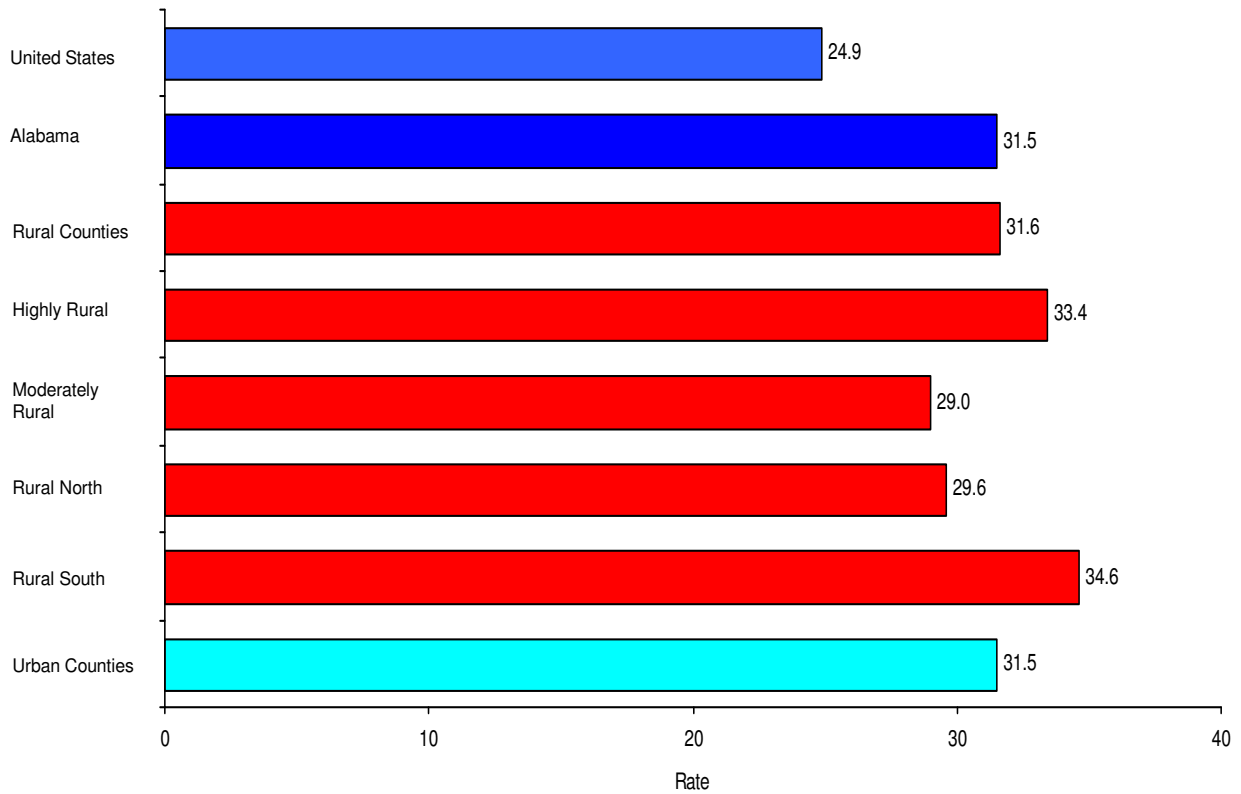
Rural South Counties include Autauga, Baldwin, Barbour, Bullock, Butler, Choctaw, Clarke, Coffee, Conecuh, Covington, Crenshaw, Dale, Dallas, Escambia, Geneva, Greene, Henry, Lowndes, Marengo, Monroe, Perry, Pike, Russell, Sumter, Washington, and Wilcox.

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.

**Diabetes Mortality Rates
U.S. and Selected Alabama Areas, 2003-2005**

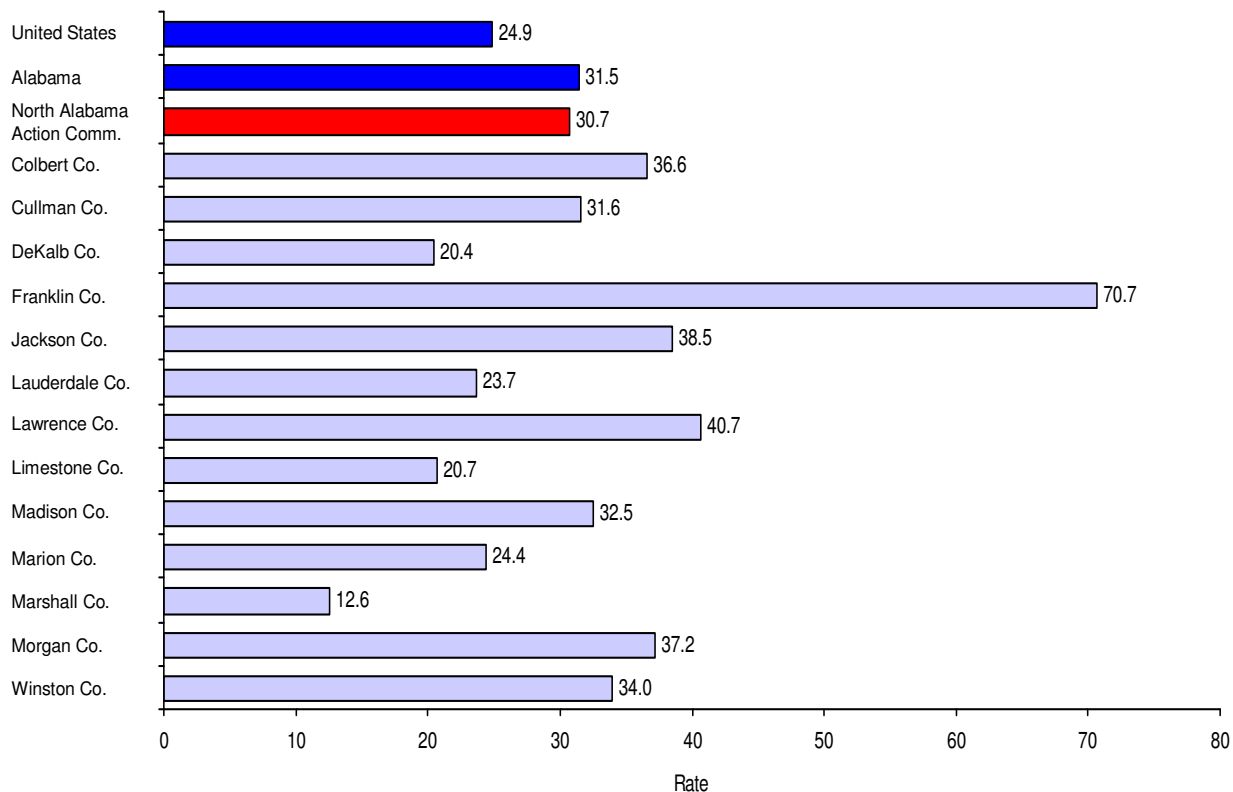


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Diabetes Mellitus Mortality and Mortality Rates
U.S. and Selected Alabama Areas, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
United States	Not Applicable	73,138	24.9
Alabama	Not Applicable	4,273	31.5
Rural Alabama Counties	Not Applicable	1,881	31.6
Highly Rural Alabama Counties	Not Applicable	1,154	33.4
Moderately Rural Alabama Counties	Not Applicable	727	29.0
Rural North Alabama Counties	Not Applicable	1,059	29.6
Rural South Alabama Counties	Not Applicable	822	34.6
Urban Alabama Counties	Not Applicable	2,392	31.5

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

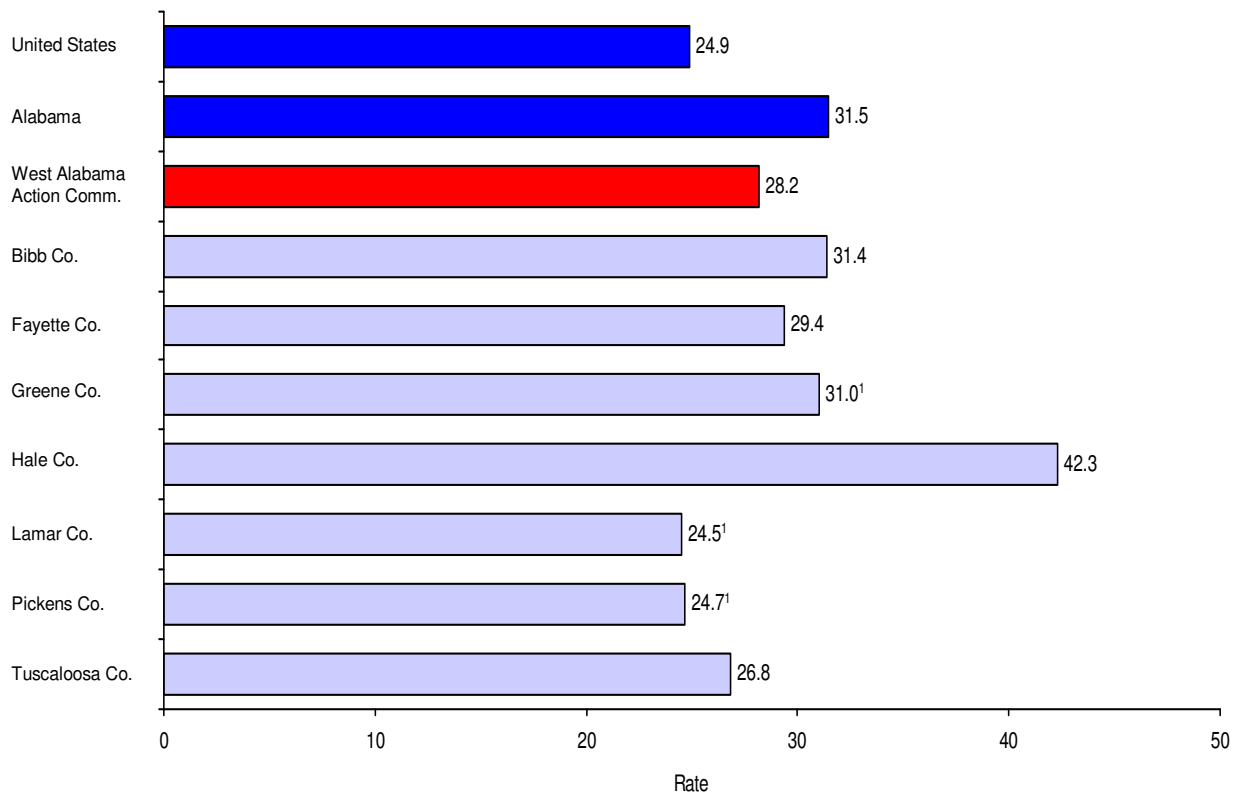


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Diabetes Mellitus Mortality and Mortality Rates
North Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
North Alabama Action Commission	Not Applicable	941	30.7
District's Rural Counties Combined	Not Applicable	467	29.5
District's Urban Counties Combined	Not Applicable	474	32.0
Colbert County	Yes	60	36.6
Cullman County	Yes	75	31.6
DeKalb County	Yes	41	20.4
Franklin County	Yes	65	70.7
Jackson County	Yes	62	38.5
Lauderdale County	No	62	23.7
Lawrence County	Yes	42	40.7
Limestone County	Yes	43	20.7
Madison County	No	286	32.5
Marion County	Yes	22	24.4
Marshall County	Yes	32	12.6
Morgan County	No	126	37.2
Winston County	Yes	25	34.0

**Diabetes 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.

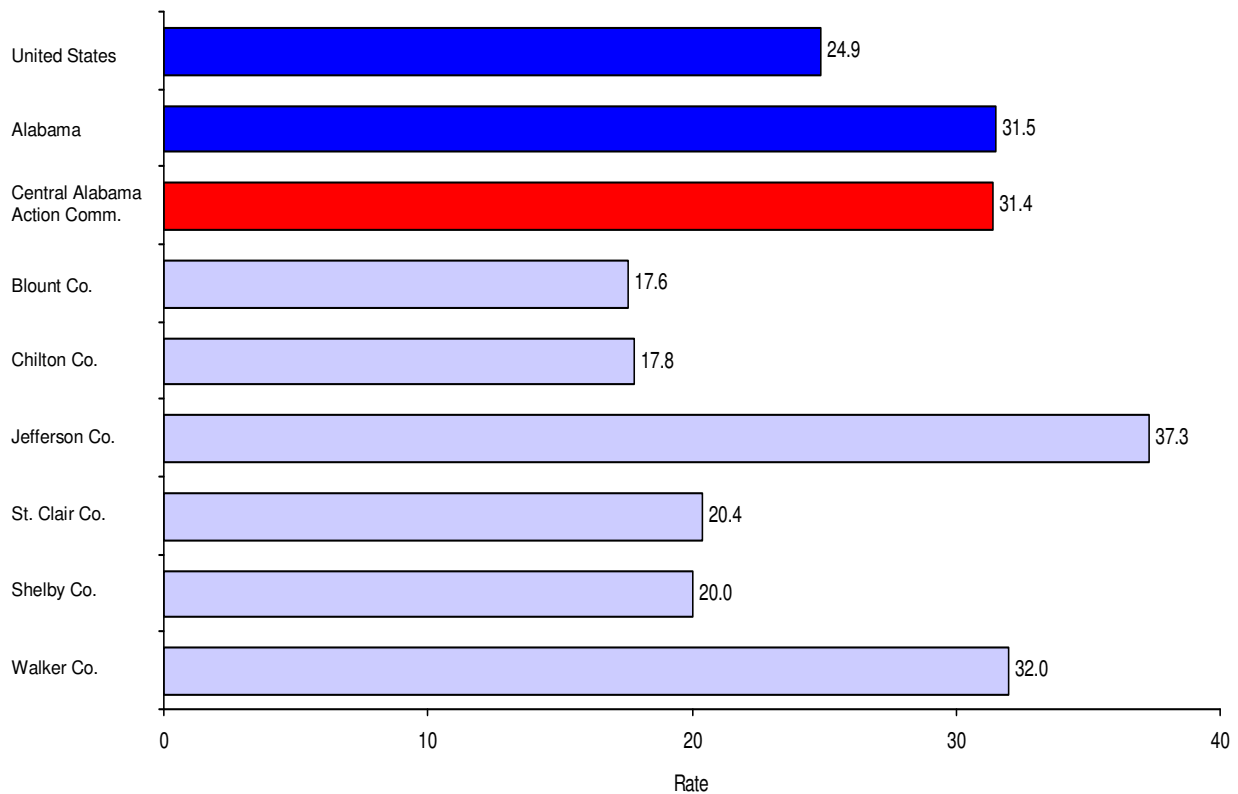
¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

**Diabetes Mellitus Mortality and Mortality Rates
West Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
West Alabama Action Commission	Not Applicable	228	28.2
District's Rural Counties Combined	Not Applicable	94	30.6
District's Urban Counties Combined	Not Applicable	134	26.8
Bibb County	Yes	20	31.4
Fayette County	Yes	16	29.4
Greene County	Yes	9	31.0 ¹
Hale County	Yes	23	42.3
Lamar County	Yes	11	24.5 ¹
Pickens County	Yes	15	24.7 ¹
Tuscaloosa County	No	134	26.8

¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

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

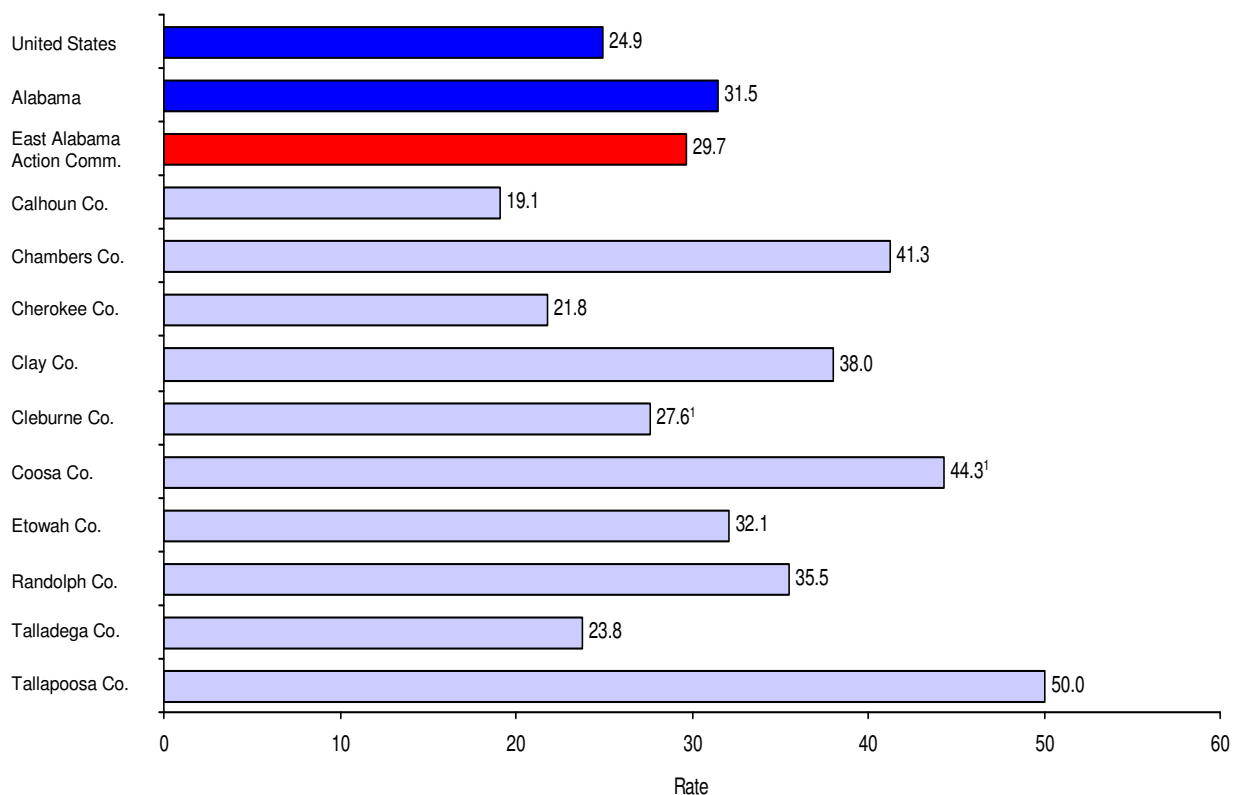


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Diabetes Mellitus Mortality and Mortality Rates
Central Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
Central Alabama Action Commission	Not Applicable	996	31.4
District's Rural Counties Combined	Not Applicable	161	22.7
District's Urban Counties Combined	Not Applicable	835	33.8
Blount County	Yes	29	17.6
Chilton County	Yes	22	17.8
Jefferson County	No	736	37.3
St. Clair County	Yes	43	20.4
Shelby County	No	99	20.0
Walker County	Yes	67	32.0

**Diabetes 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.

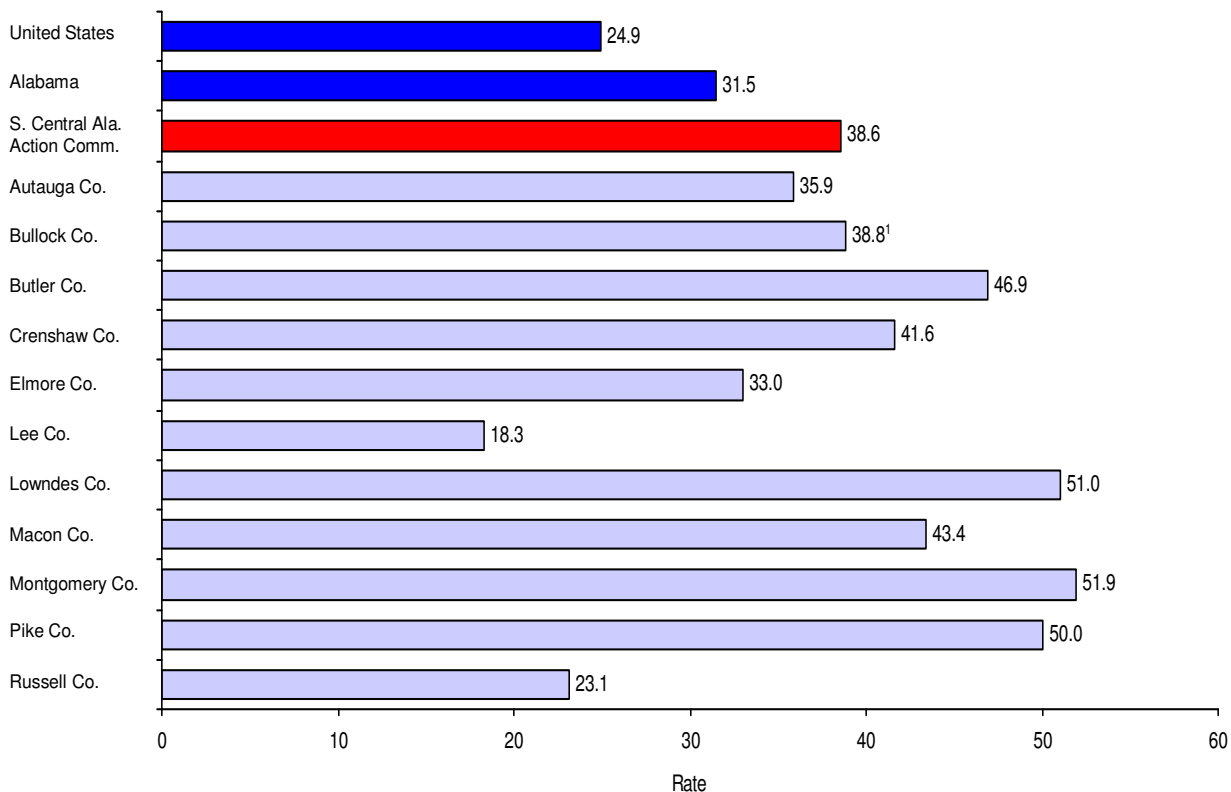
¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

**Diabetes Mellitus Mortality and Mortality Rates
East Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
East Alabama Action Commission	Not Applicable	408	29.7
District's Rural Counties Combined	Not Applicable	245	33.6
District's Urban Counties Combined	Not Applicable	163	25.3
Calhoun County	No	64	19.1
Chambers County	Yes	44	41.3
Cherokee County	Yes	16	21.8
Clay County	Yes	16	38.0
Cleburne County	Yes	12	27.6 ¹
Coosa County	Yes	15	44.3 ¹
Etowah County	No	99	32.1
Randolph County	Yes	24	35.5
Talladega County	Yes	57	23.8
Tallapoosa County	Yes	61	50.0

¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

**Diabetes 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.

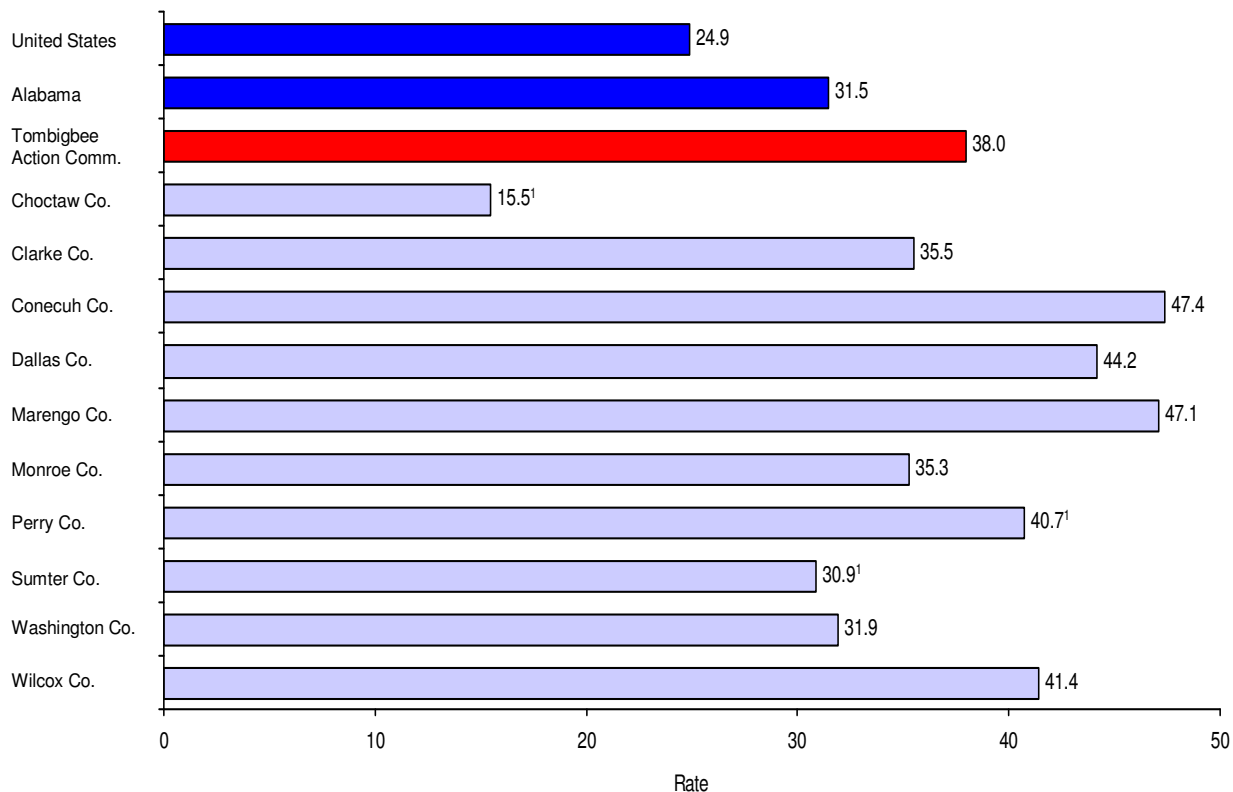
¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

**Diabetes Mellitus Mortality and Mortality Rates
South Central Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
South Central Alabama Action Commission	Not Applicable	719	38.6
District's Rural Counties Combined	Not Applicable	309	36.9
District's Urban Counties Combined	Not Applicable	410	40.0
Autauga County	Yes	51	35.9
Bullock County	Yes	13	38.8 ¹
Butler County	Yes	29	46.9
Crenshaw County	Yes	17	41.6
Elmore County	Yes	71	33.0
Lee County	No	66	18.3
Lowndes County	Yes	20	51.0
Macon County	Yes	30	43.4
Montgomery County	No	344	51.9
Pike County	Yes	44	50.0
Russell County	Yes	34	23.1

¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

**Diabetes 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.

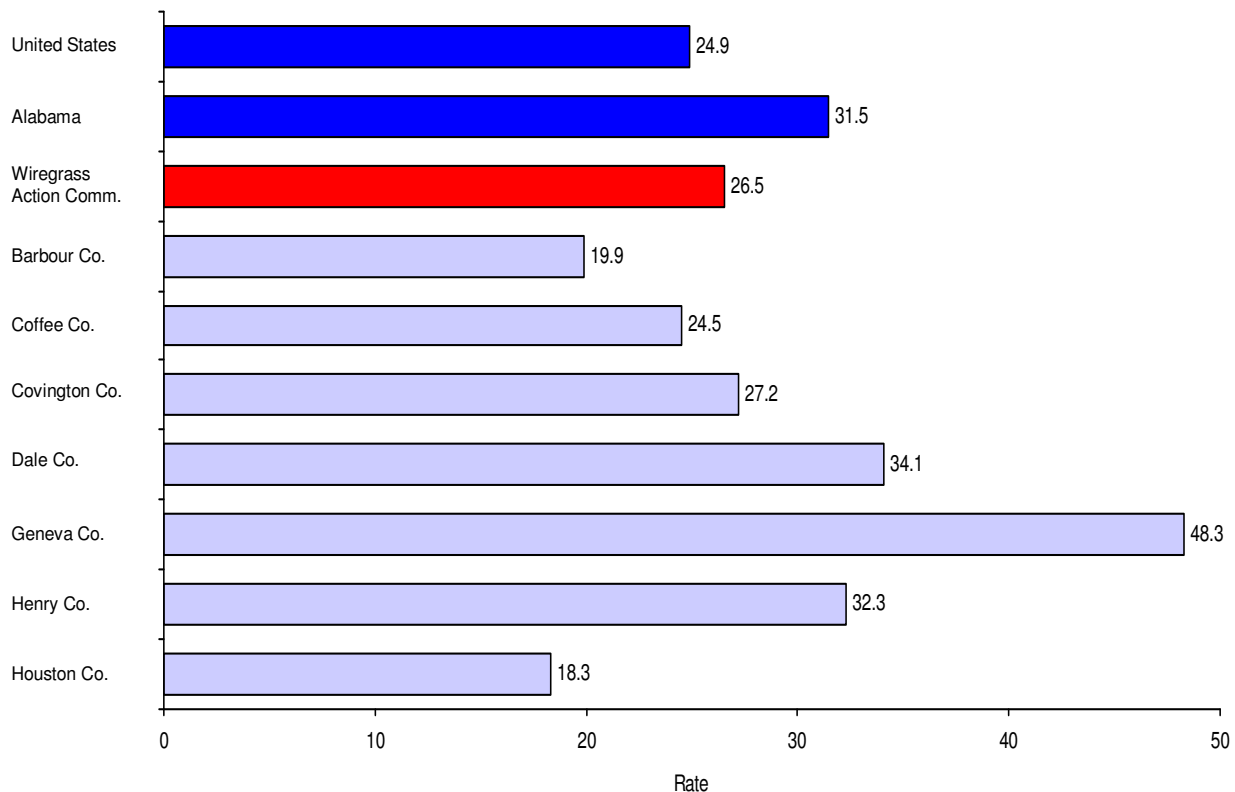
¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

**Diabetes Mellitus Mortality and Mortality Rates
Tombigbee Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
Tombigbee Action Commission	Not Applicable	230	38.0
District's Rural Counties Combined	Not Applicable	230	38.0
District's Urban Counties Combined	Not Applicable	No Urban Counties in District	
Choctaw County	Yes	7	15.5 ¹
Clarke County	Yes	29	35.5
Conecuh County	Yes	19	47.4
Dallas County	Yes	59	44.2
Marengo County	Yes	31	47.1
Monroe County	Yes	25	35.3
Perry County	Yes	14	40.7 ¹
Sumter County	Yes	13	30.9 ¹
Washington County	Yes	17	31.9
Wilcox County	Yes	16	41.4

¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

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

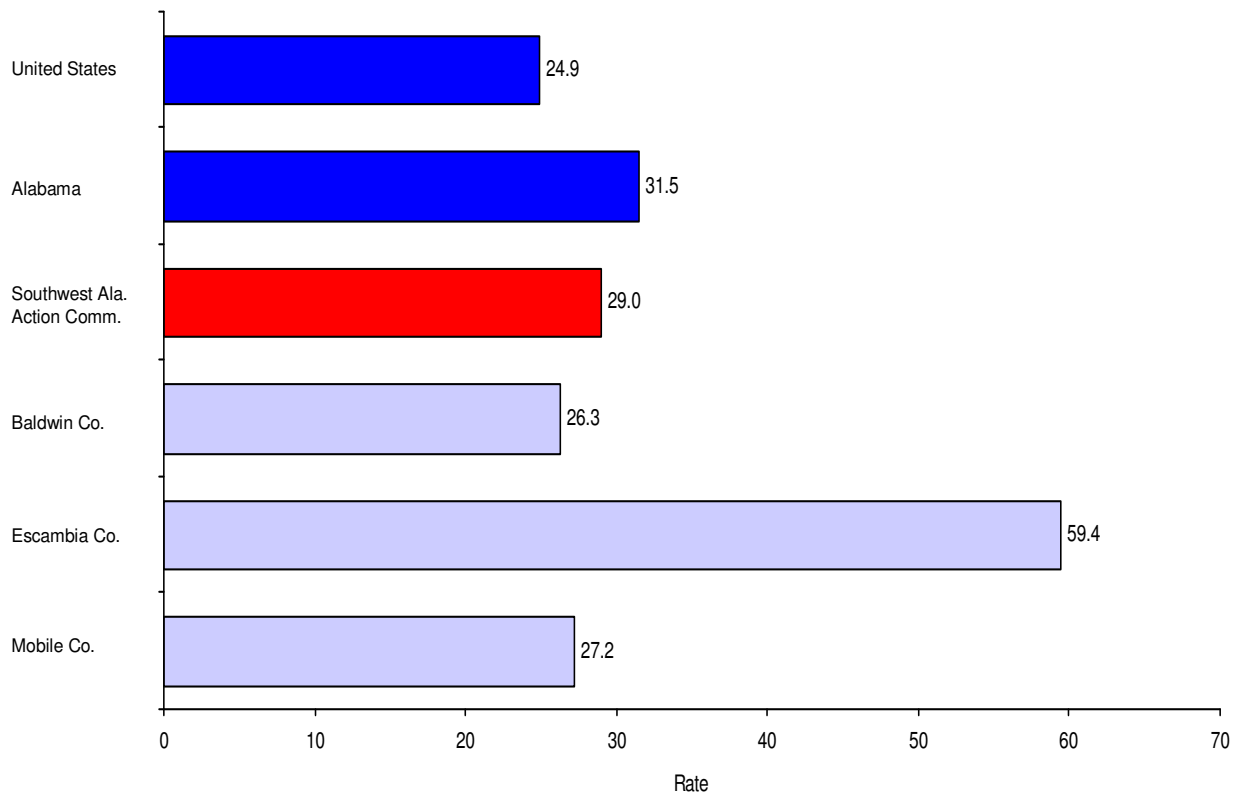


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Diabetes Mellitus Mortality and Mortality Rates
Wiregrass Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
Wiregrass Action Commission	Not Applicable	234	26.5
District's Rural Counties Combined	Not Applicable	183	30.3
District's Urban Counties Combined	Not Applicable	51	18.3
Barbour County	Yes	17	19.9
Coffee County	Yes	33	24.5
Covington County	Yes	30	27.2
Dale County	Yes	50	34.1
Geneva County	Yes	37	48.3
Henry County	Yes	16	32.3
Houston County	No	51	18.3

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

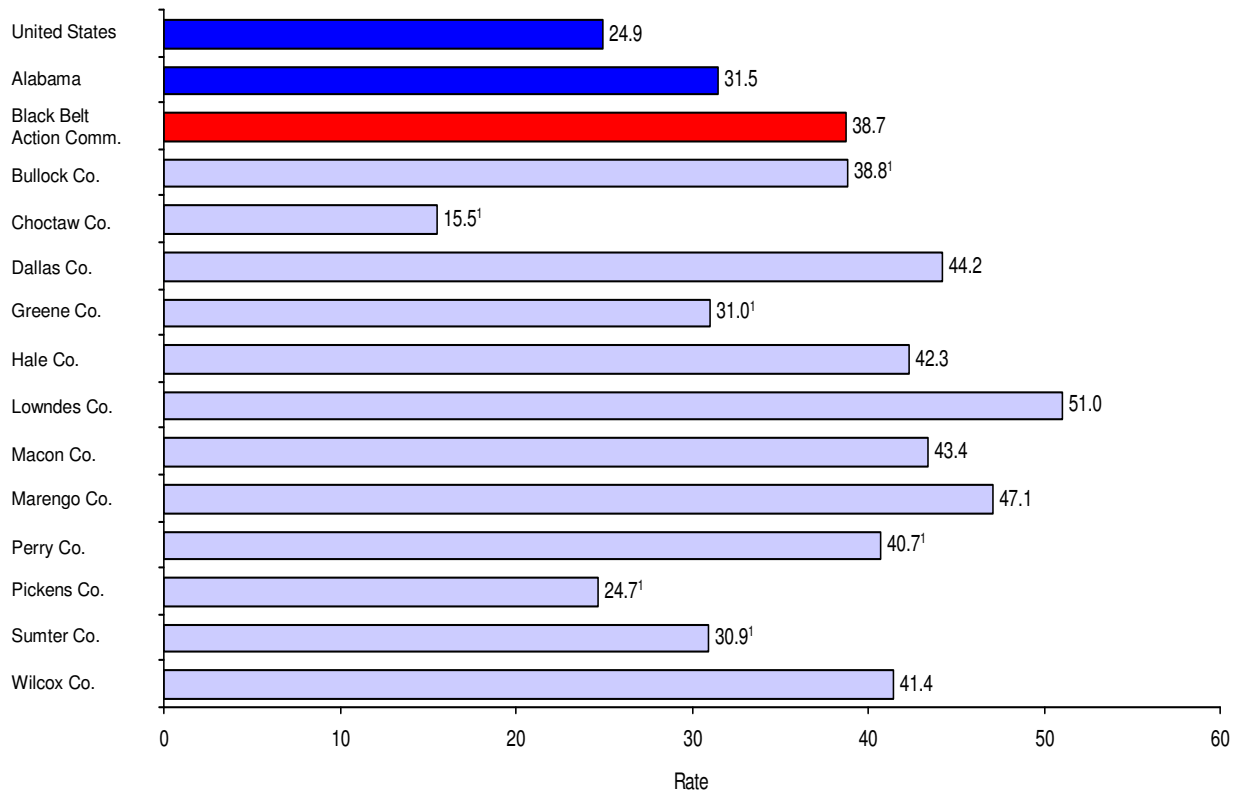


Notes: Data provided by the Center for Health Statistics, Alabama Department of Public Health and the National Center for Health Statistics, Centers for Disease Control and Prevention. U.S. rate is for 2004. Rates are per 100,000 population.

**Diabetes Mellitus Mortality and Mortality Rates
Southwest Alabama Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
Southwest Alabama Action Commission	Not Applicable	517	29.0
District's Rural Counties Combined	Not Applicable	192	32.8
District's Urban Counties Combined	Not Applicable	325	27.2
Baldwin County	Yes	124	26.3
Escambia County	Yes	68	59.4
Mobile County	No	325	27.2

**Diabetes 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.

¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

**Diabetes Mellitus Mortality and Mortality Rates
Black Belt Action Commission Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
Black Belt Action Commission	Not Applicable	250	38.7
District's Rural Counties Combined	Not Applicable	250	38.7
District's Urban Counties Combined	Not Applicable	No Urban Counties in District	
Bullock County	Yes	13	38.8 ¹
Choctaw County	Yes	7	15.5 ¹
Dallas County	Yes	59	44.2
Greene County	Yes	9	31.0 ¹
Hale County	Yes	23	42.3
Lowndes County	Yes	20	51.0
Macon County	Yes	30	43.4
Marengo County	Yes	31	47.1
Perry County	Yes	14	40.7 ¹
Pickens County	Yes	15	24.7 ¹
Sumter County	Yes	13	30.9 ¹
Wilcox County	Yes	16	41.4

¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

**Diabetes Mellitus Mortality and Mortality Rates
Alabama's Appalachian Region Counties, 2003 – 2005**

Area	Is County Rural?	Deaths	Rate Per 100,000
Alabama's Appalachian Region	Not Applicable	2,665	30.7
Region's Rural Counties Combined	Not Applicable	1,059	29.6
Region's Urban Counties Combined	Not Applicable	1,606	31.5
Bibb County	Yes	20	31.4
Blount County	Yes	29	17.6
Calhoun County	No	64	19.1
Chambers County	Yes	44	41.3
Cherokee County	Yes	16	21.8
Chilton County	Yes	22	17.8
Clay County	Yes	16	38.0
Cleburne County	Yes	12	27.6 ¹
Colbert County	Yes	60	36.6
Coosa County	Yes	15	44.3 ¹
Cullman County	Yes	75	31.6
DeKalb County	Yes	41	20.4
Elmore County	Yes	71	33.0
Etowah County	No	99	32.1
Fayette County	Yes	16	29.4
Franklin County	Yes	65	70.7
Hale County	Yes	23	42.3
Jackson County	Yes	62	38.5
Jefferson County	No	736	37.3
Lamar County	Yes	11	24.5 ¹
Lauderdale County	No	62	23.7
Lawrence County	Yes	42	40.7
Limestone County	Yes	43	20.7
Macon County	Yes	30	43.4
Madison County	No	286	32.5
Marion County	Yes	22	24.4
Marshall County	Yes	32	12.6
Morgan County	No	126	37.2
Pickens County	Yes	15	24.7 ¹
Randolph County	Yes	24	35.5
St. Clair County	Yes	43	20.4
Shelby County	No	99	20.0
Talladega County	Yes	57	23.8
Tallapoosa County	Yes	61	50.0
Tuscaloosa County	No	134	26.8
Walker County	Yes	67	32.0
Winston County	Yes	25	34.0

¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

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.

Diabetes Mellitus Mortality and Mortality Rates Alabama's Delta Region Counties, 2003 – 2005

Area	Is County Rural?	Deaths	Rate Per 100,000
Alabama's Delta Region	Not Applicable	488	37.5
Region's Rural Counties Combined	Not Applicable	488	37.5
Region's Urban Counties Combined	Not Applicable	No Urban Counties in Region	
Barbour County	Yes	17	19.9
Bullock County	Yes	13	38.8 ¹
Butler County	Yes	29	46.9
Choctaw County	Yes	7	15.5 ¹
Clarke County	Yes	29	35.5
Conecuh County	Yes	19	47.4
Dallas County	Yes	59	44.2
Escambia County	Yes	68	59.4
Greene County	Yes	9	31.0 ¹
Hale County	Yes	23	42.3
Lowndes County	Yes	20	51.0
Macon County	Yes	30	43.4
Marengo County	Yes	31	47.1
Monroe County	Yes	25	35.3
Perry County	Yes	14	40.7 ¹
Pickens County	Yes	15	24.7 ¹
Russell County	Yes	34	23.1
Sumter County	Yes	13	30.9 ¹
Washington County	Yes	17	31.9
Wilcox County	Yes	16	41.4

¹ Caution should be used in interpreting this rate due to the small number of deaths from this cause.

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)

**PERMISSION IS GRANTED TO DUPLICATE OR OTHERWISE USE ALL OR ANY PORTION OF
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.