# Meridian Area
# Community Health Needs Assessment

## 2015

ANDERSON
Regional Medical Center

SNODGRASS
RESEARCH
GROUP

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# Introduction

The Patient Protection and Affordable Care Act of 2010 (PPACA), requires all *not-for-profit* hospitals to conduct a Community Health Needs Assessment (CHNA) to fully assess the current health needs of their community. A CHNA is the starting point of an on-going process designed to improve community health through a more tailored mechanism of community benefit planning. Although the process of conducting a CHNA is flexible, there are some requirements. According to the IRS, the CHNA must include input from citizens representing the broad interests of the community served by the hospital, including, for example, community leaders, representatives or members of medically underserved populations—including low income and minority populations, as well as populations with chronic disease needs. The CHNA must also include information from experts in public health, such as state health department officials. For this CHNA, we enlisted the help of 29 residents of Lauderdale County to serve as key informants or focus group participants.

The results of a CHNA are to be used to develop an "Implementation Strategy" in which the hospital plans programs to target identified health needs. The resulting community programs are then to be carried out during the program implementation period, outcomes evaluated, and programs adjusted yearly, with repeated needs assessments, every third year.

To achieve the goals related to this assessment with an emphasis on objectivity, Snodgrass Research Group (SRG), an independent consulting firm, was contracted to conduct all aspects of the formal assessment process, including survey, analysis, and report writing. See Appendix A for further background and Qualifications.

# Project Goals

The primary goal of this project was to establish an ongoing, evidence-based process of identifying and prioritizing local community healthcare needs. The results of this assessment will establish the basis for planning appropriate community benefit programs to address these identified needs. Additionally, this information will be made widely available so as to better inform community leaders and citizens of the health-related challenges faced by this community.

Community Health Needs Assessments tend to vary substantially in their methods, scope, and depth. Guidelines stated in the Patient Protection and Affordable Care Act of 2010 and subsequent guidance issued by the IRS, require that the assessment include "input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of or expertise in public health." Best practices in health needs assessments generally include healthcare providers, patients/consumers, business leaders, as well as state and/or local health experts. To meet these guidelines, we employed several methods, both qualitative and quantitative.

- A secondary analysis of existing federal and state data (quantitative)
- Interviews with key informants representing the broad interests of the community, including experts in public health (qualitative)
- Two focus groups comprising individuals representing the most underserved and/or vulnerable population groups in this community (qualitative)
- A brief paper-based health needs survey specifically targeted at the underserved population (quantitative/qualitative)

## *Community Defined*

When assessing health needs of a community, the "community" must first be defined. Some hospitals may define their community in terms of groups of people or demographic categories served. A Women's hospital, for instance would be primarily concerned with health issues facing women, and would thus focus a needs assessment accordingly. Community is more typically defined as a geographic service area for which, in most cases, the greatest concentration of patients served is in the county in which the hospital is located.

Anderson Regional Medical Center (ARMC) is located in Meridian, the largest municipality in Lauderdale County, MS. For the purposes of this needs assessment, *Lauderdale County* will be considered the geographic "community" of focus. Meridian and Lauderdale County play host to a multitude of other healthcare service agencies (see Appendix B for listing), including two inpatient psychiatric hospitals, one Federally Qualified Community Health Center, one Community Mental Health Center, as well as several nursing homes, specialty clinics, and outpatient facilities. In fact, approximately 15% of the workforce in Lauderdale County is employed in the Health and Social Services sector, making Healthcare Services a very important economic engine for the region.

ARMC is a regional hospital that not only serves the county of Lauderdale but also several neighboring counties. These counties surrounding Lauderdale County have a range of healthcare service providers as well, including hospitals, clinics, etc. In most cases, these rural hospitals are conducting their own respective needs assessments and community benefit programs, thereby adding to the rationale for our focus on Lauderdale County as the primary "community" for ARMC.

## *Methods and Process*

As noted in the Project Goals, this assessment employed a multi-method approach that included a review of existing population health data (*secondary data analysis*) paired with interview and survey data from the community *(primary data analysis*). The initial step in this community based participatory research was to conduct "Key Informant" Interviews. Key informants are individuals who are heavily involved with and knowledgeable about the community of focus. This includes community leaders in the public and private sector, as well as individuals with special expertise in healthcare. Information gathered through these interviews, paired with public health information, vital statistics, and economic data provide a very good snapshot of the community's health needs. To further augment our understanding of the needs of the underserved, two focus groups were held for the specific purpose of gathering ideas about how to better serve those with the greatest health risk: low-income, elderly, minority, disabled, and children/youth populations. Additional primary data collection was conducted using a brief health needs survey given to every participant.

# Secondary Data

Secondary data is existing information gathered from reliable sources such as the Centers for Disease Control, Mississippi Department of Health, US Census Bureau, etc. Data gathered directly from the community as part of this study is considered "primary data" and is presented later in this report.

## *Demographics*

A demographic snapshot of Lauderdale County is presented below.

| People QuickFacts | Lauderdale County | Mississippi |
|---|---|---|
| Population, 2014 estimate | NA | 2,994,079 |
| Population, 2013 estimate | 80,254 | 2,992,206 |
| Population, 2010 (April 1) estimates base | 80,261 | 2,968,103 |
| Population, percent change - April 1, 2010 to July 1, 2014 | NA | 0.9% |
| Population, percent change - April 1, 2010 to July 1, 2013 | Z | 0.8% |
| Population, 2010 | 80,261 | 2,967,297 |
| Persons under 5 years, percent, 2013 | 6.4% | 6.6% |
| Persons under 18 years, percent, 2013 | 24.2% | 24.7% |
| Persons 65 years and over, percent, 2013 | 14.8% | 13.9% |
| Female persons, percent, 2013 | 51.5% | 51.4% |
|  |  |  |
| White alone, percent, 2013 (a) | 55.0% | 59.8% |
| Black or African American alone, percent, 2013 (a) | 42.9% | 37.4% |
| American Indian and Alaska Native alone, percent, 2013 (a) | 0.3% | 0.6% |
| Asian alone, percent, 2013 (a) | 0.9% | 1.0% |
| Native Hawaiian and Other Pacific Islander alone, percent, 2013 (a) | 0.1% | 0.1% |
| Two or More Races, percent, 2013 | 0.9% | 1.1% |
| Hispanic or Latino, percent, 2013 (b) | 2.0% | 2.9% |
| White alone, not Hispanic or Latino, percent, 2013 | 53.5% | 57.5% |
|  |  |  |

| | | |
|---|---|---|
| Living in same house 1 year & over, percent, 2009-2013 | 85.0% | 85.8% |
| Foreign born persons, percent, 2009-2013 | 1.8% | 2.2% |
| Language other than English spoken at home, pct age 5+, 2009-2013 | 3.1% | 3.9% |
| High school graduate or higher, percent of persons age 25+, 2009-2013 | 84.1% | 81.5% |
| Bachelor's degree or higher, percent of persons age 25+, 2009-2013 | 18.9% | 20.1% |
| Veterans, 2009-2013 | 6,565 | 200,748 |
| Mean travel time to work (minutes), workers age 16+, 2009-2013 | 20.6 | 23.9 |
| Housing units, 2013 | 34,726 | 1,283,165 |
| Homeownership rate, 2009-2013 | 66.1% | 69.4% |
| Housing units in multi-unit structures, percent, 2009-2013 | 17.7% | 13.9% |
| Median value of owner-occupied housing units, 2009-2013 | $87,400 | $99,900 |
| Households, 2009-2013 | 29,809 | 1,088,073 |
| Persons per household, 2009-2013 | 2.56 | 2.65 |
| Per capita money income in past 12 months (2013 dollars), 2009-2013 | $21,346 | $20,618 |
| Median household income, 2009-2013 | $36,203 | $39,031 |
| Persons below poverty level, percent, 2009-2013 | 24.1% | 22.7% |
| | | |
| Business QuickFacts | Lauderdale County | Mississippi |
| Private nonfarm establishments, 2012 | 1,975 | 58,644 |
| Private nonfarm employment, 2012 | 30,438 | 895,804 |
| Private nonfarm employment, percent change, 2011-2012 | 0.4% | 0.9% |
| Nonemployer establishments, 2012 | 4,691 | 199,777 |
| | | |
| Total number of firms, 2007 | 6,323 | 225,977 |
| Black-owned firms, percent, 2007 | 19.0% | 18.0% |

| | | |
|---|---|---|
| American Indian- and Alaska Native-owned firms, percent, 2007 | F | 0.3% |
| Asian-owned firms, percent, 2007 | S | 1.8% |
| Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007 | F | 0.0% |
| Hispanic-owned firms, percent, 2007 | F | 0.8% |
| Women-owned firms, percent, 2007 | 26.2% | 26.9% |
| Manufacturers' shipments, 2007 ($1000) | 750,921 | 59,869,456 |
| Merchant wholesaler sales, 2007 ($1000) | 1,127,560 | 23,003,585 |
| Retail sales, 2007 ($1000) | 1,320,584 | 33,751,407 |
| Retail sales per capita, 2007 | $16,936 | $11,552 |
| Accommodation and food services sales, 2007 ($1000) | 135,846 | 7,045,097 |
| Building permits, 2013 | 118 | 6,799 |
| Geography QuickFacts | Lauderdale County | Mississippi |
| Land area in square miles, 2010 | 703.63 | 46,923.27 |
| Persons per square mile, 2010 | 114.1 | 63.2 |
| FIPS Code | 75 | 28 |
| Metropolitan or Micropolitan Statistical Area | Meridian, MS | Micro Area |
| Notes | | |
| (a) Includes persons reporting only one race. | | |
| (b) Hispanics may be of any race, so also are included in applicable race categories. | | |
| FN: Footnote on this item for this area in place of data | | |
| NA: Not available | | |
| D: Suppressed to avoid disclosure of confidential information | | |
| X: Not applicable | | |
| S: Suppressed; does not meet publication standards | | |
| Z: Value greater than zero but less than half unit of measure shown shown | | |

| | |
|---|---|
| F: Fewer than 100 firms    Source: US Census Bureau State & County QuickFacts | |

## Health Indicators*

Includes health related Demographic, Social & Economic Factors, Clinical Care factors, Health Behaviors, and Health Outcomes for Lauderdale County.

### *Demographics*

Current population demographics and changes in demographic composition over time play a determining role in the types of health and social services needed by communities.

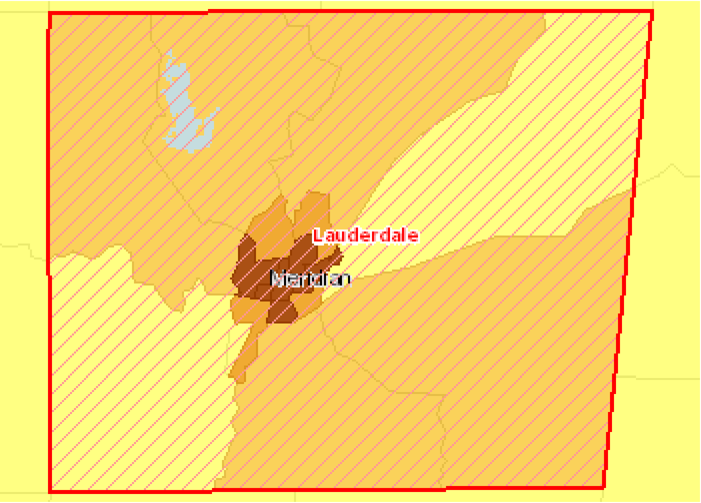
#### Total Population

A total of 80,204 people live in the 703.45 square mile report area defined for this assessment according to the U.S. Census Bureau American Community Survey 2008-12 5-year estimates. The population density for this area, estimated at 114.02 persons per square mile, is greater than the national average population density of 87.55 persons per square mile.

| Report Area | Total Population | Total Land Area (Square Miles) | Population Density (Per Square Mile) |
|---|---|---|---|
| Lauderdale County, MS | 80,204 | 703.45 | 114.02 |
| Mississippi | 2,967,620 | 46,910.9 | 63.26 |
| United States | 309,138,709 | 3,530,997.6 | 87.55 |

*Data Source: US Census Bureau, American Community Survey.2008-2012 Source geography: Tract*

* Courtesy: Community Commons, http://www.communitycommons.org



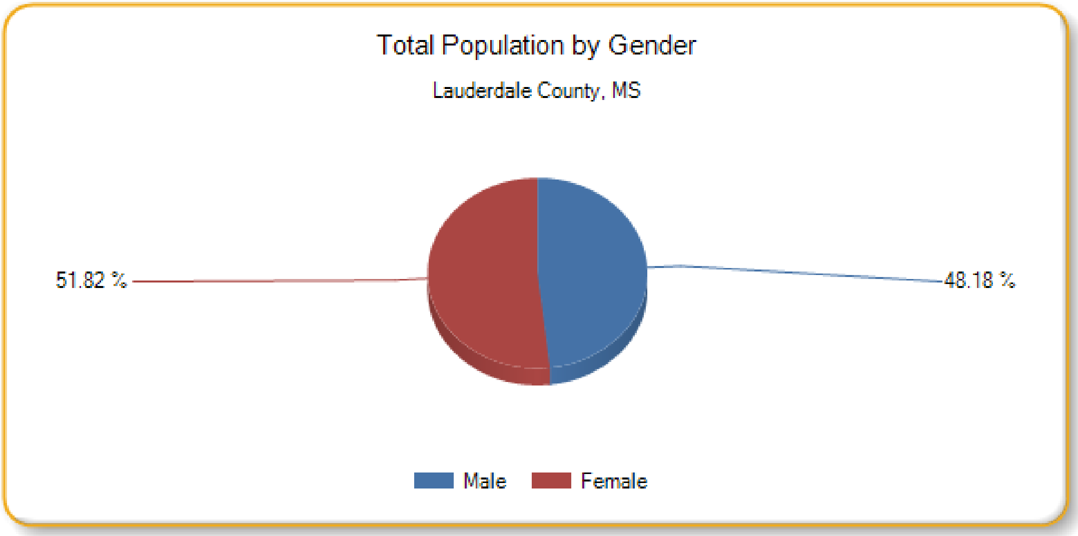
**Population, Density (Persons per Sq Mile) by Tract, ACS 2008-12**

- ■ Over 5,000
- ■ 1,001 - 5,000
- ■ 501 - 1,000
- ■ 51 - 500
- □ Under 51
- ■ No Data or Data Suppressed

▨ Report Area

## Total Population by Gender

| Report Area | Male | Female | Percent Male | Percent Female |
|---|---|---|---|---|
| Lauderdale County, MS | 38,646 | 41,558 | 48.18% | 51.82% |
| Mississippi | 1,439,787 | 1,527,833 | 48.52% | 51.48% |
| United States | 152,018,800 | 157,119,904 | 49.17% | 50.83% |

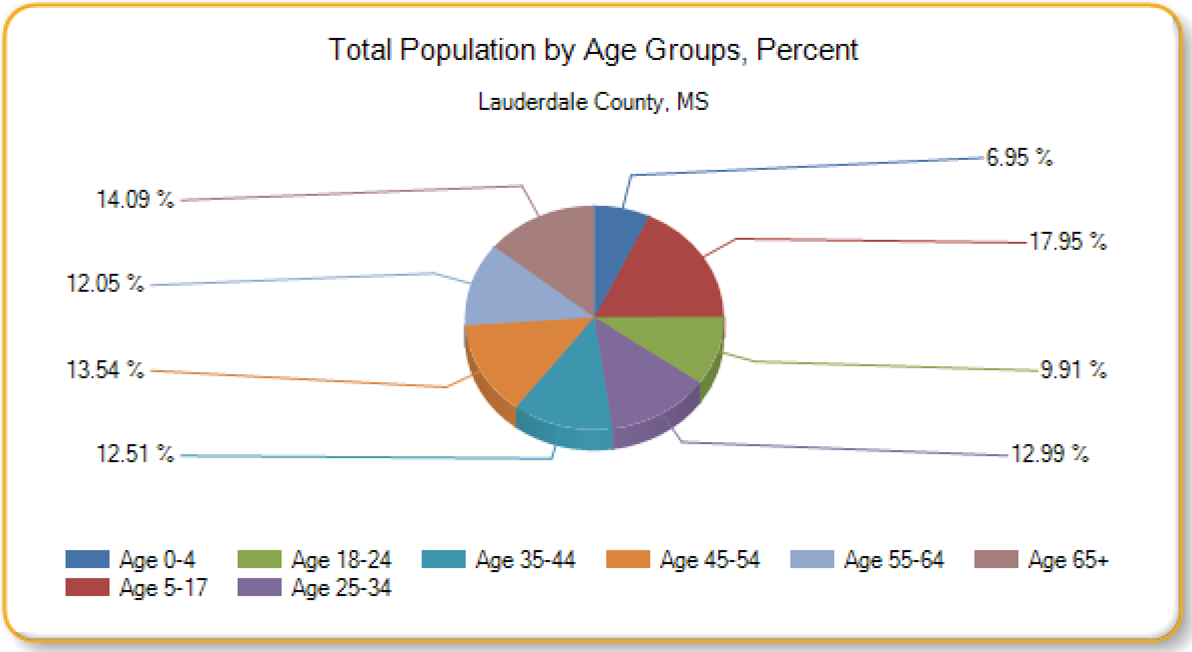


### Total Population by Age Groups, Total

| Report Area | Age 0-4 | Age 5-17 | Age 18-24 | Age 25-34 | Age 35-44 | Age 45-54 | Age 55-64 | Age 65 |
|---|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 5,572 | 14,400 | 7,950 | 10,418 | 10,035 | 10,858 | 9,667 | 11,304 |
| Mississippi | 208,315 | 545,155 | 309,301 | 383,389 | 376,644 | 412,142 | 348,833 | 383,841 |
| United States | 20,137,884 | 53,841,976 | 30,822,834 | 41,184,288 | 41,227,504 | 44,646,976 | 36,605,800 | 40,671,440 |

## Total Population by Age Groups, Percent

| Report Area | Age 0-4 | Age 5-17 | Age 18-24 | Age 25-34 | Age 35-44 | Age 45-54 | Age 55-64 | Age 65 |
|---|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 6.95% | 17.95% | 9.91% | 12.99% | 12.51% | 13.54% | 12.05% | 14.09% |
| Mississippi | 7.02% | 18.37% | 10.42% | 12.92% | 12.69% | 13.89% | 11.75% | 12.93% |
| United States | 6.51% | 17.42% | 9.97% | 13.32% | 13.34% | 14.44% | 11.84% | 13.16% |

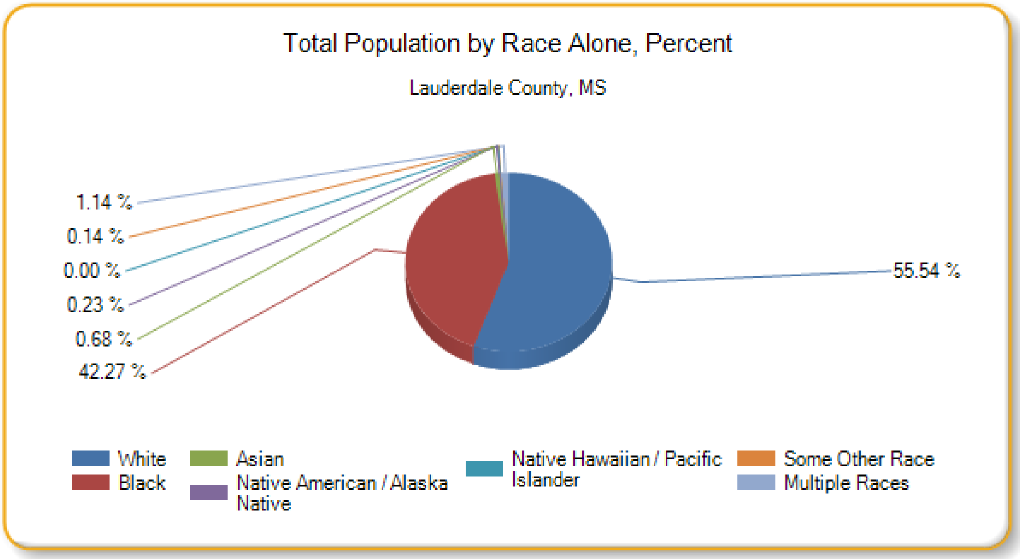


## Total Population by Race Alone, Total

| Report Area | White | Black | Asian | Native American / Alaska Native | Native Hawaiian / Pacific Islander | Some Other Race | Multiple Races |
|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 44,540 | 33,906 | 543 | 186 | 0 | 111 | 918 |
| Mississippi | 1,768,530 | 1,101,849 | 26,403 | 13,344 | 345 | 23,653 | 33,496 |
| United States | 229,298,912 | 38,825,848 | 14,859,795 | 2,529,100 | 514,402 | 14,814,369 | 8,296,291 |

## Total Population by Race Alone, Percent

| Report Area | White | Black | Asian | Native American / Alaska Native | Native Hawaiian / Pacific Islander | Some Other Race | Multiple Races |
|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 55.53% | 42.27% | 0.68% | 0.23% | 0% | 0.14% | 1.14% |
| Mississippi | 59.59% | 37.13% | 0.89% | 0.45% | 0.01% | 0.8% | 1.13% |
| United States | 74.17% | 12.56% | 4.81% | 0.82% | 0.17% | 4.79% | 2.68% |



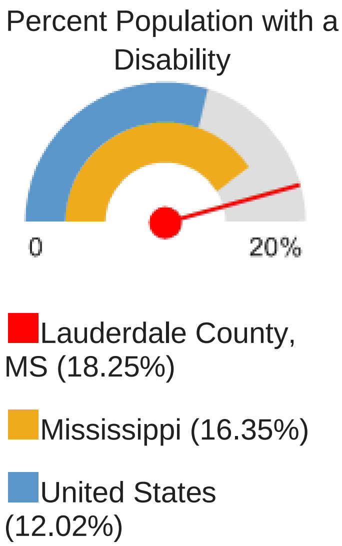
### Population with Any Disability

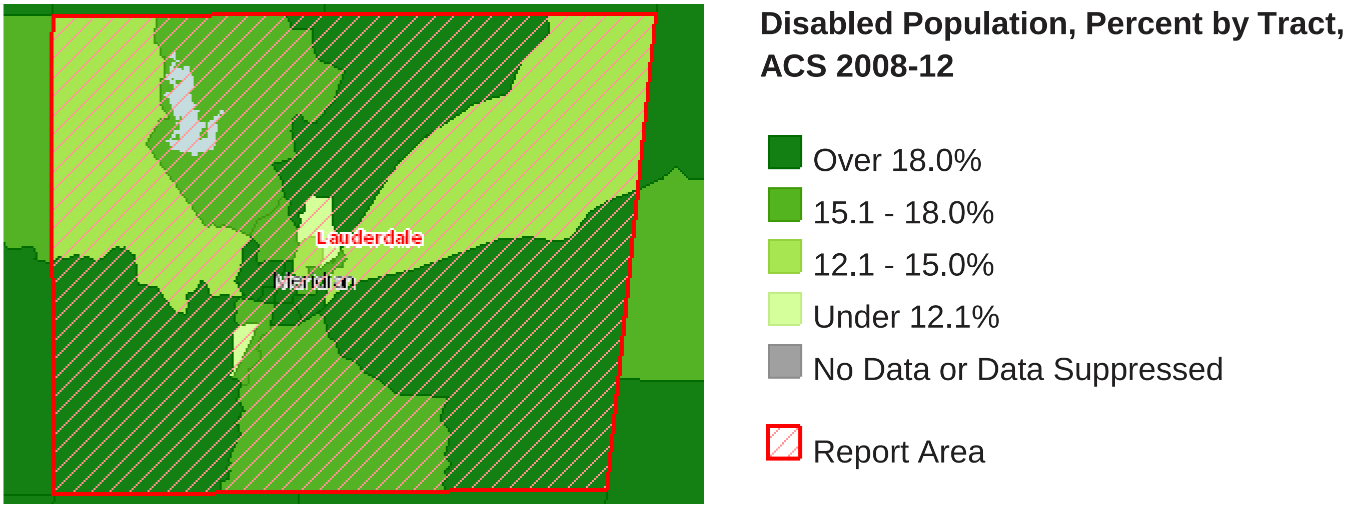
This indicator reports the percentage of the total civilian noninstitutionalized population with a disability. This indicator is relevant because disabled individuals comprise a vulnerable population that requires targeted services and outreach by providers.

| Report Area | Total Population (For Whom Disability Status Is Determined) | Total Population with a Disability | Percent Population with a Disability |
|---|---:|---:|---:|
| Lauderdale County, MS | 76,187 | 13,904 | 18.25% |
| Mississippi | 2,898,487 | 473,844 | 16.35% |
| United States | 303,984,256 | 36,551,036 | 12.02% |

*Note: This indicator is compared with the state average.*

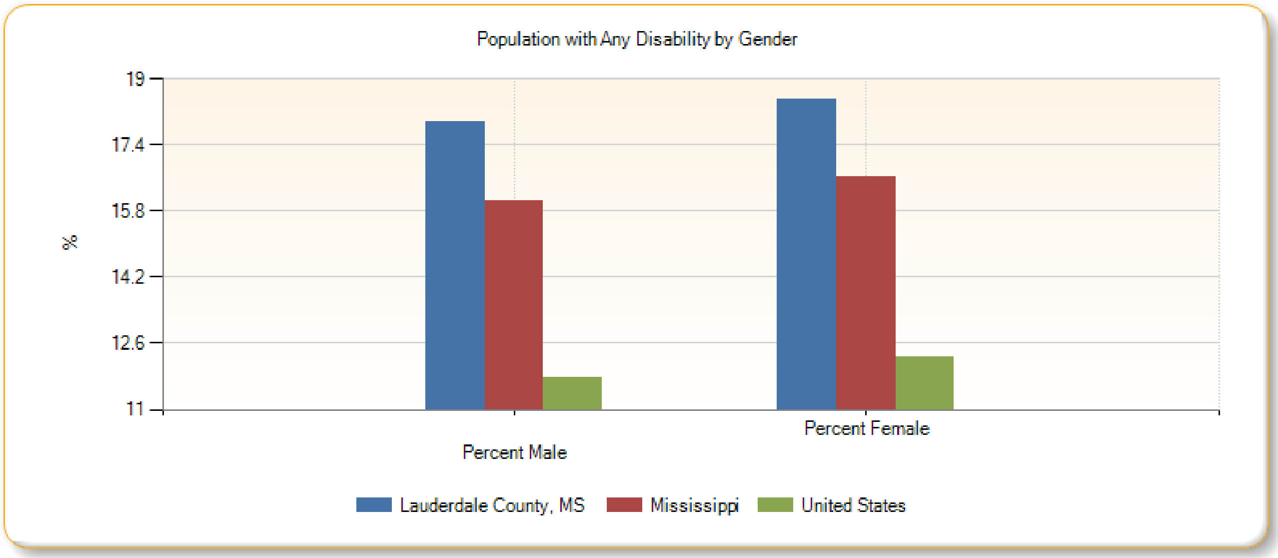
*Data Source: US Census Bureau, American Community Survey. Source geography: Tract*




**Disabled Population, Percent by Tract, ACS 2008-12**

## Population with Any Disability by Gender

| Report Area | Total Male | Total Female | Percent Male | Percent Female |
|---|---|---|---|---|
| Lauderdale County, MS | 6,357 | 7,547 | 17.96% | 18.5% |
| Mississippi | 222,531 | 251,313 | 16.04% | 16.63% |
| United States | 17,460,136 | 19,090,904 | 11.77% | 12.26% |

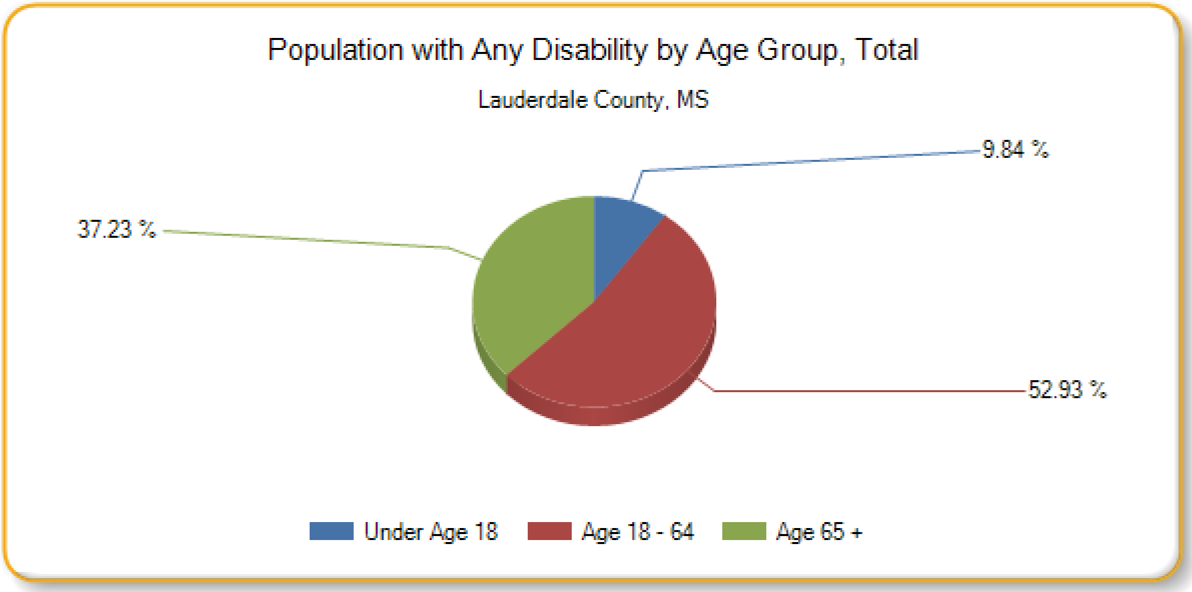


## Population with Any Disability by Age Group, Percent

| Report Area | Under Age 18 | Age 18 - 64 | Age 65 |
|---|---|---|---|
| Lauderdale County, MS | 6.86% | 16.17% | 48.23% |
| Mississippi | 4.87% | 15% | 46.13% |
| United States | 4% | 10.03% | 36.76% |

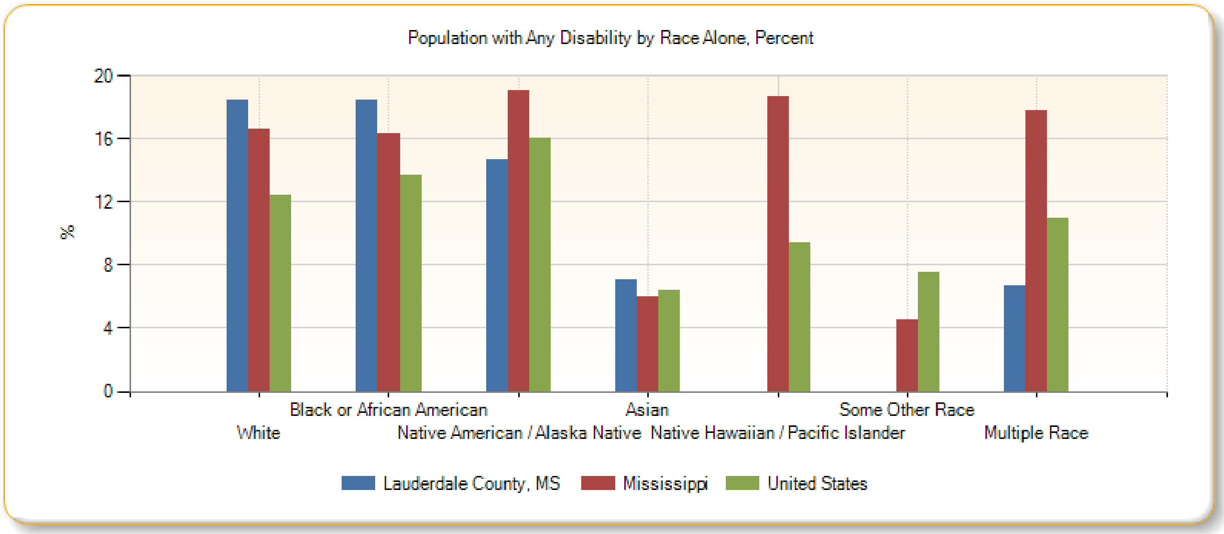
## Population with Any Disability by Age Group, Total

| Report Area | Under Age 18 | Age 18 - 64 | Age 65 |
|---|---|---|---|
| Lauderdale County, MS | 1,368 | 7,360 | 5,176 |
| Mississippi | 36,554 | 266,582 | 170,708 |
| United States | 2,952,899 | 19,128,854 | 14,469,285 |



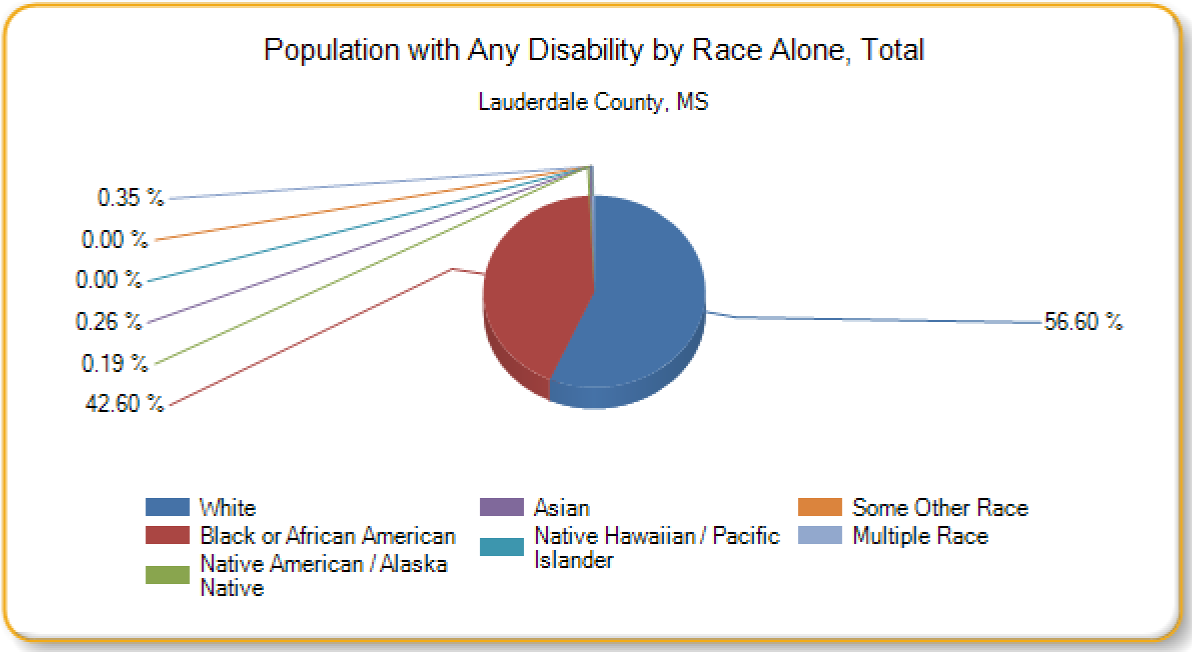
## Population with Any Disability by Race Alone, Percent

| Report Area | White | Black or African American | Native American / Alaska Native | Asian | Native Hawaiian / Pacific Islander | Some Other Race | Multiple Race |
|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 18.5% | 18.43% | 14.67% | 7.09% | no data | 0% | 6.72% |
| Mississippi | 16.65% | 16.28% | 19.02% | 5.95% | 18.62% | 4.52% | 17.78% |
| United States | 12.4% | 13.73% | 16.01% | 6.36% | 9.37% | 7.56% | 10.98% |



## Population with Any Disability by Race Alone, Total

| Report Area | White | Black or African American | Native American / Alaska Native | Asian | Native Hawaiian / Pacific Islander | Some Other Race | Multiple Race |
|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 7,869 | 5,923 | 27 | 36 | 0 | 0 | 49 |
| Mississippi | 288,555 | 174,431 | 2,487 | 1,536 | 62 | 990 | 5,783 |
| United States | 28,023,170 | 5,147,406 | 394,800 | 939,425 | 46,921 | 1,104,178 | 895,138 |



## *Social & Economic Factors*

Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community.

### Social & Economic Factors- Data Preview

- Children in Poverty – 37%
- On time High School Graduation Rate – 65%
- Income Per Capita - $21,261
- Lack of Social or Emotional Support – 22.5%
- Population in Poverty - 100% FPL 23.4%
- Population in Poverty - 200% FPL  45.75%
- Population Receiving Medicaid - 29%
- Population Receiving SNAP Benefits – 18%
- Population with No High School Diploma – 17%
- Teen Births - 58/1000 pop
- Unemployment Rate – 7.2%
- Uninsured Population – Total - 14%

## Poverty and "Quality Adjusted Life Years" lost:

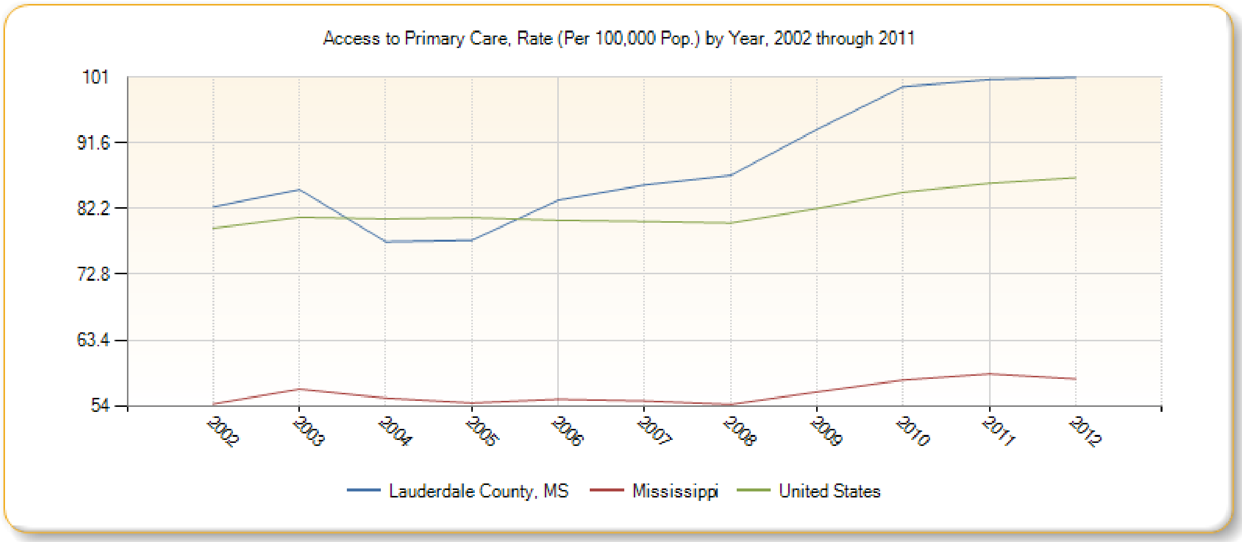
Beyond mortality rates, researchers also use lowered quality of life due to health problems as a factor to consider when prioritizing need. "Quality Adjusted Life Years" are the number of years lived with no significantly debilitating health problems. When data show individuals suffering from debilitation across a number of dimensions such as "problems walking about," "persistent pain," or "inability to care for self" each year of life is reduced statistically to account for the level of debilitation. Thus, a year living with no health problems is considered numerically as 1, a year with mild debilitation may be calculated as .7, moderate debilitation, .5, severe debilitation .3, and so on. Death is considered 0. Overall averages are computed for the population, with the most severe cases receiving negative scores (e.g., a patient who is completely bed ridden, in severe pain, and mental distress). In the final analysis, the resulting Quality of Life Years lost are statistically accounted for by a number a factors, including Weight, Smoking, Income, and Disease.

In Mississippi, according to Jia and Lubetkin (2009), *Income* was found to be the most significant contributor of lowered quality of life due to poor health. While poverty itself does not directly cause poor health, it is perhaps the most important mediating variable affecting personal health related behaviors as well as access to care.

| | Percent of explainable "Quality Adjusted Life Years" lost: attributed to | | | |
|---|---|---|---|---|
| | Weight | Smoking | Income | Diseases (asthma, diabetes, hypertension, heart disease, or stroke) |
| USA | 10.6 | 8.5 | 29.6 | 15.2 |
| Mississippi | 10.4 | 8.7 | 34.6 | 21.7 |

Source: Jia, H. and Lubetkin, E. (2009) The statewide burden of obesity, smoking, low income and chronic diseases in the United States. *Journal of Public Health 31 (4): 496-505.*

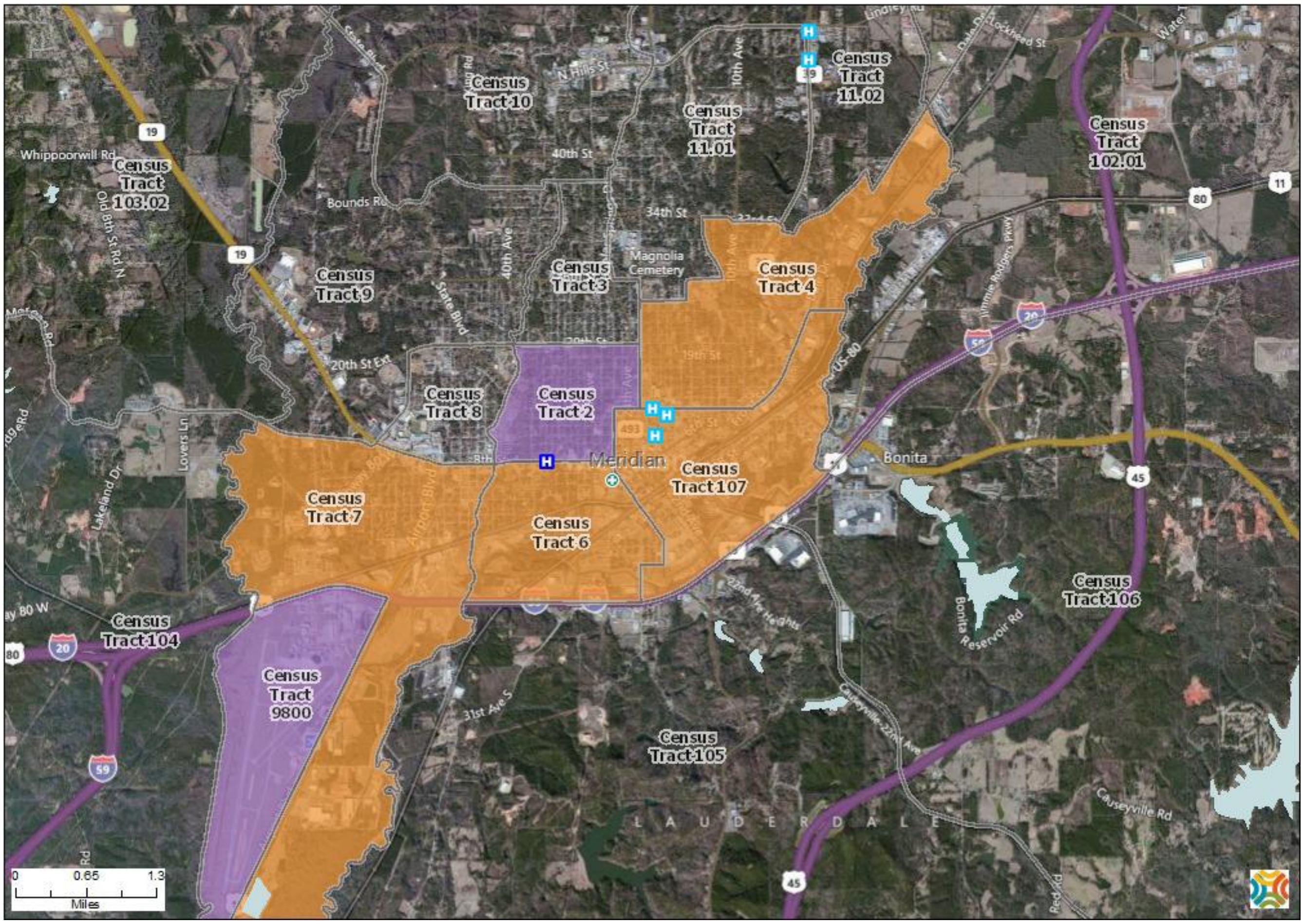
In terms of number of primary care providers available, access to primary care in Lauderdale County is above average (see chart below), yet it is likely that a substantial portion of those lacking financial resources remain underserved.



Access to Primary Care, Rate (Per 100,000 Pop.) by Year, 2002 through 2011
101
91.6
82.2
72.8
63.4
54
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Lauderdale County, MS
Mississippi
United States

## Community Map: Poverty and Lack of Education by Census Tract

Given the importance of Poverty as a recognized determinant of health, we have mapped, by census tract, the most impoverished areas in Lauderdale County. These areas are recognized as priority target zones for community benefit programs. The map below indicates areas of the community where the population is considered most vulnerable to health problems.



Vulnerable Populations, Data Source: *American Community Survey* 2008-2012

🟧 35% or greater below poverty level

🟪 35% or more with less than High School degree

*Source: Community Commons*

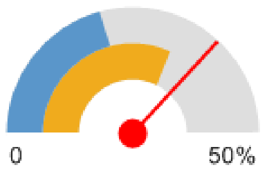
## Children in Poverty

This indicator reports the percentage of children aged 0-17 living in households with income below the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

| Report Area | Total Population | Population Under Age 18 | Population Under Age 18 in Poverty | Percent Population Under Age 18 in Poverty |
|---|---:|---:|---:|---:|
| Lauderdale County, MS | 76,072 | 19,649 | 7,243 | 36.86% |
| Mississippi | 2,872,106 | 741,450 | 236,967 | 31.96% |
| United States | 301,333,408 | 72,869,120 | 15,188,844 | 20.84% |

*Note: This indicator is compared with the state average. Data Source: US Census Bureau, American Community Survey. 2008-2012 Source geography: Tract*

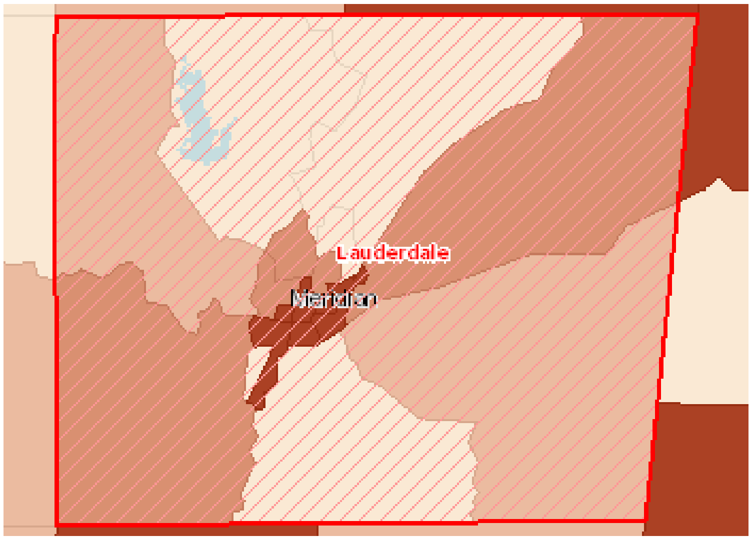
**Percent Population Under Age 18 in Poverty**



🟥 Lauderdale County, MS (36.86%)

🟨 Mississippi (31.96%)

🟦 United States (20.84%)



**Population Below the Poverty Level, Children (Age 0-17), Percent by Tract, ACS 2008-12**

■ Over 30.0%

■ 22.6 - 30.0%

■ 15.1 - 22.5%

■ Under 15.1%

□ No Population Age 0-17

## On-Time High School Graduation Rate (NCES)

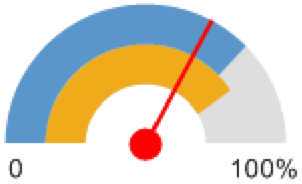
In Lauderdale County, 65.5% of students are receiving their high school diploma within four years. Although this is slightly higher than the overall rate for Mississippi (62%), it is less than US graduation rate of 75.5% and the Healthy People 2020 target of 82.4%. This indicator is relevant because research suggests education is one the strongest predictors of health.

Ref: Freudenberg N., Ruglis J. (2007) Reframing school dropout as a public health issue. Preventing Chronic Disease;4(4). http://www.cdc.gov/pcd/issues/2007/oct/07_0063.htm. Accessed [*Jan, 2015*].

| Report Area | Average Freshman Base Enrollment | Estimated Number of Diplomas Issued | On-Time Graduation Rate |
|---|---|---|---|
| Lauderdale County, MS | 985 | 645 | 65.5% |
| Mississippi | 39,536 | 24,505 | 62% |
| United States | 4,024,345 | 3,039,015 | 75.5% |
| HP 2020 Target | | | >=82.4% |

*Note: This indicator is compared with the Healthy People 2020 Target.Data Source: National Center for Education Statistics, NCES - Common Core of Data. Source geography: County*

**On-Time Graduation Rate**



🟥Lauderderdale Co, MS (65.5%)

🟧HP 2020 Target (82.4%)

🟦United States (75.5%)

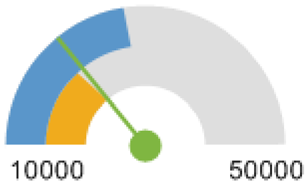
### Income Per Capita

The per capita income for the report area is $21,261. This includes all reported income from wages and salaries as well as income from self-employment, interest or dividends, public assistance, retirement, and other sources. The per capita income in this report area is the average (mean) income computed for every man, woman, and child in the specified area.

| Report Area | Total Population | Total Income ($) | Per Capita Income ($) |
|---|---|---|---|
| Lauderdale County, MS | 80,204 | $1,705,266,048 | $21,261 |
| Mississippi | 2,967,620 | $61,341,868,032 | $20,670 |
| United States | 309,138,720 | $8,671,497,551,872 | $28,050 |

*Note: This indicator is compared with the state average. Data Source: US Census Bureau, American Community Survey. 2008-2012 Source geography: Tract*

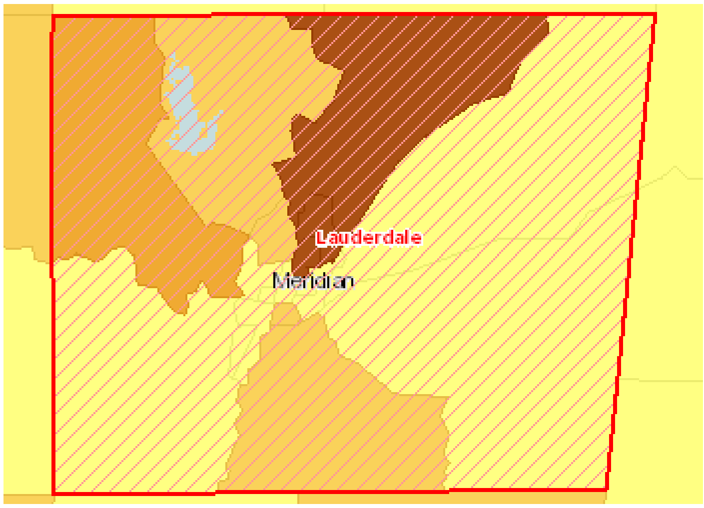
**Per Capita Income ($)**



🟩Lauderdale County, MS (21,261)

🟧Mississippi (20,670)

🟦United States (28,050)



**Per Capita Income by Tract, ACS 2008-12**

🟫 Over 30,000

🟧 25,001 - 30,000

🟨 20,001 - 25,000

🟨 Under 20,001

⬜ No Data or Data Suppressed

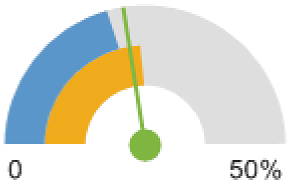
▨ Report Area

## Lack of Social or Emotional Support

This indicator reports the percentage of adults aged 18 and older who self-report that they receive insufficient social and emotional support all or most of the time. This indicator is relevant because social and emotional support is critical for navigating the challenges of daily life as well as for good mental health. Social and emotional support is also linked to educational achievement and economic stability.

| Report Area | Total Population Age 18+ | Estimated Population Without Adequate Social / Emotional Support | Crude Percentage | Age-Adjusted Percentage |
|---|---|---|---|---|
| Lauderdale County, MS | 59,832 | 13,402 | 22.4% | 22.5% |
| Mississippi | 2,199,741 | 536,737 | 24.4% | 24.4% |
| United States | 232,556,016 | 48,104,656 | 20.69% | 20.68% |

**Percent Adults Without Adequate Social / Emotional Support (Age-Adjusted)**



🟩 Lauderdale County, MS (22.5%)

🟧 Mississippi (24.4%)

🟦 United States (20.68%)

*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. Source geography: County*

## Population in Poverty - 100% FPL

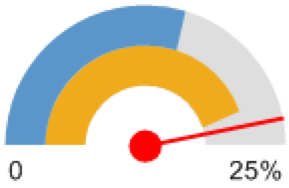
Poverty is considered a *key driver* of health status.

Within the report area 23.39% or 17,797 individuals are living in households with income below the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

| Report Area | Total Population | Population in Poverty | Percent Population in Poverty |
|---|---|---|---|
| Lauderdale County, MS | 76,072 | 17,797 | 23.39% |
| Mississippi | 2,872,106 | 640,132 | 22.29% |
| United States | 301,333,408 | 44,852,528 | 14.88% |

*Note: This indicator is compared with the state average. Data Source: US Census Bureau, American Community Survey.2008-2012 Source geography: Tract*

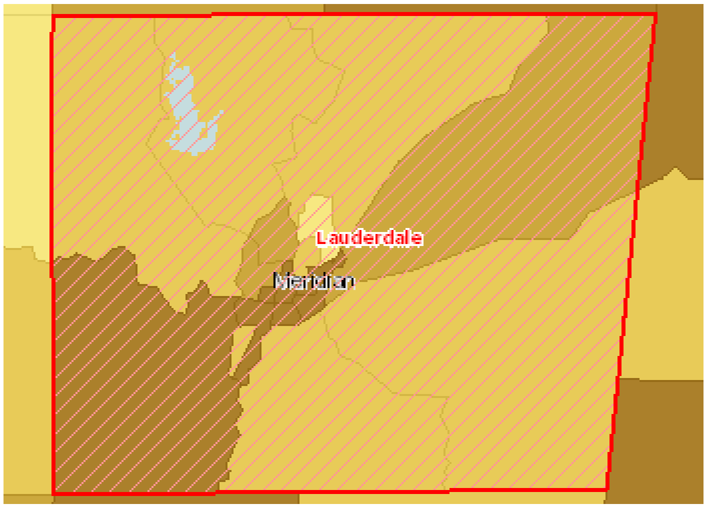
**Percent Population in Poverty**



🟥 Lauderdale County, MS (23.39%)

🟧 Mississippi (22.29%)

🟦 United States (14.88%)



**Population Below the Poverty Level, Percent by Tract, ACS 2008-12**

- 🟫 Over 20.0%
- 🟫 15.1 - 20.0%
- 🟨 10.1 - 15.0%
- 🟨 Under 10.1%
- ⬜ No Data or Data Suppressed

▨ Report Area

## Population in Poverty - 200% FPL

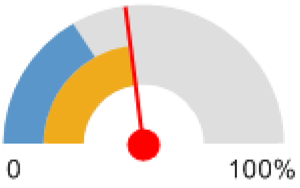
In the report area 45.75% or 34,803 individuals are living in households with income below 200% of the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

| Report Area | Total Population | Population with Income at or Below 200% FPL | Percent Population with Income at or Below 200% FPL |
|---|---|---|---|
| Lauderdale County, MS | 76,072 | 34,803 | 45.75% |
| Mississippi | 2,872,106 | 1,306,843 | 45.5% |
| United States | 301,333,408 | 101,133,072 | 33.56% |

*Note: This indicator is compared with the state average.*

*Data Source: US Census Bureau, American Community Survey. Source geography: Tract*

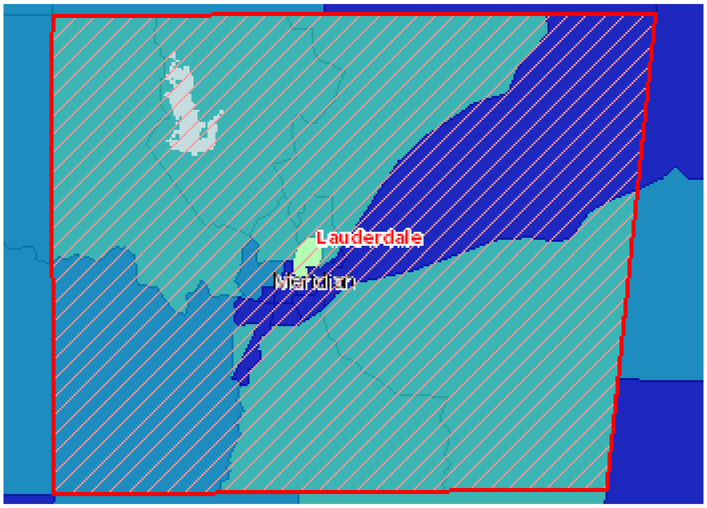
**Percent Population with Income at or Below 200% FPL**



🟥Lauderdale County, MS (45.75%)

🟧Mississippi (45.5%)

🟦United States (33.56%)



**Population Below 200% Poverty Level, Percent by Tract, ACS 2008-12**

- 🟦 Over 50.0%
- 🟦 38.1 - 50.0%
- 🟩 26.1 - 38.0%
- 🟩 Under 26.1%
- ⬜ No Data or Data Suppressed
- ▨ Report Area

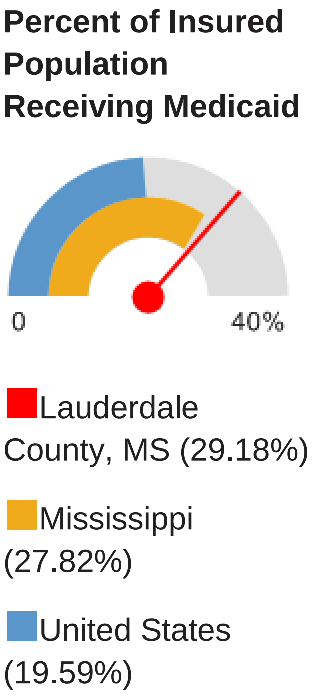
## Population Receiving Medicaid

This indicator reports the percentage of the population with insurance enrolled in Medicaid (or other means-tested public health insurance). This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

| Report Area | Total Population (For Whom Insurance Status is Determined) | Population with Any Health Insurance | Population Receiving Medicaid | Percent of Insured Population Receiving Medicaid |
|---|---|---|---|---|
| Lauderdale County, MS | 76,187 | 65,506 | 19,112 | 29.18% |
| Mississippi | 2,898,487 | 2,392,262 | 665,518 | 27.82% |
| United States | 303,984,256 | 258,778,080 | 50,682,900 | 19.59% |

*Note: This indicator is compared with the state average.*

*Data Source: US Census Bureau, [American Community Survey](). Source geography: Tract*

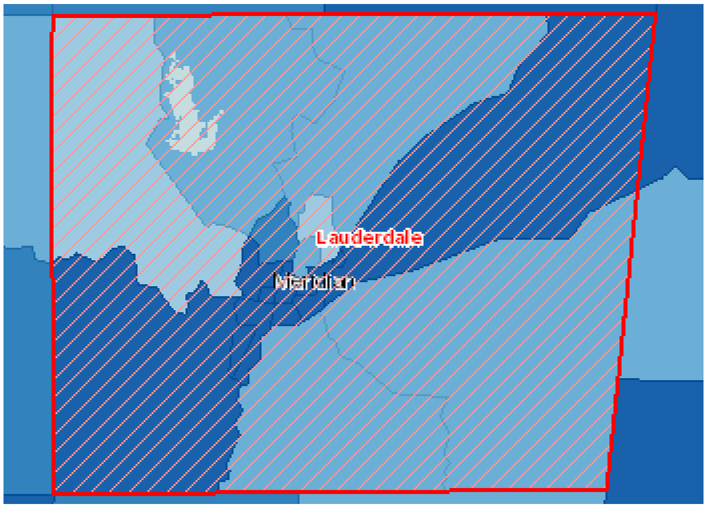


**Percent of Insured Population Receiving Medicaid**

🟥Lauderdale County, MS (29.18%)

🟧Mississippi (27.82%)

🟦United States (19.59%)



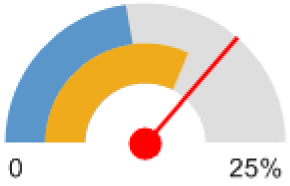
**Insured, Medicaid / Means-Tested Coverage, Percent by Tract, ACS 2008-12**

## Population Receiving SNAP Benefits

This indicator reports the estimated percentage of households receiving the Supplemental Nutrition Assistance Program (SNAP) benefits. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrolment.

| Report Area | Total Households | Households Receiving SNAP Benefits | Percent Households Receiving SNAP Benefits |
|---|---|---|---|
| Lauderdale County, MS | 29,715 | 5,390 | 18.14% |
| Mississippi | 1,087,791 | 174,893 | 16.08% |
| United States | 115,226,800 | 13,180,710 | 11.44% |

*Percent Households Receiving SNAP Benefits*



🟥 Lauderdale County, MS (18.14%)

🟧 Mississippi (16.08%)

🟦 United States (11.44%)

*Note: This indicator is compared with the state average.*

*Data Source: US Census Bureau, American Community Survey.2008-2012 Source geography: Tract*

## Population with No High School Diploma

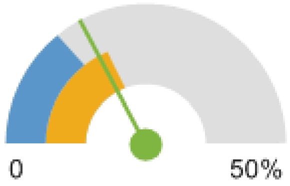
Within the report area there are 8,940 persons aged 25 and older without a high school diploma (or equivalency) or higher. This represents 17.1% of the total population aged 25 and older. This indicator is relevant because educational attainment is linked to positive health outcomes (Freudenberg & Ruglis, 2007).

| Report Area | Total Population Age 25+ | Population Age 25+ with No High School Diploma | Percent Population Age 25+ with No High School Diploma |
|---|---|---|---|
| Lauderdale County, MS | 52,282 | 8,940 | 17.1% |
| Mississippi | 1,904,849 | 361,500 | 18.98% |
| United States | 204,336,016 | 29,179,820 | 14.28% |

*Note: This indicator is compared with the state average.*

*Data Source: US Census Bureau, American Community Survey. Source geography: Tract*

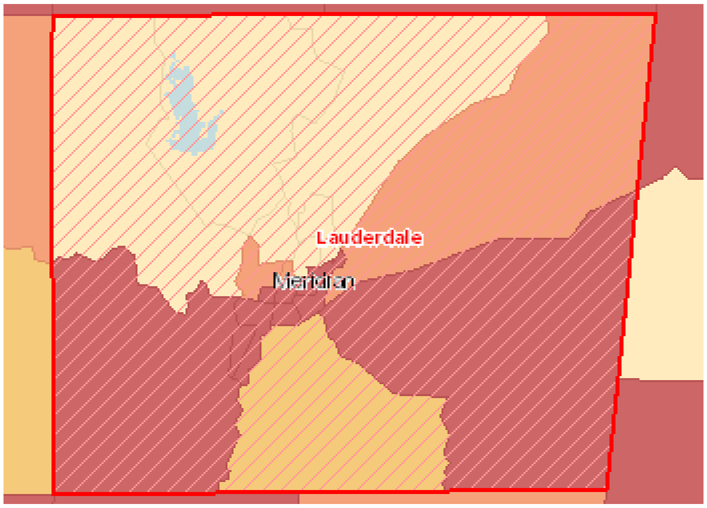
**Percent Population Age 25 with No High School Diploma**



🟩Lauderdale County, MS (17.1%)

🟧Mississippi (18.98%)

🟦United States (14.28%)



**Population with No High School Diploma (Age 25 ), Percent by Tract, ACS 2008-12**

- 🟥 Over 21.0%
- 🟧 16.1 - 21.0%
- 🟨 11.1 - 16.0%
- ▢ Under 11.1%
- ⬜ No Data or Data Suppressed
- ▨ Report Area

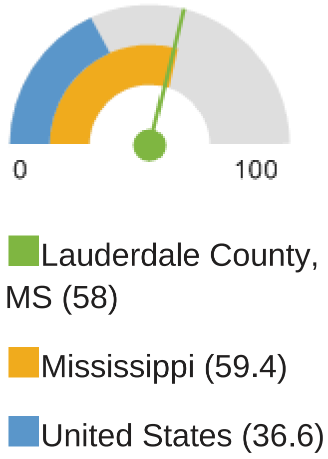
## Teen Births

This indicator reports the rate of total births to women age of 15 - 19 per 1,000 female population age 15 - 19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.

| Report Area | Female Population Age 15 - 19 | Births to Mothers Age 15 - 19 | Teen Birth Rate (Per 1,000 Population) |
|---|---|---|---|
| Lauderdale County, MS | 2,975 | 173 | 58 |
| Mississippi | 110,474 | 6,562 | 59.4 |
| United States | 10,736,677 | 392,962 | 36.6 |

*Note: This indicator is compared with the state average.*

*Data Source: US Department of Health & Human Services, Health Indicators Warehouse. 2006-2012Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. Source geography: County*

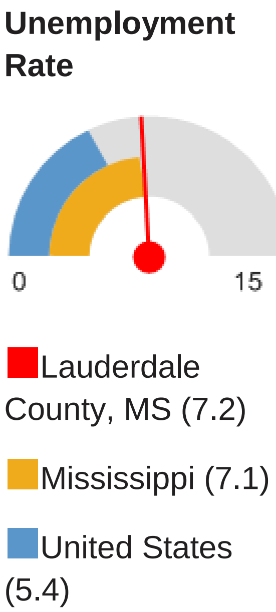


**Teen Birth Rate (Per 1,000 Population)**

## Unemployment Rate

Total unemployment in the report area for December, 2014 was 2,505, or 7.2% of the civilian non-institutionalized population age 16 and older (non-seasonally adjusted). This indicator is relevant because unemployment creates financial instability and barriers to access, (including insurance coverage, health services, healthy food, and other necessities) that contribute to poor health status.

| Report Area | Labor Force | Number Employed | Number Unemployed | Unemployment Rate |
|---|---|---|---|---|
| Lauderdale County, MS | 34,972 | 32,467 | 2,505 | 7.2 |
| Mississippi | 1,247,125 | 1,158,990 | 88,135 | 7.1 |
| United States | 156,669,187 | 148,199,073 | 8,470,114 | 5.4 |



*Note: This indicator is compared with the state average.*

*Data Source: US Department of Labor, [Bureau of Labor Statistics](). December 2014 Source geography: County*

## Uninsured Population - Total

The lack of health insurance is considered a *key driver* of health status.

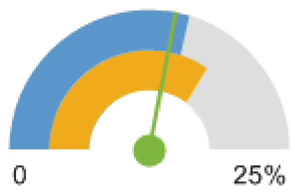
This indicator reports the percentage of the total civilian non-institutionalized population without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that contributes to poor health status.

| Report Area | Total Population (For Whom Insurance Status is Determined) | Total Uninsured Population | Percent Uninsured Population |
|---|---|---|---|
| Lauderdale County, MS | 76,187 | 10,681 | 14.02% |
| Mississippi | 2,898,487 | 506,225 | 17.47% |
| United States | 303,984,256 | 45,206,152 | 14.87% |

*Note: This indicator is compared with the state average.*

*Data Source: US Census Bureau, American Community Survey. Source geography: Tract*

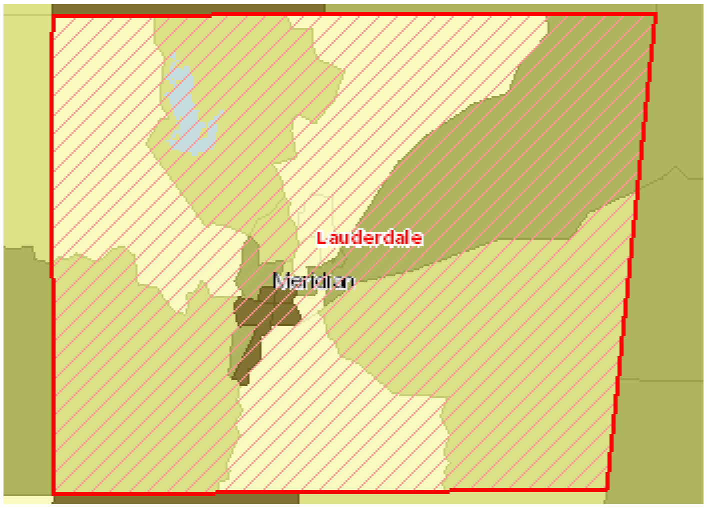
**Percent Uninsured Population**



🟩 Lauderdale County, MS (14.02%)

🟧 Mississippi (17.47%)

🟦 United States (14.87%)



**Uninsured Population, Percent by Tract, ACS 2008-12**

■ Over 20.0%

■ 15.1 - 20.0%

■ 10.1 - 15.0%

■ Under 10.1%

■ No Data or Data Suppressed

▨ Report Area

## *Health Behaviors*

Health behaviors such as poor diet, a lack of exercise, and substance abuse contribute to poor health status.

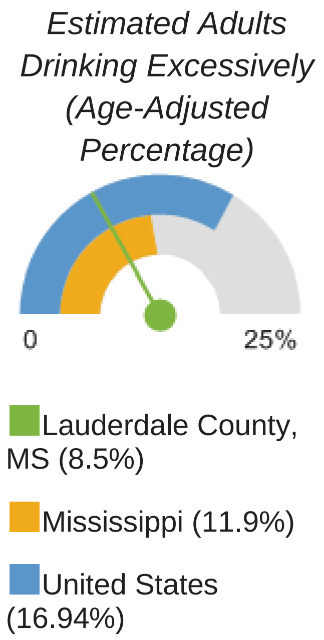
**Health Behaviors Data Preview**

| | |
|---|---|
| Alcohol Consumption | Tobacco Expenditures |
| Fruit/Vegetable Consumption | Tobacco Usage - Current Smokers |
| Physical Inactivity | |

### Alcohol Consumption

This indicator reports the percentage of adults aged 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day on average for men and one drink per day on average for women). This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

| Report Area | Total Population Age 18+ | Estimated Adults Drinking Excessively | Estimated Adults Drinking Excessively (Crude Percentage) | Estimated Adults Drinking Excessively (Age-Adjusted Percentage) |
|---|---|---|---|---|
| Lauderdale County, MS | 59,832 | 4,966 | 8.3% | 8.5% |
| Mississippi | 2,199,741 | 252,970 | 11.5% | 11.9% |
| United States | 232,556,016 | 38,248,349 | 16.45% | 16.94% |



*Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.2006-2012 Accessed via the Health Indicators Warehouse. Source geography: County*

## Fruit/Vegetable Consumption

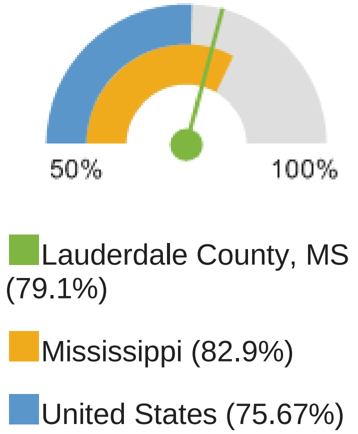
In the report area an estimated 45,854, or 79.1% of adults over the age of 18 are consuming less than 5 servings of fruits and vegetables each day. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may cause of significant health issues, such as obesity and diabetes.

| Report Area | Total Population (Age 18+) | Total Adults with Inadequate Fruit / Vegetable Consumption | Percent Adults with Inadequate Fruit / Vegetable Consumption |
|---|---:|---:|---:|
| Lauderdale County, MS | 57,970 | 45,854 | 79.1% |
| Mississippi | 2,158,108 | 1,789,072 | 82.9% |
| United States | 227,279,010 | 171,972,118 | 75.67% |

*Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.*

*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.2005-2009 Accessed via the Health Indicators Warehouse. Source geography: County*

*Percent Adults with Inadequate Fruit / Vegetable Consumption*



## Physical Inactivity

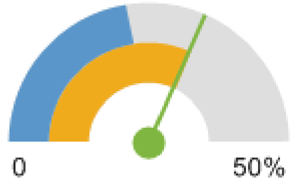
Within the report area, 18,755 or 31.6% of adults aged 20 and older self-report no leisure time for activity, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?". This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as obesity and poor cardiovascular health.

| Report Area | Total Population Age 20+ | Population with no Leisure Time Physical Activity | Percent Population with no Leisure Time Physical Activity |
|---|---|---|---|
| Lauderdale County, MS | 58,245 | 18,755 | 31.6% |
| Mississippi | 2,137,908 | 694,528 | 32% |
| United States | 228,772,311 | 52,318,681 | 22.47% |

*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2011 Source geography: County*

*Percent Population with no Leisure Time Physical Activity*



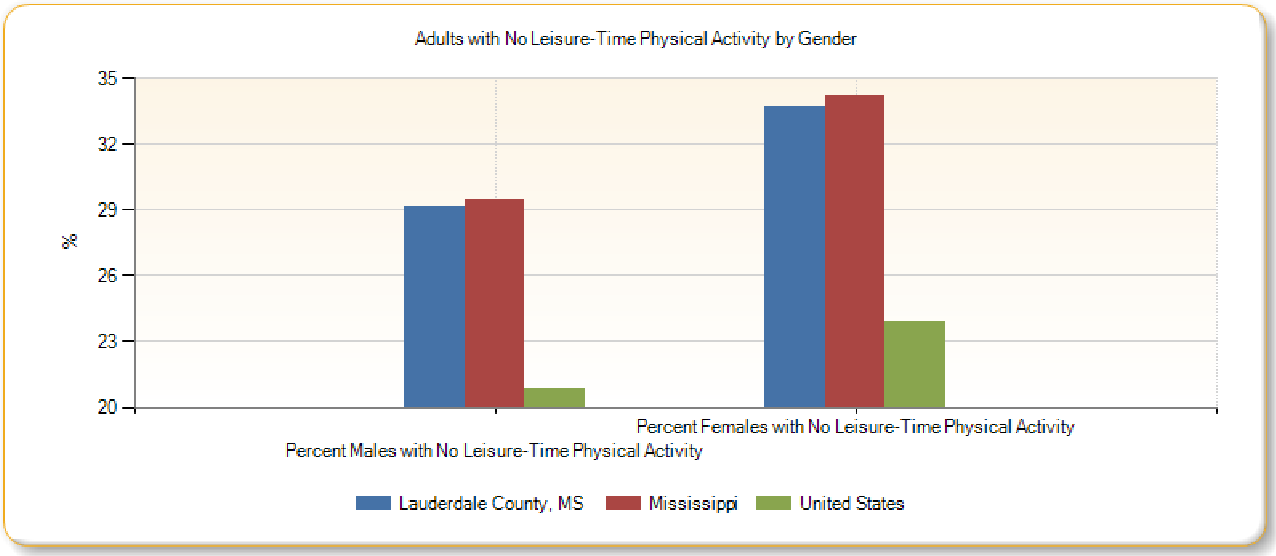
🟩 Lauderdale County, MS (31.6%)

🟧 Mississippi (32%)

🟦 United States (22.47%)

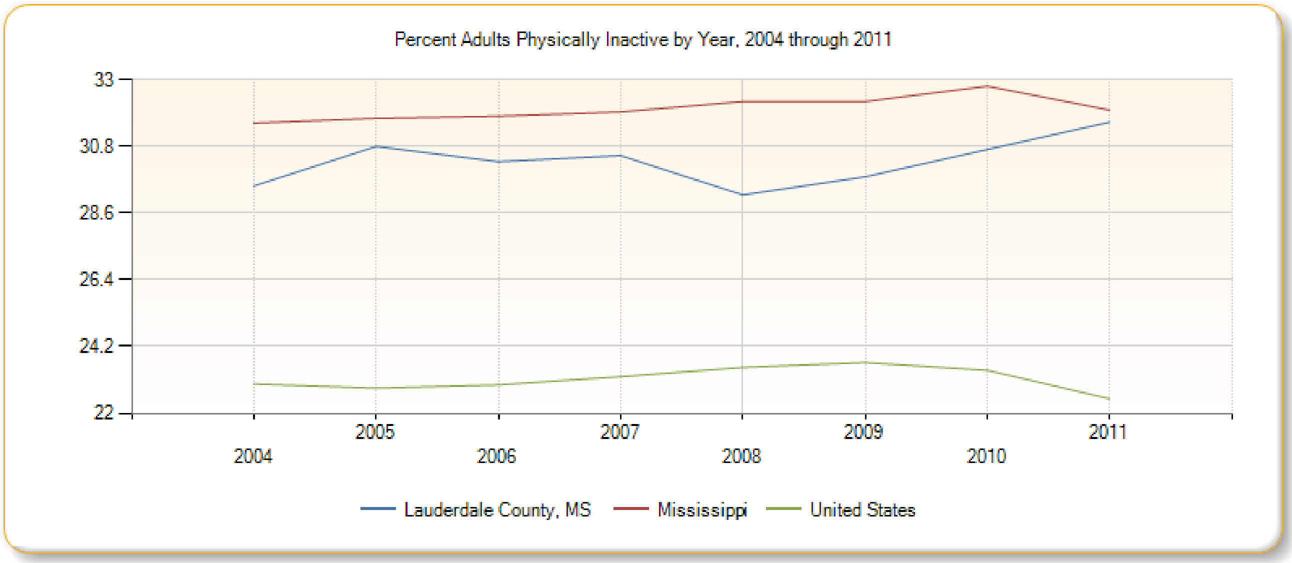
## Adults with No Leisure-Time Physical Activity by Gender

| Report Area | Total Males with No Leisure-Time Physical Activity | Percent Males with No Leisure-Time Physical Activity | Total Females with No Leisure-Time Physical Activity | Percent Females with No Leisure-Time Physical Activity |
|---|---|---|---|---|
| Lauderdale County, MS | 8,177 | 29.2% | 10,579 | 33.7% |
| Mississippi | 303,466 | 29.45% | 391,057 | 34.21% |
| United States | 23,332,443 | 20.82% | 28,986,230 | 23.93% |



## Percent Adults Physically Inactive by Year, 2004 through 2011

| Report Area | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 29.5% | 30.8% | 30.3% | 30.5% | 29.2% | 29.8% | 30.7% | 31.6% |
| Mississippi | 31.57% | 31.73% | 31.8% | 31.94% | 32.28% | 32.28% | 32.79% | 32% |
| United States | 22.96% | 22.82% | 22.93% | 23.2% | 23.51% | 23.67% | 23.41% | 22.47% |

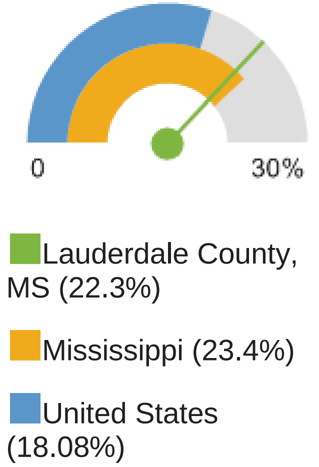


## Tobacco Usage - Current Smokers

In the report area an estimated 13,343, or 22.3% of adults age 18 or older self-report currently smoking cigarettes some days or every day. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

| Report Area | Total Population Age 18+ | Total Adults Regularly Smoking Cigarettes | Percent Population Smoking Cigarettes (Crude) | Percent Population Smoking Cigarettes (Age-Adjusted) |
|---|---|---|---|---|
| Lauderdale County, MS | 59,832 | 13,343 | 22.3% | 22.3% |
| Mississippi | 2,199,741 | 510,340 | 23.2% | 23.4% |
| United States | 232,556,016 | 41,491,223 | 17.84% | 18.08% |

*Percent Population Smoking Cigarettes (Age-Adjusted)*



*Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.*

*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. Source geography: County*

## *Clinical Care*

A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of uninsurance, financial hardship, transportation barriers, cultural competency, and coverage limitations affect access.

Rates of morbidity, mortality, and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests, and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions.

**Data Indicators: Clinical Care**

Access to Primary Care
Cancer Screening - Mammogram
Cancer Screening - Pap Test
Cancer Screening - Sigmoidoscopy or Colonoscopy
Dental Care Utilization
Diabetes Management - Hemoglobin A1c Test
High Blood Pressure Management
Lack of a Consistent Source of Primary Care
Lack of Prenatal Care

### Access to Primary Care

This indicator reports the number of primary care physicians per 100,000 population. Doctors classified as "primary care physicians" by the AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs and General Pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

| Report Area | Total Population, 2012 | Primary Care Physicians, 2012 | Primary Care Physicians, Rate per 100,000 Pop. |
|---|---|---|---|
| Lauderdale County, MS | 80,220 | 81 | 100.97 |
| Mississippi | 2,984,926 | 1,570 | 52.6 |
| United States | 313,914,040 | 233,862 | 74.5 |

*Note: indicator is compared with the state average.Data Source: US Department of Health & Human Services, HRSA, Area Health Resource File. 2012 Source geography: County*

*Primary Care Physicians, Rate per 100,000 Pop.*

🟩Lauderdale County, MS (100.97)

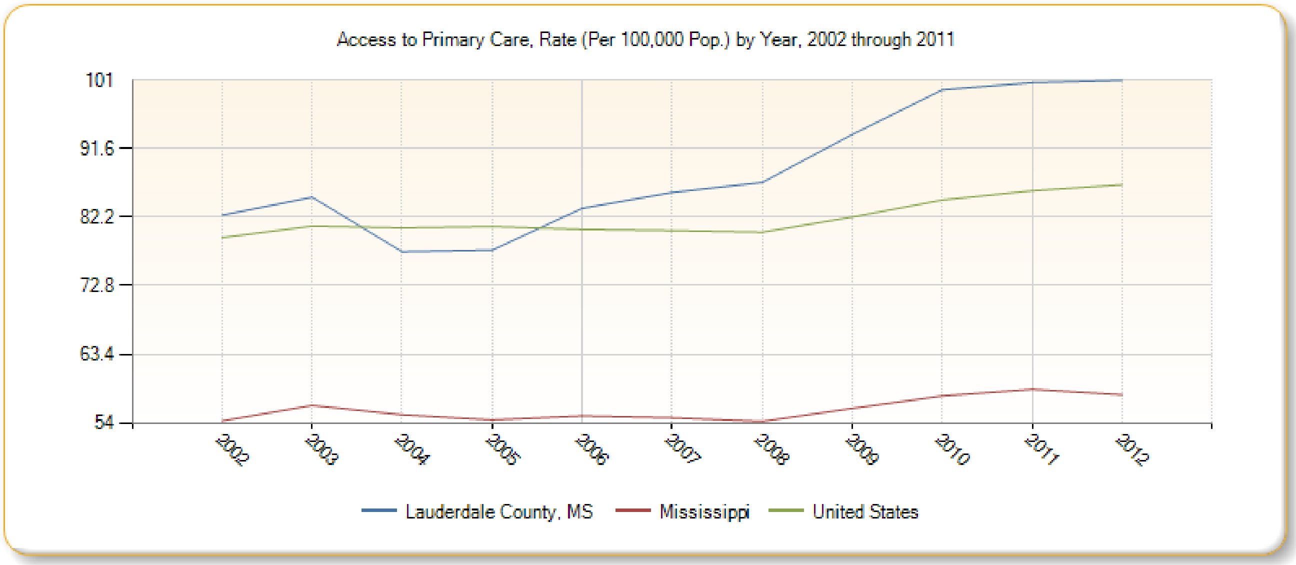
🟧Mississippi (52.6)

🟦United States (74.5)

## Access to Primary Care, Rate (Per 100,000 Pop.) by Year, 2002 through 2011

This indicator reports the rate of primary care physicians per 100,000 population by year. This figure represents all primary care physicians practicing patient care, including hospital residents. In counties with teaching hospitals, this figure may differ from the rate reported above.

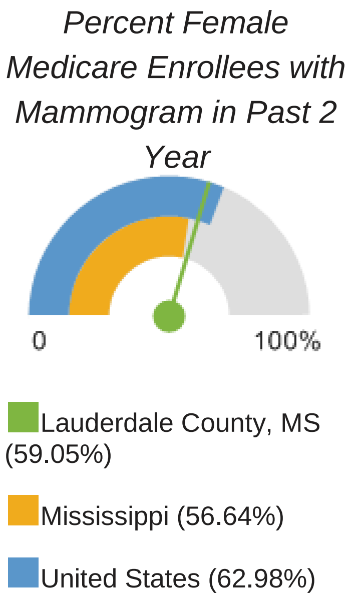
| Report Area | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 82.47 | 84.94 | 77.47 | 77.7 | 83.42 | 85.6 | 86.98 | 93.55 | 99.67 | 100.65 | 100.97 |
| Mississippi | 54.29 | 56.4 | 55.12 | 54.43 | 54.97 | 54.71 | 54.21 | 56 | 57.7 | 58.59 | 57.86 |
| United States | 79.41 | 80.99 | 80.76 | 80.94 | 80.54 | 80.38 | 80.16 | 82.22 | 84.57 | 85.83 | 86.66 |



## Cancer Screening - Mammogram

This indicator reports the percentage of female Medicare enrollees, age 67-69 or older, who have received one or more mammograms in the past two years. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

| Report Area | Total Medicare Enrollees | Female Medicare Enrollees Age 67-69 | Female Medicare Enrollees with Mammogram in Past 2 Years | Percent Female Medicare Enrollees with Mammogram in Past 2 Year |
|---|---|---|---|---|
| Lauderdale County, MS | 9,730 | 840 | 495 | 59.05%s |
| Mississippi | 321,469 | 29,096 | 16,478 | 56.64%s |
| United States | 53,131,712 | 4,402,782 | 2,772,990 | 62.98%s |


*Percent Female Medicare Enrollees with Mammogram in Past 2 Year*

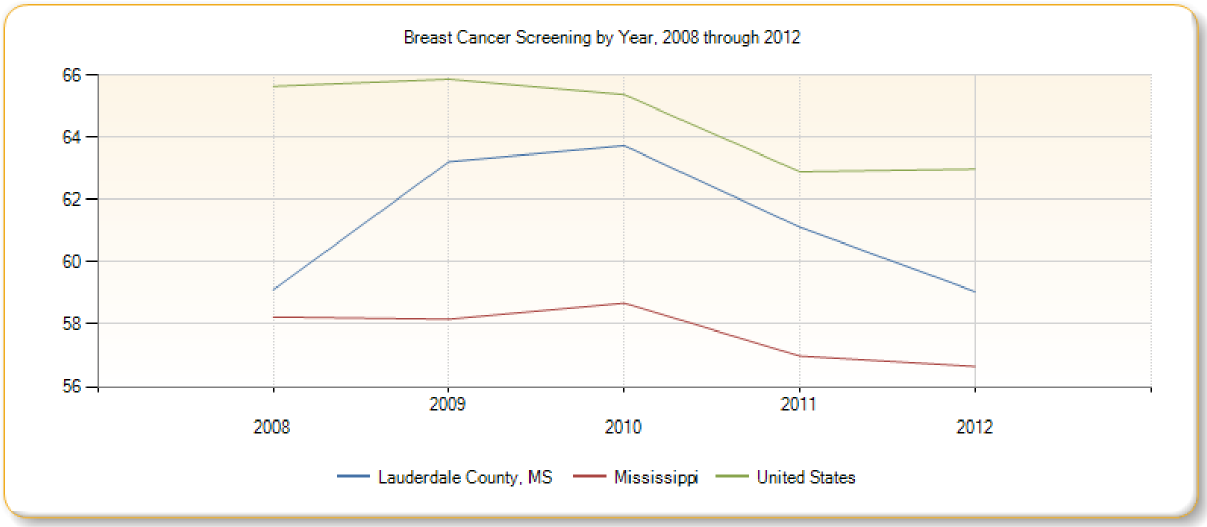
*Note: This indicator is compared with the state average.*

*Data Source: Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. Mammogram (Past 2 Years), Percent of Female Medicare Enrollees, Age 67-69 by County, DA 2012Source geography: County*

## Breast Cancer Screening by Year, 2008 through 2012

Percent of Female Medicare Beneficiaries Age 67-69 with Mammogram in Past 2 Years

| Report Area | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|
| Lauderdale County, MS | 59.11 | 63.22 | 63.73 | 61.12 | 59.05 |
| Mississippi | 58.23 | 58.16 | 58.68 | 56.98 | 56.64 |
| United States | 65.64 | 65.87 | 65.37 | 62.9 | 62.98 |



## Cancer Screening - Pap Test

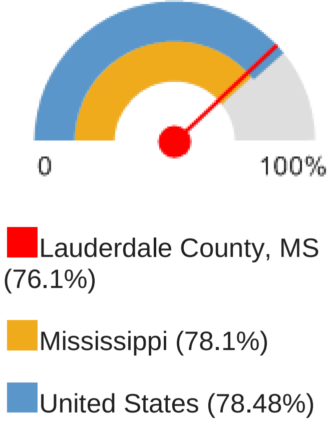
This indicator reports the percentage of women aged 18 and older who self-report that they have had a Pap test in the past three years. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

| Report Area | Female Population Age 18+ | Estimated Number with Regular Pap Test | Crude Percentage | Age-Adjusted Percentage |
|---|---|---|---|---|
| Lauderdale County, MS | 35,455 | 26,662 | 75.2% | 76.1% |
| Mississippi | 1,376,159 | 1,056,890 | 76.8% | 78.1% |
| United States | 176,847,182 | 137,191,142 | 77.58% | 78.48% |

*Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.*

*Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](). 2006-2012 Accessed via the [Health Indicators Warehouse](). Source geography: County*

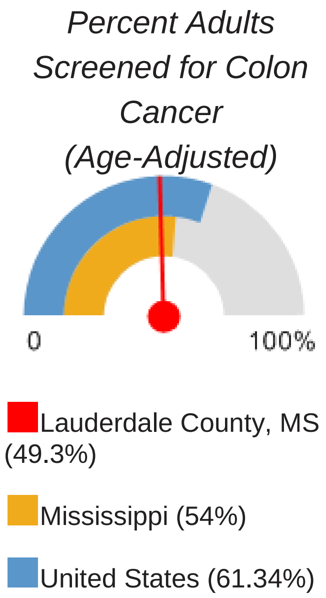
*Percent Adults Females Age 18 with Regular Pap Test (Age-Adjusted)*



## Cancer Screening - Sigmoidoscopy or Colonoscopy

This indicator reports the percentage of adults 50 and older who self-report that they have ever had a sigmoidoscopy or colonoscopy. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

| Report Area | Total Population Age 50+ | Estimated Population Ever Screened for Colon Cancer | Crude Percentage | Age-Adjusted Percentage |
|---|---|---|---|---|
| Lauderdale County, MS | 20,616 | 11,174 | 54.2% | 49.3% |
| Mississippi | 715,991 | 406,683 | 56.8% | 54% |
| United States | 75,116,406 | 48,549,269 | 64.63% | 61.34% |



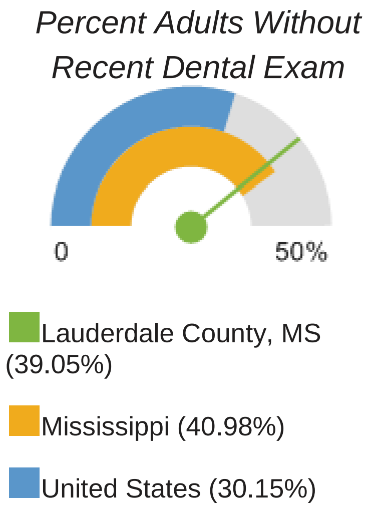
*Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.*

*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-2012 Accessed via the Health Indicators Warehouse. Source geography: County*

## Dental Care Utilization

This indicator reports the percentage of adults aged 18 and older who self-report that they have not visited a dentist, dental hygienist or dental clinic within the past year. This indicator is relevant because engaging in preventive behaviors decreases the likelihood of developing future health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

| Report Area | Total Population (Age 18+) | Total Adults Without Recent Dental Exam | Percent Adults with No Dental Exam |
|---|---|---|---|
| Lauderdale County, MS | 59,442 | 23,211 | 39.05% |
| Mississippi | 2,199,741 | 901,562 | 40.98% |
| United States | 235,375,690 | 70,965,788 | 30.15% |

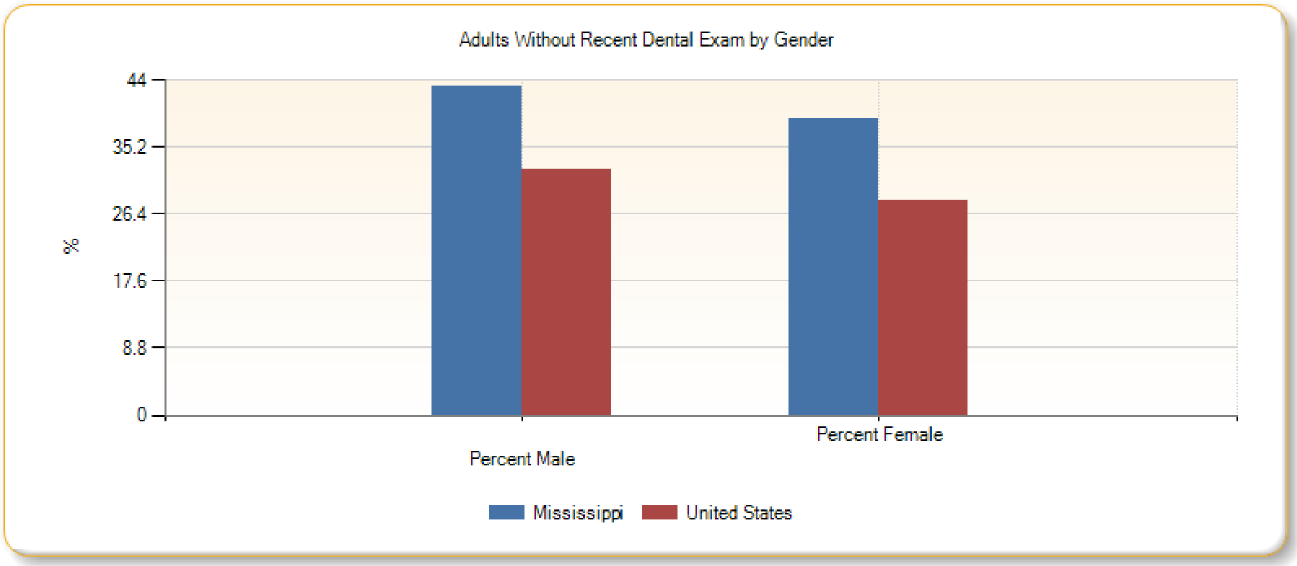


*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System . 2006-2010 Additional data analysis by CARES. Source geography: County*

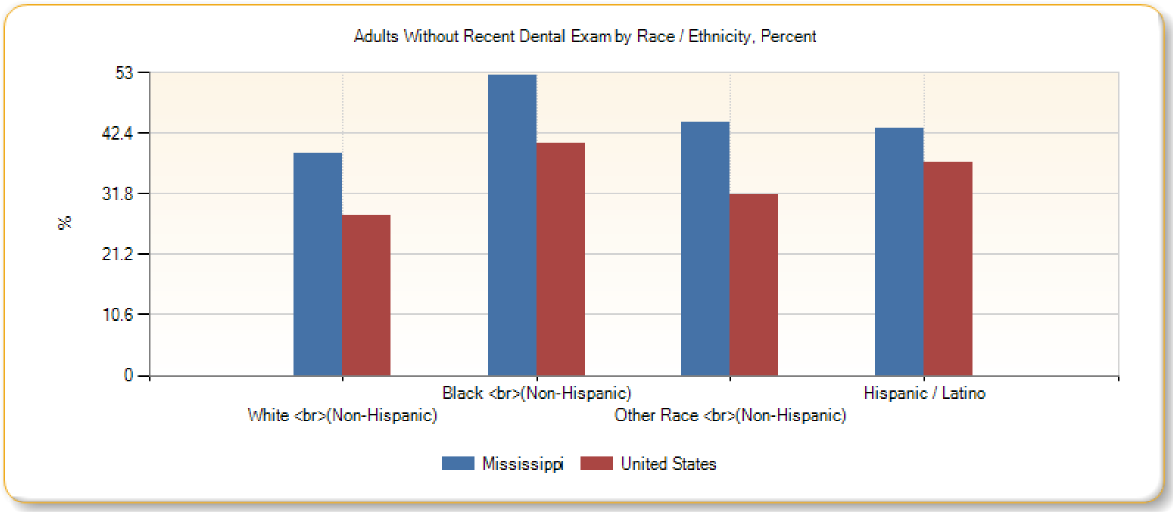
## Adults Without Recent Dental Exam by Gender

| Report Area | Total Male | Total Female | Percent Male | Percent Female |
|---|---|---|---|---|
| Mississippi | 447,603 | 448,715 | 43.16% | 39% |
| United States | 36,311,042 | 34,083,921 | 32.3% | 28.12% |



## Adults Without Recent Dental Exam by Race / Ethnicity, Percent

| Report Area | White (Non-Hispanic) | Black (Non-Hispanic) | Other Race (Non-Hispanic) | Hispanic / Latino |
|---|---|---|---|---|
| Mississippi | 38.77% | 52.55% | 44.21% | 43.13% |
| United States | 28.08% | 40.65% | 31.75% | 37.39% |

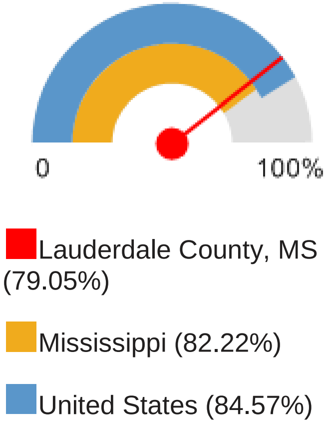


## Diabetes Management - Hemoglobin A1c Test

This indicator reports the percentage of diabetic Medicare patients who have had a hemoglobin A1c (hA1c) test, a blood test which measures blood sugar levels, administered by a health care professional in the past year. In the report area, 1,068 Medicare enrollees with diabetes have had an annual exam out of 1,351 Medicare enrollees in the report area with diabetes, or 79.05%. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

| Report Area | Total Medicare Enrollees | Medicare Enrollees with Diabetes | Medicare Enrollees with Diabetes with Annual Exam | Percent Medicare Enrollees with Diabetes with Annual Exam |
|---|---|---|---|---|
| Lauderdale County, MS | 9,730 | 1,351 | 1,068 | 79.05% |
| Mississippi | 321,469 | 48,371 | 39,770 | 82.22% |
| United States | 53,131,712 | 6,517,150 | 5,511,632 | 84.57% |

*Percent Medicare Enrollees with Diabetes with Annual Exam*



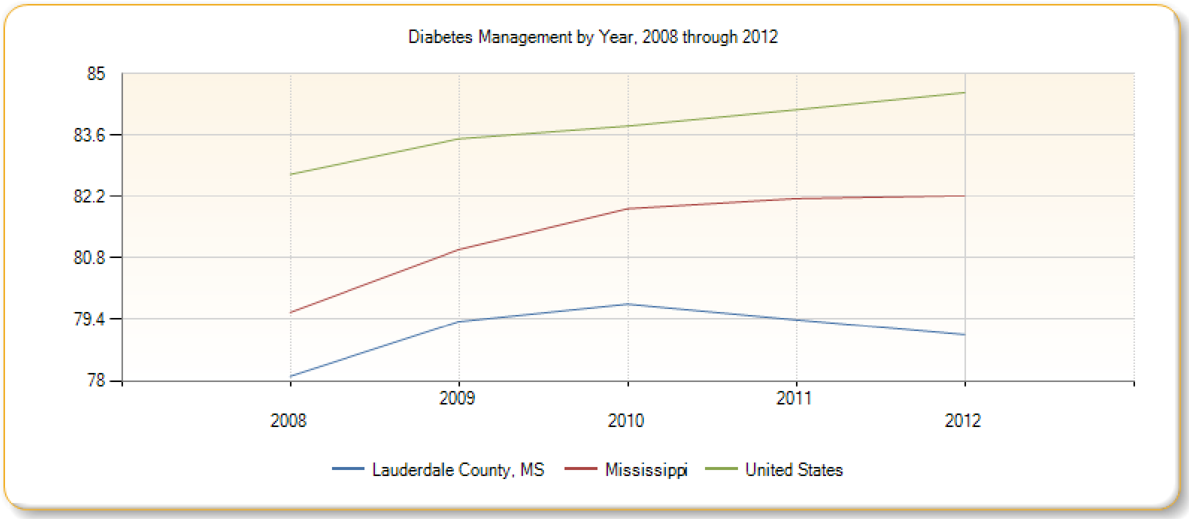
*Note: This indicator is compared with the state average.*

*Data Source: Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care.2012. Source geography: County*

## Diabetes Management by Year, 2008 through 2012

Percent of Medicare Beneficiaries with Diabetes with Annual Hemoglobin A1c Test

| Report Area | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|
| Lauderdale County, MS | 78.1 | 79.35 | 79.75 | 79.39 | 79.05 |
| Mississippi | 79.56 | 80.99 | 81.92 | 82.15 | 82.22 |
| United States | 82.71 | 83.52 | 83.81 | 84.18 | 84.57 |

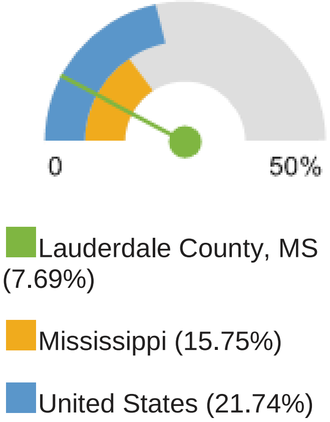


## High Blood Pressure Management

In the report area, 7.69% of adults, or 4,573, self-reported that they are not taking medication for their high blood pressure according to the CDC's Behavioural Risk Factor Surveillance System (2006-2010). This indicator is relevant because engaging in preventive behaviors decreases the likelihood of developing future health problems. When considered with other indicators of poor health, this indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

| Report Area | Total Population (Age 18+) | Total Adults Not Taking Blood Pressure Medication (When Needed) | Percent Adults Not Taking Medication |
|---|---|---|---|
| Lauderdale County, MS | 59,442 | 4,573 | 7.69% |
| Mississippi | 2,199,741 | 346,512 | 15.75% |
| United States | 235,375,690 | 51,175,402 | 21.74% |

*Percent Adults with High Blood Pressure Not Taking Medication*

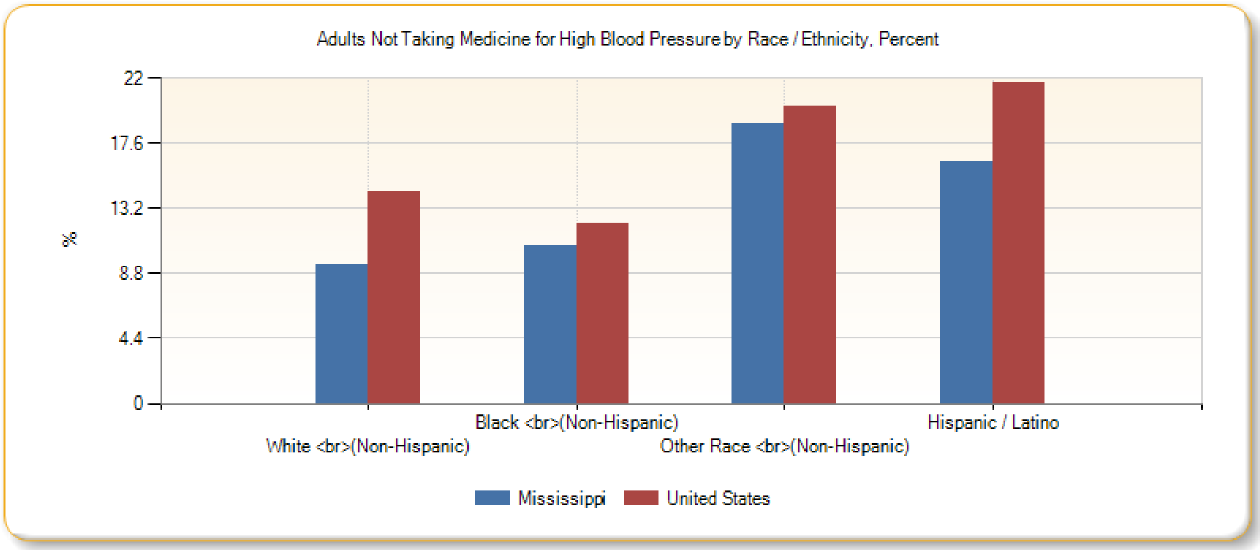


*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.2006-2010 Additional data analysis by CARES. Source geography: County*

## Adults Not Taking Medicine for High Blood Pressure by Race / Ethnicity, Percent

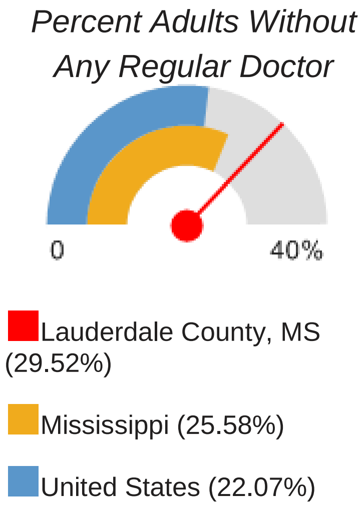
| Report Area | White (Non-Hispanic) | Black (Non-Hispanic) | Other Race (Non-Hispanic) | Hispanic / Latino |
|---|---|---|---|---|
| Mississippi | 9.33% | 10.69% | 18.89% | 16.33% |
| United States | 14.31% | 12.19% | 20.1% | 21.72% |



## Lack of a Consistent Source of Primary Care

This indicator reports the percentage of adults aged 18 and older who self-report that they do not have at least one person who they think of as their personal doctor or health care provider. This indicator is relevant because access to regular primary care is important to preventing major health issues and emergency department visits.

| Report Area | Survey Population (Adults Age 18+) | Total Adults Without Any Regular Doctor | Percent Adults Without Any Regular Doctor |
|---|---|---|---|
| Lauderdale County, MS | 52,114 | 15,387 | 29.52% |
| Mississippi | 2,206,813 | 564,473 | 25.58% |
| United States | 236,884,668 | 52,290,932 | 22.07% |

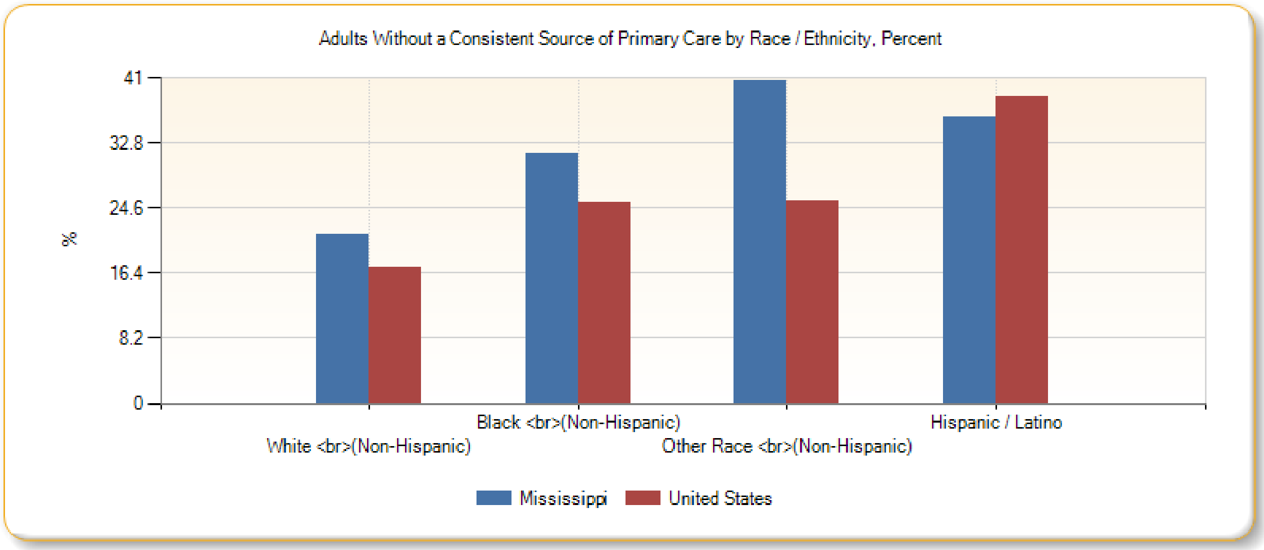


*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System 2011-2012 Additional data analysis by CARES. Source geography: County*

## Adults Without a Consistent Source of Primary Care by Race / Ethnicity, Percent

| Report Area | White (Non-Hispanic) | Black (Non-Hispanic) | Other Race (Non-Hispanic) | Hispanic / Latino |
|---|---|---|---|---|
| Mississippi | 21.3% | 31.38% | 40.73% | 36.05% |
| United States | 17.15% | 25.28% | 25.47% | 38.58% |



### *Health Outcomes*

Measuring morbidity and mortality rates allows assessing linkages between social determinants of health and outcomes. By comparing, for example, the prevalence of certain chronic diseases to indicators in other categories (e.g., poor diet and exercise) with outcomes (e.g., high rates of obesity and diabetes), various causal relationship may emerge, allowing a better understanding of how certain community health needs may be addressed.

**Data Indicators: Health Outcomes**

Asthma Prevalence
Cancer Incidence - Breast
Cancer Incidence - Cervical
Cancer Incidence - Colon and Rectum
Cancer Incidence - Lung
Cancer Incidence - Prostate
Chlamydia Incidence
Diabetes (Adult)
Diabetes (Medicare Population)
Gonorrhea Incidence
Heart Disease (Adult)
Heart Disease (Medicare Population)
High Blood Pressure (Adult)
High Blood Pressure (Medicare Population)
High Cholesterol (Adult)
High Cholesterol (Medicare Population)
HIV Prevalence
Infant Mortality
Low Birth Weight
Mortality - Cancer
Mortality - Heart Disease
Mortality - Homicide
Mortality - Ischaemic Heart Disease
Mortality - Lung Disease
Mortality - Motor Vehicle Accident
Mortality - Stroke
Mortality - Suicide
Mortality - Unintentional Injury
Obesity
Overweight
Poor Dental Health
Poor General Health

## Asthma Prevalence

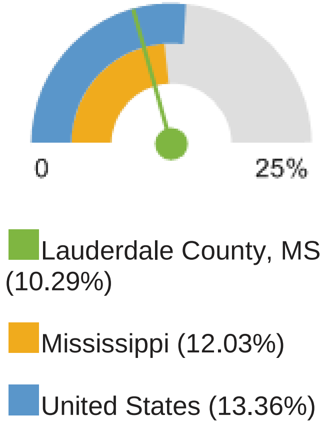
This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma. This indicator is relevant because asthma is a prevalent problem in the U.S. that is often exacerbated by poor environmental conditions.

| Report Area | Survey Population (Adults Age 18+) | Total Adults with Asthma | Percent Adults with Asthma |
|---|---:|---:|---:|
| Lauderdale County, MS | 51,439 | 5,294 | 10.29% |
| Mississippi | 2,201,928 | 264,933 | 12.03% |
| United States | 237,197,465 | 31,697,608 | 13.36% |

*Note: This indicator is compared with the state average.*

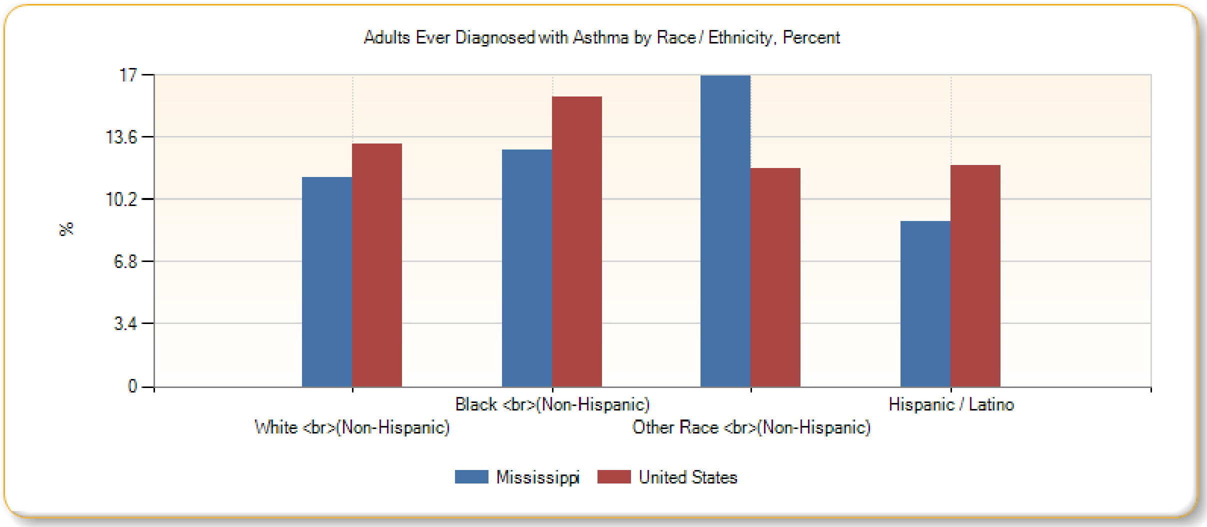
*Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](). Additional data analysis by [CARES](). Source geography: County*

*Percent Adults with Asthma*



## Adults Ever Diagnosed with Asthma by Race / Ethnicity, Percent

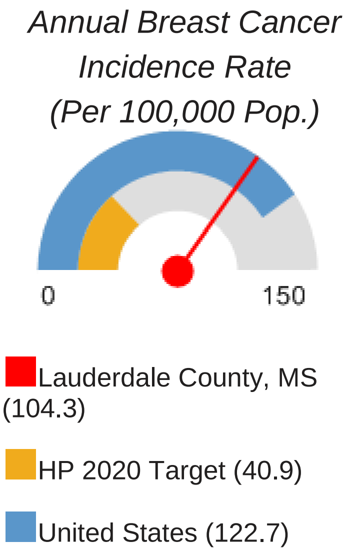
| Report Area | White (Non-Hispanic) | Black (Non-Hispanic) | Other Race (Non-Hispanic) | Hispanic / Latino |
|---|---|---|---|---|
| Mississippi | 11.41% | 12.87% | 16.93% | 8.98% |
| United States | 13.19% | 15.75% | 11.9% | 12.02% |



## Cancer Incidence - Breast

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of females with breast cancer adjusted to 2000 U.S. standard population age groups (Under Age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

| Report Area | Female Population | Average New Cases per Year | Annual Incidence Rate (Per 100,000 Pop.) |
|---|---|---|---|
| Lauderdale County, MS | 41,437 | 50 | 104.3 |
| Mississippi | 1,522,128 | 1,953 | 116 |
| United States | 155,863,552 | 216,052 | 122.7 |
| HP 2020 Target | | | <= 40.9 |

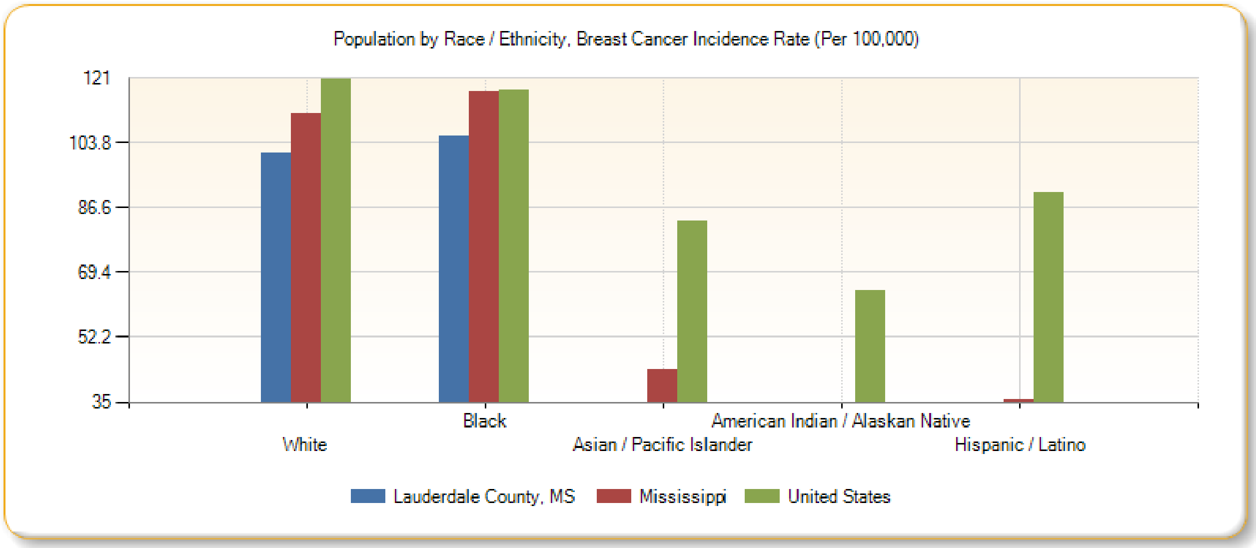


*Note: This indicator is compared with the Healthy People 2020 Target.*

*Data Source: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. STCANPRO 2011 State Cancer Profiles. Source geography: County*

## Population by Race / Ethnicity, Breast Cancer Incidence Rate (Per 100,000)

| Report Area | White | Black | Asian / Pacific Islander | American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 101.1 | 105.7 | suppressed | suppressed | no data |
| Mississippi | 111.5 | 117.3 | 43.6 | no data | 35.1 |
| United States | 120.7 | 117.9 | 83 | 64.4 | 90.5 |



## Population by Race / Ethnicity, New Breast Cancer Incidence (Count)

| Report Area | White | Black | Asian / Pacific Islander | American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 32 | 17 | no data | no data | no data |
| Mississippi | 1,271 | 610 | 6 | no data | 7 |
| United States | 174,757 | 22,918 | 6,607 | 949 | 14,396 |

## Cancer Incidence - Cervical

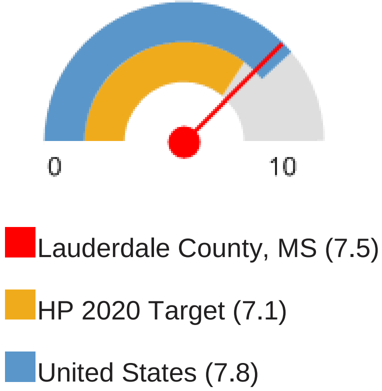
This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of females with cervical cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

| Report Area | Female Population | Average New Cases per Year | Annual Incidence Rate (Per 100,000 Pop.) |
|---|---:|---:|---:|
| Lauderdale County, MS | 41,437 | 3 | 7.5 |
| Mississippi | 1,522,128 | 149 | 9.7 |
| United States | 155,863,552 | 12,530 | 7.8 |
| HP 2020 Target | | | <= 7.1 |

*Note: This indicator is compared with the Healthy People 2020 Target.*

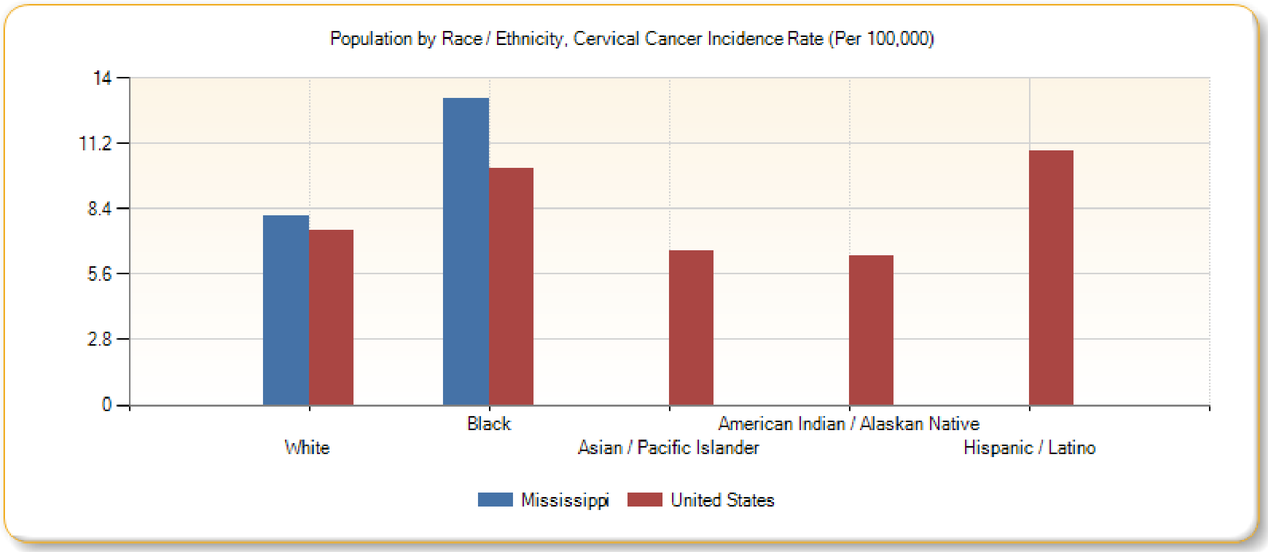
*Data Source: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. State Cancer Profiles. Source geography: County*

*Annual Cervical Cancer Incidence Rate (Per 100,000 Pop.)*



## Population by Race / Ethnicity, Cervical Cancer Incidence Rate (Per 100,000)

| Report Area | White | Black | Asian / Pacific Islander | American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | no data | no data | suppressed | suppressed | no data |
| Mississippi | 8.1 | 13.1 | no data | no data | no data |
| United States | 7.5 | 10.1 | 6.6 | 6.4 | 10.9 |



## Population by Race / Ethnicity, New Cervical Cancer Incidence (Count)

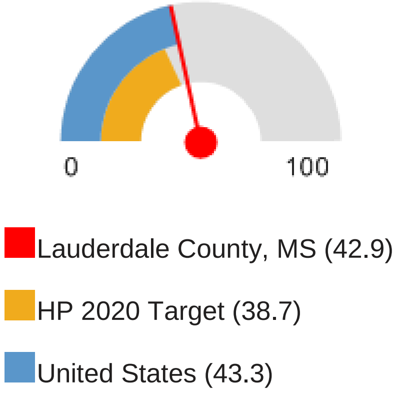
| Report Area | White | Black | Asian / Pacific Islander | American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | no data | no data | no data | no data | no data |
| Mississippi | 78 | 68 | no data | no data | no data |
| United States | 9,522 | 1,998 | 538 | 108 | 2,006 |

## Cancer Incidence - Colon and Rectum

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of colon and rectum cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

| Report Area | Total Population | Average New Cases per Year | Annual Incidence Rate (Per 100,000 Pop.) |
|---|---|---|---|
| Lauderdale County, MS | 79,882 | 39 | 42.9 |
| Mississippi | 2,956,700 | 1,593 | 51.2 |
| United States | 306,603,776 | 142,173 | 43.3 |
| HP 2020 Target | | | <= 38.7 |

*Annual Colon and Rectum Cancer Incidence Rate (Per 100,000 Pop.)*

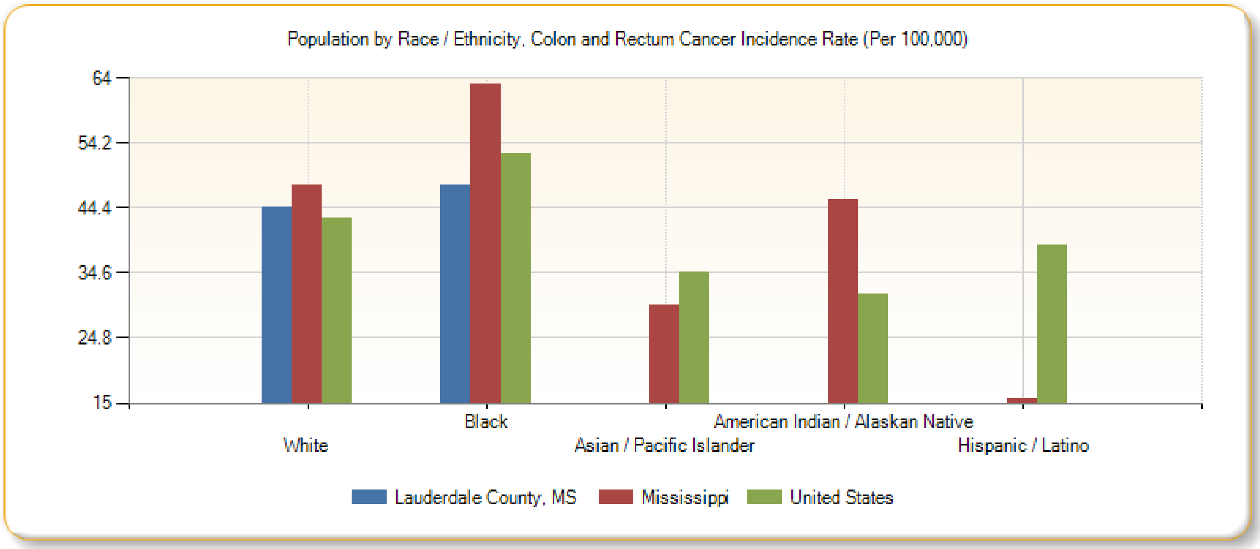


*Note: This indicator is compared with the Healthy People 2020 Target.*

*Data Source: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. State Cancer Profiles. Source geography: County*

## Population by Race / Ethnicity, Colon and Rectum Cancer Incidence Rate (Per 100,000)

| Report Area | White | Black | Asian / Pacific Islander | American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 44.5 | 47.8 | suppressed | suppressed | no data |
| Mississippi | 47.7 | 63.1 | 29.6 | 45.7 | 15.6 |
| United States | 42.7 | 52.5 | 34.7 | 31.3 | 38.7 |



## Population by Race / Ethnicity, New Colon and Rectum Cancer Incidence (Count)

| Report Area | White | Black | Asian / Pacific Islander | American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 28 | 13 | no data | no data | no data |
| Mississippi | 1,035 | 540 | 6 | 6 | 4 |
| United States | 117,775 | 16,767 | 4,406 | 754 | 9,768 |

## Cancer Incidence - Lung

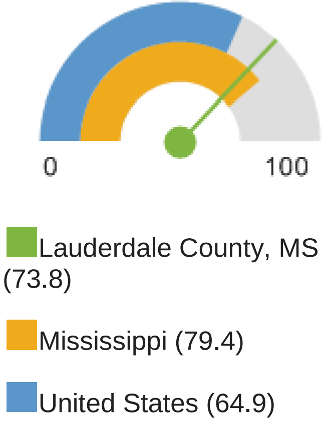
This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of colon and rectum cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

| Report Area | Total Population | Average New Cases per Year | Annual Incidence Rate (Per 100,000 Pop.) |
|---|---:|---:|---:|
| Lauderdale County, MS | 79,882 | 66 | 73.8 |
| Mississippi | 2,956,700 | 2,491 | 79.4 |
| United States | 306,603,776 | 212,768 | 64.9 |

*Note: This indicator is compared with the state average.*

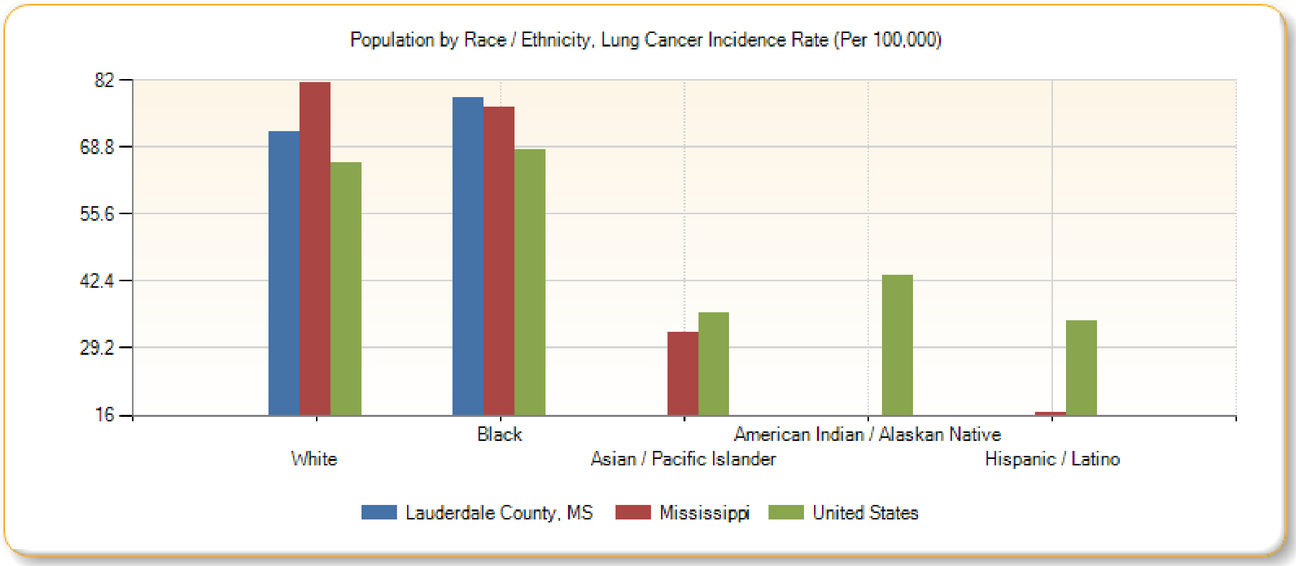
*Data Source: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. State Cancer Profiles. Source geography: County*

*Annual Lung Cancer Incidence Rate (Per 100,000 Pop.)*



**Population by Race / Ethnicity, Lung Cancer Incidence Rate (Per 100,000)**

| Report Area | White | Black | Asian / Pacific Islander | American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 71.7 | 78.6 | suppressed | suppressed | no data |
| Mississippi | 81.3 | 76.6 | 32.1 | no data | 16.5 |
| United States | 65.6 | 68.2 | 36.2 | 43.4 | 34.6 |



## Population by Race / Ethnicity, New Lung Cancer Incidence (Count)

| Report Area | White | Black | Asian / Pacific Islander | American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 44 | 21 | no data | no data | no data |
| Mississippi | 1,803 | 653 | 5 | no data | 5 |
| United States | 180,739 | 21,506 | 4,336 | 964 | 7,983 |

## Cancer Incidence - Prostate

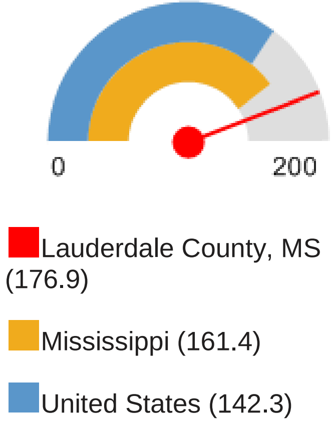
This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of males with prostate cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

| Report Area | Male Population | Average New Cases per Year | Annual Incidence Rate (Per 100,000 Pop.) |
|---|---:|---:|---:|
| Lauderdale County, MS | 38,445 | 73 | 176.9 |
| Mississippi | 1,434,572 | 2,335 | 161.4 |
| United States | 150,740,224 | 220,000 | 142.3 |

*Note: This indicator is compared with the state average.*

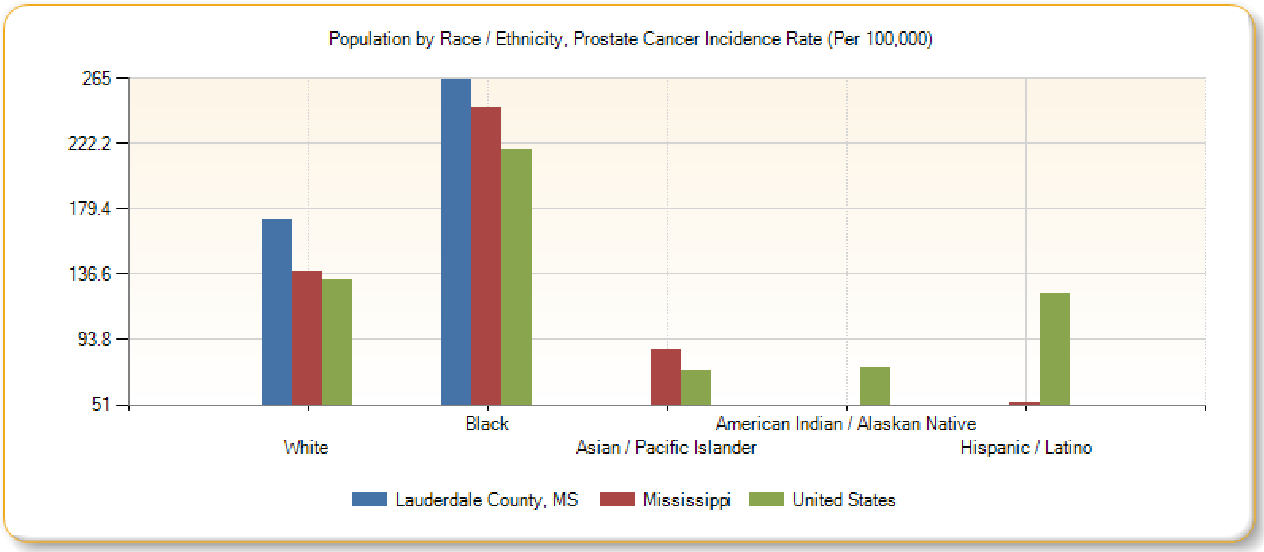
*Data Source: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. State Cancer Profiles. Source geography: County*

*Annual Prostate Cancer Incidence Rate (Per 100,000 Pop.)*



## Population by Race / Ethnicity, Prostate Cancer Incidence Rate (Per 100,000)

| Report Area | White | Black | Asian / Pacific Islander | American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 172.7 | 264.2 | suppressed | suppressed | no data |
| Mississippi | 137.6 | 245.5 | 86.8 | no data | 51.5 |
| United States | 133.3 | 217.9 | 73.8 | 75.8 | 123.6 |



## Population by Race / Ethnicity, New Prostate Cancer Incidence (Count)

| Report Area | White | Black | Asian / Pacific Islander | American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 49 | 29 | no data | no data | no data |
| Mississippi | 1,422 | 886 | 5 | no data | 7 |
| United States | 171,991 | 30,367 | 4,018 | 778 | 13,248 |

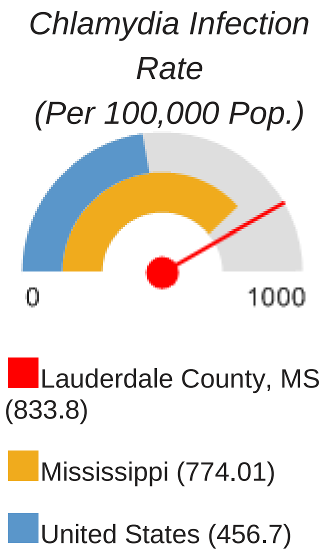
## Chlamydia Incidence

This indicator reports incidence rate of chlamydia cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

| Report Area | Total Population | Total Chlamydia Infections | Chlamydia Infection Rate (Per 100,000 Pop.) |
|---|---|---|---|
| Lauderdale County, MS | 80,475 | 671 | 833.8 |
| Mississippi | 2,978,512 | 23,054 | 774.01 |
| United States | 311,577,841 | 1,422,976 | 456.7 |

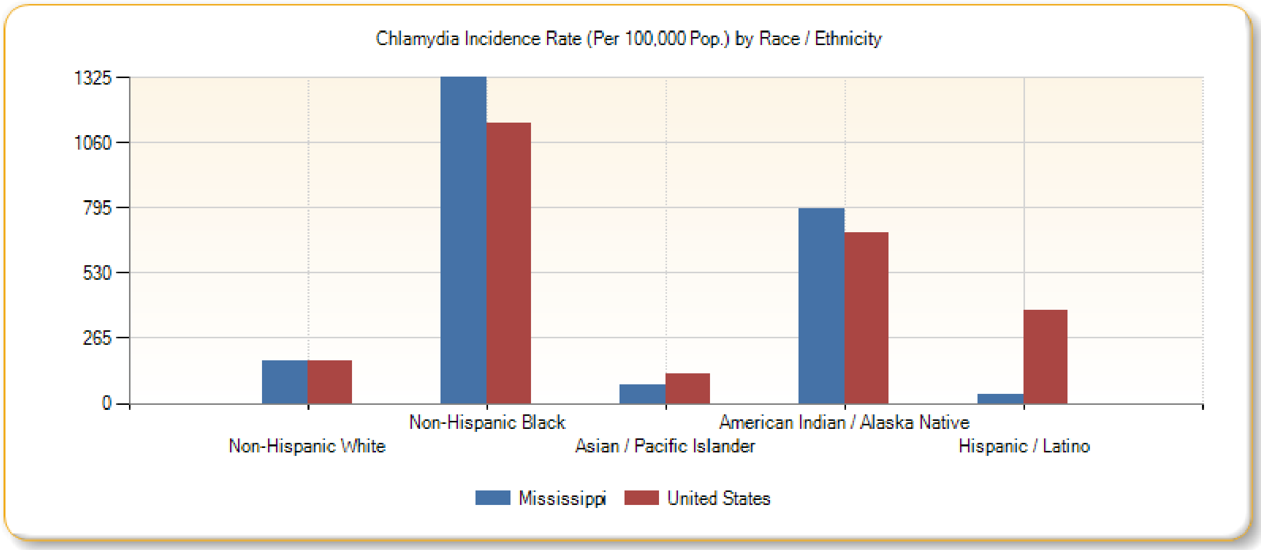
*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Source geography: County*



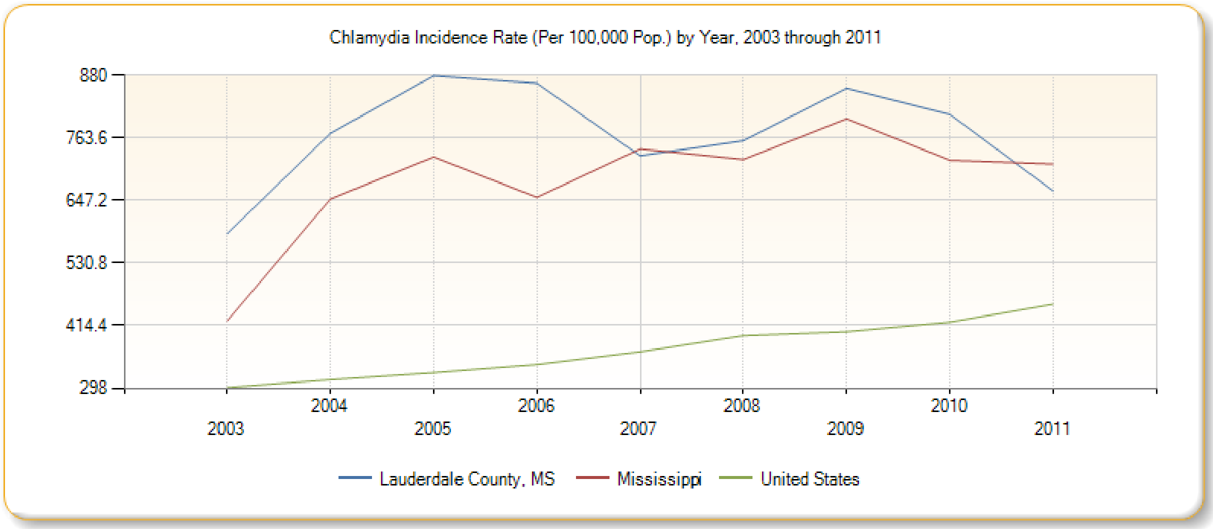
## Chlamydia Incidence Rate (Per 100,000 Pop.) by Race / Ethnicity

| Report Area | Non-Hispanic White | Non-Hispanic Black | Asian / Pacific Islander | American Indian / Alaska Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Mississippi | 168.95 | 1,324.59 | 72.95 | 792.41 | 37.37 |
| United States | 171.72 | 1,140.79 | 118.8 | 696.2 | 377.52 |



## Chlamydia Incidence Rate (Per 100,000 Pop.) by Year, 2003 through 2011

| Report Area | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 585.5 | 772.1 | 879.3 | 865.4 | 730.2 | 758.5 | 855.9 | 807.4 | 664.8 |
| Mississippi | 423.18 | 649.78 | 728.08 | 652.87 | 742.98 | 723.23 | 799.09 | 721.77 | 714.99 |
| United States | 298.78 | 313.66 | 326.59 | 341.74 | 365.5 | 395.54 | 402.72 | 420.56 | 454.12 |

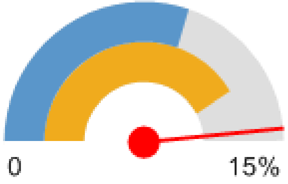


## Diabetes (Adult)

This indicator reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. This indicator is relevant because diabetes is a prevalent problem in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

| Report Area | Total Population Age 20+ | Population with Diagnosed Diabetes | Population with Diagnosed Diabetes, Crude Rate | Population with Diagnosed Diabetes, Age-Adjusted Rate |
|---|---|---|---|---|
| Lauderdale County, MS | 58,063 | 9,232 | 15.9 | 14.5 |
| Mississippi | 2,138,502 | 288,397 | 13.49 | 12.52 |
| United States | 231,492,313 | 22,563,124 | 9.75 | 9.09 |

*Percent Adults with Diagnosed Diabetes (Age-Adjusted)*



🟥 Lauderdale County, MS (14.5%)

🟧 Mississippi (12.52%)

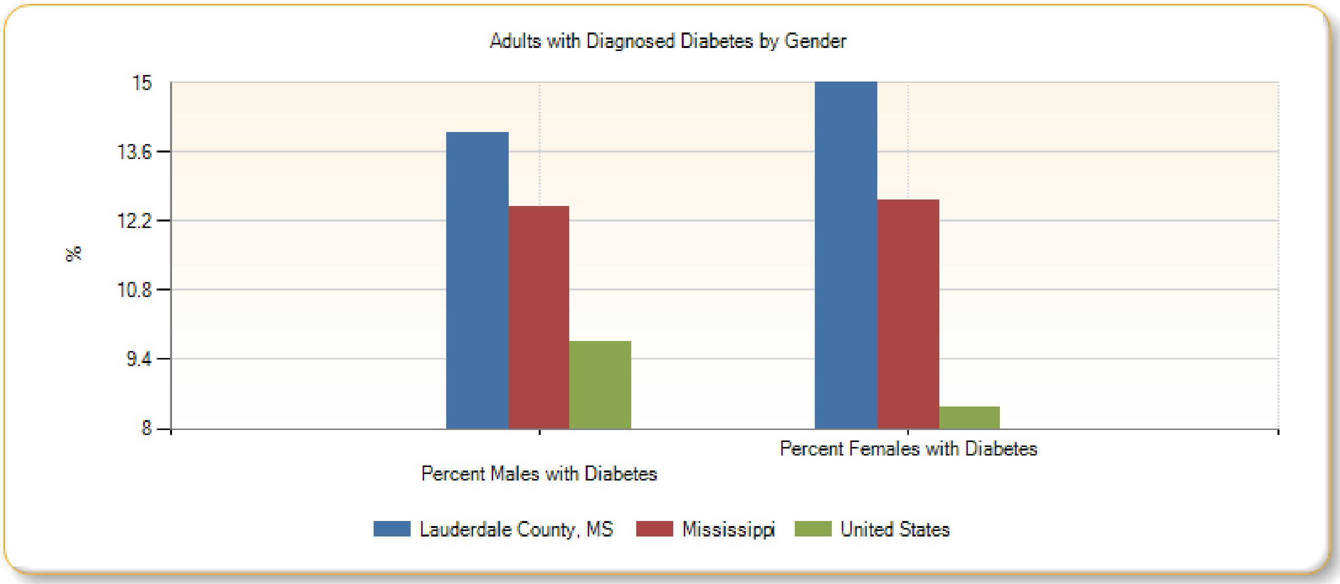
🟦 United States (9.09%)

*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, [National Center for Chronic Disease Prevention and Health Promotion](). Source geography: County*

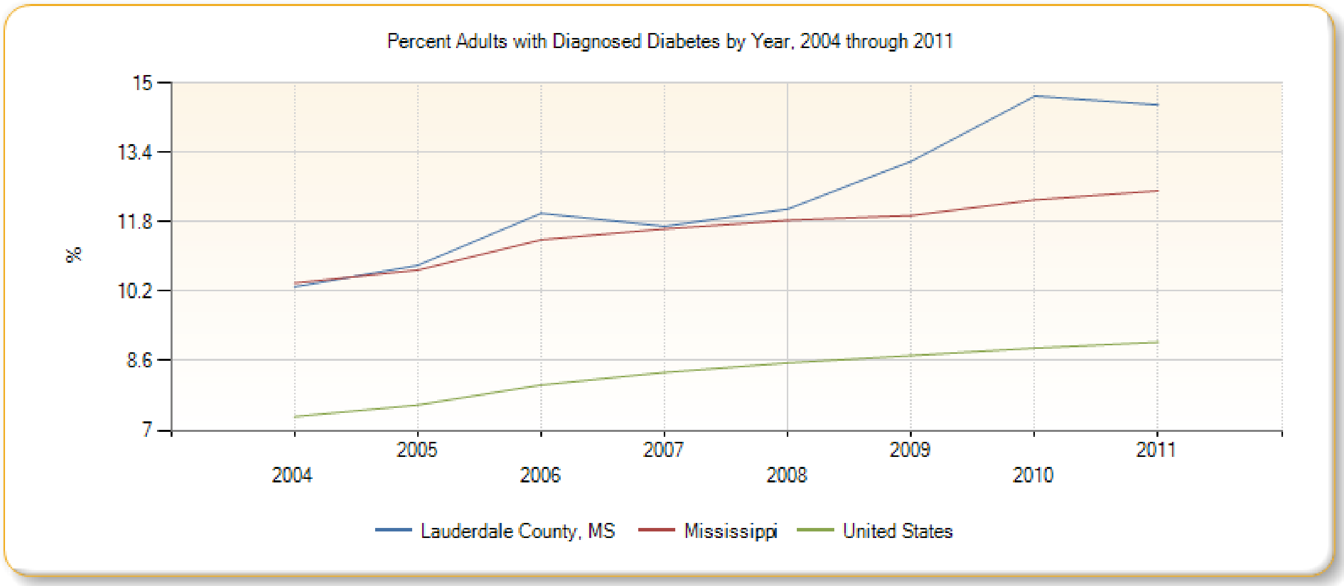
## Adults with Diagnosed Diabetes by Gender

| Report Area | Total Males with Diabetes | Percent Males with Diabetes | Total Females with Diabetes | Percent Females with Diabetes |
|---|---|---|---|---|
| Lauderdale County, MS | 4,097 | 14% | 5,135 | 15% |
| Mississippi | 133,873 | 12.47% | 154,528 | 12.63% |
| United States | 11,236,989 | 9.75% | 10,910,588 | 8.42% |



## Percent Adults with Diagnosed Diabetes by Year, 2004 through 2011

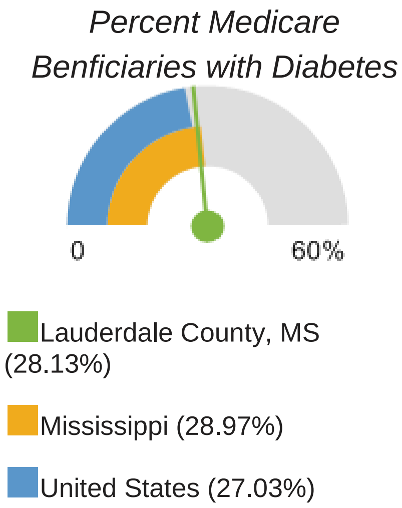
| Report Area | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 10.3% | 10.8% | 12% | 11.7% | 12.1% | 13.2% | 14.7% | 14.5% |
| Mississippi | 10.39% | 10.69% | 11.39% | 11.64% | 11.84% | 11.95% | 12.31% | 12.52% |
| United States | 7.31% | 7.58% | 8.04% | 8.33% | 8.55% | 8.72% | 8.89% | 9.03% |



## Diabetes (Medicare Population)

This indicator reports the percentage of the Medicare fee-for-service population with diabetes.

| Report Area | Total Medicare Beneficiaries | Beneficiaries with Diabetes | Percent with Diabetes |
|---|---|---|---|
| Lauderdale County, MS | 13,347 | 3,755 | 28.13% |
| Mississippi | 450,177 | 130,416 | 28.97% |
| United States | 34,126,305 | 9,224,278 | 27.03% |



*Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.*

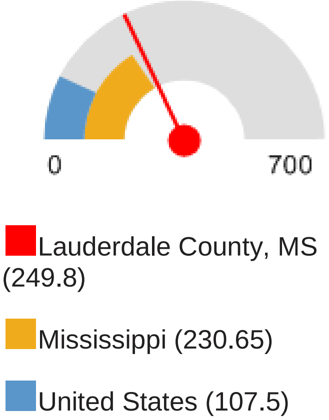
*Data Source: [Centers for Medicare and Medicaid Services](). Source geography: County*

## Gonorrhea Incidence

This indicator reports incidence rate of Gonorrhea cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

| Report Area | Total Population | Total Gonorrhea Infections | Gonorrhea Infection Rate (Per 100,000 Pop.) |
|---|---|---|---|
| Lauderdale County, MS | 80,475 | 201 | 249.8 |
| Mississippi | 2,978,512 | 6,870 | 230.65 |
| United States | 311,466,046 | 334,826 | 107.5 |

*Gonorrhea Infection Rate (Per 100,000 Pop.)*

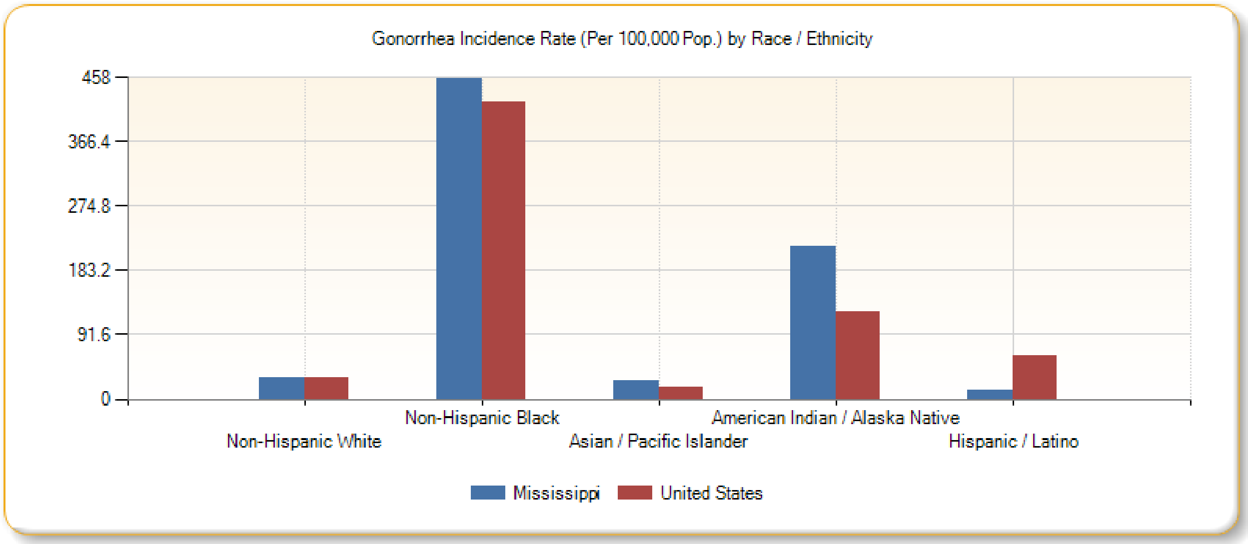


*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Source geography: County*

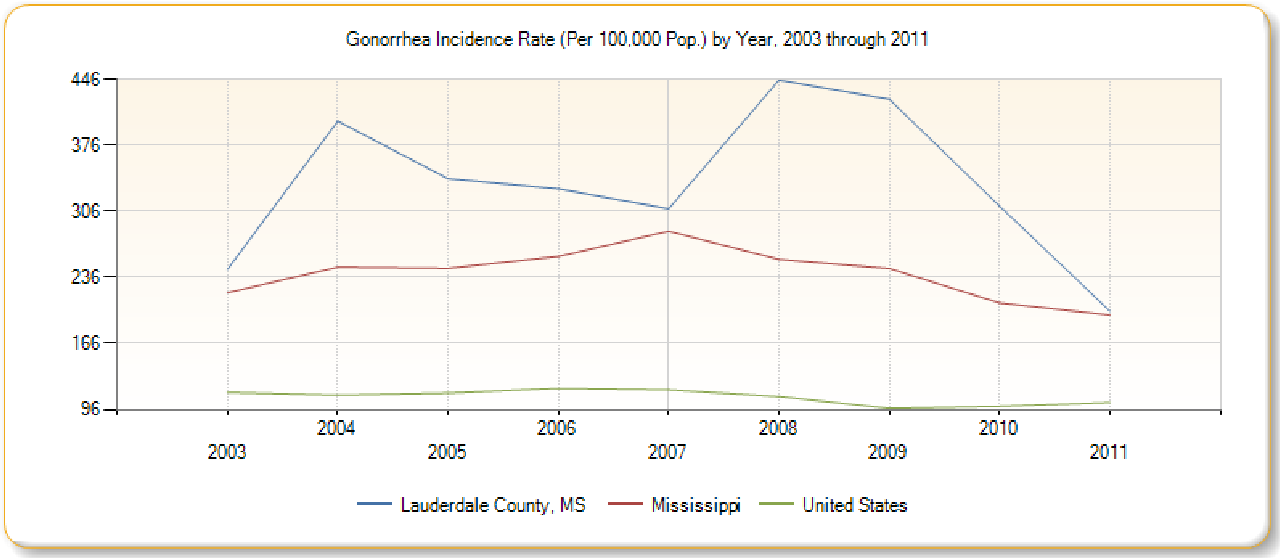
## Gonorrhea Incidence Rate (Per 100,000 Pop.) by Race / Ethnicity

| Report Area | Non-Hispanic White | Non-Hispanic Black | Asian / Pacific Islander | American Indian / Alaska Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Mississippi | 30.06 | 457.26 | 26.53 | 216.73 | 11.68 |
| United States | 29.7 | 422.05 | 17.82 | 124.21 | 60.7 |



## Gonorrhea Incidence Rate (Per 100,000 Pop.) by Year, 2003 through 2011

| Report Area | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 244.5 | 401.6 | 340.6 | 329.8 | 308.7 | 445.1 | 424.8 | 311.5 | 200.1 |
| Mississippi | 219.62 | 246.75 | 245.49 | 258.06 | 284.84 | 255.02 | 245.29 | 208.78 | 195.94 |
| United States | 113.82 | 111.02 | 113.17 | 118.23 | 116.63 | 109.46 | 96.96 | 99.08 | 103.09 |


Gonorrhea Incidence Rate (Per 100,000 Pop.) by Year, 2003 through 2011
446
376
306
236
166
96
2003
2004
2005
2006
2007
2008
2009
2010
2011
Lauderdale County, MS
Mississippi
United States

## *Heart Disease (Adult)*

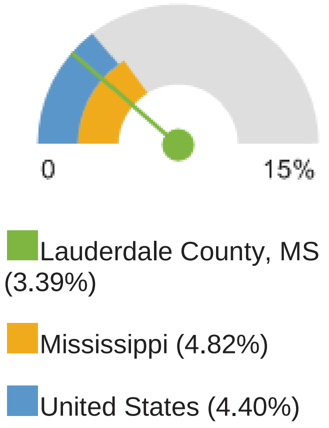
1,726, or 3.39% of adults aged 18 and older have ever been told by a doctor that they have coronary heart disease or angina. This indicator is relevant because coronary heart disease is a leading cause of death in the U.S. and is also related to high blood pressure, high cholesterol, and heart attacks.

| Report Area | Survey Population (Adults Age 18+) | Total Adults with Heart Disease | Percent Adults with Heart Disease |
|---|---:|---:|---:|
| Lauderdale County, MS | 50,933 | 1,726 | 3.39% |
| Mississippi | 2,188,588 | 105,597 | 4.82% |
| United States | 236,406,904 | 10,407,185 | 4.40% |

*Note: This indicator is compared with the state average.*

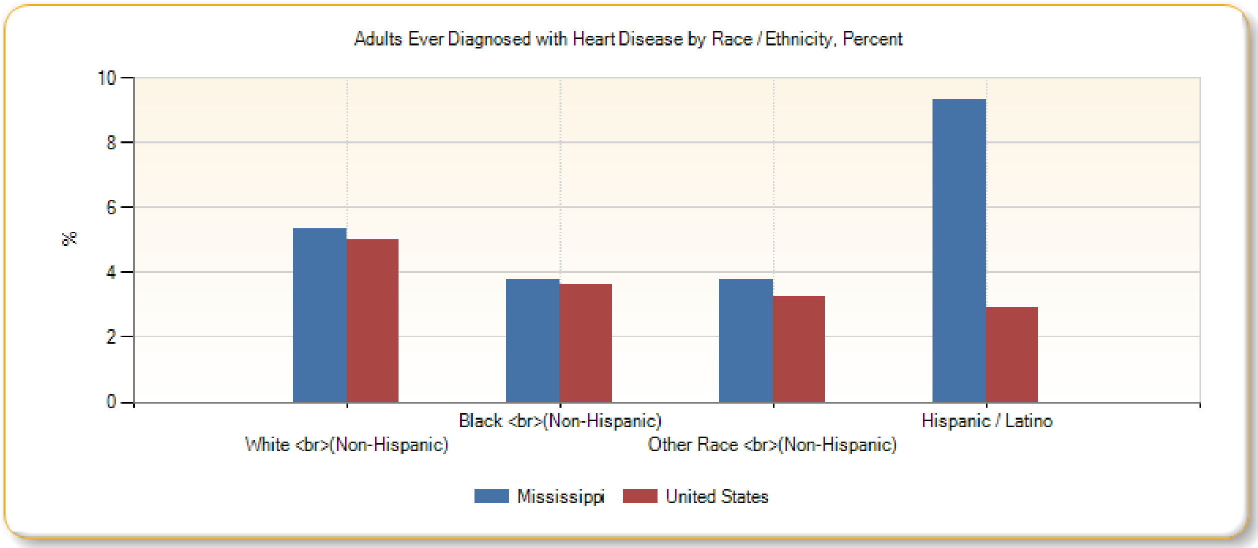
*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. Source geography: County*

*Percent Adults with Heart Disease*



## Adults Ever Diagnosed with Heart Disease by Race / Ethnicity, Percent

| Report Area | White (Non-Hispanic) | Black (Non-Hispanic) | Other Race (Non-Hispanic) | Hispanic / Latino |
|---|---|---|---|---|
| Mississippi | 5.35% | 3.79% | 3.77% | 9.31% |
| United States | 4.99% | 3.63% | 3.23% | 2.92% |



## Heart Disease (Medicare Population)

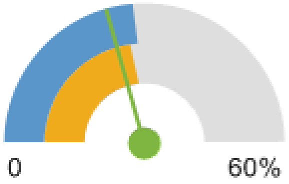
This indicator reports the percentage of the Medicare fee-for-service population with ischaemic heart disease.

| Report Area | Total Medicare Beneficiaries | Beneficiaries with Heart Disease | Percent with Heart Disease |
|---|---|---|---|
| Lauderdale County, MS | 13,347 | 3,288 | 24.63% |
| Mississippi | 450,177 | 124,546 | 27.67% |
| United States | 34,126,305 | 9,744,058 | 28.55% |

*Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.*

*Data Source: Centers for Medicare and Medicaid Services .2012 Source geography: County*

*Percent Medicare Benficiaries with Heart Disease*



🟩 Lauderdale County, MS (24.63%)

🟧 Mississippi (27.67%)

🟦 United States (28.55%)

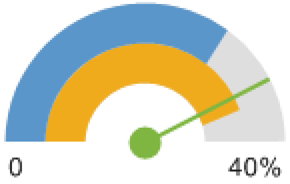
## High Blood Pressure (Adult)

20,343, or 34% of adults aged 18 and older have ever been told by a doctor that they have high blood pressure or hypertension.

| Report Area | Total Population (Age 18+) | Total Adults with High Blood Pressure | Percent Adults with High Blood Pressure |
|---|---|---|---|
| Lauderdale County, MS | 59,832 | 20,343 | 34% |
| Mississippi | 2,199,741 | 789,707 | 35.9% |
| United States | 232,556,016 | 65,476,522 | 28.16% |

*Note: This indicator is compared with the state average. Data break out by demographic groups are not available.*
*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-2012 Additional data analysis by CARES. Source geography: County*

*Percent Adults with High Blood Pressure*



🟩 Lauderdale County, MS (34%)

🟧 Mississippi (35.9%)

🟦 United States (28.16%)

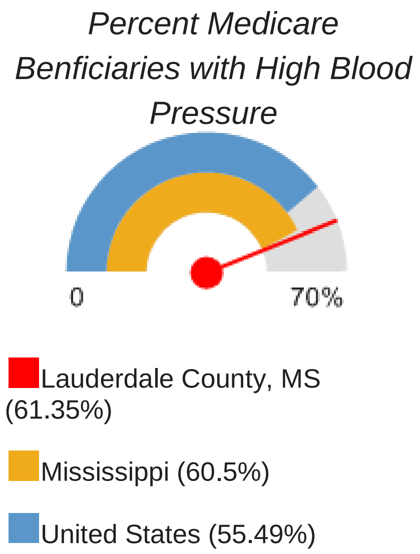
## High Blood Pressure (Medicare Population)

This indicator reports the percentage of the Medicare fee-for-service population with hypertension (high blood pressure).

| Report Area | Total Medicare Beneficiaries | Beneficiaries with High Blood Pressure | Percent with High Blood Pressure |
|---|---|---|---|
| Lauderdale County, MS | 13,347 | 8,189 | 61.35% |
| Mississippi | 450,177 | 272,376 | 60.5% |
| United States | 34,126,305 | 18,936,118 | 55.49% |

*Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.*

*Data Source: [Centers for Medicare and Medicaid Services](#) .2012 Source geography: County*

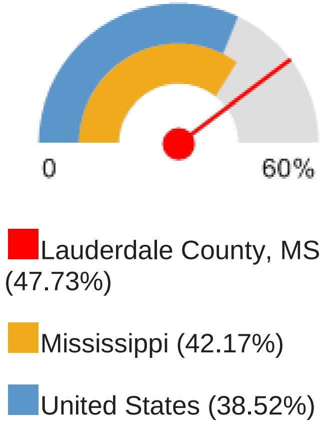


## High Cholesterol (Adult)

This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had high blood cholesterol.

| Report Area | Survey Population (Adults Age 18+) | Total Adults with High Cholesterol | Percent Adults with High Cholesterol |
|---|---:|---:|---:|
| Lauderdale County, MS | 37,174 | 17,746 | 47.73% |
| Mississippi | 1,565,255 | 660,021 | 42.17% |
| United States | 180,861,326 | 69,662,357 | 38.52% |

*Percent Adults with High Cholesterol*

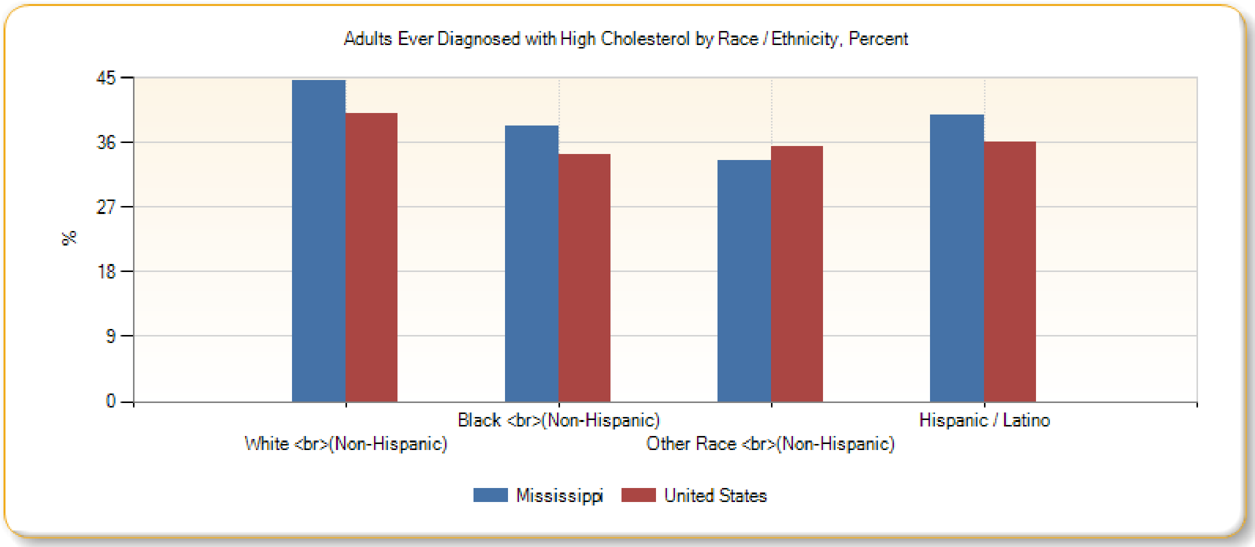


*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-2012 Additional data analysis by CARES. Source geography: County*

## Adults Ever Diagnosed with High Cholesterol by Race / Ethnicity, Percent

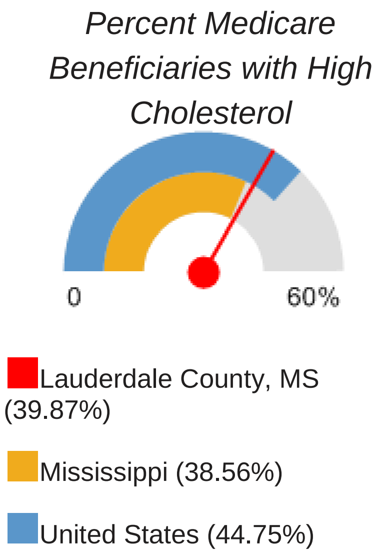
| Report Area | White (Non-Hispanic) | Black (Non-Hispanic) | Other Race (Non-Hispanic) | Hispanic / Latino |
|---|---|---|---|---|
| Mississippi | 44.66% | 38.24% | 33.33% | 39.75% |
| United States | 39.95% | 34.28% | 35.42% | 35.97% |



## High Cholesterol (Medicare Population)

This indicator reports the percentage of the Medicare fee-for-service population with hyperlipidemia, which is typically associated with high cholesterol.

| Report Area | Total Medicare Beneficiaries | Beneficiaries with High Cholesterol | Percent with High Cholesterol |
|---|---:|---:|---:|
| Lauderdale County, MS | 13,347 | 5,322 | 39.87% |
| Mississippi | 450,177 | 173,568 | 38.56% |
| United States | 34,126,305 | 15,273,052 | 44.75% |



*Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.*

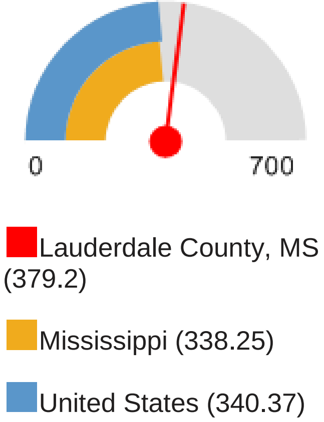
*Data Source: [Centers for Medicare and Medicaid Services ](). 2012 Source geography: County*

## HIV Prevalence

This indicator reports prevalence rate of HIV per 100,000 population. This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

| Report Area | Total Population | Population with HIV / AIDS | Population with HIV / AIDS, Rate (Per 100,000 Pop.) |
|---|---:|---:|---:|
| Lauderdale County, MS | 65,779 | 249 | 379.2 |
| Mississippi | 2,428,088 | 8,213 | 338.25 |
| United States | 509,288,471 | 1,733,459 | 340.37 |

*Population with HIV / AIDS, Rate (Per 100,000 Pop.)*

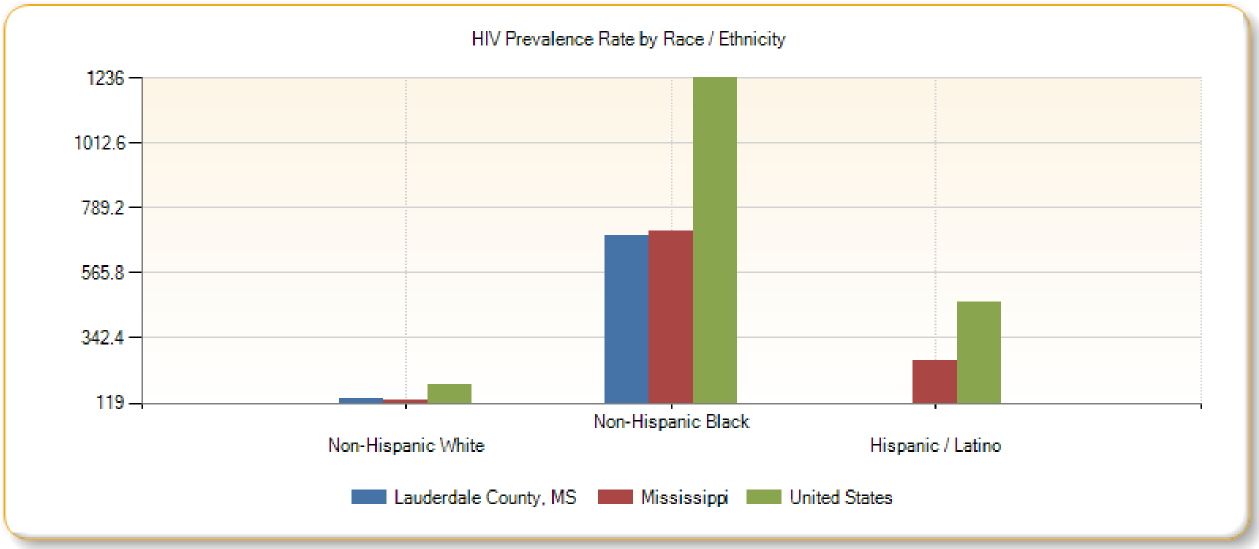


*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2010 Source geography: County*

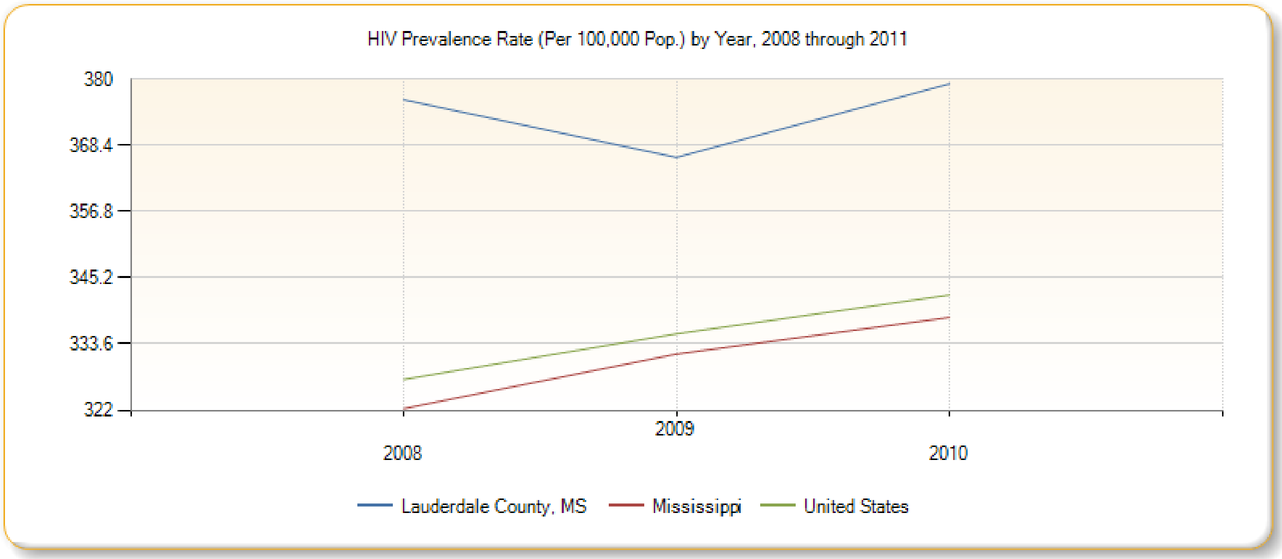
## HIV Prevalence Rate by Race / Ethnicity

| Report Area | Non-Hispanic White | Non-Hispanic Black | Hispanic / Latino |
|---|---|---|---|
| Lauderdale County, MS | 131.4 | 691.4 | no data |
| Mississippi | 119.89 | 709.04 | 264.01 |
| United States | 180.16 | 1,235.54 | 464.11 |



## HIV Prevalence Rate (Per 100,000 Pop.) by Year, 2008 through 2011

| Report Area | 2008 | 2009 | 2010 |
|---|---|---|---|
| Lauderdale County, MS | 376.4 | 366.3 | 379.2 |
| Mississippi | 322.26 | 331.83 | 338.25 |
| United States | 327.37 | 335.38 | 342.17 |

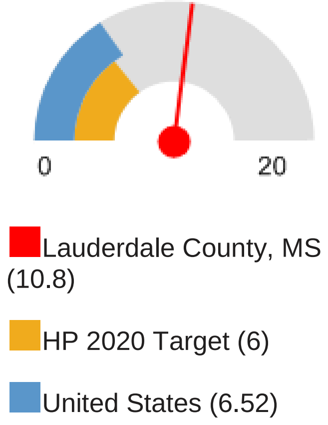


## Infant Mortality

This indicator reports the rate of deaths to infants less than one year of age per 1,000 births. This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

| Report Area | Total Births | Total Infant Deaths | Infant Mortality Rate (Per 1,000 Births) |
|---|---|---|---|
| Lauderdale County, MS | 5,860 | 63 | 10.8 |
| Mississippi | 216,795 | 2,190 | 10.1 |
| United States | 20,913,535 | 136,369 | 6.52 |
| HP 2020 Target | | | <= 6.0 |

*Infant Mortality Rate (Per 1,000 Births)*

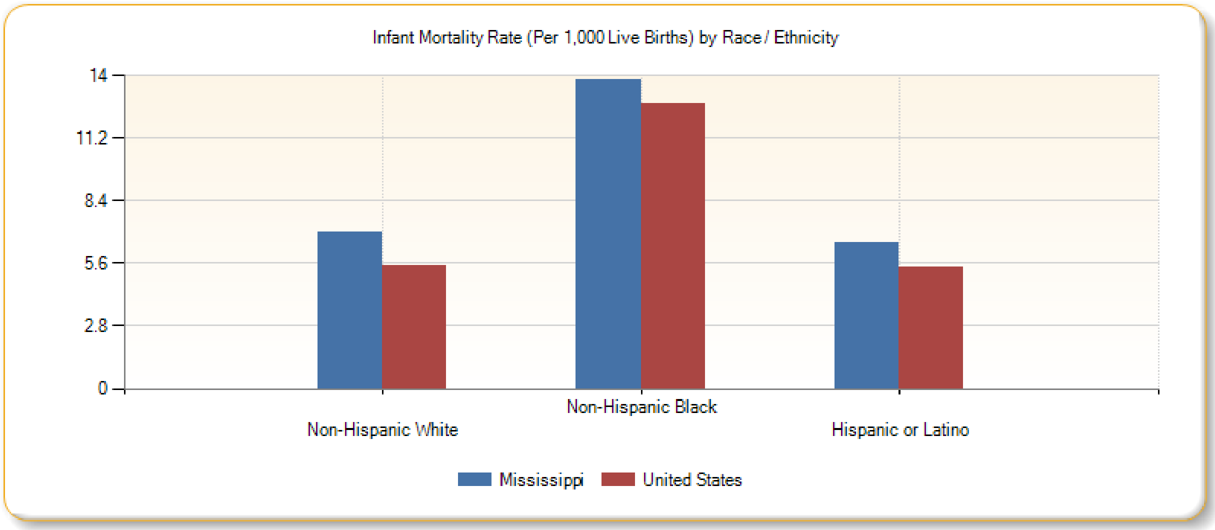


*Note: This indicator is compared with the Healthy People 2020 Target.*

*Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. 2006-2010 Source geography: County*

### Infant Mortality Rate (Per 1,000 Live Births) by Race / Ethnicity

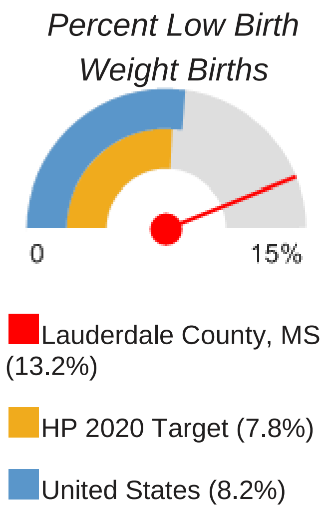
| Report Area | Non-Hispanic White | Non-Hispanic Black | Hispanic or Latino |
|---|---|---|---|
| Lauderdale County, MS | no data | no data | no data |
| Mississippi | 7 | 13.8 | 6.5 |
| United States | 5.5 | 12.7 | 5.4 |


Infant Mortality Rate (Per 1,000 Live Births) by Race / Ethnicity
14
11.2
8.4
5.6
2.8
0
Non-Hispanic White
Non-Hispanic Black
Hispanic or Latino
Mississippi
United States

## Low Birth Weight

This indicator reports the percentage of total births that are low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

| Report Area | Total Live Births | Low Weight Births (Under 2500g) | Low Weight Births, Percent of Total |
|---|---|---|---|
| Lauderdale County, MS | 8,393 | 1,108 | 13.2% |
| Mississippi | 308,000 | 37,268 | 12.1% |
| United States | 29,300,495 | 2,402,641 | 8.2% |
| HP 2020 Target | | | <=7.8% |

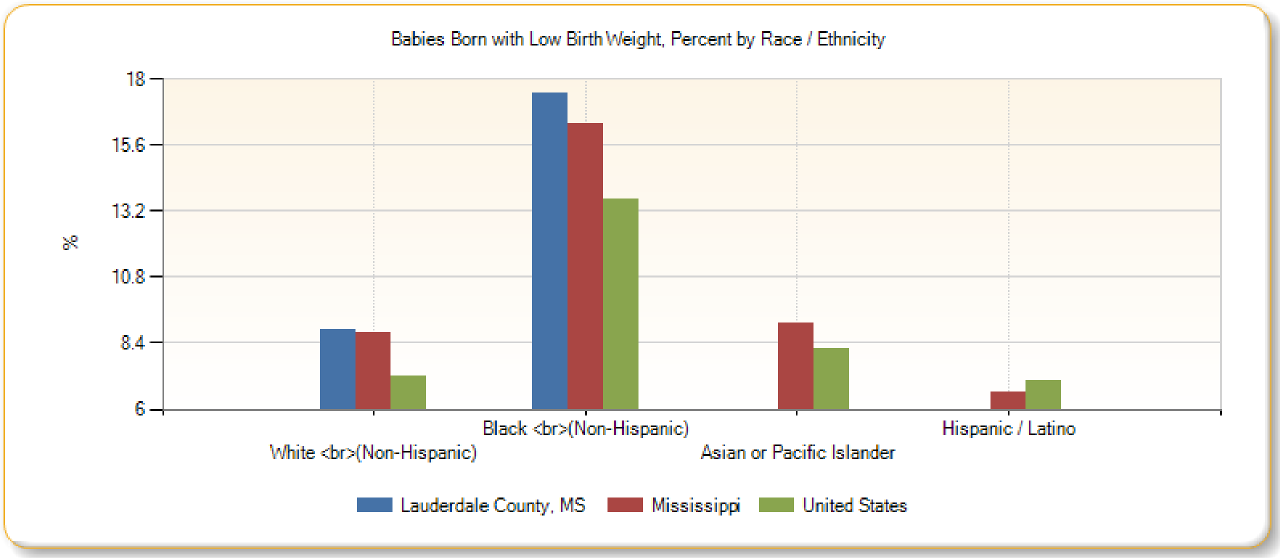


*Note: This indicator is compared with the Healthy People 2020 Target.*

*Data Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. 2006-2012 Accessed via CDC WONDER. Source geography: County*

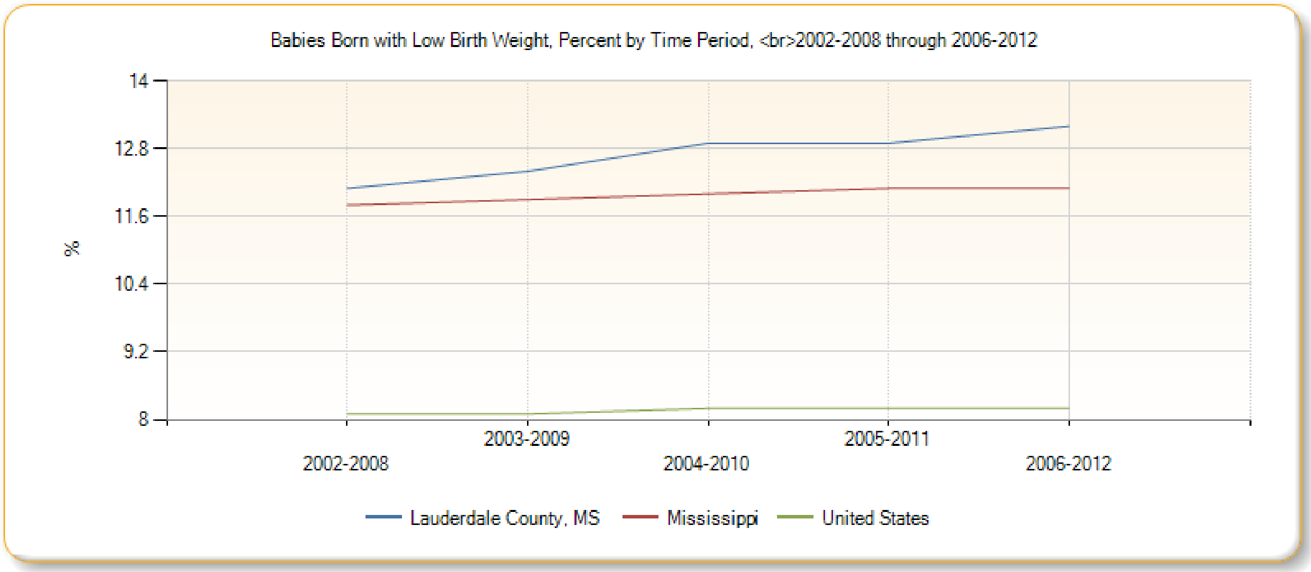
## Babies Born with Low Birth Weight, Percent by Race / Ethnicity

| Report Area | White (Non-Hispanic) | Black (Non-Hispanic) | Asian or Pacific Islander | Hispanic / Latino |
|---|---|---|---|---|
| Lauderdale County, MS | 8.9% | 17.5% | no data | no data |
| Mississippi | 8.8% | 16.4% | 9.1% | 6.6% |
| United States | 7.2% | 13.6% | 8.2% | 7% |



## Babies Born with Low Birth Weight, Percent by Time Period, 2002-2008 through 2006-2012

| Report Area | 2002-2008 | 2003-2009 | 2004-2010 | 2005-2011 | 2006-2012 |
|---|---|---|---|---|---|
| Lauderdale County, MS | 12.1% | 12.4% | 12.9% | 12.9% | 13.2% |
| Mississippi | 11.8% | 11.9% | 12% | 12.1% | 12.1% |
| United States | 8.1% | 8.1% | 8.2% | 8.2% | 8.2% |

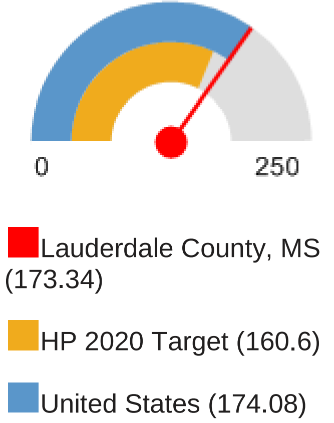


## Mortality - Cancer

This indicator reports the rate of death due to malignant neoplasm (cancer) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because cancer is a leading cause of death in the United States.

| Report Area | Total Population | Average Annual Deaths, 2007-2011 | Crude Death Rate (Per 100,000 Pop.) | Age-Adjusted Death Rate (Per 100,000 Pop.) |
|---|---|---|---|---|
| Lauderdale County, MS | 79,894 | 157 | 196.01 | 173.34 |
| Mississippi | 2,956,148 | 6,170 | 208.7 | 200.61 |
| United States | 306,486,831 | 569,481 | 185.81 | 174.08 |
| HP 2020 Target | | | | <= 160.6 |

Cancer Mortality, Age-Adjusted Death Rate (Per 100,000 Pop.)

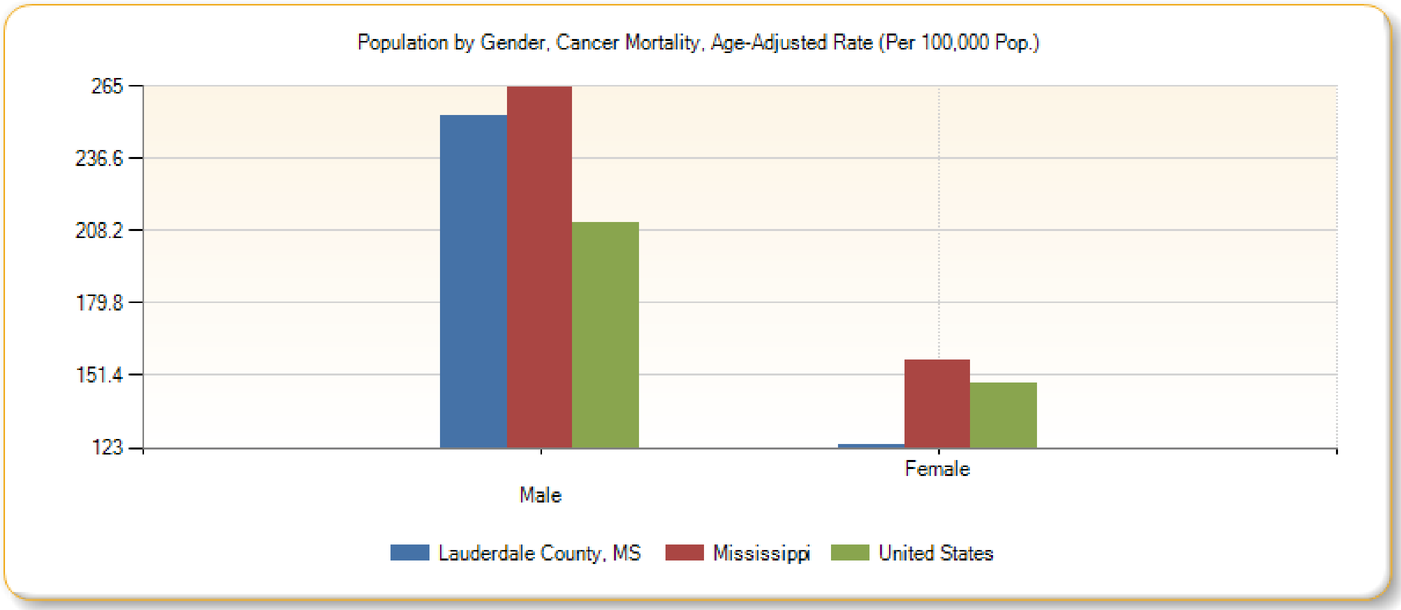


*Note: This indicator is compared with the Healthy People 2020 Target.*

*Data Source: Centers for Disease Control and Prevention, National Vital Statistics System.2007-2011 Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. Source geography: County*

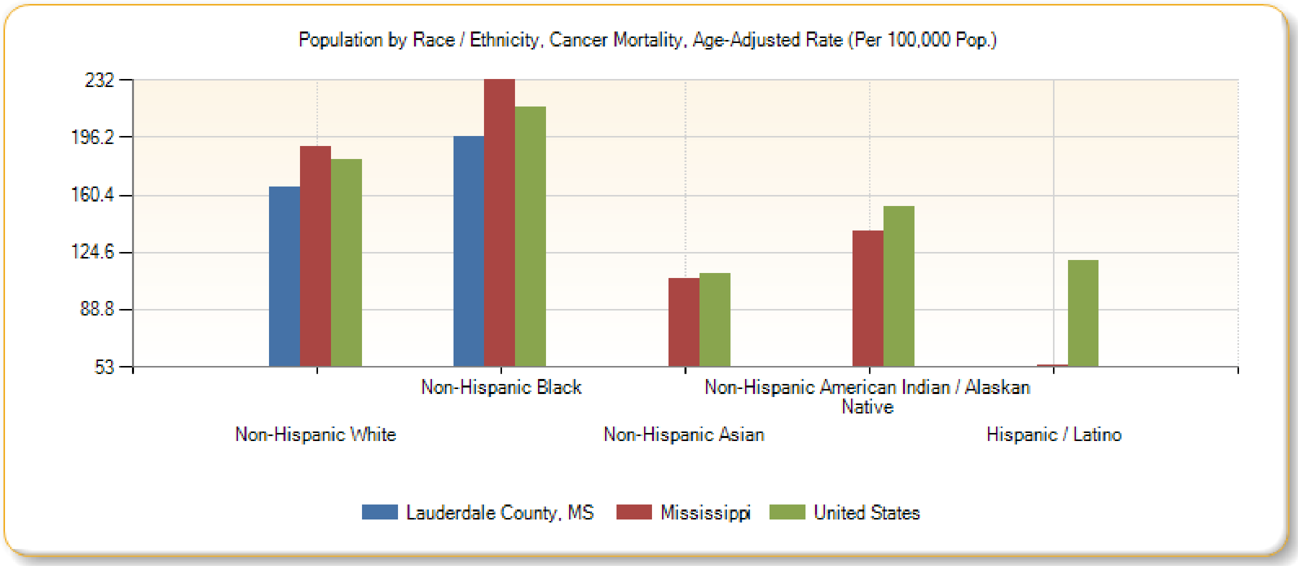
## Population by Gender, Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Male | Female |
|---|---|---|
| Lauderdale County, MS | 253.17 | 123.41 |
| Mississippi | 264.69 | 157.37 |
| United States | 211.52 | 147.92 |



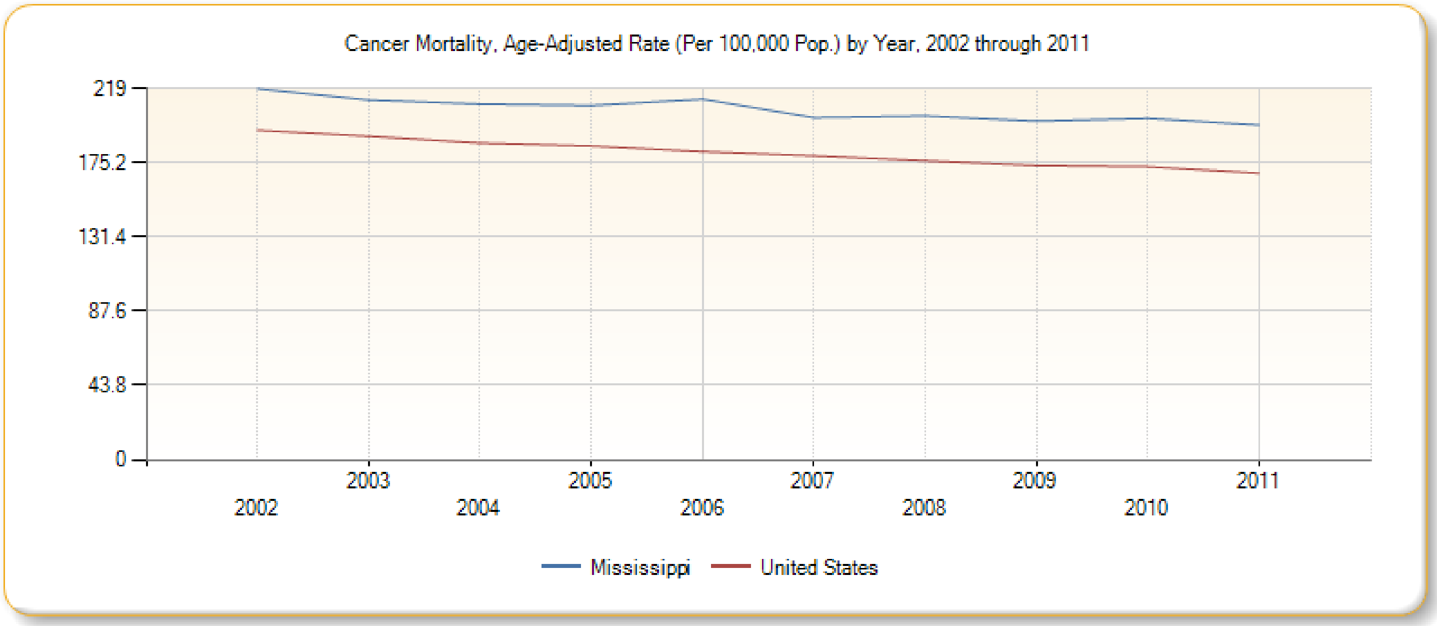
## Population by Race / Ethnicity, Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic Asian | Non-Hispanic American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 165.4 | 197.05 | no data | no data | no data |
| Mississippi | 190.13 | 231.75 | 108.05 | 137.54 | 53.58 |
| United States | 182.58 | 214.88 | 111.57 | 152.74 | 119.74 |



## Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011

| Report Area | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi | 218.84 | 212.23 | 209.83 | 208.92 | 212.66 | 201.8 | 202.85 | 199.77 | 201.42 | 197.43 |
| United States | 194.34 | 190.85 | 186.79 | 185.09 | 181.78 | 179.26 | 176.37 | 173.53 | 172.79 | 168.96 |

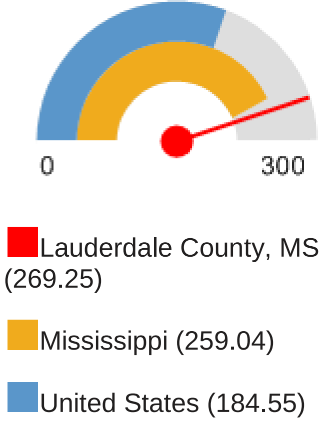


## Mortality - Heart Disease

Within the report area the rate of death due to coronary heart disease per 100,000 population is 269.25. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because heart disease is a leading cause of death in the United States.

| Report Area | Total Population | Average Annual Deaths, 2007-2011 | Crude Death Rate (Per 100,000 Pop.) | Age-Adjusted Death Rate (Per 100,000 Pop.) |
|---|---|---|---|---|
| Lauderdale County, MS | 79,894 | 245 | 307.16 | 269.25 |
| Mississippi | 2,956,148 | 7,688 | 260.07 | 259.04 |
| United States | 306,486,831 | 605,315 | 197.5 | 184.55 |

*Heart Disease Mortality, Age-Adjusted Death Rate (Per 100,000 Pop.)*

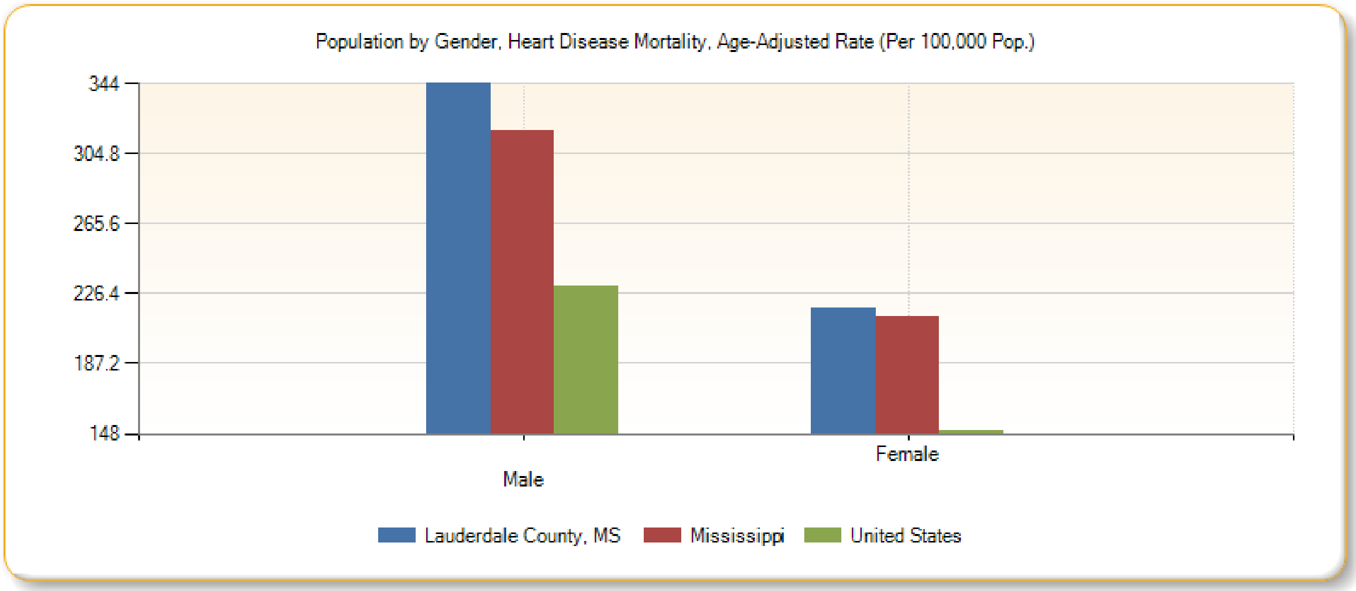


*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, National Vital Statistics System.2007-2011 Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. Source geography: County*

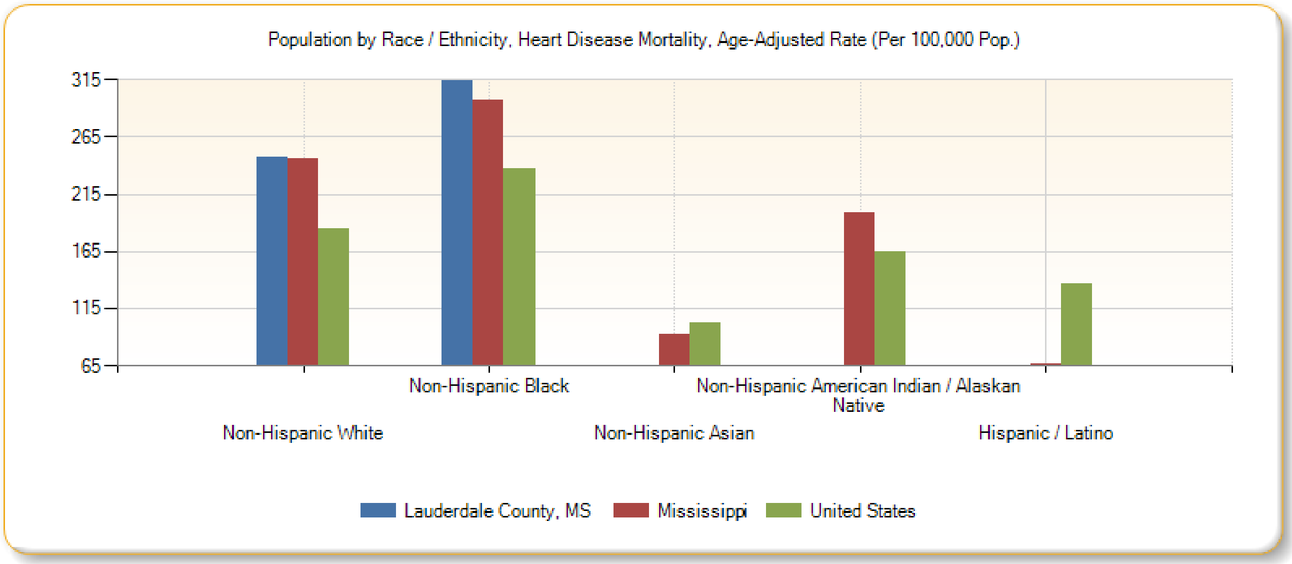
## Population by Gender, Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Male | Female |
|---|---|---|
| Lauderdale County, MS | 343.71 | 218.47 |
| Mississippi | 317.79 | 213.45 |
| United States | 230.61 | 148.54 |



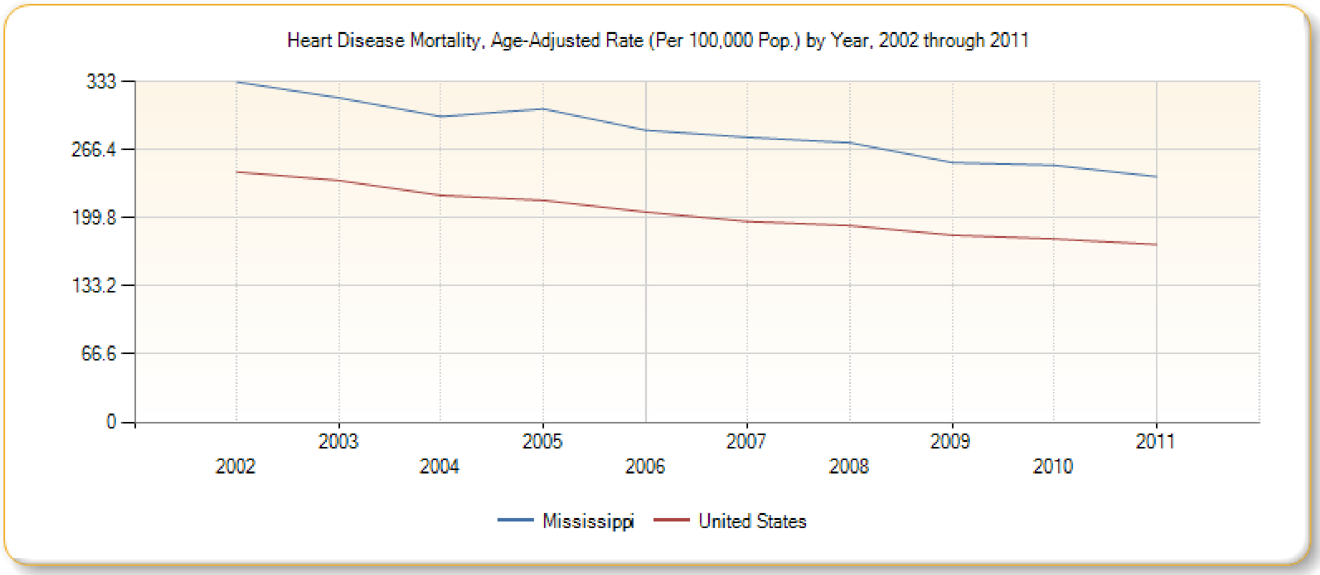
## Population by Race / Ethnicity, Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic Asian | Non-Hispanic American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 246.57 | 314.38 | no data | no data | no data |
| Mississippi | 245.6 | 296.53 | 92.52 | 198.86 | 65.1 |
| United States | 185.11 | 237.6 | 102.64 | 164.23 | 135.98 |



## Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011

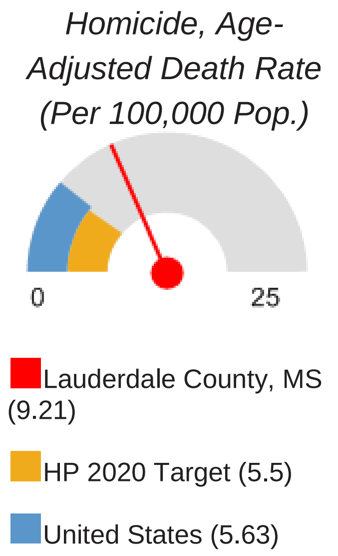
| Report Area | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi | 332.56 | 317.13 | 298.84 | 306.42 | 285.41 | 278.47 | 273.19 | 253.8 | 251.08 | 240.12 |
| United States | 244.64 | 236.31 | 221.63 | 216.85 | 205.47 | 196.09 | 192.12 | 182.82 | 179.14 | 173.74 |



## Mortality - Homicide

This indicator reports the rate of death due to assault (homicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because homicide rate is a measure of poor community safety and is a leading cause of premature death.

| Report Area | Total Population | Average Annual Deaths, 2007-2011 | Crude Death Rate (Per 100,000 Pop.) | Age-Adjusted Death Rate (Per 100,000 Pop.) |
|---|---|---|---|---|
| Lauderdale County, MS | 79,894 | 7 | 9.01 | 9.21 |
| Mississippi | 2,956,148 | 297 | 10.06 | 10.23 |
| United States | 306,486,831 | 17,097 | 5.58 | 5.63 |
| HP 2020 Target | | | | <= 5.5 |

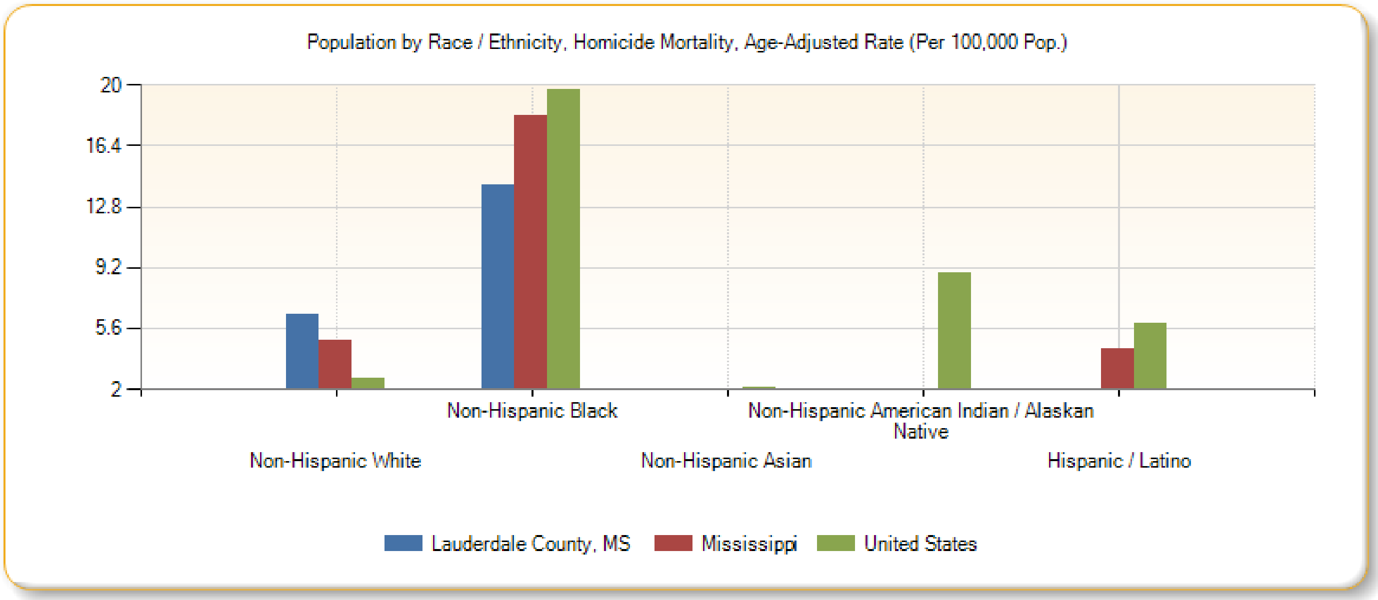


*Note: This indicator is compared with the Healthy People 2020 Target.*

*Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. 2007-2011 Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. Source geography: County*

## Population by Race / Ethnicity, Homicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic Asian | Non-Hispanic American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 6.41 | 14.05 | no data | no data | no data |
| Mississippi | 4.93 | 18.19 | no data | no data | 4.38 |
| United States | 2.68 | 19.67 | 2.04 | 8.84 | 5.9 |

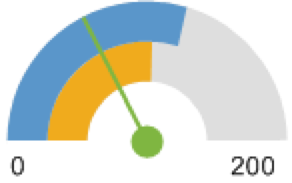


## Mortality - Ischaemic Heart Disease

Within the report area the rate of death due to coronary heart disease per 100,000 population is 70.13. This rate is less than the Healthy People 2020 target of less than or equal to 103.4. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because heart disease is a leading cause of death in the United States.

| Report Area | Total Population | Average Annual Deaths, 2007-2011 | Crude Death Rate (Per 100,000 Pop.) | Age-Adjusted Death Rate (Per 100,000 Pop.) |
|---|---|---|---|---|
| Lauderdale County, MS | 79,894 | 64 | 80.11 | 70.13 |
| Mississippi | 2,956,148 | 3,928 | 132.89 | 131.05 |
| United States | 306,486,831 | 390,568 | 127.43 | 118.96 |
| HP 2020 Target | | | | <= 103.4 |

*Ischaemic Heart Disease Mortality, Age-Adjusted Death Rate (Per 100,000 Pop.)*



🟩 Lauderdale County, MS (70.13)

🟧 HP 2020 Target (103.4)

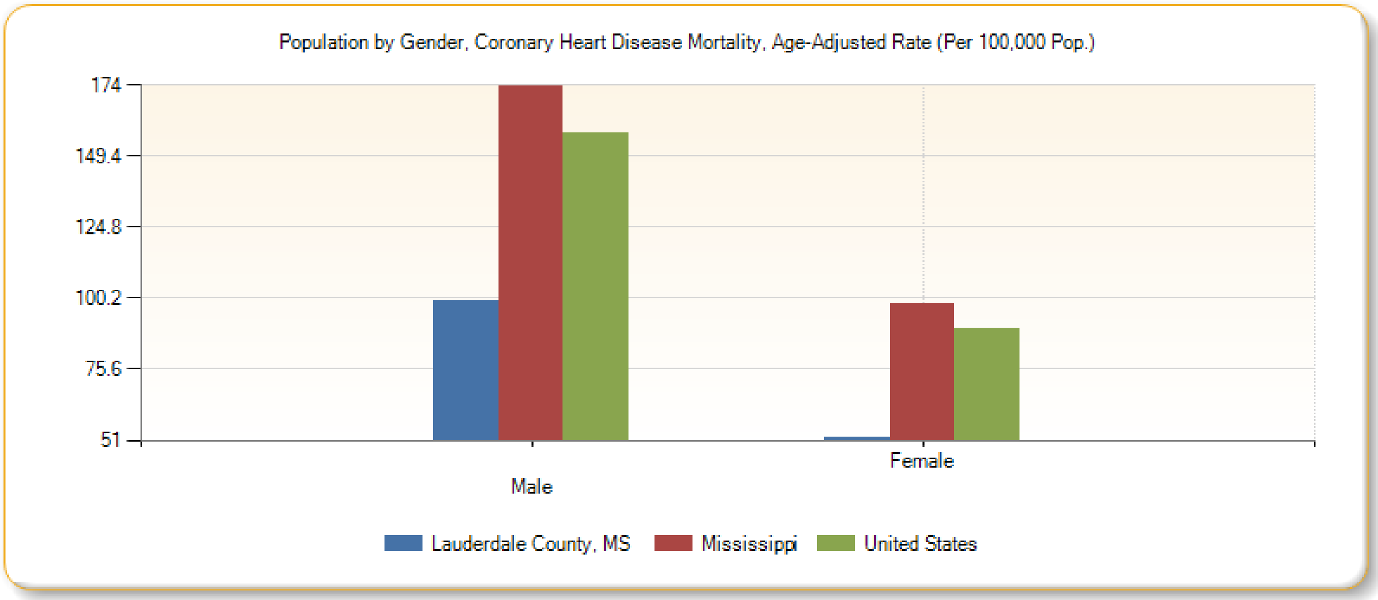
🟦 United States (118.96)

*Note: This indicator is compared with the Healthy People 2020 Target.*

*Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. 2007-2011Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. Source geography: County*

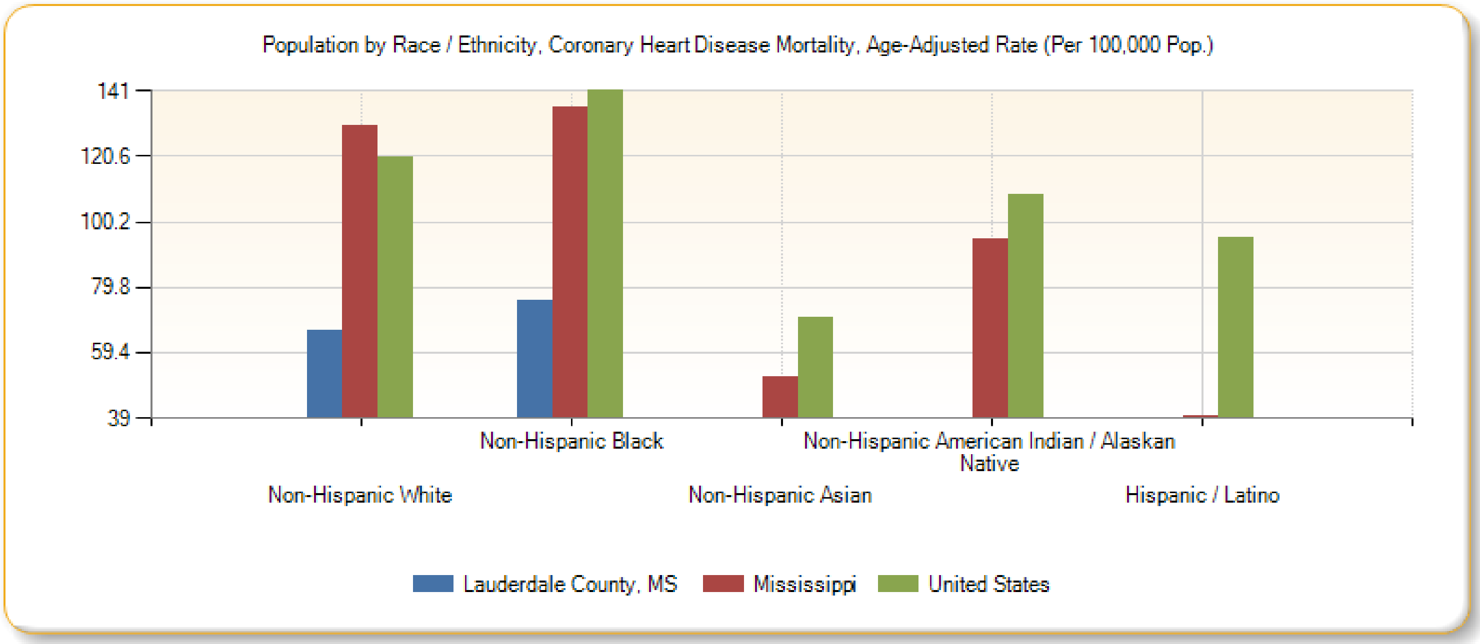
## Population by Gender, Coronary Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Male | Female |
|---|---|---|
| Lauderdale County, MS | 99.11 | 51.27 |
| Mississippi | 173.75 | 98.25 |
| United States | 157.16 | 89.72 |



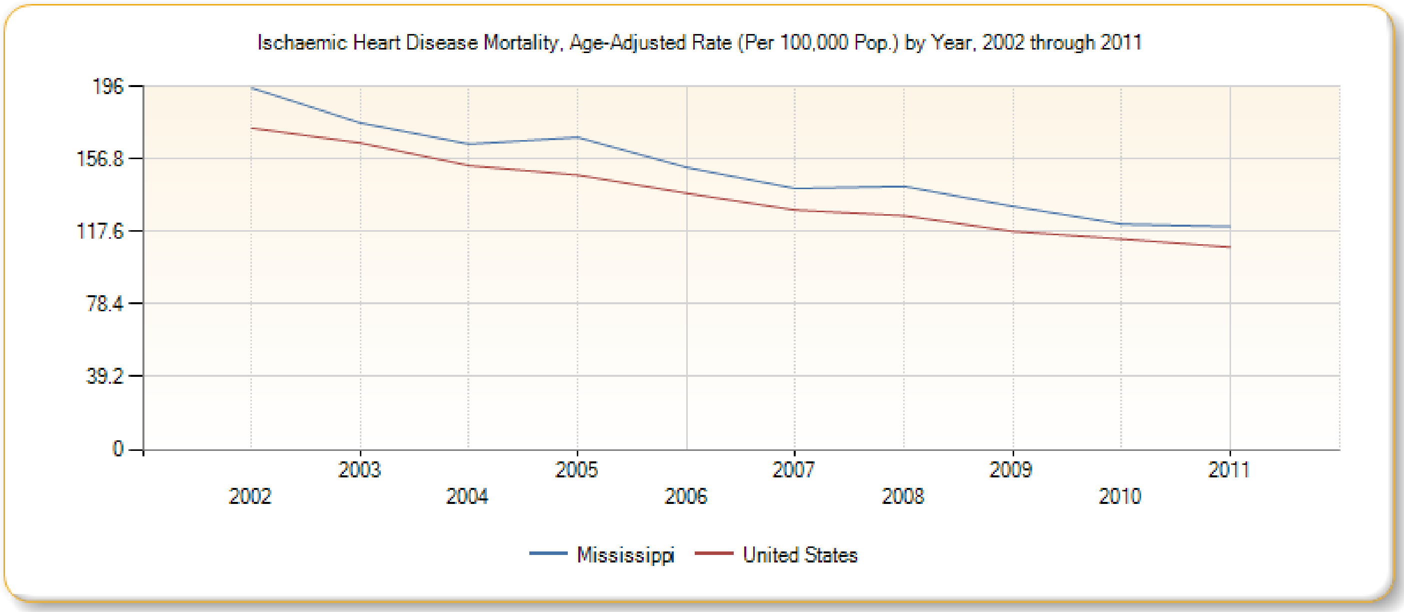
## Population by Race / Ethnicity, Coronary Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic Asian | Non-Hispanic American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 66.28 | 75.61 | no data | no data | no data |
| Mississippi | 129.84 | 135.61 | 52.13 | 94.5 | 39.96 |
| United States | 120.31 | 141 | 70.65 | 108.56 | 95.22 |



## Ischaemic Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011

| Report Area | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi | 195.27 | 176.34 | 164.96 | 168.54 | 152.27 | 140.91 | 142.05 | 131.31 | 121.61 | 120.31 |
| United States | 173.5 | 165.55 | 153.24 | 148.15 | 138.33 | 129.24 | 126.14 | 117.72 | 113.65 | 109.18 |



## Mortality - Lung Disease

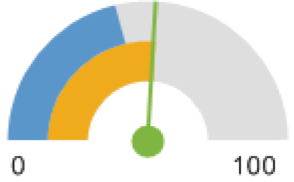
This indicator reports the rate of death due to chronic lower respiratory disease per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because lung disease is a leading cause of death in the United States.

| Report Area | Total Population | Average Annual Deaths, 2007-2011 | Crude Death Rate (Per 100,000 Pop.) | Age-Adjusted Death Rate (Per 100,000 Pop.) |
|---|---|---|---|---|
| Lauderdale County, MS | 79,894 | 47 | 59.33 | 52.02 |
| Mississippi | 2,956,148 | 1,568 | 53.04 | 52.67 |
| United States | 306,486,831 | 137,478 | 44.86 | 42.67 |

*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, National Vital Statistics System.2007-201. Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. Source geography: County*

*Lung Disease Mortality, Age-Adjusted Death Rate (Per 100,000 Pop.)*



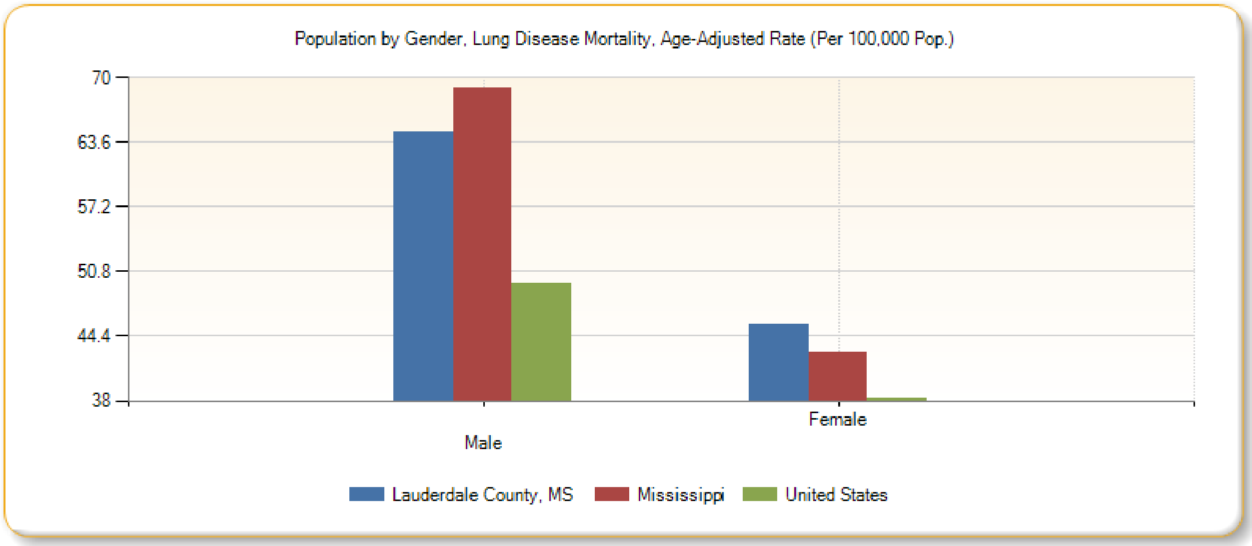
🟩Lauderdale County, MS (52.02)

🟧Mississippi (52.67)

🟦United States (42.67)

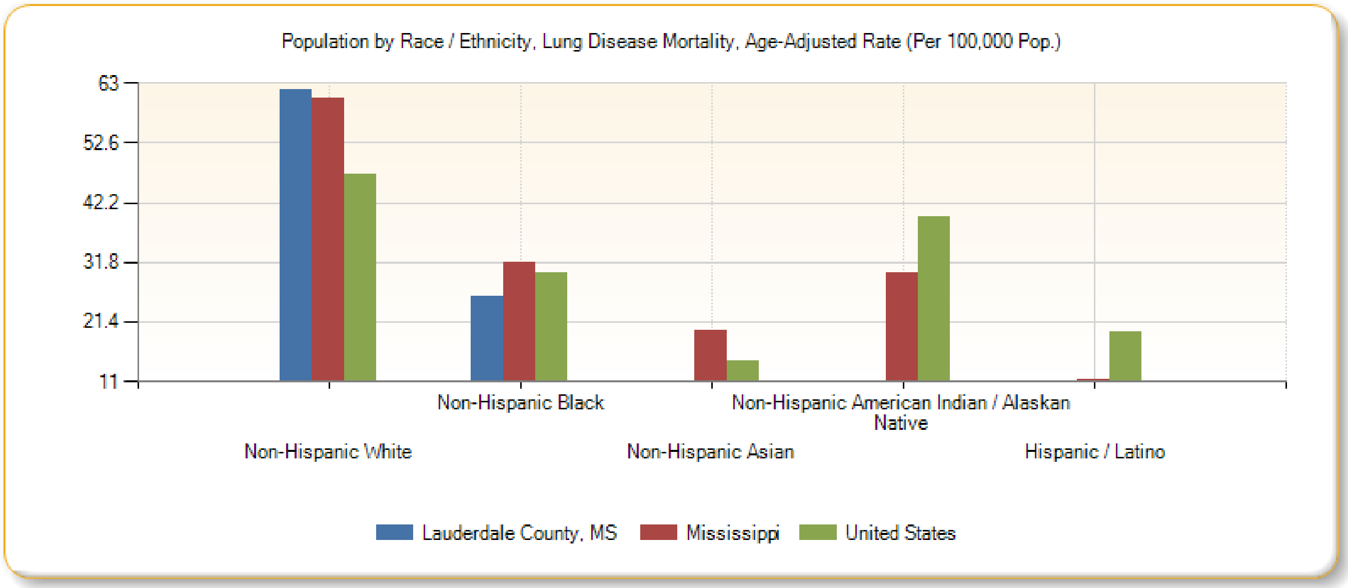
## Population by Gender, Lung Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Male | Female |
|---|---|---|
| Lauderdale County, MS | 64.53 | 45.59 |
| Mississippi | 69.01 | 42.77 |
| United States | 49.57 | 38.24 |



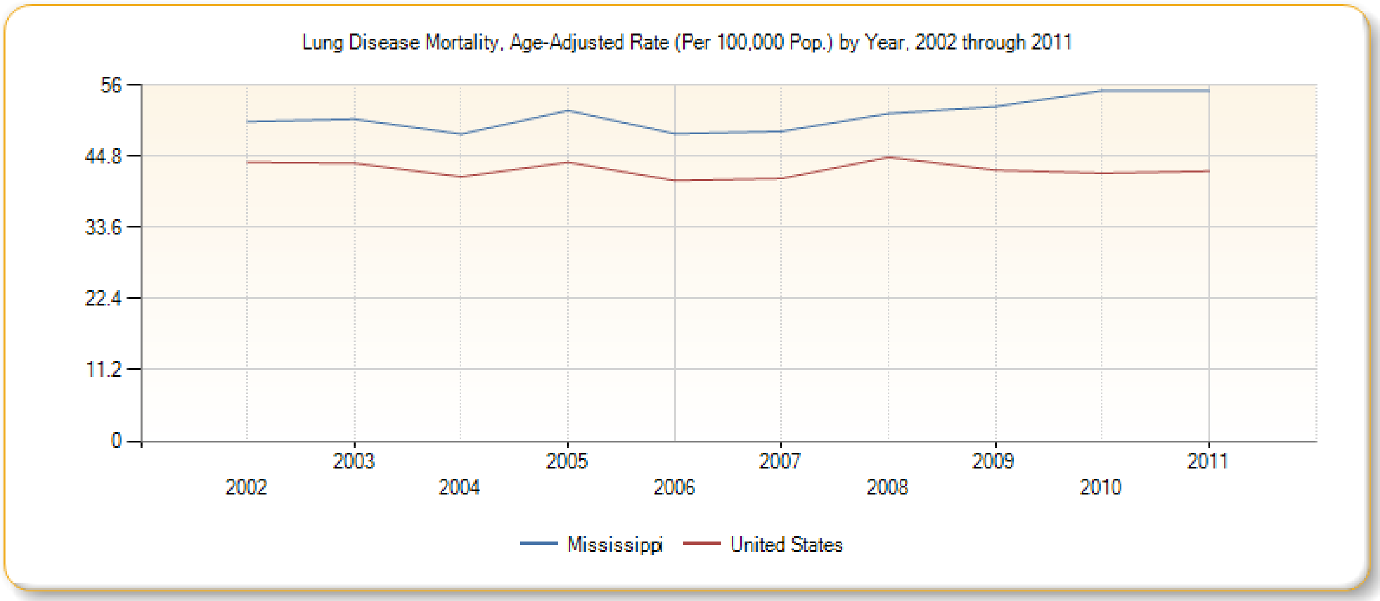
## Population by Race / Ethnicity, Lung Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic Asian | Non-Hispanic American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 62.01 | 25.71 | no data | no data | no data |
| Mississippi | 60.42 | 31.62 | 19.81 | 29.91 | 11.28 |
| United States | 47.07 | 29.93 | 14.54 | 39.61 | 19.62 |



## Lung Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011

| Report Area | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi | 50.3 | 50.69 | 48.31 | 52.04 | 48.36 | 48.74 | 51.56 | 52.65 | 55.15 | 55.1 |
| United States | 43.88 | 43.74 | 41.61 | 43.89 | 41.01 | 41.35 | 44.67 | 42.65 | 42.18 | 42.51 |



## Mortality - Motor Vehicle Accident

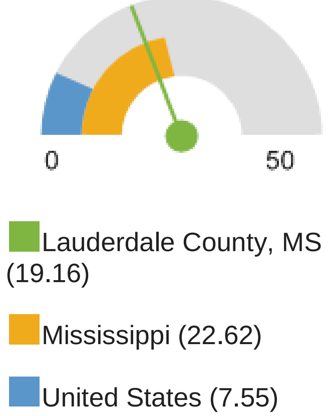
This indicator reports the rate of death due to motor vehicle crashes per 100,000 population, which include collisions with another motor vehicle, a nonmotorist, a fixed object, and a non-fixed object, an overturn, and any other non-collision. This indicator is relevant because motor vehicle crash deaths are preventable and they are a cause of premature death.

| Report Area | Total Population | Average Annual Deaths, 2007-2011 | Crude Death Rate (Per 100,000 Pop.) | Age-Adjusted Death Rate (Per 100,000 Pop.) |
|---|---|---|---|---|
| Lauderdale County, MS | 79,894 | 15 | 19.03 | 19.16 |
| Mississippi | 2,956,148 | 667 | 22.57 | 22.62 |
| United States | 306,486,831 | 23,559 | 7.69 | 7.55 |

*Note: This indicator is compared with the state average.*

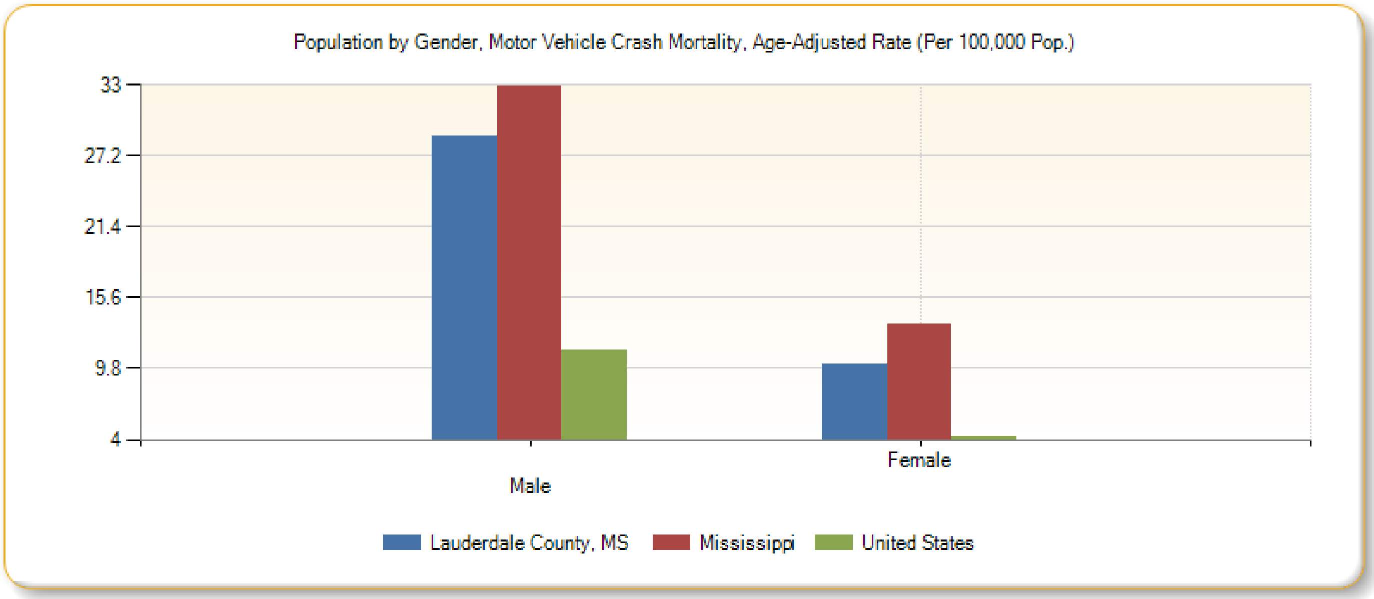
*Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](). 2007-2011. Accessed via [CDC WONDER](). Centers for Disease Control and Prevention, [Wide-Ranging Online Data for Epidemiologic Research](). Source geography: County*

*Motor Vehicle Crash Death, Age-Adjusted Death Rate (Per 100,000 Pop.)*



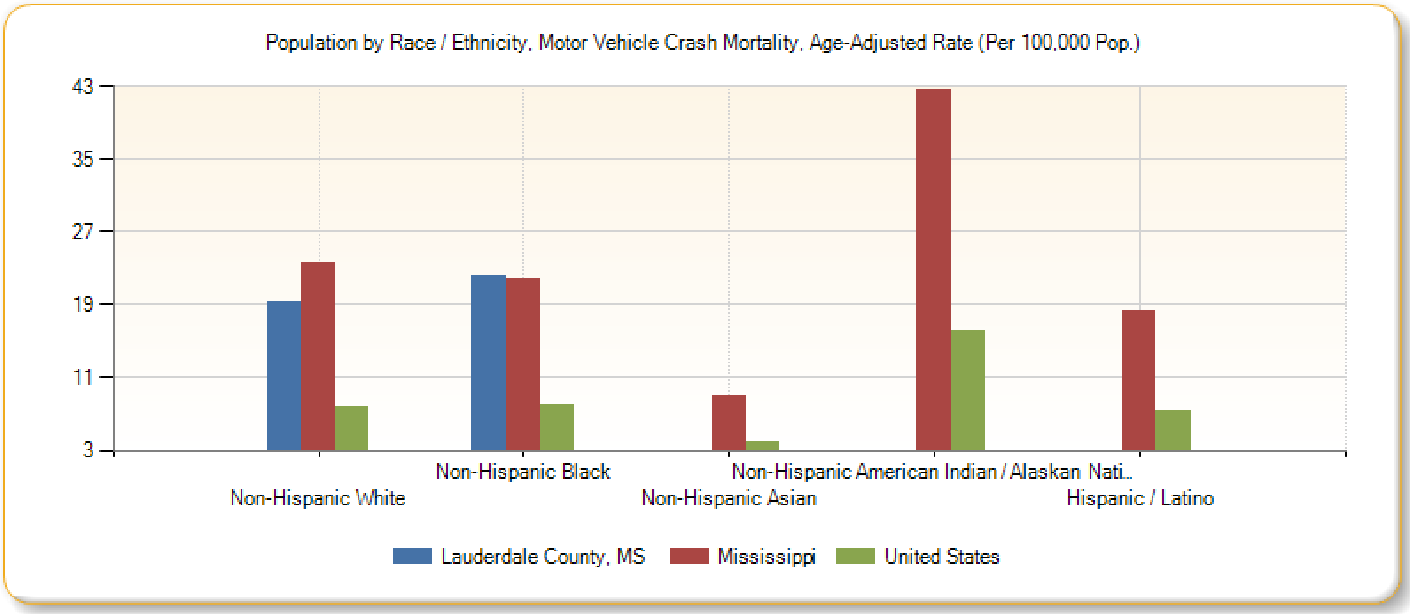
## Population by Gender, Motor Vehicle Crash Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Male | Female |
|---|---|---|
| Lauderdale County, MS | 28.82 | 10.11 |
| Mississippi | 32.9 | 13.33 |
| United States | 11.3 | 4.02 |



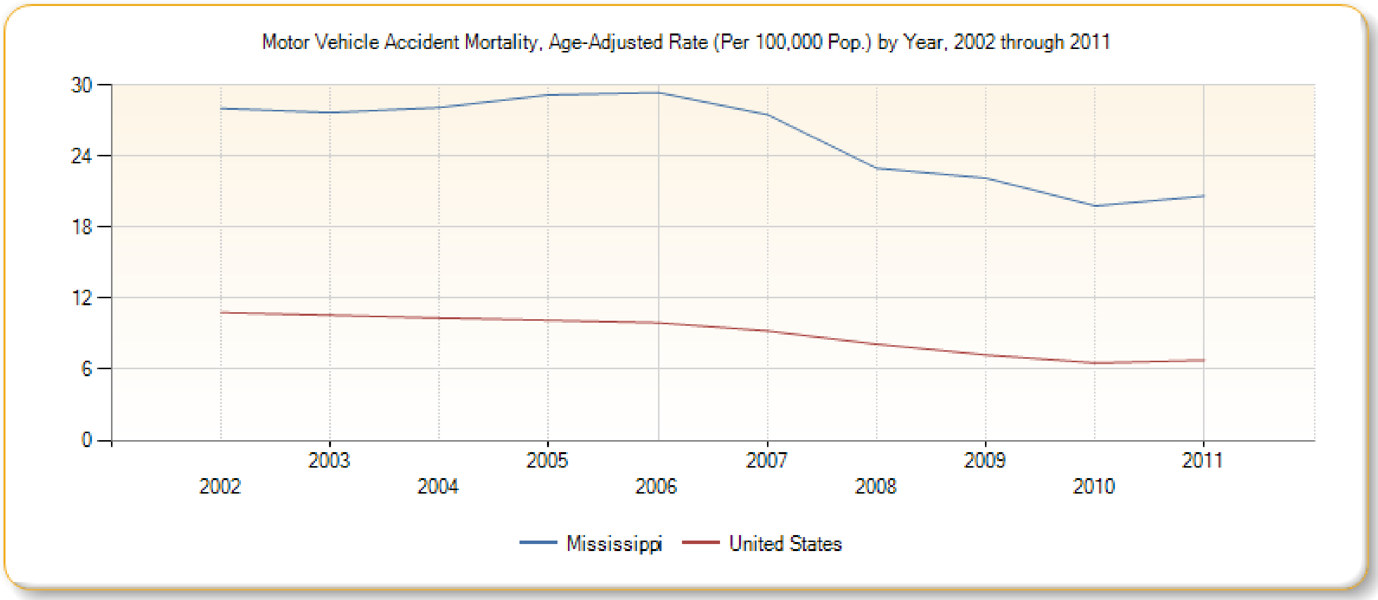
## Population by Race / Ethnicity, Motor Vehicle Crash Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic Asian | Non-Hispanic American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 19.28 | 22.11 | no data | no data | no data |
| Mississippi | 23.59 | 21.71 | 9.04 | 42.64 | 18.36 |
| United States | 7.77 | 7.96 | 3.82 | 16.08 | 7.34 |


Population by Race / Ethnicity, Motor Vehicle Crash Mortality, Age-Adjusted Rate (Per 100,000 Pop.)
43
35
27
19
11
3
Non-Hispanic White
Non-Hispanic Black
Non-Hispanic Asian
Non-Hispanic American Indian / Alaskan Nati...
Hispanic / Latino
Lauderdale County, MS
Mississippi
United States

## Motor Vehicle Accident Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011

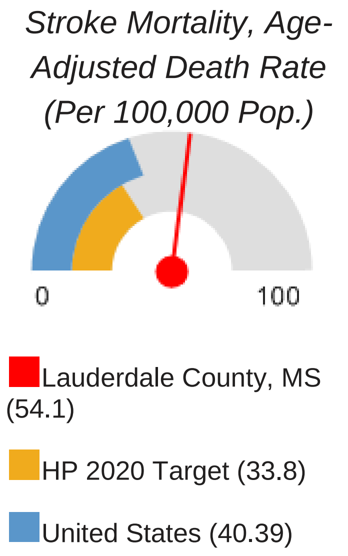
| Report Area | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi | 28.04 | 27.69 | 28.11 | 29.17 | 29.37 | 27.51 | 22.98 | 22.15 | 19.81 | 20.63 |
| United States | 10.8 | 10.57 | 10.34 | 10.15 | 9.93 | 9.24 | 8.12 | 7.21 | 6.54 | 6.76 |



## Mortality - Stroke

Within the report area there are an estimated 54.1 deaths due to cerebrovascular disease (stroke) per 100,000 population. This is greater than than the Healthy People 2020 target of less than or equal to 33.8. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because stroke is a leading cause of death in the United States.

| Report Area | Total Population | Average Annual Deaths, 2007-2011 | Crude Death Rate (Per 100,000 Pop.) | Age-Adjusted Death Rate (Per 100,000 Pop.) |
|---|---|---|---|---|
| Lauderdale County, MS | 79,894 | 49 | 61.08 | 54.1 |
| Mississippi | 2,956,148 | 1,533 | 51.84 | 52.15 |
| United States | 306,486,831 | 131,470 | 42.9 | 40.39 |
| HP 2020 Target | | | | <= 33.8 |

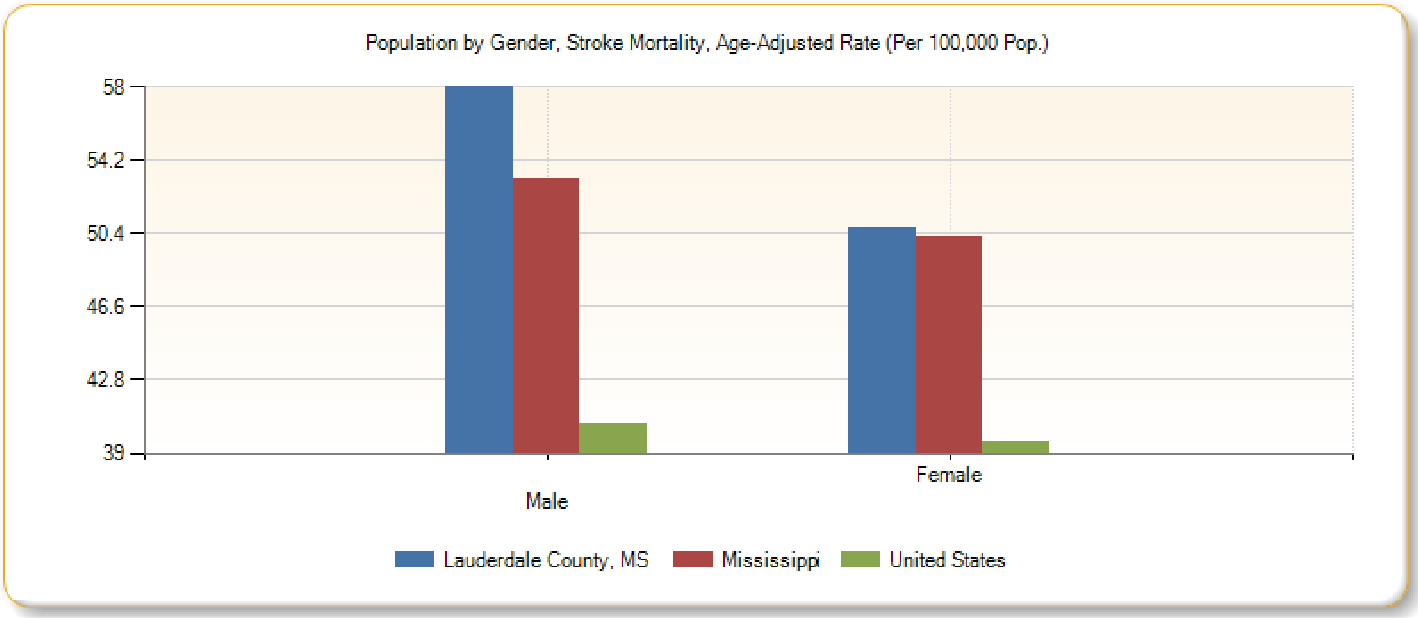


*Note: This indicator is compared with the Healthy People 2020 Target.*

*Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. 2007-2011 Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. Source geography: County*

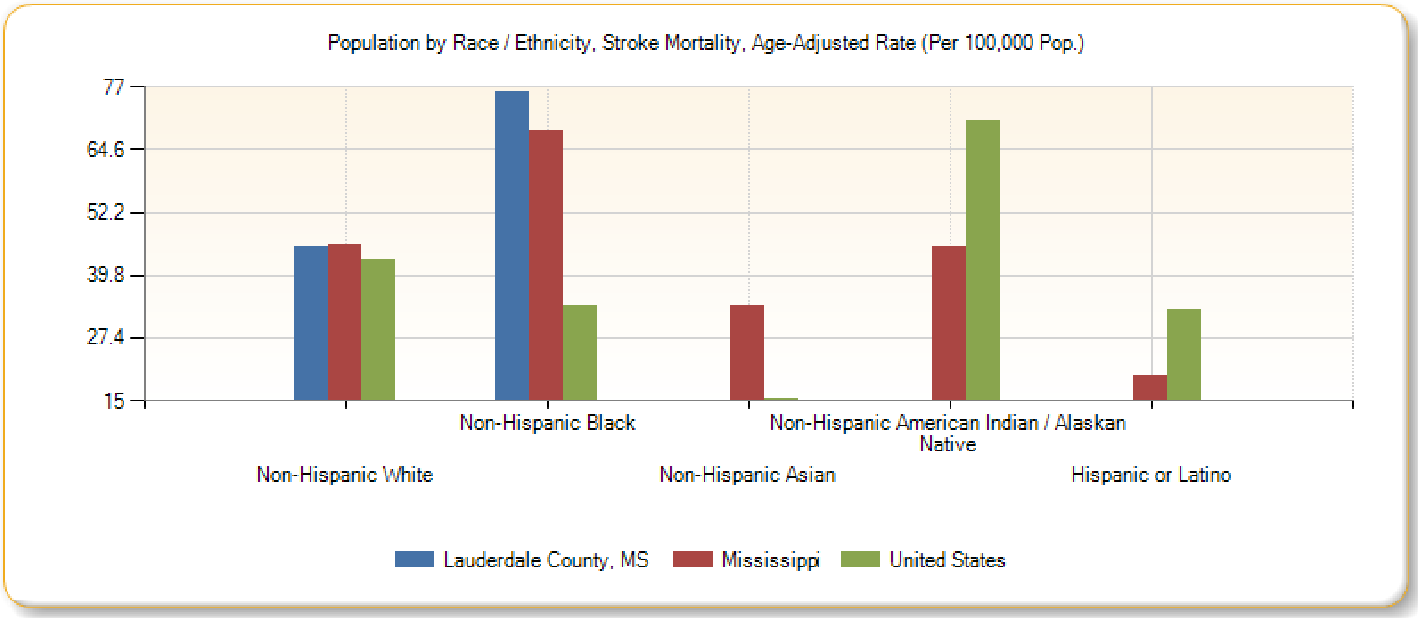
## Population by Gender, Stroke Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Male | Female |
|---|---|---|
| Lauderdale County, MS | 57.98 | 50.69 |
| Mississippi | 53.19 | 50.2 |
| United States | 40.51 | 39.62 |



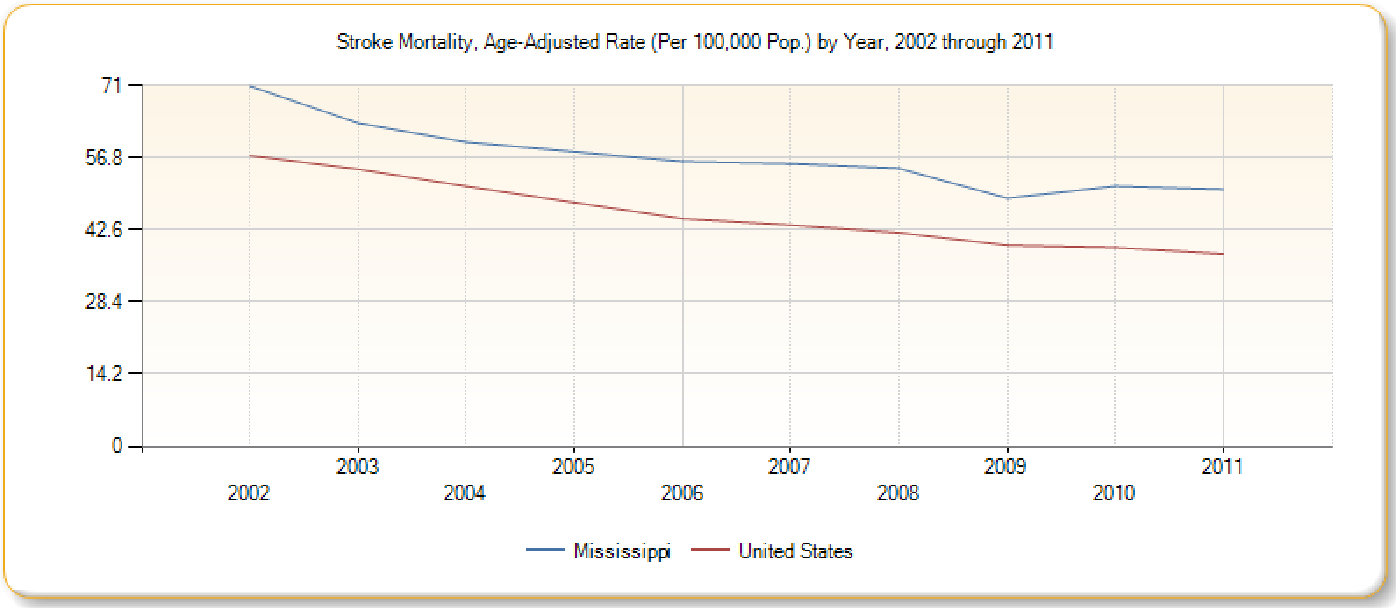
## Population by Race / Ethnicity, Stroke Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic Asian | Non-Hispanic American Indian / Alaskan Native | Hispanic or Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 45.24 | 76.08 | no data | no data | no data |
| Mississippi | 45.88 | 68.22 | 33.8 | 45.35 | 20.04 |
| United States | 42.93 | 33.86 | 15.56 | 70.31 | 32.88 |



## Stroke Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011

| Report Area | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi | 70.93 | 63.64 | 59.85 | 58 | 56.07 | 55.66 | 54.72 | 48.84 | 51.2 | 50.57 |
| United States | 57.24 | 54.57 | 51.18 | 47.96 | 44.8 | 43.52 | 42.05 | 39.59 | 39.13 | 37.9 |

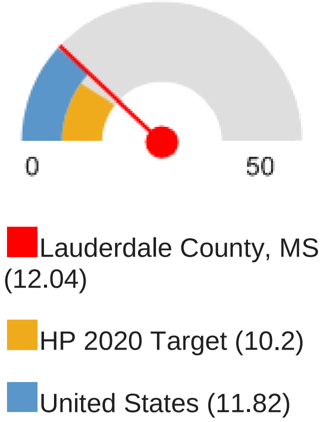


## Mortality - Suicide

This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because suicide is an indicator of poor mental health.

| Report Area | Total Population | Average Annual Deaths, 2007-2011 | Crude Death Rate (Per 100,000 Pop.) | Age-Adjusted Death Rate (Per 100,000 Pop.) |
|---|---|---|---|---|
| Lauderdale County, MS | 79,894 | 10 | 12.27 | 12.04 |
| Mississippi | 2,956,148 | 393 | 13.28 | 13.32 |
| United States | 306,486,831 | 37,085 | 12.1 | 11.82 |
| HP 2020 Target | | | | <= 10.2 |

*Suicide, Age-Adjusted Death Rate (Per 100,000 Pop.)*

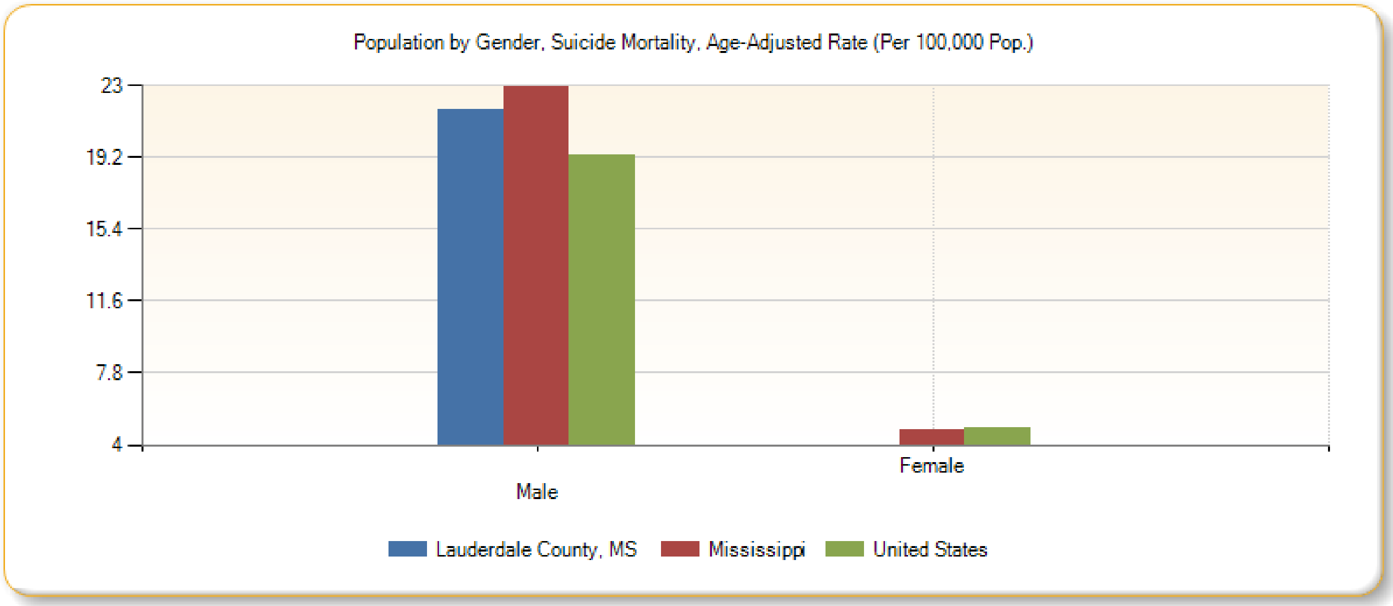


*Note: This indicator is compared with the Healthy People 2020 Target.*

*Data Source: Centers for Disease Control and Prevention, National Vital Statistics System.2007-2011 Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. Source geography: County*

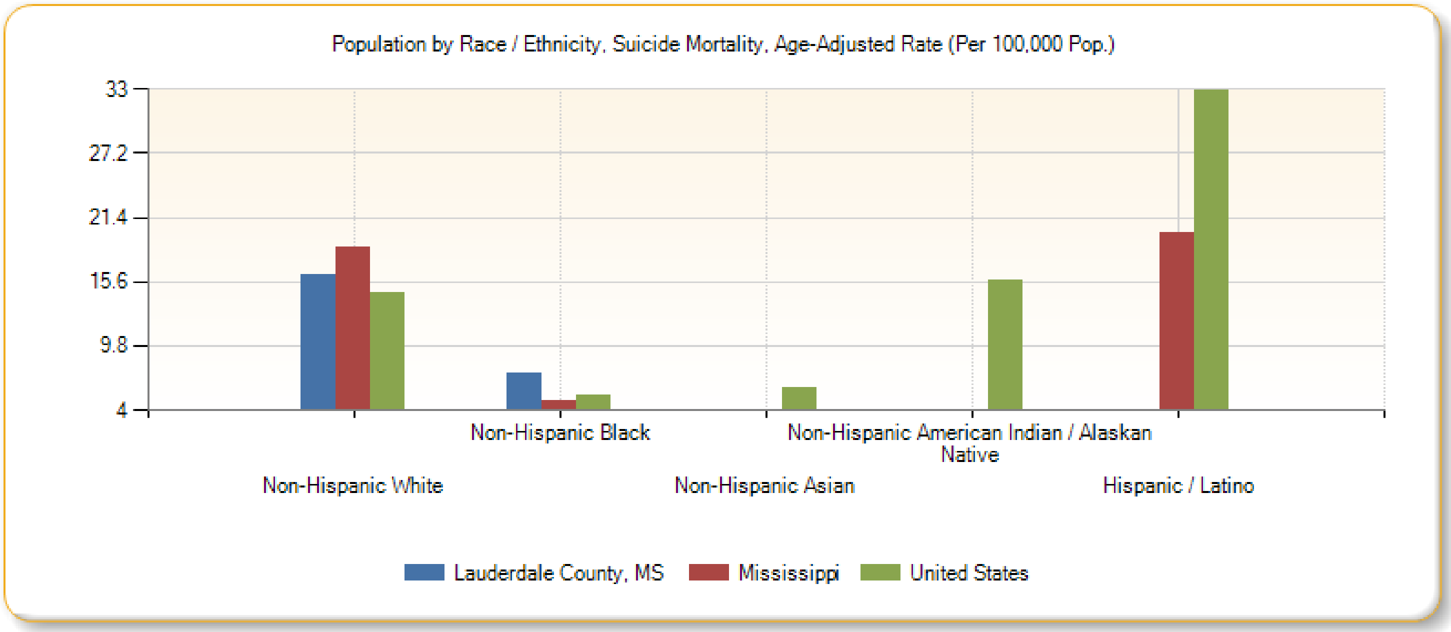
## Population by Gender, Suicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Male | Female |
|---|---|---|
| Lauderdale County, MS | 21.76 | no data |
| Mississippi | 22.96 | 4.81 |
| United States | 19.35 | 4.89 |



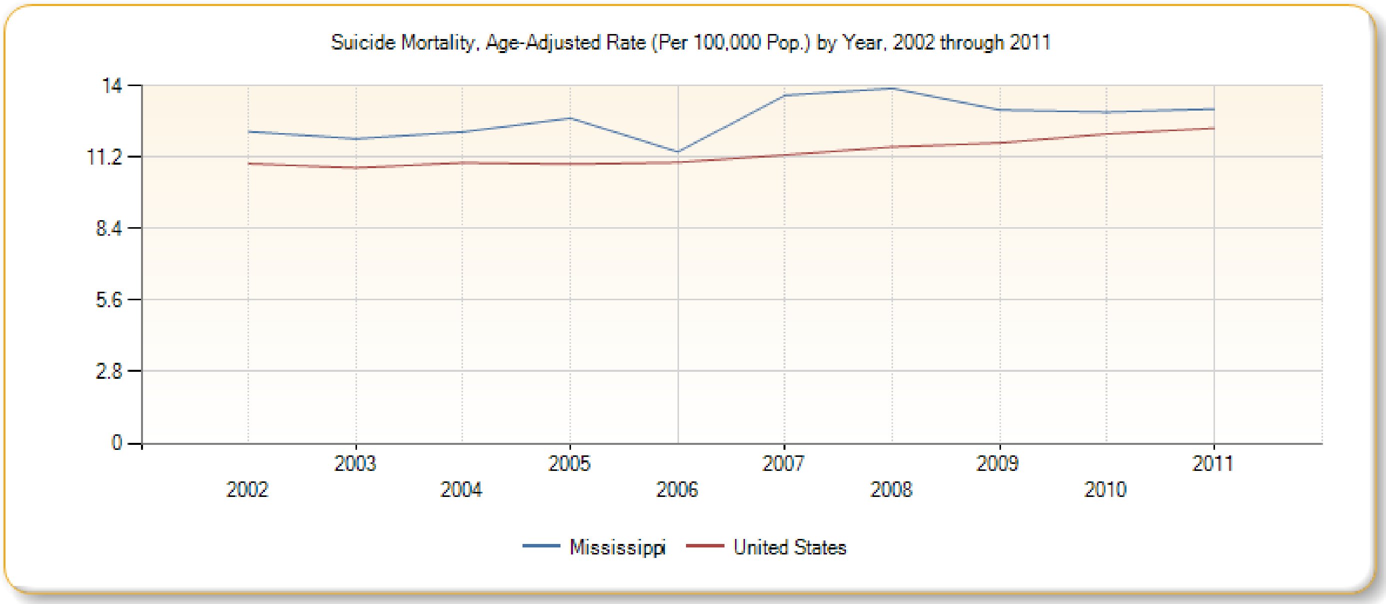
## Population by Race / Ethnicity, Suicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic Asian | Non-Hispanic American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 16.24 | 7.38 | no data | no data | no data |
| Mississippi | 18.63 | 4.82 | no data | no data | 20.04 |
| United States | 14.55 | 5.34 | 5.96 | 15.71 | 32.88 |



## Suicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011

| Report Area | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi | 12.2 | 11.92 | 12.19 | 12.73 | 11.41 | 13.62 | 13.89 | 13.05 | 12.97 | 13.09 |
| United States | 10.95 | 10.79 | 10.99 | 10.93 | 11 | 11.29 | 11.6 | 11.76 | 12.11 | 12.34 |

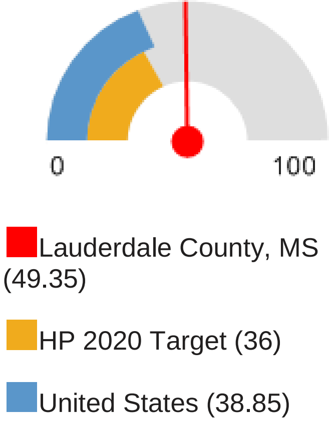


## Mortality - Unintentional Injury

This indicator reports the rate of death due to unintentional injury (accident) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because accidents are a leading cause of death in the U.S.

| Report Area | Total Population | Average Annual Deaths, 2007-2011 | Crude Death Rate (Per 100,000 Pop.) | Age-Adjusted Death Rate (Per 100,000 Pop.) |
|---|---|---|---|---|
| Lauderdale County, MS | 79,894 | 40 | 50.32 | 49.35 |
| Mississippi | 2,956,148 | 1,714 | 57.97 | 58.27 |
| United States | 306,486,831 | 122,185 | 39.87 | 38.85 |
| HP 2020 Target | | | | <= 36.0 |

*Unintentional Injury (Accident) Mortality, Age-Adjusted Death Rate (Per 100,000 Pop.)*

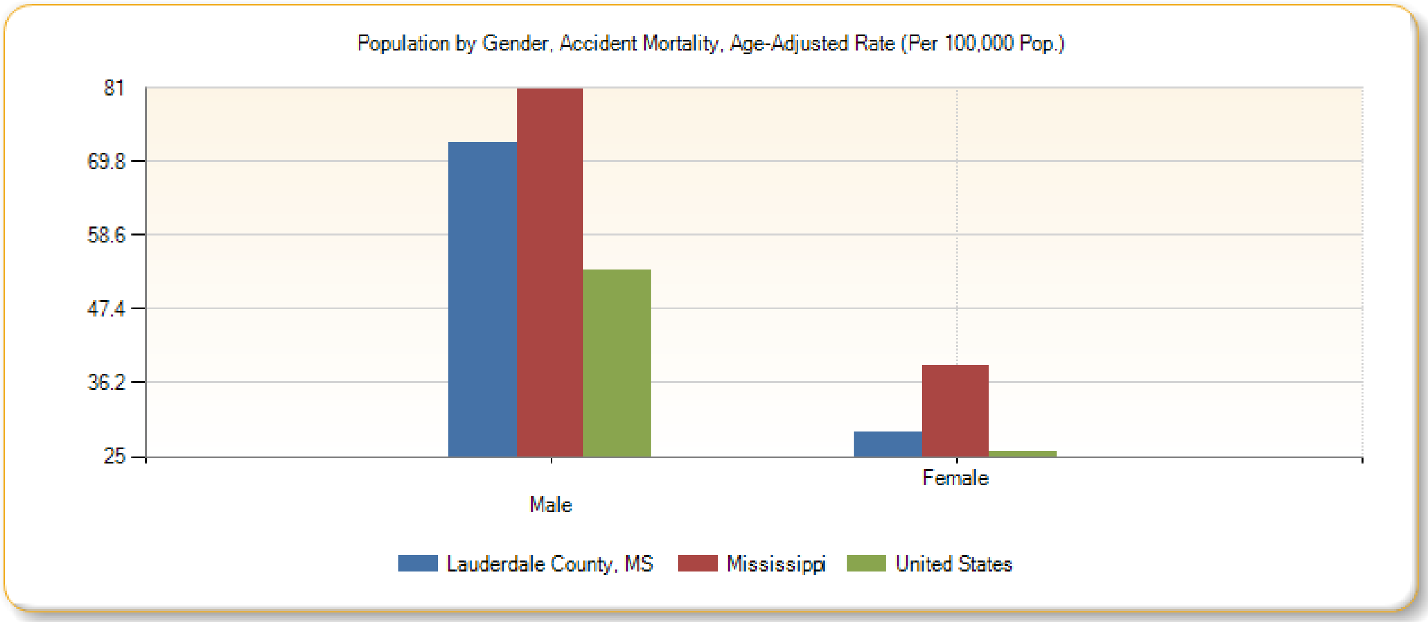


*Note: This indicator is compared with the Healthy People 2020 Target.*

*Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. 2007-2011. Accessed via CDC WONDER. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. Source geography: County*

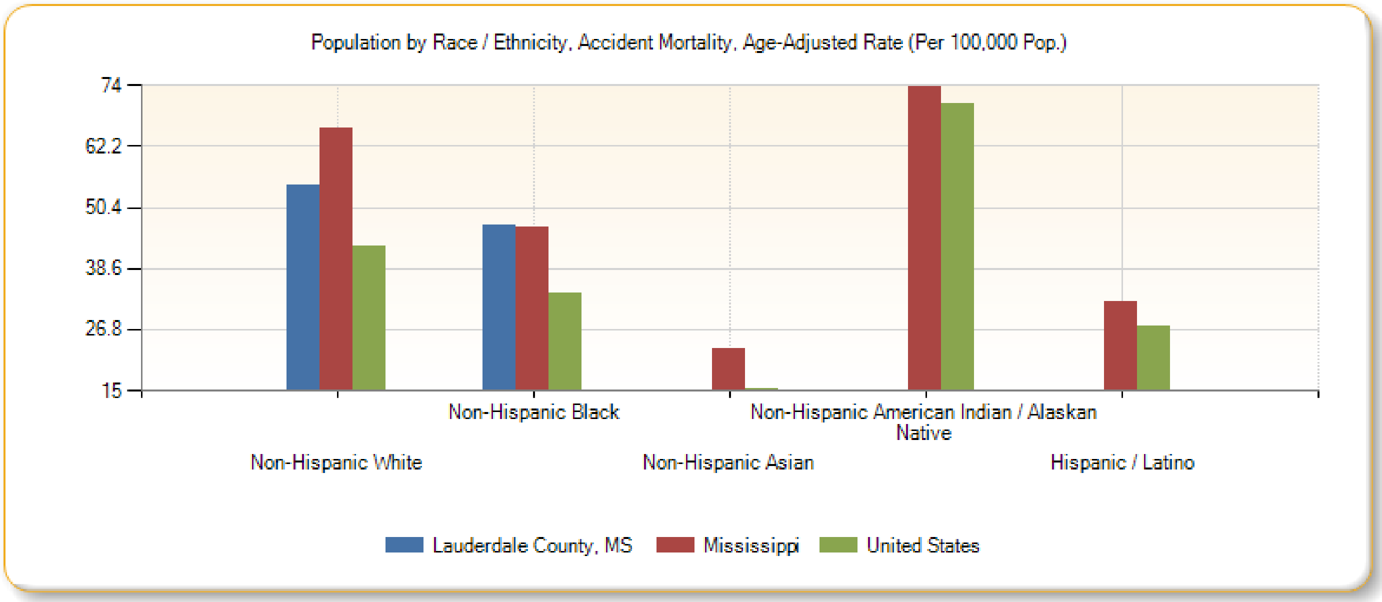
## Population by Gender, Accident Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Male | Female |
|---|---|---|
| Lauderdale County, MS | 72.64 | 28.74 |
| Mississippi | 80.64 | 38.67 |
| United States | 53.19 | 25.67 |



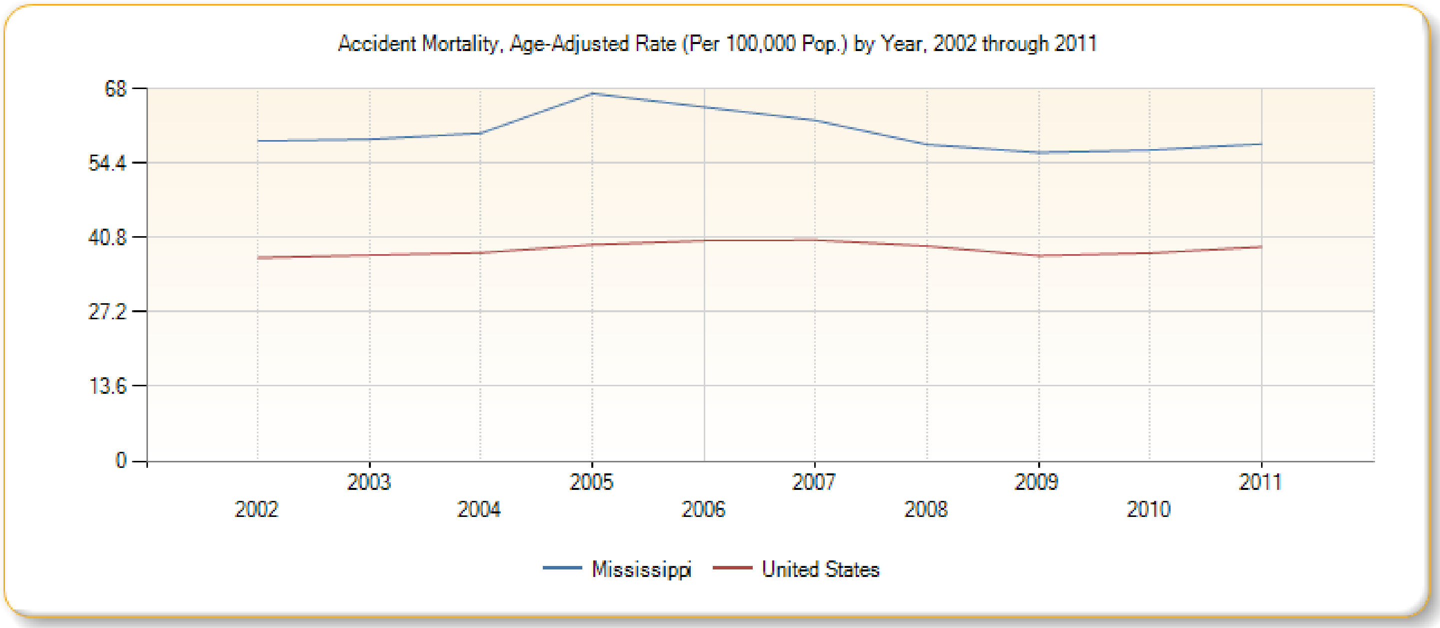
## Population by Race / Ethnicity, Accident Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

| Report Area | Non-Hispanic White | Non-Hispanic Black | Non-Hispanic Asian | Non-Hispanic American Indian / Alaskan Native | Hispanic / Latino |
|---|---|---|---|---|---|
| Lauderdale County, MS | 54.73 | 46.81 | no data | no data | no data |
| Mississippi | 65.8 | 46.47 | 23.16 | 73.63 | 32.22 |
| United States | 42.93 | 33.86 | 15.56 | 70.31 | 27.38 |



## Accident Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011

| Report Area | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|
| Mississippi | 58.47 | 58.78 | 59.9 | 67.13 | 64.66 | 62.2 | 57.81 | 56.35 | 56.81 | 57.9 |
| United States | 37.12 | 37.59 | 38.06 | 39.51 | 40.24 | 40.36 | 39.25 | 37.49 | 37.99 | 39.13 |



Accident Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011

## Obesity

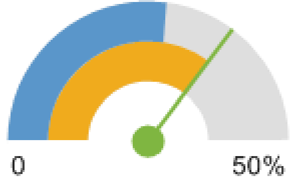
35.2% of adults aged 20 and older self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the report area. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

| Report Area | Total Population Age 20+ | Adults with BMI > 30.0 (Obese) | Percent Adults with BMI > 30.0 (Obese) |
|---|---|---|---|
| Lauderdale County, MS | 58,154 | 20,412 | 35.2% |
| Mississippi | 2,138,513 | 754,973 | 35.31% |
| United States | 228,794,129 | 62,704,376 | 27.19% |

*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.2011  Source geography: County*

**Percent Adults with BMI > 30.0 (Obese)**



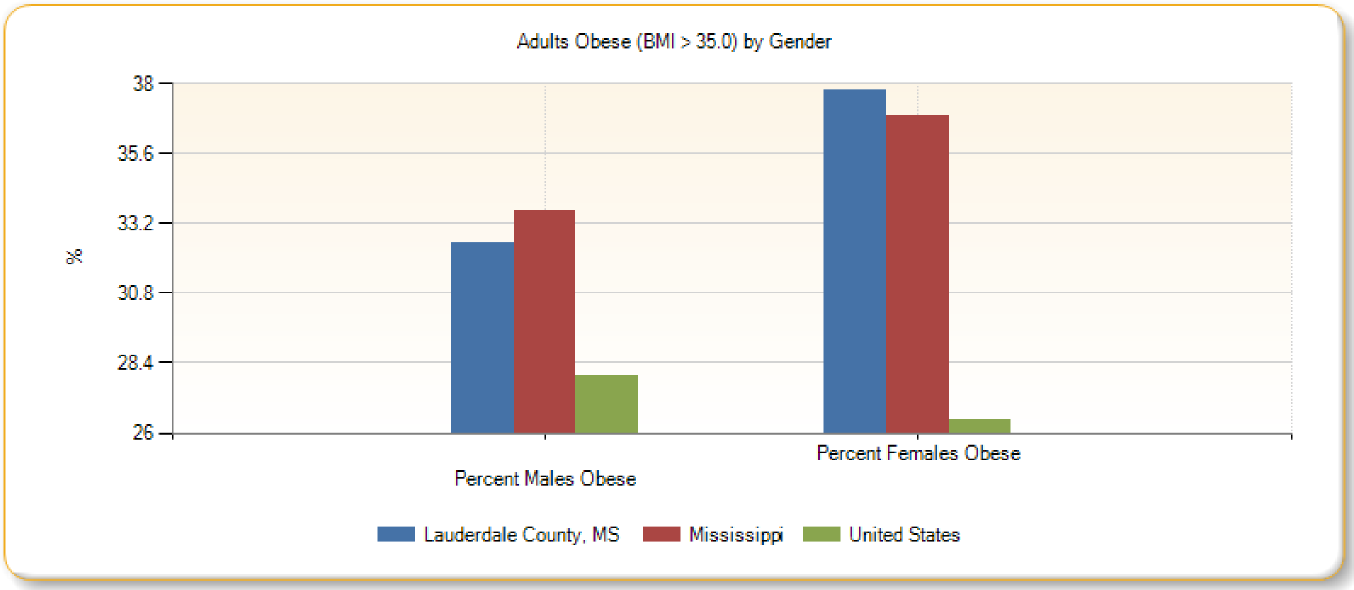
🟩 Lauderdale County, MS (35.2%)

🟧 Mississippi (35.31%)

🟦 United States (27.19%)

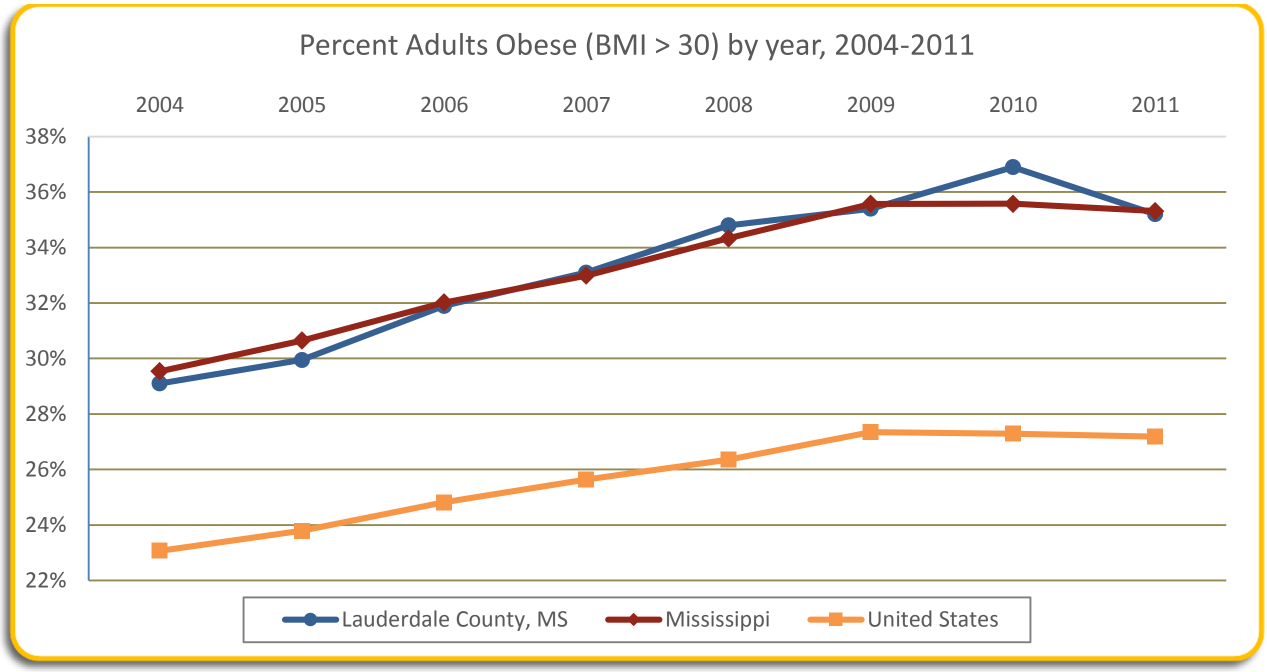
## Adults Obese (BMI > 30.0) by Gender

| Report Area | Total Males Obese | Percent Males Obese | Total Females Obese | Percent Females Obese |
|---|---|---|---|---|
| Lauderdale County, MS | 9,033 | 32.5% | 11,378 | 37.8% |
| Mississippi | 344,000 | 33.6% | 410,976 | 36.92% |
| United States | 31,324,487 | 27.97% | 31,379,939 | 26.43% |



## Percent Adults Obese (BMI > 30.0) by Year, 2004 through 2011

| Report Area | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|
| Lauderdale County, MS | 29.1% | 29.95% | 31.9% | 33.1% | 34.8% | 35.4% | 36.9% | 35.2% |
| Mississippi | 29.54% | 30.65% | 32.02% | 32.99% | 34.33% | 35.57% | 35.58% | 35.31% |
| United States | 23.07% | 23.79% | 24.82% | 25.64% | 26.36% | 27.35% | 27.29% | 27.19% |



## Overweight

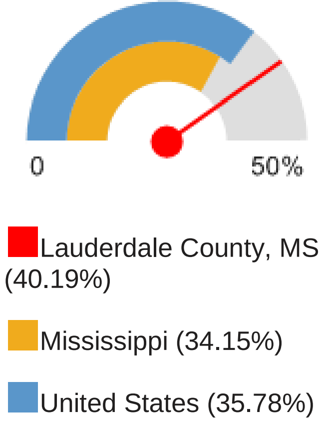
40.19% of adults aged 18 and older self-report that they have a Body Mass Index (BMI) between 25.0 and 30.0 (overweight) in the report area. Excess weight may indicate an unhealthy lifestyle and puts individuals at rist for further health issues. Combining percentages for Obese and Overweight totals just over 75%

| Report Area | Survey Population (Adults Age 18+) | Total Adults Overweight | Percent Adults Overweight |
|---|---|---|---|
| Lauderdale County, MS | 48,741 | 19,590 | 40.19% |
| Mississippi | 2,111,734 | 721,257 | 34.15% |
| United States | 224,991,207 | 80,499,532 | 35.78% |

*Note: This indicator is compared with the state average.*

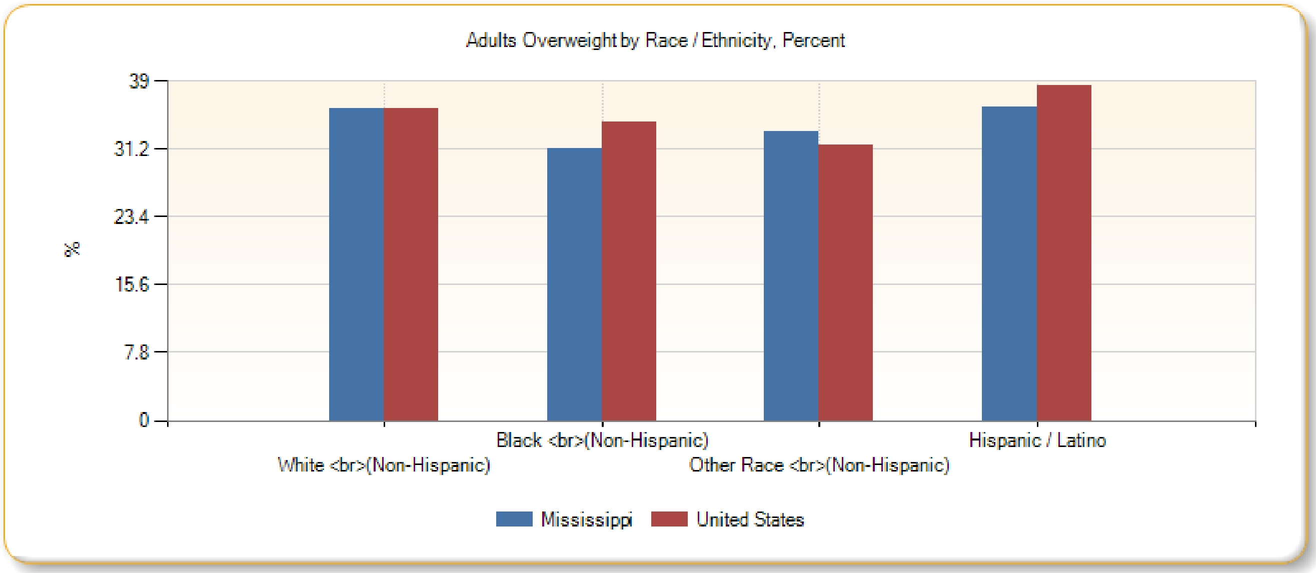
*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-2012 Additional data analysis by CARES. Source geography: County*

**Percent Adults Overweight**



## Adults Overweight by Race / Ethnicity, Percent

| Report Area | White (Non-Hispanic) | Black (Non-Hispanic) | Other Race (Non-Hispanic) | Hispanic / Latino |
|---|---|---|---|---|
| Mississippi | 35.74% | 31.29% | 33.07% | 36.03% |
| United States | 35.85% | 34.31% | 31.61% | 38.43% |


Adults Overweight by Race / Ethnicity, Percent
%
39
31.2
23.4
15.6
7.8
0
White <br>(Non-Hispanic)
Black <br>(Non-Hispanic)
Other Race <br>(Non-Hispanic)
Hispanic / Latino
Mississippi
United States

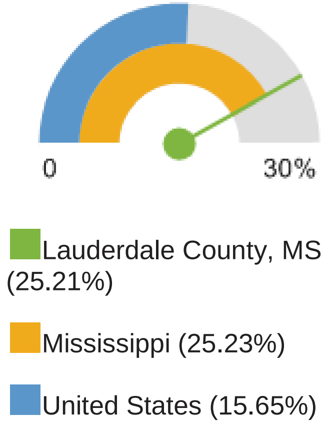
## Poor Dental Health

This indicator reports the percentage of adults age 18 and older who self-report that six or more of their permanent teeth have been removed due to tooth decay, gum disease, or infection. This indicator is relevant because it indicates lack of access to dental care and/or social barriers to utilization of dental services.

| Report Area | Total Population (Age 18+) | Total Adults with Poor Dental Health | Percent Adults with Poor Dental Health |
|---|---|---|---|
| Lauderdale County, MS | 59,442 | 14,987 | 25.21% |
| Mississippi | 2,199,741 | 554,988 | 25.23% |
| United States | 235,375,690 | 36,842,620 | 15.65% |

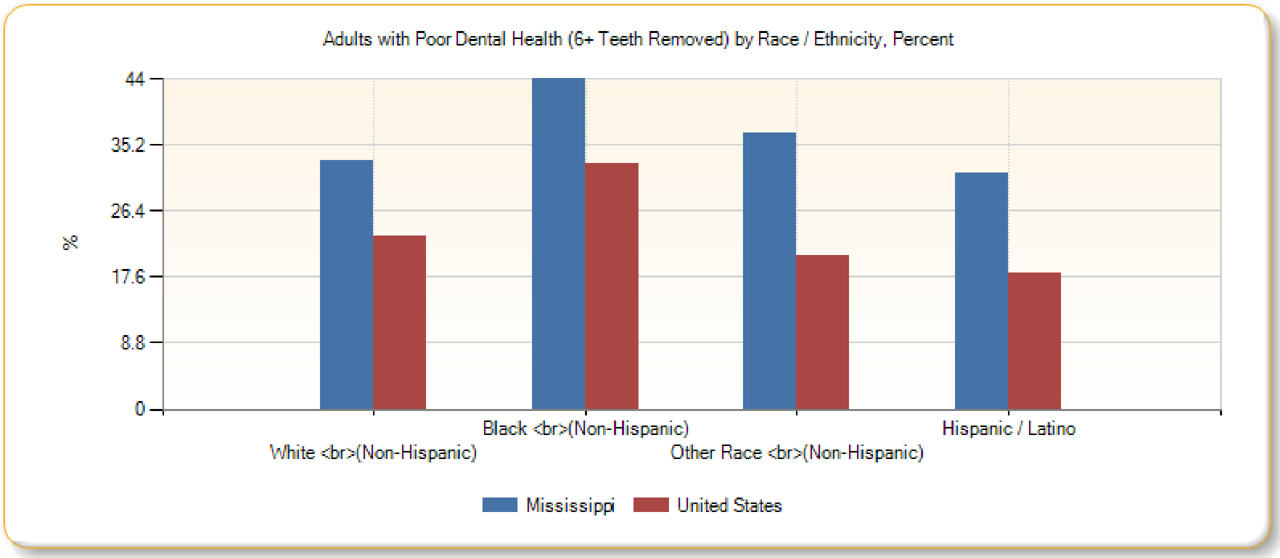
*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.2006-2010 Additional data analysis by CARES. Source geography: County*


**Percent Adults with Poor Dental Health**

## Adults with Poor Dental Health (6 Teeth Removed) by Race / Ethnicity, Percent

| Report Area | White (Non-Hispanic) | Black (Non-Hispanic) | Other Race (Non-Hispanic) | Hispanic / Latino |
|---|---|---|---|---|
| Mississippi | 33.19% | 44% | 36.67% | 31.42% |
| United States | 22.98% | 32.63% | 20.47% | 18.05% |



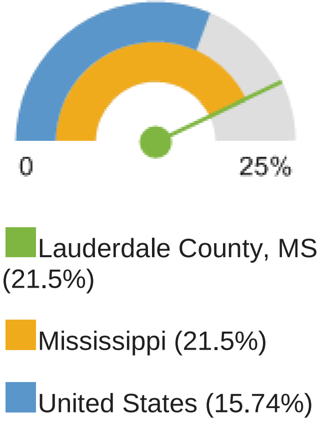
## Poor General Health

Within the report area 22.4% of adults age 18 and older self-report having poor or fair health in response to the question "Would you say that in general your health is excellent, very good, good, fair, or poor?". This indicator is relevant because it is a measure of general poor health status.

| Report Area | Total Population Age 18+ | Estimated Population with Poor or Fair Health | Crude Percentage | Age-Adjusted Percentage |
|---|---|---|---|---|
| Lauderdale County, MS | 59,832 | 13,402 | 22.4% | 21.5% |
| Mississippi | 2,199,741 | 492,742 | 22.4% | 21.5% |
| United States | 232,556,016 | 37,766,703 | 16.24% | 15.74% |

*Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.*

*Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-2012. Accessed via the Health Indicators Warehouse. Source geography: County*



**Percent Adults with Poor or Fair Health (Age-Adjusted)**

## Health needs identified in the population data.

Clearly, the health needs of Lauderdale County are diverse, affecting every segment of the population. Considering the proportion of the population affected and the relative severity when compared to state and national prevalence rates, several critical health needs surfaced in the data. In terms of health behaviors, *Physical Inactivity* (30.7% of Lauderdale Co. adults get no exercise) and *Tobacco Usag*e (22.3% of adults smoke cigarettes) stand out as significant maladaptive lifestyle patterns. In terms of health outcomes, *Obesity* and *Diabetes* top the list. Lauderdale County's obesity rate is 36.9%, and its diabetes prevalence rate is 14.7%. Patient Mortality due to *Lung Disease*, *Heart Disease*, and *Stroke* also stood out as areas of high need, with high mortality rates, relative to national benchmarks. These findings will be compared with results from qualitative data analysis and final priorities/recommendations will be made.

# Qualitative Studies

## *Key Informant Interviews*

To gather important information and opinion about the health needs of the community, Key Informant Interviews were conducted with community leaders representing various organizations including the Mississippi Department of Health, Greater Meridian Health Clinic, Weems Community Mental Health, and several community service organizations—each playing an important role in the community. These informants are well aware of healthcare issues facing those they serve and their respective organizations represent the broader interests of the community at large and especially the underserved.

### Method

Each interview was structured similarly, and averaged 45 minutes. Questions were open-ended, and designed to capture the informants' perceptions and rankings of the most critical health challenges facing the community. To further benefit from the knowledge and expertise of the interviewees (several of whom have expertise in public health), we asked for their thoughts and opinions about the root causes of health problems, potential solutions to these problems, and barriers to achieving success in implementing programs to address areas of need. Careful notes were taken during the interviews, which were also recorded. Recordings were transcribed, categorized thematically, and summarized into general statements with numbers of mentions reflecting the number of statements across all interviews that could be categorized as such.

Participants of Individual Interviews:

| **Key Informants** | **Affiliation** |
|---|---|
| Becky Glover,<br>Director | Community Foundation of East MS<br>P.O. Box 865<br>Meridian MS 39302-0865<br>601-696-3035<br>http://cfem.org |
| Andy Hodges,<br>Community Agency Coordinator | Wesley House Community Center<br>1520 8th Ave<br>Meridian, MS 39301<br>601-485-4736<br>http://www.wesleyhousemeridian.org |
| Ronald J. Turner,<br>Executive Director | Meridian Housing Authority<br>2415 E Street<br>P.O. Box 870<br>Meridian, MS 39302<br>601-693-4285<br>http://www.meridianhousing.net |

| | |
|---|---|
| Ricky Hood,<br>Executive Director | East MS Boys and Girls Club<br>1717 45th Avenue<br>Meridian, MS 39307<br>Office: 601.482.2544<br>http://eastmsbgc.org |
| J.T. (Thad ) Quarles,<br>CEO | United Way of East Mississippi<br>2003 23rd Avenue<br>Meridian, MS 39301<br>or<br>P.O. Box 5376<br>Meridian, MS 39302<br>(601) 693-2732<br>(601) 693-2748 fax<br>http://www.unitedforunitedway.org/ |
| Chrisadel Heath, MD<br>Clinic Medical Director | Anderson Regional Medical Center, River birch Clinic<br>2514 67th Ave Loop<br>Suite 112<br>Meridian, MS 39307<br>www.andersonregional.org |
| Cheryl Isaac,<br>Tribal Liaison | Mississippi Band of Choctaw Indians/Anderson Regional Medical Center<br><br>MS Band of Choctaw Indians<br>101 Industrial Road<br>Choctaw, MS 39350<br>601-616-5251<br>http://www.choctaw.org |
| Debbie Mathis,<br>Manager of Operations | East MS Business Development Corporation<br>1901 Front Street, Suite A<br>P.O. Box 790<br>Meridian, MS 39302<br>http://embdc.org |
| Angela Hicks,<br>Interim Executive Director | Multi-County Community Service Agency<br>2906 St. Paul Street<br>P.O. Box 905<br>Meridian, MS 39302<br>(601) 483-4838 or<br>www.yourmccsa.com |
| Rebecca James, MD,<br>Health Officer, District VI | MS Department of Health District 6 |

| | |
|---|---|
| | District 6 Office<br>3128 Eighth St, Meridian, MS 39302<br>Telephone: 601-482-3171<br>http://msdh.ms.gov |
| Wilbert Jones,<br>Executive Director<br>Former state legislator, District 82, Mississippi House of Representatives | Greater Meridian Health Clinic<br>2701 Davis Street<br>Meridian, MS 39301<br>Phone: 601-693-0118<br>Fax: 601-483-8803<br>http://www.gmhcinc.org |
| Susan H. Carmichael, PhD, LPC<br>Quality Measures/Staff Development Officer<br>Human Resources Director<br>Weems Community Mental Health Center<br><br>State Board of Examiners for Licensed Professional Counselors | Weems Community Mental Health<br>1415 College Drive<br>Meridian, MS 39307<br>601-483-4821<br>www.weemsmh.com |

## *Results*

Across all interviews, similar responses were noted regarding broad based health needs in this community and region. These “major themes” reflected much of what is known through state and national health databases. The interviews did, however, yield several statements related to root causes and barriers that the informants’ proposed causes of and solutions to health problems/needs varied according to their personal experience and the population they and their organization serve. The results of these interviews are summarized here:

### Greatest Health Issues:

- Lifestyle-Related Health Problems
    - Obesity
    - Heart disease
    - Diabetes
    - Stroke
    - Hypertension
- Children and Youth/Adolescent Issues
    - Overweight/obesity
    - Teen Pregnancy
    - Sexually Transmitted Diseases
    - Drug and Alcohol Use
- Lack of preventive care

- Cancer
- Mental Health

**Potential Root Causes:**

| Key Informants' Root Causes of Health Problems | No. of Mentions |
|---|---|
| Lack of Health Knowledge/Education | 8 |
| Poverty | 7 |
| Lack of access to exercise sites | 5 |
| Dietary behavior | 4 |
| Sedentary lifestyle | 3 |
| Short-term thinking | 3 |
| Apathy-Lack of desire to be healthy | 2 |
| Costs of Medical Coverage | 2 |
| Cost of Medications | 2 |
| Parents' choice of food purchases | 1 |
| Children are being exposed to substance abuse at an early age | 1 |
| Unemployment/underemployment | 1 |
| Parents are too busy | 1 |
| Lack of financial education among low income groups | 1 |

- Lack of education about the relevance and importance of preventive care and healthy lifestyles was mentioned more often than any other root cause.
- Poverty was also mentioned frequently.  Low Income also tends to be associated with short term priorities.  Preventive care/routine checkups are not typically viewed as a priorities.  Lack of financial resources creates stress on individuals and families, which can exacerbate mental health problems along with elevating potential for domestic violence.
- Cultural issues play a role that spans across income groups.
- Children's "lifestyle-related" health issues, to a large extent, find their root cause in the home and school systems in which children live. Norms have shifted. Parents allow children to consume excessive "junk food," and don't encourage physical activity (e.g., outdoor free play).  Schools, over the years, have limited access to free play and ceased requiring students to participate in PE classes, and/or sports. Each of these, along with excessive sedentary "screen time," have led to a youth obesity crisis that is sure to have significantly detrimental long-term health and economic outcomes.

## Barriers:

- Lack of transportation was the most widely mentioned barrier among interviewees
- The competition (i.e., "rivalry") between local hospitals was second, being mentioned by about half of the key informants.
- Cost – will solutions be affordable? Where will funding come from.
- Lack of Insurance was mentioned by several as a major barrier
- Finally, educating adults about health is "difficult until they're faced with the problem directly"

## Proposed Solutions/Programs:

| Key Informants' Proposed Solutions | No. of Mentions |
|---|---|
| Health Education (through Health providers, Health Fairs and publicity campaigns | 5 |
| More places for children to play (Playgrounds, places to go, healthy activities, etc) | 4 |
| School Based Programs: (e.g., "Robust family wellness and prevention programs should be administered through school systems") | 3 |
| Hospitals should collaborate with Greater Meridian Health Clinic | 3 |
| Funding for programs | 3 |
| Bring in more industry/jobs | 3 |
| Hospitals should collaborate with Weems Community Mental Health Center | 2 |
| Collaborate, Funding sources are looking for collaboration too. | 2 |
| Better communication with low income population about how to access services offered by the hospitals | 2 |
| Hospital Billing practices scare people | 2 |
| Churches need to be involved | 1 |
| Local Hospital based programs to help the uninsured, Doctors could volunteer - Help for the indigent. "Hospitals should do more on the front end" | 1 |
| Discounted gym fees | 1 |
| More public transportation | 1 |
| More organized eldercare | 1 |
| Behavioral/Psychological weight management | 1 |

- Make preventive care affordable and where possible, incentivize patients for getting their check-ups.
- Create a means of effectively distributing health information to the populations at greatest risk.
- Work to create culture change so that being healthy and fit becomes part of one's overall goals to being "successful." This is particularly relevant to those working with children and youth.
- Create more opportunities for recreation and fitness: Safe access for children to walk to school, easier access to Bonita Lakes, and less expensive memberships to existing fitness clubs/facilities. Create "Family Fitness" programs. The prospect of developing a YMCA was also mentioned, as well as fostering a sense of belongingness among new members of existing fitness centers. Involve Churches in the education and marketing of healthy lifestyles
- Create stronger linkages between agencies (e.g., partnerships between Greater Meridian Health Clinic (an FQHC) and the hospitals, to set up a clinic to provide care for non-emergent cases to be referred out of hospital emergency rooms during afterhours and on weekends).

# Summary of Focus Groups

## *Method/Process*

To extend the base of knowledge gleaned from key informant interviews, focus groups were held on the campus of Anderson Regional Cancer Center. The first focus group included members of the health advisory board of the United Way, and was held on January 21st, 2015. The second group included participants who were recruited by direct invitation based on their individual work with the underserved population, including the elderly, low-income, minority, and the very young. The second focus group was held February 4th, 2015 at the same location.

### Participants of Focus Group #1, held January 21, 2015:

| Focus Group Participant | Title | Affiliation |
|---|---|---|
| Thad Quarles | Chief Executive Officer | United Way<br>P.O. Box 5376<br>Meridian, MS 39302<br>(601) 693-2732<br>(601) 693-2748 fax<br>http://www.unitedforunitedway.org |
| Damon Wise | Chairman of the Board | United Way |
| Sara Odom | VP, Resource Development and Communication | United Way |
| Jay Howell | Board Member;<br>Employee of Rush Health Systems | United Way |
| Stephanie Davidson-Womack | Public Policy Officer | United Way |
| Thomas L. Tabereaux | Retired Senior Volunteer Program | United Way |

### Participants of Focus Group #2, held February 4, 2015:

| Focus Group Participant | Title | Affiliation |
|---|---|---|
| Kathy Anderson | Director/Instructor | Meridian Activity Center |

|  |  |  |
|---|---|---|
| Khristen Cockrell | DPS | American Red Cross<br>Key Chapter (East Central MS)<br>1820 23rd Ave,<br>Meridian, MS, 39301<br>601-485-5151<br>http://www.redcross.org/mississippi/about/chapters/east-central |
| Ann Compton, RN | School Nurse | Meridian Public Schools<br>MPSD Central Office<br>1019 25th Ave<br>Meridian, MS  39301<br>601.483.6271<br>http://www.mpsd.k12.ms.us |
| Dan Fritts,<br>Licensed Physical Therapist | Director | Camp Eagle Ridge (non-profit camp for able and special needs children)<br>9099 A Collinsville Rd.<br>Collinsville, MS 39325<br>601-626-8885<br>http://campeagleridge.org |
| Robert Kendrick | Director | Feed by Faith Ministry<br>P.O. Box 1064<br>Meridian, MS  39301<br>601-483-8999<br>http://feedbyfaith.org/ |
| Pearline Burdette | Volunteer | Feed by Faith Ministry (see above) |
| Susie Broadhead | Director of Public Relations, EMSH | East MS State Hospital<br>1818 College Drive<br>Meridian, MS 39307<br>601-581-7600<br>http://www.emsh.state.ms.us |

| | | |
|---|---|---|
| | Board Member for LCCA | Lauderdale County Council on Aging, Inc.<br>3300 32nd Ave<br>Meridian, MS 39305 |
| Colby Campbell | Disaster Recovery | American Red Cross<br>Key Chapter (East Central MS)<br>1820 23rd Ave,<br>Meridian, MS, 39301<br>601-485-5151<br>http://www.redcross.org/mississippi/about/chapters/east-central |
| Leslie Payne | Executive Director | Care Lodge Domestic Violence Shelter<br>P.O. Box 5331<br>Meridian, MS 39302<br>601-482-8719<br>http://www.carelodge.com |
| Carlotta Downing | Director of Foster Grandparent Program | Multi-County Community Service Agency<br>2906 St. Paul Street<br>P.O. Box 905<br>Meridian, MS 39302<br>(601) 483-4838 or<br>www.yourmccsa.com |
| Quinta Thomas | Teacher, Northwest Middle School, 6th grade | Meridian Public Schools<br>MPSD Central Office<br>1019 25th Ave<br>Meridian, MS 39301<br>601.483.6271<br>http://www.mpsd.k12.ms.us |
| Tina Aycock | Executive Director | Hope Village for Children<br>P.O. Box 26<br>Meridian, MS 39302<br>601-553-8660<br>http://www.hopevillagems.org |

| | | |
|---|---|---|

The focus groups were introduced to the facilitators, who explained that the goal of the project was to identify and prioritize local community healthcare needs and that the focus group was structured to provide key information to augment the survey and archival data pertaining to the health status of the community.

Specifically, the focus group was asked to consider:

1. Strengths and weaknesses of the community and its healthcare system;
2. Major health issues of the community, with special attention to children, elderly, low income, and minority groups
3. Recommendations and/or priorities

## HEALTHY COMMUNITIES

### Strengths and Weaknesses

**Strengths of community in general**:

- Good locale for economic development; located near two interstates, major railway system, and close to coastal ports
- Very family oriented area, great place to raise a family.
- Hospitality
- One participant stated that moving to Meridian from _______ (intentionally blank) he saw lots of positives such as retail, the arts, restaurants, better school systems, lower crime rate, and more industry.
- Many volunteer groups

**Weaknesses of community in general**:

- Economic development could be improved; tough to recruit and retain robust industry here;
- Need better paying jobs; poor education here, which makes economic development more difficult.
- Lack of effective communication to many people who would benefit from various services

**Strengths of healthcare system**:

- Two large medical centers within our community
- Diverse array of services offered; good availability of medical care
- Competent physicians; access of “choice” of providers
- High availability of primary care; low wait times for PC physicians.

**Weaknesses of healthcare system**:

- Lack of access to transportation for seniors, the low income, and for people in outlying areas;
- A large group of people work but can't afford private insurance, and do not qualify for Medicaid.
- The mental health system was put under pressure to release patients (least restrictive environment), now many of these patients are out on the streets.

## Groups more adversely affected by health issues

### Children:

- Numerous issues affect the children in our community; the group overwhelmingly stated many problems occur in the home.
- school systems are viewed as a "babysitting service".
- Drugs are a major issue, whether it's the child bringing them to school to sell, starting at the age of kindergarten, or the child is exposed to drugs in the home (i.e. parent is on drugs).
- A possible "anti-vaccine" environment growing in our area
- Pregnancy among teens, and even younger females in the 4th-6th grade age group is a major problem.
- Obesity is also a large problem among our youth. Low income families and lack of parental understanding leads to poor nutrition. Families can't afford to buy healthier foods.
- There are children who are "under-nourished", meaning very little food is provided in the home.

### Low income:

- Poverty leads to all sorts of health issues across all groups of people (i.e. children, elderly, and minority). "Poor people eat the worst because cheap food is often bad food."
- In terms of individual and family income, several attendees mentioned the struggle faced by some who try to work 2-3 jobs to get off of public assistance, while others seem to "abuse the system" by avoiding employment out of fear that they will lose their government assistance. It was revealed that the middle class views the poor as a problem, and there appears to be a fundamental disconnect between the "haves and have nots."

### Elderly:

- There is a gap in availability of nursing home facilities for the elderly in our area. The cost is such that the middle class can't afford this level of care, only Medicaid recipients or the super wealthy could afford a nursing home. believed this group, along with elderly veterans, are the "forgotten group" within our community, and it's a large issue not being addressed.

## Minority:

- One focus group expressed deep concern over the topic of race and how it needed to be addressed within our community.
- "Culturally," many kids do not have access to health programs such as fitness centers, or safe areas outdoors to exercise.
- Several in the group believe many minority children "fall between the cracks." One participant stated we don't want "self-fulfilling prophecies, and we're all in the same sandbox a must learn to get along."

## Possible solutions to health problems

- Incorporate health classes into local schools.
- Incorporate health/wellness checks into local schools 1-2x/year that consist of BP check, temperature, basic vital signs, etc.
- A "healthy van" or mobile unit visiting schools was also discussed as an option.
- Continue to have healthy meals in schools; limit access to junk food. One group participant stated an example used by Kemper county public schools. She stated they had a fresh fruit program where the morning snack consisted of a piece of fresh fruit. She stated this jumpstarted a habit of healthy eating and the children looked forward to having a healthy snack each day.
- One group member stated some convenient stores across the state have implemented a "healthy kiosk" where healthy snacks, such as fruit, are within 20 feet of the cash register.
- The group also agreed the accountability of parents must be taken into consideration when addressing health concerns. This means a responsible adult must be present within the home to insure a child's healthcare needs are being addressed, whether it's proper nutrition or exercise.
- General safety within the community needs to be improved. The focus group stated there seems to be a lack of safety overall within Meridian. Kids need a safe environment to ride bikes and run outside. It was mentioned that the Village Fair mall area could be a well located recreational site to which inner-city kids could safely walk to exercise.
- The Upward basketball program provided by local churches was mentioned as a healthy activity for children. The program includes basketball, as well as cheerleading.
- The Boys and Girls Club is also a safe area for kids to exercise, along with the Northeast softball/soccer complex, and Bonita Lakes.
- The group believed children's access to video games should be limited vs. outdoor activity.
- One group member mentioned this area needs a "government assisted" fitness facility such as the YMCA. She stated the community only has privately owned fitness facilities and many can't afford the membership fees.
- It was mentioned that a having a facility such as *UMMC's Medical Mall* would be an asset to the community. The facility could include fitness and nutrition classes, along with financial education.

### Recommendations/Priorities of the Focus Groups

- **Obesity** is a priority
- **Teen pregnancy** is a priority
- Being overweight is “the norm” and for some “having a child at school” is also a norm. Develop cultural change programs that will change these norms.
- **Community Safety** is a priority. Overall, safety needs to be increased in the community, work on improving the local crime rate, as well as safe routes to school and safety at home for children.
- Develop more **outdoor recreation** opportunities. The majority of the focus group participants would like to see bike/walking lanes added around town (as well as better access to Bonita Lakes and other area parks). They stated Meridian could be “a more exercise friendly town”. One participant did note an increased interest in running within the community. She would like to see more open spaces and areas for healthy outdoor recreation.
- Incorporate churches for physical activity programs. As a sponsor, the churches could do something as simple as offering up their parking lots for basketball games for the youth.
- **Health education and wellness programs**. Hold health fairs but “Make health festivals fun.” One participant used the example of *Wells Fest* in Jackson. This could be a way to draw more attendees by having concerts along with a health fair.
- Talk with business leaders who have implemented corporate wellness programs with success. Model community efforts in a similar way.
- Two focus group participants also mentioned how important it is to start getting people out of the emergency room for non-emergent illnesses such as coughs and colds. “The ER is throwing money in the wind and no one is getting healthy,” stated one participant.

## *Conclusions from Interviews and Focus Group*

Regarding the qualitative information gleaned from the Key Informant Interviews and the Focus Group, it was concluded that there was a fairly high level of crossover between the concerns of each group. The general consensus was that Meridian offers a wide array of healthcare services and in general, the quality of these services is highly regarded in the community. The connection between poverty and poor health was certainly the most pressing issue of concern. Also, the fact that Mississippi continues to rank at the bottom of many state rankings of health status was an issue that calls into question the behavioral choices made by individuals in this community. The recommendations

Optimum health for this community will not be achieved by simple expansion of service. The degree to which additional services offered may improve the community's health status will, in many cases, be mediated by the degree to which patient behavior (diet, exercise, and medical compliance) is better managed.

### *Resources*

Lauderdale County has a multitude of Health and Social resources. In developing an implementation plan, ARMC will reach out to the agencies that participated in the Qualitative process, and work from there in an effort to seek effective collaborative partnerships to address these health needs.

### *Information Gaps*

One significant gap has appeared. This relates to current data regarding mental health issues facing the population. Mental health/Mental Illness needs have emerged, however, it is unclear precisely how these issues are manifesting and what might be accomplished. ARMC will further collaborate with local mental health agencies to determine what, if anything, might be done to assist.

## Brief Paper Survey

A paper survey was administered to all interview and focus group participants to add quantitative data to this report. The results of this survey are presented here.

### *Participant Data:*

Survey respondents' age ranged from 32 to 77 yrs., with an average age of participant age of 57.89 yrs. (n=27, 1 did not answer). Twelve were male (42.9%), while 16 were female (57.1%). All but two respondents live in Lauderdale County.

**Survey Table 1: Residency (County)**

| Are you a resident of Lauderdale County? | | |
|---|---|---|
| Answer Options | Response Percent | Response Count |
| Yes | 93.1% | 27 |
| No | 6.9% | 2 |
| | *answered question* | 29 |
| | *skipped question* | 0 |

**Survey Table 2: Residency (City)**

| Do you live within the Meridian City Limits? (If not, please take the survey anyway) | | |
|---|---|---|
| Answer Options | Response Percent | Response Count |

| | | |
|---|---|---|
| Yes | 58.6% | 17 |
| No | 41.4% | 12 |
| *answered question* | | 29 |
| *skipped question* | | 0 |

## Survey Table 3: Male/Female

| Your Sex | | |
|---|---|---|
| Answer Options | Response Percent | Response Count |
| Male | 41.4% | 12 |
| Female | 58.6% | 17 |
| *answered question* | | 29 |
| *skipped question* | | 0 |

## Survey Table 4: Children living in household

| Are there any children or young adults under 18 currently living in your household? | | |
|---|---|---|
| Answer Options | Response Percent | Response Count |
| Yes | 34.5% | 10 |
| No | 65.5% | 19 |
| *answered question* | | 29 |
| *skipped question* | | 0 |

## Survey Table 5: Educational Level

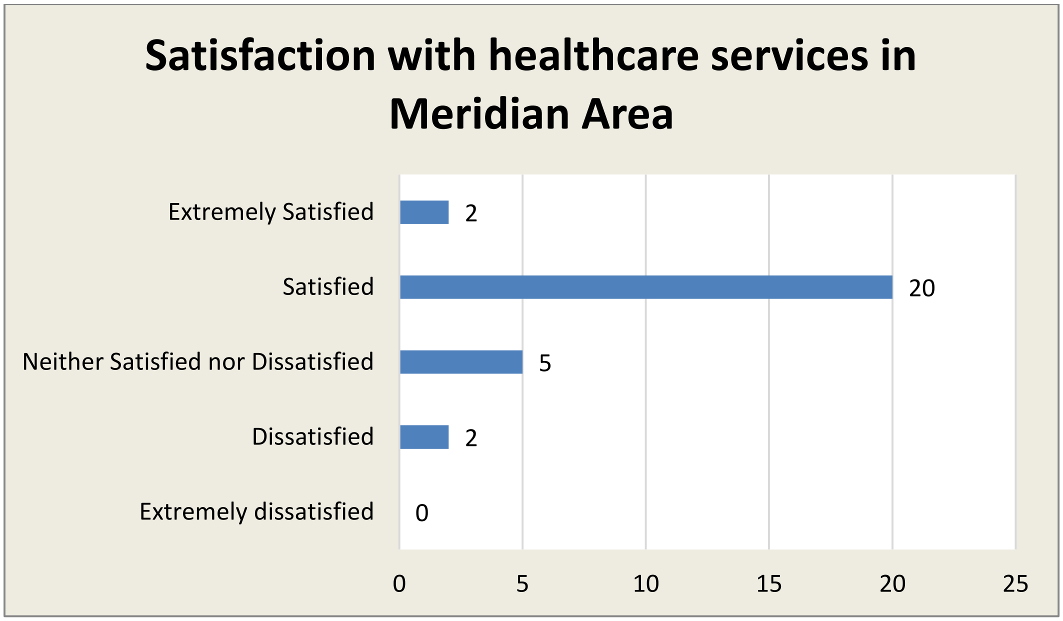
| What is the highest level of education you have completed? | | | |
|---|---|---|---|
| Answer Options | | Response Percent | Response Count |
| | Graduate Degree (masters, doctorate, etc) | 35.7% | 10 |
| | College Graduate (bachelors degree) | 32.1% | 9 |
| | Some Graduate courses | 14.3% | 4 |
| | Some College | 10.7% | 3 |
| | Less than 12 years | 3.6% | 1 |
| | High School Graduate or GED | 3.6% | 1 |
| *answered question* | | | 28 |
| *skipped question* | | | 0 |

## Survey Table 6: Familiarity with at-risk populations

| In your occupation (or volunteer work), do you work with any of these populations | | |
|---|---|---|
| **Answer Options** | **Response Percent** | **Response Count** |
| Children | 93.1% | 27 |
| The Elderly | 79.3% | 23 |
| Medically Underserved | 79.3% | 23 |
| Individuals with "special needs" | 79.3% | 23 |
| | *answered question* | 29 |
| | *skipped question* | 0 |

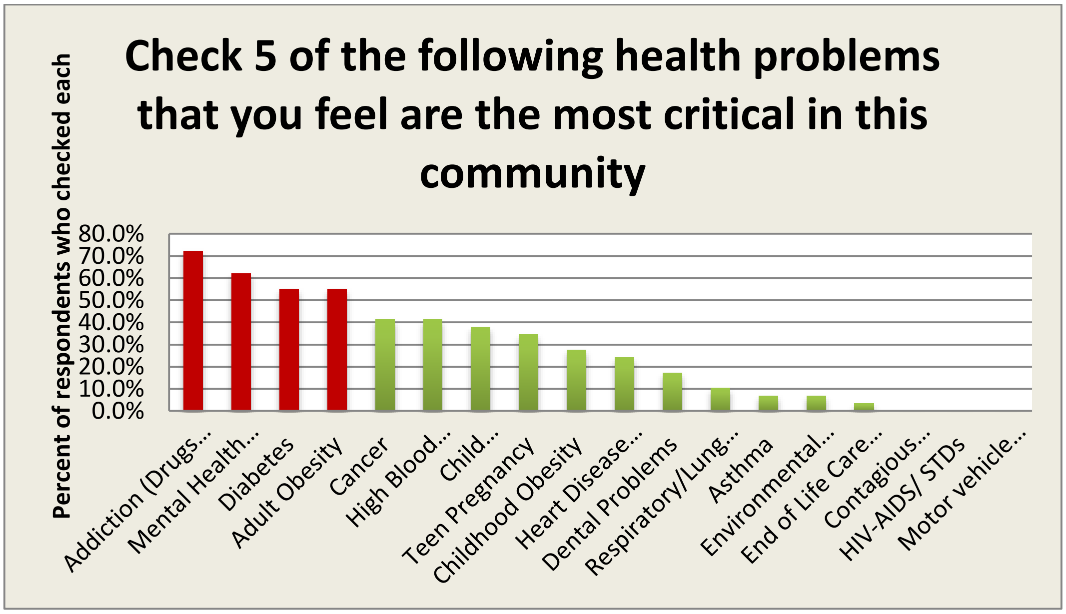
## *Community Health*

### Survey Figure 1: Level of Satisfaction with healthcare services



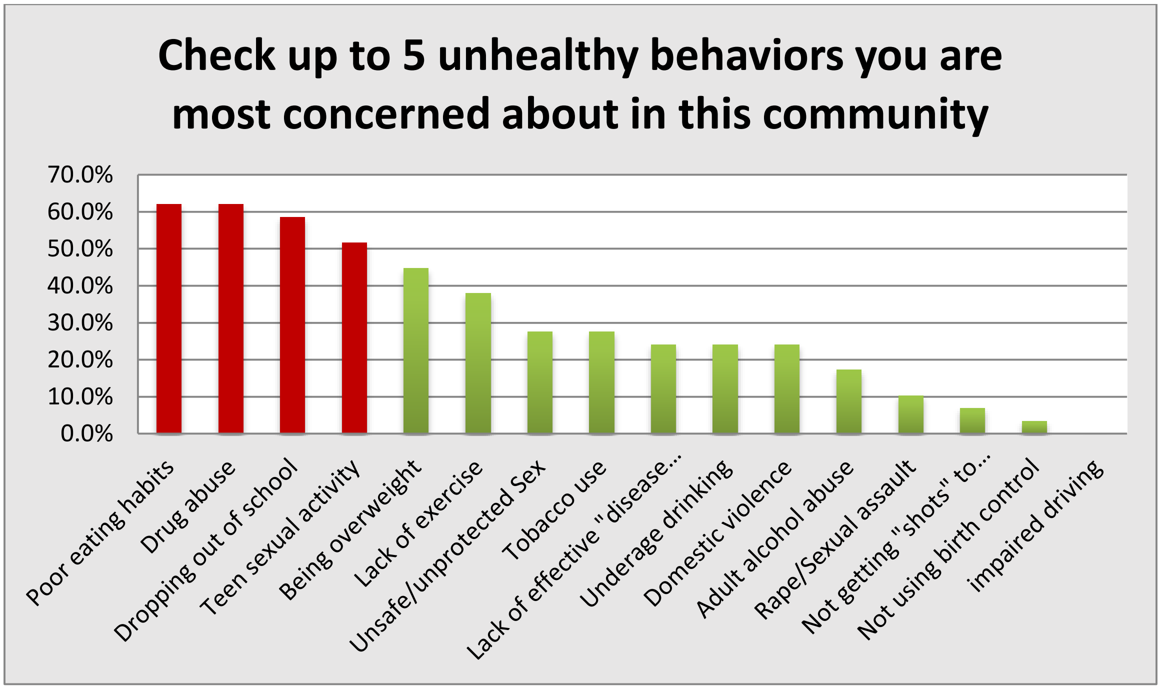
### Survey Figure 2: Top health problems

Respondents were asked to check the top five top health problems in the community. The most often identified problems (selected by over 50% of the respondents) were Addiction, Mental Health Problems, Diabetes, Adult Obesity.



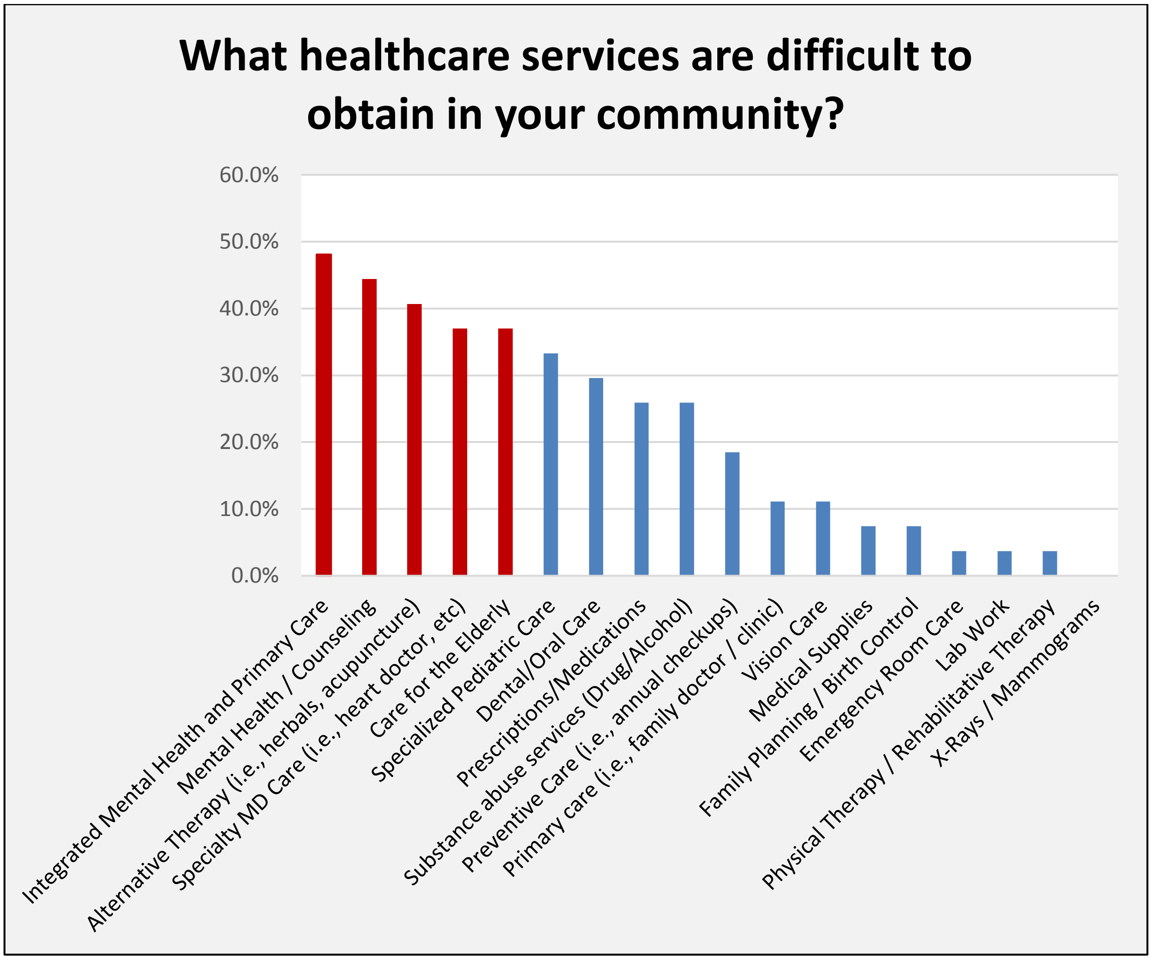
**Survey Figure 3: Unhealthy behaviors of highest concern**

Over half of the respondents selected the following behaviors of most concern: Poor Eating Habits, Drug Abuse, Dropping out of School, and Teen Sexual Activity.



**Survey Figure 4: Services difficult to obtain.**

Integrated mental health and Primary Care, Counseling, Alternative Therapy, Specialty care, and Elder Care were the top five services considered most difficult to obtain. It should be noted, however, that simply because a service is difficult to obtain, does not necessarily translate into a "need." For instance, some questioned the need for Alternative Therapy, however, for the other four services, respondents agreed that there was a need, especially in terms of moving toward "Wellness" models of healthcare.



## Survey Table 7: Barriers to Health Care

Over fifty percent of the respondents chose the following as what they perceive as most typical barriers: "Can't pay for doctor visits" and "Lack of transportation," each reflect economic pressures, and/or lack of social support. "Don't know what types of services are available" points to a communication/education gap between health service organizations and their constituents.

| **Considering the broad interests of the community, what do you feel are the most typical barriers to residents getting health care? (check all that apply)** | | |
|---|---|---|
| Answer Options | Response Percent | Response Count |
| Can't pay for Doctor/Hospital visits | 78.6% | 22 |
| Don't know what types of services are available | 60.7% | 17 |
| Lack of transportation | 60.7% | 17 |
| Have no regular source of health care | 42.9% | 12 |
| Long waits for appointments | 39.3% | 11 |
| Lack of evening and weekend services for non-emergency needs | 35.7% | 10 |
| Can't find providers that accept insurance | 25.0% | 7 |
| Other (please specify) | | 3 |
| | *answered question* | **28** |
| | *skipped question* | **1** |

| | **Other (please specify)** |
|---|---|
| | patients with limited knowledge, access, and understanding |
| | lack of insurance |
| | value of services provided is not understood |

# Conclusion

This assessment employed a multi-method approach that included a review of existing federal and state data (*secondary data analysis*) paired with newly gathered data from the community *(primary data analysis*). The initial step in this process was to conduct "Key Informant" Interviews. Key informants are individuals who are heavily involved with and knowledgeable about the community of focus. This includes community leaders in the public and private sector, as well as individuals with special expertise in healthcare. Information gathered through these interviews, paired with public health information, vital statistics, and economic data provide a very good snapshot of the community's health needs. To further augment our understanding of the needs of the underserved, two focus groups were held for the specific purpose of gathering ideas about how to better serve those with the greatest health risk: low-income, elderly, minority, disabled, and children/youth populations. The results of the interviews and focus group were compared and cross validated against the existing secondary data. Community health needs were then prioritized according to degree of overlap, severity, and resources.

In consideration of the information gathered through a variety of means, including existing state and federal data, Key Informant Interviews, Focus Groups, and survey, a high level of consistency across data sources emerged.

According to the Mississippi Public Health Institute (www.mpsi.org), the top health priorities for the state of Mississippi are *Physical Activity*, *Nutrition*, *Environmental Health*, *Obesity, Diabetes, Teen Pregnancy, Infant Mortality,* and *Tobacco use.*

For Lauderdale County, with the exception of *Environmental Health* and *Infant Mortality*, these priorities corresponded with health needs discovered through the key informant interviews and the focus group. These priorities were also cross-validated against secondary data with results confirming tobacco use and infant mortality as significant issues, though not environmental health. The following table summarizes the county, state, and national data for each of these domains.

| Health Issue | Mississippi | Lauderdale County | United States |
|---|---|---|---|
| Percent of adults with inadequate fruit and vegetable Consumption | 82.9% | 79.1% | 75.86% |
| Percent of adults reporting no leisure time physical activity | 32% | 31.6% | 22.47% |
| Obesity (Body Mass Index greater than 30) | 35.31% | 35.2% | 27.19% |
| Percent of adults diagnosed with diabetes | 12.52% | 14.5% | 9.09% |
| Percent of adults who regularly smoke cigarettes | 23.4% | 22.3% | 18.08% |
| Teen Birth Rate (per 1,000 female age 15-19) | 59.4 | 58 | 36.6 |
| Infant Mortality Rate (per 1,000 births) | 10.1 | 10.8 | 6.52 |

In developing a priority list, *community opinion* about community health issues is hypothesized to be a critical component to facilitate "buy in" when community benefit implementation strategies are formulated. Priorities should also reflect the hospital's capacity and resources available to address community health problems. It is also important to gauge the overall impact of various health issues, such as chronic illness, both economically and in terms of the number of people affected. In consideration of all data, the health needs that emerged were those that were most consistently found across all methods of inquiry. It is presumed, that if not addressed, these health problems will have a tremendously detrimental impact on the community. The resulting Health priorities are presented below.

## *Priorities*

- **Reduce *Obesity* through health education directed at cultural change. An effective community-wide focus on healthy *Diet* and *Exercise* should reduce *Obesity* and *Diabetes*, while improving overall population health.**

- **Diabetes and Hypertension affect thousands of people in this county. For people with *Diabetes* and Hypertension other related health conditions, develop effective chronic disease management programs.**

- **Develop Programs to address youth health issues: Teen Pregnancy, Obesity, and Drug Use**

- **Strengthen Health Education for the community at large, Conduct more screenings for Cancer, Heart Disease, Hypertension, and Diabetes, especially in the at risk categories of Low Income and Minority.**

- **Explore opportunities for partnering with other agencies to support services for the elderly, including case management and transportation services.**

- **Explore Mental Health Issues and work with local mental health agencies to address problems identified in survey and focus groups.**

# *Appendix A*

**Author's Background and Qualifications**

Snodgrass Research Group, LLC provides independent, population based, health sector research, program evaluation, and other consumer survey analytics.

Dr. C. Edward Snodgrass is managing Principal of Snodgrass Research Group, LLC. Dr. Snodgrass holds a Ph.D. in Experimental Psychology (University of Southern Mississippi, 1999). He has published and presented on health-related topics at the local, state, and national level. He has taught advanced research methods and experimental design at the university level (University of Southern MS, and Mississippi State University).

Dr. Snodgrass has served on the Institutional Review Board at East Mississippi State Hospital and on the advisory boards of the Mississippi Center for Health Workforce, the East Central MS Health Network, and the Mississippi Health Sciences Information Network at the University of MS Medical Center.

As the Director of the East Central Mississippi Area Health Education Center (EC-AHEC), and later as West AL/East MS Health Programs Director for The Montgomery Institute (a regional 501(c)3 economic development entity), Dr. Snodgrass gained experience in Community Health Needs Assessment while developing projects involving diverse agencies (including schools, universities, community colleges, and hospitals) partnering to build a sustainable and competent health workforce throughout the West Alabama East Mississippi region. Dr. Snodgrass also directed health professional training/CME opportunities, community health education programs, and health education pipeline and recruitment programs (e.g., Youth Health Service Corps).

SNODGRASS
RESEARCH
GROUP

Member
Association for Community Health Improvement
communityhlth.org

# *Appendix B: Community Healthcare Resource List for Lauderdale County*

*Source: Directory of MS Health Facilities January 2013*
*Available for download here: http://msdh.ms.gov/msdhsite/_static/resources/5235.pdf*

## Licensed Hospitals

Alliance Health System
5000 Highway 39 North
Meridian, MS 39303
Phone: (601) 483-6211
William Patterson, CEO
Licensed Beds: 154
68 Acute
8 CDU
58 Psychiatric
12 Geriatric Psychiatric
License #12-308
Accredited

East MS State Hospital
4555 Highland Park Drive/ Post Office Box 4128
Meridian, MS 39304
Phone: (601) 482-6186
Charles Carlisle, Administrator
Licensed Beds: 407
372 Psychiatric
35 CDU
License #31-136
Non-Accredited

Anderson Regional Medical Center
2124 14th Street
Meridian, MS 39301
Phone: (601) 553-6000
John Anderson, Interim CEO
Licensed Beds: 260
260 Acute
License #13-237
Accredited

Anderson Regional Medical Center-South
1102 Constitution Avenue / Post Office Box 1810
Meridian, MS 39301
Phone: (601) 693-2511
John Anderson, Interim CEO
Licensed Beds: 140
120 Acute
20 Rehab
License #12-249
Accredited

Regency Hospital of Meridian
1102 Constitution Ave., 2nd Floor
Meridian, MS 39301
Phone: (601)484-7900
Clifton Quinn, Administrator
Licensed Beds: 40
40 Acute
License #22-332
Accredited

Rush Foundation Hospital
1314 19th Avenue
Meridian, MS 39301
Phone: (601) 483-0011
Christopher Rush, Administrator
Licensed Beds: 215
215 Acute
License #13-059
Accredited

The Specialty Hospital of Meridian
1314 19th Avenue
Meridian, MS 39301
Phone: (601) 486-4211 or 703-4211
Elizabeth Mitchell, Administrator
Licensed Beds: 49
49 Acute
License #23-324
Non-Accredited

## Nursing Homes

Bedford Care Center of Marion
6434-A Dale Drive
Marion, MS 39342
Phone: (601) 294-3515
Bedford Care Center of Marion,. LLC, Licensee
Susan H. Fox, Administrator
Proprietary
Medicaid/Medicare
Capacity: 128

Golden Living Center - Meridian
4728 Highway 39 North / Box 3604
Meridian, MS 39301
Phone: (601) 482-8151
Beverly Enterprises-MS, Inc., Licensee
Janet Wise, Administrator
Proprietary
Medicaid/Medicare
Capacity: 120

James T. Champion
1455 North Lakeland Drive
Meridian, MS 39307
Phone: (601) 581-8450
Edwin C. LeGrand, Licensee
Judd Nance, Administrator
Public
Medicaid
Capacity: 120

Meridian Community Living Center
517 33rd Street
Meridian, MS 39305
Phone: (601) 483-3916
CLC of Meridian, LLC, Licensee
Megan Ten Eyck, Administrator
Proprietary
Medicaid/Medicare
Capacity: 58

Poplar Springs Nursing Center
6615 Poplar Springs Drive/P.O. Box 3623
Meridian, MS 39305

Phone: (601) 483-5256
Poplar Springs Nursing Center, LLC, Licensee
Kristy Certain, Administrator
Proprietary
Medicaid/Medicare
Capacity: 130

Queen City Nursing Center
1201 28th Avenue
Meridian, MS 39301
Phone: (601) 483-1467
Queen City Nursing Center, Inc., Licensee
Barbara Howard, Administrator
Proprietary
Medicaid/Medicare
Capacity: 84

Reginald P. White Nursing Facility
1451 North Lakeland Drive
P.O. Box 4128, West Station
Meridian, MS 39307
Phone: (601) 581-8500
Edwin C. LeGrand, Licensee
Wanda Kennedy, Administrator
Public
Medicaid
Capacity: 120

The Oaks Rehabilitation & Healthcare Center
3716 Highway 39 North
Meridian, MS 39301
Phone: (601) 482-7164
Riley Healthcare, LLC Licensee
Sherry Davis, Administrator
Proprietary
Medicaid/Medicare
Capacity: 82

## Psychiatric Residential Treatment Facilities

The Crossings
5000 Highway 39 North
Meridian, MS 39301
Phone: (601) 483-5452
PSI Crossing, LLC, Licensee
Stacy R. Andreacchio, Administrator
Capacity: 60

## Licensed Personal Care Homes

Aldersgate Personal Care Home
6600 Poplar Springs Drive
Meridian, MS 39305
Phone: (601) 485-9484
Stephen McAlilly, Licensee
Capacity: 58

Bee Hive Homes of Marion
5750 Dale Drive
Marion, MS 39342
Phone: (601482-8200
Elsie Jordan, Manager

Emeritus at Silverleaf Manor (Assisted Living)
4555 35th Avenue
Meridian, MS 39305
Phone: (601) 483-4566
Emeritus Corporation, Licensee
Capacity: 110

Fisher Care
5207 Zero Road
Meridian, MS 39301
Phone: (601) 481-4907
Fisher Care, LLC, Licensee
Capacity: 8

Magnolia Home PCH
1900 24th Avenue /P.O. Box 3064
Meridian, MS 39301
Phone: (601) 938-2435
Shelia Powe, Licensee
Capacity: 14

McCoy's Personal Care Home
919 35th Avenue
Meridian, MS 39301
Phone: (601) 693-4104
Mary Cleo McCoy, Licensee
Capacity: 15

## State Department of Health Home Health Agencies

### Public Health District VI

**East Central Home Health Agency – Region A**
Magnolia Office Park
2071 Highway 355 #C / P.O. Box 150
Forest, MS 39074
Phone: (601) 469-3043
Counties: Clarke, Covington, Jasper, Kemper**, Lauderdale**,
Leake, Neshoba, Newton, Rankin, Scott, Simpson, Smith

## Hospital Based Health Home Health Agencies

**Wayne General Hospital Home Health Agency**
920 Matthew Drive / P.O. Box 1249
Waynesboro, MS 39367
Phone: (601) 735-5500 & (601) 735-7133
Home Health Aide, Appliance & Equipment Service,
Physical Therapy, Skilled Nursing, Occupational Therapy &
Speech Therapy
Counties: Clarke, Forrest, Greene, Jasper, Jones,
**Lauderdale**, Perry & Wayne

## Private Freestanding Home Health Agencies

**Amedisys Home Health of Meridian**
2900 North Hills Street, Suite A
Meridian, MS 39305
Phone: (601)484-3293
Home Health Aide, Occupational Therapy, Medical Social
Service, Physical Therapy, Speech Therapy & Skilled

Nursing
Counties: Clarke, Jasper, Kemper, Lauderdale, Neshoba,
Newton, Scott & Wayne
Branch: Quitman
For Profit

**Deaconess Home Care - Region I**
108 Lundy Lane
Mail: Post Office Box 16929 Zip 39404-6929
Hattiesburg, MS 39401
Phone: (601) 268-1842
Skilled Nursing, Home Health Aide,
Physical Therapy, Occupational Therapy,
Speech Therapy, Medical Social Services,
Appliance & Equipment Services
Counties: Clarke, Covington, Forrest, George, Greene,
Hancock, Harrison, Jackson, Jasper, Jeff Davis, Jones,
Lamar**, Lauderdale**, Lawrence, Marion, Newton, Pearl
River, Perry, Scott, Simpson, Stone, Smith, Wayne &
Walthall
Branches: Biloxi, Columbia, Gulfport, Laurel, Lucedale,
Magee, **Meridian**, Pascagoula, Picayune & Waynesboro
For Profit

**Gentiva Home Health**
2600 Old North Hill Street
Meridian, MS 39305
Phone: (601) 484-6726
Home Health Aide, Medical Social Services, Physical
Therapy, Skilled Nursing, Speech Therapy & Occupational
Therapy
Counties: Clarke, Jasper, Kemper, **Lauderdale**, Neshoba,
Newton, Scott & Wayne
For Profit

**Sta-Home Health Agency, Inc. of Carthage, Inc.**
616 Highway 35 South / P.O. Box 366
Carthage, MS 39051
Phone: (662) 267-9770
Home Health Aide, Occupational Therapy, Physical
Therapy, Skilled Nursing & Speech Therapy, Medical Social
Services
Counties: Attala, Clarke, Covington, Jasper, Kemper,
**Lauderdale**, Leake, Madison, Neshoba, Newton, Noxubee,
Rankin, Scott, Simpson, Smith & Winston
Branches: Forest, Kosciusko, Louisville, **Meridian**, Newton,
Philadelphia, Sebastopol & Walnut Grove
For profit

## Hospice Facilities

Harper's Hospice Care, Inc.
1703 24th Avenue
Meridian, MS 39301
(601) 483-4134

Hometown Hospice, Inc.
8366 Hwy 19 North
Collinsville, MS 39325
(601) 626-7277

Hospice Advantage of Meridian
1300-C 14th Street
Meridian, MS 39301
(601) 483-9990

## Rural Health Facilities

Anderson Family Medical Center - Riverbirch
A Division of Anderson Regional Medical Center - South
2514 67th Avenue Loop, Suite 112
Meridian, MS 39307
Phone: 601-553-0707

Central MS Family Health Clinic
905-C South Frontage Road
Meridian, MS 39301
Phone: (601) 486-4210

East Mississippi Medical Clinic
4711 Poplar Springs Drive
Meridian, MS 39305-2666
Phone: (601) 485-7777

Immediate Care Family Clinic
1710 14th Street
Meridian, MS 39301
Phone: (601) 482-9211

North Hills Family Medical Clinic
5009 Highway 493
Meridian, MS 39305
Phone: (601) 626-8874

Rush Medical Clinic – Collinsville
9097 Collinsville Road
Collinsville, MS 39325
(601) 626-8374

## *Appendix C Footnotes to Health Indicators Report*

### Total Population

#### Data Background

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data (2008).*

For more information about this source, including data collection methodology and definitions, refer to the American Community Survey website.

#### Methodology

Population counts for demographic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2008-2012. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

**Percentage = [Subgroup Population] / [Total Population] * 100**

For more information on the data reported in the American Community Survey, please see the complete American Community Survey 2012 Subject Definitions.

#### Notes

**Race and Ethnicity**
Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. Total population counts are reported in the ACS public use files by combined race and ethnicity; social and economic data are reported by race or ethnicity alone.

**Data Limitations**
Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age and sex distributions that are very different from the household population. The

inclusion of the GQ population could therefore have a noticeable impact on demographic distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails).

## Population with Any Disability

### Data Background

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data (2008).*

For more information about this source, including data collection methodology and definitions, refer to the American Community Survey website.

### Methodology

Counts for population subgroups and total area population data are acquired from the U.S. Census Bureau's American Community Survey (ACS). Data represent estimates for the 5 year period 2008-2012. Data are summarized to 2010 census tract boundaries. Disability status is classified in the ACS according to yes/no responses to questions (17 - 19) about specific physical (hearing, vision, ambulatory) and cognitive statuses, and any other status which, if present, would make living in the absence of accommodations difficult or impossible. Indicator statistics are measured as a percentage of the total universe (non-institutionalized) population using the following formula:

**Percentage = [Subgroup Population] / [Total Population] * 100**

For more information on the data reported in the American Community Survey, please see the complete American Community Survey 2012 Subject Definitions.

**Notes**

**Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

**Data Limitations**
Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations have age and sex distributions that are very different from the household population. The inclusion of the GQ population could therefore have a noticeable impact on demographic distribution. This is particularly true for areas with a substantial GQ population (like areas with military bases, colleges, or jails).

## Children in Poverty

### Data Background

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data (2008).*

For more information about this source, including data collection methodology and definitions, refer to the American Community Survey website.

### Methodology

Population counts for demographic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2008-2012. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

**Percentage = [Subgroup Population] / [Total Population] * 100**

For more information on the data reported in the American Community Survey, please see the complete American Community Survey 2011 Subject Definitions.

### Notes

**Trends Over Time**
The American Community Survey multi-year estimates are based on data collected over 5 years. For any given consecutive release of ACS 5-year estimates, 4 of the 5 years overlap. The Census Bureau discourages direct comparisons between estimates for overlapping periods; use caution when interpreting this data.

**Race and Ethnicity**
Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community

Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as “Two or More Races”. The minimum ethnicity categories are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

**Data Limitations**

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. The part of the group quarters population in the poverty universe (for example, people living in group homes or those living in agriculture workers’ dormitories) is many times more likely to be in poverty than people living in households. Direct comparisons of the data would likely result in erroneous conclusions about changes in the poverty status of all people in the poverty universe.

High School Graduation Rate (NCES)

**Data Background**

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfils a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.
*Citation: Documentation to the NCES Common Core of Data Public Elementary/Secondary School Universe Survey (2013).*

The National Center for Education Statistics releases a dataset containing detailed information about every public school in the United States in their annual Common Core of Data (CCD) files. The information from which this data is compiled is supplied by state education agency officials. The CCD reports information about both schools and school districts, including name, address, and phone number; descriptive information about students and staff demographics; and fiscal data, including revenues and current expenditures.

For more information, please visit the Common Core of Data web page.

**Methodology**

Graduation rates are acquired for all US counties from the 2012 County Health Rankings (CHR). The 2011 County Health Rankings (CHR) used graduation rates calculated from the National Center for Education Statistics (NCES) using an estimated cohort. This measure is generally known as the Averaged Freshman Graduation Rate (AFGR). Starting in 2012, CHR reports cohort graduation rates collected from State Department of Education websites. These rates are an improvement over the AFGR rates previously reported due to student-level outcomes tracking that accounts better for transfers, early and late completers. For 12 states, CHR continues to use NCES-based AFGRs. These states are: AL, AK, AR, CT, HI, ID, MT, NJ, ND, OK, SD and TN.

Total freshmen cohorts were compiled for all counties from school-level data, provided by NCES for academic years 2005-06 through 2007-08. Using the graduation rates from the 2012 CHR and these class sizes, the number of graduates* was estimated for each county. On-time graduation rate, or average freshman graduation rate, is re-calculated for unique service areas and aggregated county groupings using the following formula:

**Graduation Rate = [Estimated Number of Graduates] / [Average Base Freshman Enrollment] * 100.**

*Average freshman graduation rate is a measure of on-time graduation only. It does not include 5th year high school completers, or high-school equivalency completers such as GED recipients. For more information on average freshman graduation rates, please review the information on page 4 of the NCES Common Core of Data Public-Use Local Education Agency Dropout and Completion Data File

**Notes**

**Race and Ethnicity**

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

Income Per Capita

**Data Background**

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data (2008).*

For more information about this source, including data collection methodology and definitions, refer to the American Community Survey website.

**Methodology**

Total income and total area population data are acquired from the U.S. Census Bureau’s American Community Survey. Data represent estimates for the 5 year period 2008-2012. Mapped data are summarized to 2010 census tract boundaries. Per capita income is the mean money income received in the past 12 months computed for every man, woman, and child in a geographic area. It is derived by dividing the total income of all people 15 years old and over in a geographic area by the total population in that area based on the following formula:

**Per Capita Income = [Total Income of Population Age 15 ] / [Total Population]**

For more information on the data reported in the American Community Survey, please see the complete American Community Survey 2012 Subject Definitions.

### Notes

#### Trends Over Time

The American Community Survey multi-year estimates are based on data collected over 5 years. For any given consecutive release of ACS 5-year estimates, 4 of the 5 years overlap. The Census Bureau discourages direct comparisons between estimates for overlapping periods; use caution when interpreting this data.

#### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. The part of the group quarters population in the poverty universe (for example, people living in group homes or those living in agriculture workers' dormitories) is many times more likely to be in poverty than people living in households. Direct comparisons of the data would likely result in erroneous conclusions about changes in the poverty status of all people in the poverty universe.

## Lack of Social or Emotional Support

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

"... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010.*

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the Health Indicator Warehouse, the official repository of the nation's health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

The Health Indicator Warehouse is the official repository of the nation's health data, providing public access to the information resources of the Centers for Disease Control and Prevention (CDC), the Environmental Protection Agency (EPA), the Health Resources and Services Administration (HRSA), and others. When applicable, data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment.

**Methodology**

Indicator percentages are acquired for years 2006-2012 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following question:

*"How often do you get the social and emotional support you need?"*

This indicator represents the percentage of those persons who answered that they do not receive adequate social/emotional support all or most of the time. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Persons with Inadequate Support] = ([Indicator Percentage] / 100) * [Total Population] .**

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2007-2011 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

**Notes**

**Race and Ethnicity**

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

**Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

Population in Poverty - 100% FPL

**Data Background**

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data (2008).*

For more information about this source, including data collection methodology and definitions, refer to the American Community Survey website.

### Methodology

Population counts for demographic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2008-2012. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

**Percentage = [Subgroup Population] / [Total Population] * 100**

For more information on the data reported in the American Community Survey, please see the complete American Community Survey 2011 Subject Definitions.

### Notes

### Trends Over Time

The American Community Survey multi-year estimates are based on data collected over 5 years. For any given consecutive release of ACS 5-year estimates, 4 of the 5 years overlap. The Census Bureau discourages direct comparisons between estimates for overlapping periods; use caution when interpreting this data.

### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. The part of the group quarters population in the poverty universe (for example, people living in group homes or those living in agriculture workers' dormitories) is many times more likely to be in poverty than people living in households. Direct comparisons of the data would likely result in erroneous conclusions about changes in the poverty status of all people in the poverty universe.

## Population in Poverty - 200% FPL

### Data Background

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data (2008).*

For more information about this source, including data collection methodology and definitions, refer to the American Community Survey website.

### Methodology

Population counts for demographic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2008-2012. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population based on the following formula:

**Percentage = [Subgroup Population] / [Total Population] * 100**

For more information on the data reported in the American Community Survey, please see the complete American Community Survey 2011 Subject Definitions.

### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. The part of the group quarters population in the poverty universe (for example, people living in group homes or those living in agriculture workers' dormitories) is many times more likely to be in poverty than people living in households. Direct comparisons of the data would likely result in erroneous conclusions about changes in the poverty status of all people in the poverty universe.

## Population Receiving Medicaid

### Data Background

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data (2008).*

For more information about this source, including data collection methodology and definitions, refer to the American Community Survey website.

### Methodology

Population counts for socio-economic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2008-2012. Data are aggregate summaries based on 2010 Census Tract boundaries. Health insurance coverage status is classified in the ACS according to yes/no responses to questions (16a - 16h) representing eight categories of health insurance, including: Employer-based, Directly-purchased, Medicare, Medicaid/Medical Assistance, TRICARE, VA health care, Indian Health Service, and Other. An eligibility edit was applied to give Medicaid, Medicare, and TRICARE coverage to individuals based on program eligibility rules. People were considered insured if they reported at least one "yes" to Questions 16a - 16f. Indicator statistics are measured as a percentage of the universe population using the following formula:

**Percentage = [Subgroup Population] / [Total Population] * 100**

For more information on the data reported in the American Community Survey, please see the complete American Community Survey 2012 Subject Definitions.

### Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

### Data Limitations

The population 'universe' for most health insurance coverage estimates is the civilian noninstitutionalized population, which excludes active-duty military personnel and the population living in correctional facilities and nursing homes. Some noninstitutionalized group quarters (GQ) populations have health insurance coverage distributions that are different from the household population (e.g., the prevalence of private health insurance among residents of college dormitories is higher than the household population). The proportion of the universe that is in the noninstitutionalized GQ populations could therefore have a noticeable impact on estimates of the health insurance coverage. Institutionalized GQ populations may also have health insurance coverage distributions that are different from the civilian noninstitutionalized population, the distributions in the published tables may differ slightly from how they would look if the total population were represented.

## Population Receiving SNAP Benefits (ACS)

### Data Background

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data (2008).*

For more information about this source, including data collection methodology and definitions, refer to the American Community Survey website.

**Methodology**

Population counts for household program participation and total household data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2008-2012. Mapped data are summarized to 2010 census tract boundaries. This indicator is a measure of household-level SNAP participation based on survey response about "receipts of food stamps or a food stamp benefit card in the past 12 months" by one or more household members. Area statistics are measured as a percentage of total occupied households based on the following formula:

**Percentage = [Participating Households] / [Total Households] * 100**

For more information on the data reported in the American Community Survey, please see the complete American Community Survey 2012 Subject Definitions.

**Notes**

**Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population

## Population with No High School Diploma

### Data Background

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data (2008).*

For more information about this source, including data collection methodology and definitions, refer to the American Community Survey website.

### Methodology

Population counts for population by educational attainment and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2008-2012. Mapped data are summarized to 2010 census tract boundaries. Area demographic statistics are measured as a percentage of the total population aged 25 based on the following formula:

**Percentage = [Subgroup Population] / [Total Population Age 25 ] * 100**

For more information on the data reported in the American Community Survey, please see the complete American Community Survey 2012 Subject Definitions.

### Notes

#### Trends Over Time

The American Community Survey multi-year estimates are based on data collected over 5 years. For any given consecutive release of ACS 5-year estimates, 4 of the 5 years overlap. The Census Bureau discourages direct comparisons between estimates for overlapping periods; use caution when interpreting this data.

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

#### Data Limitations

Beginning in 2006, the population in group quarters (GQ) was included in the ACS. Some types of GQ populations may have educational attainment distributions that are different from the household population.

The inclusion of the GQ population could therefore have a noticeable impact on the educational attainment distribution. This is particularly true for areas with a substantial GQ population.

## Teen Births

### Data Background

The Health Indicator Warehouse is the official repository of the nation's health data, providing public access to the information resources of the Centers for Disease Control and Prevention (CDC), the Environmental Protection Agency (EPA), the Health Resources and Services Administration (HRSA), and others. When applicable, data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment.

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

### Methodology

Counts for this indicator represent the annual average births over the 5-year period 2007-2011. Original data was tabulated by the CDC based on information reported on each birth certificate. Rates represent the number of births per 1,000 female population based on the following formula:

**Rate = [Births to Mothers Age 15-19] / [Female Population Age 15-19] * 1,000**

Data was acquired from the Health Indicators Warehouse. For more information about this source, including data inclusion requirements and subject definitions, please visit the Health Indicator Warehouse indicator page or refer to the NVSS natality public use file documention .

### Notes

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. In their original form, birth statistics from the CDC National Vital Statistics System (NVSS) are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Birth data from the Health Indicators Warehouse is provided using combined race/ethnicity. Due to sample size, data for this indicator is only reported for White (Non-Hispanic), Black (Non-Hispanic), Other (Non-Hispanic) and the Hispanic or Latino population.

#### Data Suppression

Suppression is used to protect confidentiality and to avoid misinterpretation when rates are unstable. Data is suppressed for all indicator components (geographic area population group) with fewer than 20 births over the report period.

## Unemployment Rate

### Data Background

The Bureau of Labor Statistics (BLS) is the principal Federal agency responsible for measuring labor market activity, working conditions, and price changes in the economy. Its mission is to collect, analyze, and disseminate essential economic information to support public and private decision-making. As an independent statistical agency, BLS serves its diverse user communities by providing products and services that are objective, timely, accurate, and relevant.

### Methodology

Unemployment statistics are downloaded from the US Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics (LAUS) database. The LAUS is dataset consists of modelled unemployment estimates. It is described by the BLS as follows:

*The concepts and definitions underlying LAUS data come from the Current Population Survey (CPS), the household survey that is the official measure of the labor force for the nation. State monthly model estimates are controlled in "real time" to sum to national monthly labor force estimates from the CPS. These models combine current and historical data from the CPS, the Current Employment Statistics (CES) program, and State unemployment insurance (UI) systems. Estimates for seven large areas and their respective balances of State are also model-based. Estimates for the remainder of the sub-state labor market areas are produced through a building-block approach known as the "Handbook method." This procedure also uses data from several sources, including the CPS, the CES program, State UI systems, and the decennial census, to create estimates that are adjusted to the statewide measures of employment and unemployment. Below the labor market area level, estimates are prepared using disaggregation techniques based on inputs from the decennial census, annual population estimates, and current UI data.*

From the LAUS estimates, unemployment is recalculated as follows:

**Unemployment Rate = [Total Unemployed] / [Total Labor Force] * 100**

For more information, please visit the Bureau of Labor Statistics Local Area Unemployment Statistics web page.

## Uninsured Population - Total

### Data Background

The American Community Survey (ACS) is a nationwide, continuous survey designed to provide communities with reliable and timely demographic, housing, social, and economic data. The ACS samples nearly 3 million addresses each year, resulting in nearly 2 million final interviews. The ACS replaces the long-form decennial census; however, the number of household surveys reported annually for the ACS is significantly less than the number reported in the long-form decennial census. As a result, the ACS combines detailed population and housing data from multiple years to produce reliable estimates for small counties, neighborhoods, and other local areas. Negotiating between timeliness and accuracy, the ACS annually releases current, one-year estimates for geographic areas with large populations; three-year and five-year estimates are also released each year for additional areas based on minimum population thresholds.

*Citation: U.S. Census Bureau: A Compass for Understanding and Using American Community Survey Data (2008).*

For more information about this source, including data collection methodology and definitions, refer to the American Community Survey website.

**Methodology**

Population counts for socio-economic groups and total area population data are acquired from the U.S. Census Bureau's American Community Survey. Data represent estimates for the 5 year period 2008-2012. Data are aggregate summaries based on 2010 Census Tract boundaries. Health insurance coverage status is classified in the ACS according to yes/no responses to questions (16a - 16h) representing eight categories of health insurance, including: Employer-based, Directly-purchased, Medicare, Medicaid/Medical Assistance, TRICARE, VA health care, Indian Health Service, and Other. An eligibility edit was applied to give Medicaid, Medicare, and TRICARE coverage to individuals based on program eligibility rules. People were considered insured if they reported at least one "yes" to Questions 16a - 16f. Indicator statistics are measured as a percentage of the universe population using the following formula:

**Percentage = [Subgroup Population] / [Total Population] * 100**

For more information on the data reported in the American Community Survey, please see the complete American Community Survey 2012 Subject Definitions.

**Notes**

**Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories in the American Community Survey (ACS) based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Indicator race and ethnicity statistics are generated from self-identified survey responses. Using the OMB standard, the available race categories in the ACS are: White, Black, American Indian/Alaskan Native, Asian, and Other. An ACS survey respondent may identify as one race alone, or may choose multiple races. Respondents selecting multiple categories are racially identified as "Two or More Races". The minimum ethnicity categories are: Hispanic or Latino, and Not Hispanic or Latino. Respondents may only choose one ethnicity. All social and economic data are reported in the ACS public use files by race alone, ethnicity alone, and for the white non-Hispanic population.

**Data Limitations**

The population 'universe' for most health insurance coverage estimates is the civilian noninstitutionalized population, which excludes active-duty military personnel and the population living in correctional facilities and nursing homes. Some noninstitutionalized group quarters (GQ) populations have health insurance coverage distributions that are different from the household population (e.g., the prevalence of private health insurance among residents of college dormitories is higher than the household population). The proportion of the universe that is in the noninstitutionalized GQ populations could therefore have a noticeable impact on estimates of the health insurance coverage. Institutionalized GQ populations may also have health insurance coverage distributions that are different from the civilian noninstitutionalized population, the distributions in the published tables may differ slightly from how they would look if the total population were represented.

Report prepared by Community Commons, February 13, 2015

## Alcohol Consumption

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. ”
>
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the Health Indicator Warehouse, the official repository of the nation’s health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

### Methodology

Indicator percentages are acquired for years 2006-2012 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following question:

*"One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average?"*

Respondents are considered heavy drinkers if they were male and reported having more than 2 drinks per day, or females that reported having more than 1 drink per day. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Heavy Drinkers] = ([Indicator Percentage] / 100) * [Total Population] .**

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2007-2011 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

### Notes

**Race and Ethnicity**
Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

**Data Suppression**
Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## Fruit/Vegetable Consumption

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. ”
>
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010.*

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the Health Indicator Warehouse, the official repository of the nation’s health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

### Methodology

Indicator percentages are acquired for years 2005-2009 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Data are based on the percentage of respondents who report regularly consuming five or more servings of fruits or vegetables each week. Fried potatoes and chips are excluded. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adults consuming 5 servings) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Population Consuming 5 Servings] = ([Indicator Percentage] / 100) * [Total Population].**

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2005-2009 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

### Notes

**Race and Ethnicity**
Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

**Data Suppression**
Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## Physical Inactivity

### Data Background

The Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion monitors the health of the Nation and produces publically available data to promote general health. The division maintains the Diabetes Data and Trends data system, which includes the National Diabetes Fact Sheet and the National Diabetes Surveillance System. These programs provide resources documenting the public health burden of diabetes and its complications in the United States. The surveillance system also includes county-level estimates of diagnosed diabetes and selected risk factors for all U.S. counties to help target and optimize the resources for diabetes control and prevention.

*Citation: Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions (FAQ). (2012).*

### Methodology

Data for total population and estimated obese population data are acquired from the County Level Estimates of Diagnosed Diabetes, a service of the Centers for Disease Control and Prevention's National Diabetes Surveillance Program. Diabetes and other risk factor prevalence is estimated using the following formula:

**Percent Prevalence = [Risk Factor Population] / [Total Population] * 100.**

All data are estimates modeled by the CDC using the methods described below:

The National Diabetes Surveillance system produces data estimating the prevalence of diagnosed diabetes and population obesity by county using data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) and data from the U.S. Census Bureau’s Population Estimates Program. The BRFSS is an ongoing, monthly, state-based telephone survey of the adult population. The survey provides state-specific information on behavioral risk factors and preventive health practices. Respondents were considered to have diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes. Respondents were considered obese if their body mass index was 30 or greater. Body mass index (weight [kg]/height [m]2) was derived from self-report of height and weight. Respondents were considered to be physically inactive if they answered "no" to the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors. For example, 2003, 2004, and 2005 were used for the 2004 estimate and 2004, 2005, and 2006 were used for the 2005 estimate. Estimates were restricted to adults 20 years of age or older to be consistent with population estimates from the U.S. Census Bureau. The U.S. Census Bureau provides year-specific county population estimates by demographic characteristics—age, sex, race, and Hispanic origin. .

The county-level estimates were based on indirect model-dependent estimates. The model-dependent approach employs a statistical model that “borrows strength” in making an estimate for one county from BRFSS data collected in other counties. Bayesian multilevel modeling techniques were used to obtain these estimates. Separate models were developed for each of the four census regions: West, Midwest, Northeast and South. Multilevel Poisson regression models with random effects of demographic variables (age 20–44, 45–64, 65 ; race; sex) at the county-level were developed. State was included as a county-level covariate.

*Citation: Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions (FAQ). (2012).*

Rates were age adjusted by the CDC for the following three age groups: 20-44, 45-64, 65 . Additional information, including the complete methodology and data definitions, can be found at the CDC’s Diabetes Data and Trends website.

### Notes

#### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Tobacco Usage - Current Smokers

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households.

”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010.*

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the Health Indicator Warehouse, the official repository of the nation’s health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

## Methodology

Indicator percentages are acquired for years 2006-2012 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Data are based on the percentage of respondents answering the following question:

*"Do you now smoke cigarettes every day, some days, or not at all?"*

Respondents are considered smokers if they reported smoking every day or some days. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adult smokers) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Adults Smokers] = ([Indicator Percentage] / 100) * [Total Population] .**

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2007-2011 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## Access to Primary Care

### Data Background

The Area Health Resource File (AHRF) is a database of information about the U.S. health care system, maintained and released annually by the U.S. Health and Human Services (HHS) Health Resources and Services Administration (HRSA). The AHRF contains more than 6,000 variables, aggregated for each of the nation's counties. The ARF contains information on health facilities, health professions, health status, economic activity, health training programs, measures of resource scarcity, and socioeconomic and environmental characteristics. In addition, the basic file contains geographic codes and descriptors which enable it to be linked to many other files and to aggregate counties into various geographic groupings.

The ARF integrates data from numerous primary data sources including: the American Hospital Association, the American Medical Association, the American Dental Association, the American Osteopathic Association, the Bureau of the Census, the Centers for Medicare and Medicaid Services (formerly Health Care Financing Administration), Bureau of Labor Statistics, National Center for Health Statistics and the Veteran's Administration.

For more information, please visit HRSA's Area Health Resource File website.

### Methodology

Physician data are acquired from the 2013-14 Health Resources and Services Administration (HRSA) Area Health Resource File (AHRF). These counts are tabulations from the 2012 *American Medical Association (AMA) Physician Masterfiles*. Doctors classified as "primary care physicians" by the AMA include those practicing: General Family Medicine, General Practice, General Internal Medicine, and General Pediatricss. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded.

Data is tabulated for physicians practicing office-based patient care only. Practitioners who are hospital residents (including clinical fellows) and hospital-based (FT) staff are not included. Non-patient care practitioners include administrators, medical teachers, researchers, etc. Rates are calculated per 100,000 total population using the following formula:

**Provider Rate = [ Number of Primary Care Physicians ] / [ Total Population ] * 100,000**

For detailed documentation or to view the original data, please view the documentation included in the 2013-2014 AHRF, which can be downloaded here.

### Notes

#### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

#### Data Limitations

Reported data represent summaries limited by county boundaries. When comparing rates, consider the following:

1) Rates assume uniform distribution of both establishments and populations throughout the county and

may not detect disparities in access for rural or minority populations.
2) Summaries may over-represent or under-represent county rates when populations or establishments are highly concentrated on county border lines.
3) Rates do not describe quality of the establishment or utilization frequency.

## Cancer Screening - Mammogram

### Data Background

The Dartmouth Atlas of Healthcare is an online repository of health data and maps based on information included in the massive Medicare database maintained by the Center for Medicare and Medicaid Services (CMS). The project uses Medicare claims data in conjunction with other demographic data to provide information and analysis about national, regional, and local markets, as well as hospitals and their affiliated physicians. The Dartmouth Atlas of Health Care is produced and maintained by The Dartmouth Institute for Health Policy and Clinical Practice.

For more information about this source, including methodologies and definitions, refer to the Dartmouth Atlas of Healthcare website.

### Methodology

The Dartmouth Institute analyzes data drawn from enrollment and claims files from the Medicare program. Analysis is restricted to the fee-for-service population over age 65; HMO patients are not included. Indicator data tables express the proportion of Medicare Part B patients screened for medical conditions based on the following formula:

**Percentage = [Number Screened] / [Total Patients] *100**

When appropriate, statistical adjustments are carried out to account for differences in age, race and sex.

Access to the complete methodology is available in the Dartmouth Institute's Report of the Dartmouth Atlas Project .

## Cancer Screening - Pap Test

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with

50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the Health Indicator Warehouse, the official repository of the nation's health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

### Methodology

Indicator percentages are acquired for years 2006-2012 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following questions:

*"A Pap test is a test for cancer of the cerivx. Have you ever had a Pap test?"*

Respondents are considered to have had a Pap test if they answer that they had ever had a test. Percentages are age-adjusted and only pertain to the non-institutionalized female population aged 18 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Persons having a Pap test] = ([Indicator Percentage] / 100) * [Total Population] .**

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2007-2011 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

### Notes

#### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## Cancer Screening - Sigmoidoscopy or Colonoscopy

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010.*

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the Health Indicator Warehouse, the official repository of the nation's health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

## Methodology

Indicator percentages are acquired for years 2006-2012 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following questions:

*"Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams? For a SIGMOIDOSCOPY, a flexible tube is inserted into the rectum to look for problems. A COLONOSCOPY is similar but uses a longer tube, and you are usually given medication through a needle in your arm to make you sleepy and told to have someone else drive you home after the test. Was your MOST RECENT exam a sigmoidoscopy or a colonoscopy? How long has it been since you had your last sigmoidoscopy or colonoscopy?"*

Respondents are considered to be have had a Sigmoidoscopy/Colonoscopy if they answer that they had ever had a test. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 50 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Persons having a Sigmoidoscopy/Colonoscopy] = ([Indicator Percentage] / 100) * [Total Population] .**

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2007-2011 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## Dental Care Utilization

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. ”
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS Annual Survey Data web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

### Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:
*>"How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists." and "How long has it been since you had your teeth cleaned by a dentist or dental hygienist?"* This indicator represents the percentage of respondents who indicated that they had not seen any dentist or dental hygienist within the past year. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

**Adults Without Recent Dental Exam = ([Indicator Percentage] / 100) * [Total Population] .**

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the Behavioral Risk Factor Surveillance System home page.

### Notes

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Diabetes Management - Hemoglobin A1c Test

### Data Background

The Dartmouth Atlas of Healthcare is an online repository of health data and maps based on information included in the massive Medicare database maintained by the Center for Medicare and Medicaid Services (CMS). The project uses Medicare claims data in conjunction with other demographic data to provide information and analysis about national, regional, and local markets, as well as hospitals and their affiliated physicians. The Dartmouth Atlas of Health Care is produced and maintained by The Dartmouth Institute for Health Policy and Clinical Practice.

For more information about this source, including methodologies and definitions, refer to the Dartmouth Atlas of Healthcare website.

### Methodology

The Dartmouth Institute analyzes data drawn from enrollment and claims files from the Medicare program. Analysis is restricted to the fee-for-service population over age 65; HMO patients are not included. Indicator data tables express the proportion of Medicare Part B patients screened for medical conditions based on the following formula:

**Percentage = [Number Screened] / [Total Patients] *100**

When appropriate, statistical adjustments are carried out to account for differences in age, race and sex.

Access to the complete methodology is available in the Dartmouth Institute's Report of the Dartmouth Atlas Project .

## High Blood Pressure Management

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS Annual Survey Data web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

### Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:

*"Have you EVER been told by a doctor, nurse or other health professional that you have high blood pressure? "* and *"Are you currently taking medicine for your high blood pressure?"*

This indicator represents the percentage of those persons who answered that 'yes' they have high blood pressure who also answered 'no', that they are not currently taking medication to control it. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

**Adults Not Taking Blood Pressure Medication = ([Indicator Percentage] / 100) * [Total Adult Population]**

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the Behavioral Risk Factor Surveillance System home page.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

# Lack of a Consistent Source of Primary Care

## Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. ”
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS Annual Survey Data web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

## Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2011-2012. Percentages are generated based on valid responses to the following questions:

*" Do you have one person you think of as your personal doctor or health care provider? (If "No" ask "Is there more than one or is there no person who you think of as your personal doctor or health care provider?".)”*

This indicator represents the percentage of those persons who answered “no” to both parts of the question, indicating that they do not see any regular doctor. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population using the methods described in the BRFSS Comparability of Data documentation.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the Behavioral Risk Factor Surveillance System home page.

### Notes

**Data Suppression**
Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

**Race and Ethnicity**
Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Asthma Prevalence

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. ”
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS Annual Survey Data web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

### Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2011-2012. Percentages are generated based on valid responses to the following questions:

*"Have you ever been told by a doctor, nurse, or health professional that you have Asthma?"*

This indicator represents the percentage of those persons who answered “yes”. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population using the methods described in the BRFSS Comparability of Data documentation.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the Behavioral Risk Factor Surveillance System home page.

### Notes

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Cancer Incidence - Breast

### Data Background

The Surveillance, Epidemiology and End Results (SEER) program of the National Cancer Institute (NCI) collect information on incidence, prevalence and survival from state and local cancer resgistries in 14 US sates. SEER also compiles cancer mortality statistics for the entire country.

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). The incidence rates tables accessed through the State Cancer Profiles website provide incidence statistics compiled from state and local cancer registries. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the State Cancer Profiles website.

## Methodology

Annual incidence rates are acquired for all US states and counties as an average for years 2007-2011 from the State Cancer Profiles Incidence Rates Tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. The new case counts (incidence) used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The population data displayed in the report summary tables are based on American Community Survey 2007-11 5-year estimates and are shown for reference only.

In order to perform aggregate (multi-county or service area) incidence rate estimates with the data provided, age-adjusted total populations are first back-calculated using the following formula:

*Adj. Population* = **(** [Cancer Incidence] / ([Adj. Incidence Rate] / 100,000) **)**

This estimated population figure is then used in the formula to re-calculate age-adjusted cancer rates as follows:

**Adj. Incidence Rate** = 100,000 * ([Cancer Incidence] / [*Adj. Population*])

For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the SEER*Stat website.

## Notes

### Data Limitations

1. Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
2. Data is not available for the state of Minnesota.
3. Data for Ohio counties are acquired from CDC WONDER. Data are estimates based on metropolitan areas which consist of multiple counties.
4. Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

### Race and Ethnicity

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine

Hispanic ethnicity. See the *Technical Notes* section of the 2003 United States Cancer Statistics Report for more information.

**Data Suppression**
Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Cancer Incidence - Cervical

### Data Background

The Surveillance, Epidemiology and End Results (SEER) program of the National Cancer Institute (NCI) collect information on incidence, prevalence and survival from state and local cancer resgistries in 14 US sates. SEER also compiles cancer mortality statistics for the entire country.

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). The incidence rates tables accessed through the State Cancer Profiles website provide incidence statistics compiled from state and local cancer registries. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC’s National Program of Cancer Registries and the National Cancer Institute’s Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the State Cancer Profiles website.

### Methodology

Annual incidence rates are acquired for all US states and counties as an average for years 2007-2011 from the State Cancer Profiles Incidence Rates Tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. The new case counts (incidence) used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The population data displayed in the report summary tables are based on American Community Survey 2007-11 5-year estimates and are shown for reference only.

In order to perform aggregate (multi-county or service area) incidence rate estimates with the data provided, age-adjusted total populations are first back-calculated using the following formula:

*Adj. Population* = **(** [Cancer Incidence] / ([Adj. Incidence Rate] / 100,000) **)**

This estimated population figure is then used in the formula to re-calculate age-adjusted cancer rates as follows:

**Adj. Incidence Rate** = 100,000 * ([Cancer Incidence] / [*Adj. Population*])

For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the SEER*Stat website.

### Notes

**Data Limitations**

1. Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
2. Data is not available for the state of Minnesota.
3. Data for Ohio counties are acquired from CDC WONDER. Data are estimates based on metropolitan areas which consist of multiple counties.
4.Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

**Race and Ethnicity**

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the 2003 United States Cancer Statistics Report for more information.

**Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Cancer Incidence - Colon and Rectum

### Data Background

The Surveillance, Epidemiology and End Results (SEER) program of the National Cancer Institute (NCI) collect information on incidence, prevalence and survival from state and local cancer resgistries in 14 US sates. SEER also compiles cancer mortality statistics for the entire country.

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). The incidence rates tables accessed through the State Cancer Profiles website provide incidence statistics compiled from state and local cancer registries. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the State Cancer Profiles website.

## Methodology

Annual incidence rates are acquired for all US states and counties as an average for years 2007-2011 from the State Cancer Profiles Incidence Rates Tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. The new case counts (incidence) used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The population data displayed in the report summary tables are based on American Community Survey 2007-11 5-year estimates and are shown for reference only.

In order to perform aggregate (multi-county or service area) incidence rate estimates with the data provided, age-adjusted total populations are first back-calculated using the following formula:

*Adj. Population* = **(** [Cancer Incidence] / ([Adj. Incidence Rate] / 100,000) **)**

This estimated population figure is then used in the formula to re-calculate age-adjusted cancer rates as follows:

**Adj. Incidence Rate** = 100,000 * ([Cancer Incidence] / [*Adj. Population*])

For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the SEER*Stat website.

## Notes

### Data Limitations

1. Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
2. Data is not available for the state of Minnesota.
3. Data for Ohio counties are acquired from CDC WONDER. Data are estimates based on metropolitan areas which consist of multiple counties.
4. Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

### Race and Ethnicity

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the 2003 United States Cancer Statistics Report for more information.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Cancer Incidence - Lung

### Data Background

The Surveillance, Epidemiology and End Results (SEER) program of the National Cancer Institute (NCI) collect information on incidence, prevalence and survival from state and local cancer resgistries in 14 US sates. SEER also compiles cancer mortality statistics for the entire country.

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). The incidence rates tables accessed through the State Cancer Profiles website provide incidence statistics compiled from state and local cancer registries. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the State Cancer Profiles website.

### Methodology

Annual incidence rates are acquired for all US states and counties as an average for years 2007-2011 from the State Cancer Profiles Incidence Rates Tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. The new case counts (incidence) used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The population data displayed in the report summary tables are based on American Community Survey 2007-11 5-year estimates and are shown for reference only.

In order to perform aggregate (multi-county or service area) incidence rate estimates with the data provided, age-adjusted total populations are first back-calculated using the following formula:

*Adj. Population* = **(** [Cancer Incidence] / ([Adj. Incidence Rate] / 100,000) **)**

This estimated population figure is then used in the formula to re-calculate age-adjusted cancer rates as follows:

**Adj. Incidence Rate** = 100,000 * ([Cancer Incidence] / [*Adj. Population*])

For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the SEER*Stat website.

## Notes

### Data Limitations

1. Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
2. Data is not available for the state of Minnesota.
3. Data for Ohio counties are acquired from CDC WONDER. Data are estimates based on metropolitan areas which consist of multiple counties.
4.Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

### Race and Ethnicity

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the 2003 United States Cancer Statistics Report for more information.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

# Cancer Incidence - Prostate

## Data Background

The Surveillance, Epidemiology and End Results (SEER) program of the National Cancer Institute (NCI) collect information on incidence, prevalence and survival from state and local cancer resgistries in 14 US sates. SEER also compiles cancer mortality statistics for the entire country.

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). The incidence rates tables accessed through the State Cancer Profiles website provide incidence statistics compiled from state and local cancer registries. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC’s National Program of Cancer Registries and the National Cancer Institute’s Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the State Cancer Profiles website.

## Methodology

Annual incidence rates are acquired for all US states and counties as an average for years 2007-2011 from the State Cancer Profiles Incidence Rates Tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. The new case counts (incidence) used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The population data displayed in the report summary tables are based on American Community Survey 2007-11 5-year estimates and are shown for reference only.

In order to perform aggregate (multi-county or service area) incidence rate estimates with the data provided, age-adjusted total populations are first back-calculated using the following formula:
*Adj. Population* = **(** [Cancer Incidence] / ([Adj. Incidence Rate] / 100,000) **)**
This estimated population figure is then used in the formula to re-calculate age-adjusted cancer rates as follows:
**Adj. Incidence Rate** = 100,000 * ([Cancer Incidence] / [*Adj. Population*])

For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the SEER*Stat website.

## Notes

### Data Limitations

1. Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
2. Data is not available for the state of Minnesota.
3. Data for Ohio counties are acquired from CDC WONDER. Data are estimates based on metropolitan areas which consist of multiple counties.
4.Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

### Race and Ethnicity

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the 2003 United States Cancer Statistics Report for more information.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Chlamydia Incidence

### Data Background

The National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Disease (STD), and Tuberculosis (TB) Prevention (NCHHSTP) is the branch of the Centers for Disease Control and Prevention (CDC) responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. NCHHSTP developed a set of indicators to monitor the prevalence and track its progress toward ending these diseases in each state, and regularly reports its progress. The NCHHSTEP program includes data from new patient case reports from 56 areas (all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands).

### Methodology

Cases of a given STD refer to confirmed diagnoses during a given time period. For example, the 2010 data on gonorrhea infection would include persons with laboratory-confirmed infection diagnosed between January 1, 2010 and December 31, 2010, and reported to CDC through June 8, 2011. Rates per 100,000 population were calculated for each STD. The population denominators used to compute these rates for the 50 states and the District of Columbia were based on the National Center for Health Statistics (NCHS) bridged-race population counts for the 2000–2010. These estimates are a modification of the U.S. Census Bureau population estimates in which the 31 race categories used by the Census Bureau are bridged into the five race/ethnicity groups that have been historically used to report race data for STD cases. Each rate was calculated by dividing the number of cases for the calendar year by the population for that calendar year and then multiplying the number by 100,000.

For more information, visit the NCHHSTP Atlas and click on the “About these data and footnotes” link.

### Notes

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state departments of health based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Data reported from the CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) is available by combined race and ethnicity, and is reported only for state and national data summaries. County level statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available from a local source.

## Diabetes (Adult)

### Data Background

The Centers for Disease Control and Prevention’s National Center for Chronic Disease Prevention and Health Promotion monitors the health of the Nation and produces publically available data to promote general health. The division maintains the Diabetes Data and Trends data system, which includes the National Diabetes Fact Sheet and the National Diabetes Surveillance System. These programs provide resources documenting the public health burden of diabetes and its complications in the United States. The surveillance system also includes county-level estimates of diagnosed diabetes and selected risk factors for all U.S. counties to help target and optimize the resources for diabetes control and prevention.

*Citation: Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions (FAQ). (2012).*

### Methodology

Data for total population and estimated obese population data are acquired from the County Level Estimates of Diagnosed Diabetes, a service of the Centers for Disease Control and Prevention's National Diabetes Surveillance Program. Diabetes and other risk factor prevalence is estimated using the following formula:

**Percent Prevalence = [Risk Factor Population] / [Total Population] * 100.**

All data are estimates modeled by the CDC using the methods described below:

The National Diabetes Surveillance system produces data estimating the prevalence of diagnosed diabetes and population obesity by county using data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) and data from the U.S. Census Bureau's Population Estimates Program. The BRFSS is an ongoing, monthly, state-based telephone survey of the adult population. The survey provides state-specific information on behavioral risk factors and preventive health practices. Respondents were considered to have diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes. Respondents were considered obese if their body mass index was 30 or greater. Body mass index (weight [kg]/height [m]2) was derived from self-report of height and weight. Respondents were considered to be physically inactive if they answered "no" to the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors. For example, 2003, 2004, and 2005 were used for the 2004 estimate and 2004, 2005, and 2006 were used for the 2005 estimate. Estimates were restricted to adults 20 years of age or older to be consistent with population estimates from the U.S. Census Bureau. The U.S. Census Bureau provides year-specific county population estimates by demographic characteristics—age, sex, race, and Hispanic origin. .

The county-level estimates were based on indirect model-dependent estimates. The model-dependent approach employs a statistical model that "borrows strength" in making an estimate for one county from BRFSS data collected in other counties. Bayesian multilevel modeling techniques were used to obtain these estimates. Separate models were developed for each of the four census regions: West, Midwest, Northeast and South. Multilevel Poisson regression models with random effects of demographic variables (age 20–44, 45–64, 65 ; race; sex) at the county-level were developed. State was included as a county-level covariate.

*Citation: Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions (FAQ). (2012).*

Rates were age adjusted by the CDC for the following three age groups: 20-44, 45-64, 65 . Additional information, including the complete methodology and data definitions, can be found at the CDC's Diabetes Data and Trends website.

### Notes

#### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Diabetes (Medicare Population)

### Data Background

The Centers for Medicare & Medicaid Services (CMS), a branch of the Department of Health and Human Services (HHS), is the federal agency that runs the Medicare Program and monitors Medicaid programs offered by each state. Medicare is a type of federally-funded health insurance available to disabled persons and the population age 65 and older. CMS provides various data on the Medicare population based on claims and enrollment data.

### Methodology

Indicator percentages are acquired for 2012 from Centers for Medicare and Medicaid Services (CMS) Chronic Conditions Warehouse. The data used in the chronic condition reports are based upon CMS administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program. Beneficiaries who died during the year are included up to their date of death if they meet the other inclusion criteria. Chronic condition prevalence estimates are calculated by CMS by taking the beneficiaries with a particular condition divided by the total number of beneficiaries in our fee-for-service population, expressed as a percentage. For more information and to view the original data, please visit the CMS Chronic Conditions web page.

## Gonorrhea Incidence

### Data Background

The National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Disease (STD), and Tuberculosis (TB) Prevention (NCHHSTP) is the branch of the Centers for Disease Control and Prevention (CDC) responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. NCHHSTP developed a set of indicators to monitor the prevalence and track its progress toward ending these diseases in each state, and regularly reports its progress. The NCHHSTEP program includes data from new patient case reports from 56 areas (all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands).

### Methodology

Cases of a given STD refer to confirmed diagnoses during a given time period. For example, the 2010 data on gonorrhea infection would include persons with laboratory-confirmed infection diagnosed between January 1, 2010 and December 31, 2010, and reported to CDC through June 8, 2011. Rates per 100,000 population were calculated for each STD. The population denominators used to compute these rates for the 50 states and the District of Columbia were based on the National Center for Health Statistics (NCHS) bridged-race population counts for the 2000–2010. These estimates are a modification of the U.S. Census Bureau population estimates in which the 31 race categories used by the Census Bureau are bridged into the five race/ethnicity groups that have been historically used to report race data for STD cases. Each rate was calculated by dividing the number of cases for the calendar year by the population for that calendar year and then multiplying the number by 100,000.

For more information, visit the NCHHSTP Atlas and click on the “About these data and footnotes” link.

### Notes

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state departments of health based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Data reported from the CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) is available by combined race and ethnicity, and is reported only for state and national data summaries. County level statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available from a local source.

## Heart Disease (Adult)

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. ”
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS Annual Survey Data web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

### Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2011-2012. Percentages are generated based on valid responses to the following questions:
*" Has a doctor, nurse, or other health professional ever told you that you had any of the following:*
*-Ever told you had a heart attack, also called mycardial infarction?*
*-Ever told you had angina or coronary heart disease?*
*- Ever told you had a stroke?"*
This indicator represents the percentage of those persons who answered that “yes”, they have been diagnosed with angina or coronary heart disease. Data only pertain to the non-institutionalized

population aged 18 and up and are weighted to reflect the total county population using the methods described in the BRFSS Comparability of Data documentation.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the Behavioral Risk Factor Surveillance System home page.

### Notes

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Heart Disease (Medicare Population)

### Data Background

The Centers for Medicare & Medicaid Services (CMS), a branch of the Department of Health and Human Services (HHS), is the federal agency that runs the Medicare Program and monitors Medicaid programs offered by each state. Medicare is a type of federally-funded health insurance available to disabled persons and the population age 65 and older. CMS provides various data on the Medicare population based on claims and enrollment data.

### Methodology

Indicator percentages are acquired for 2012 from Centers for Medicare and Medicaid Services (CMS) Chronic Conditions Warehouse. The data used in the chronic condition reports are based upon CMS administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program. Beneficiaries who died during the year are included up to their date of death if they meet the other inclusion criteria. Chronic condition prevalence estimates are calculated by CMS by taking the beneficiaries with a particular condition divided by the total number of beneficiaries in our fee-for-service population, expressed as a percentage. For more information and to view the original data, please visit the CMS Chronic Conditions web page.

## High Blood Pressure (Adult)

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS Annual Survey Data web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

## Methodology

Indicator percentages are acquired for years 2006-2012 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following question:

*"Have you EVER been told by a doctor, nurse or other health professional that you have high blood pressure?"*

This indicator represents the percentage of those persons who answered that "yes", they have been diagnosed with high blood pressure or hypertension. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

**Adults Diagnosed with High Blood Pressure = ([Indicator Percentage] / 100) * [Total Population] .**

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2007-2011 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the Behavioral Risk Factor Surveillance System

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

## High Blood Pressure (Medicare Population)

### Data Background

The Centers for Medicare & Medicaid Services (CMS), a branch of the Department of Health and Human Services (HHS), is the federal agency that runs the Medicare Program and monitors Medicaid programs offered by each state. Medicare is a type of federally-funded health insurance available to disabled persons and the population age 65 and older. CMS provides various data on the Medicare population based on claims and enrollment data.

### Methodology

Indicator percentages are acquired for 2012 from Centers for Medicare and Medicaid Services (CMS) Chronic Conditions Warehouse. The data used in the chronic condition reports are based upon CMS administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program. Beneficiaries who died during the year are included up to their date of death if they meet the other inclusion criteria. Chronic condition prevalence estimates are calculated by CMS by taking the beneficiaries with a particular condition divided by the total number of beneficiaries in our fee-for-service population, expressed as a percentage. For more information and to view the original data, please visit the CMS Chronic Conditions web page.

## High Cholesterol (Adult)

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS Annual Survey Data web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

## High Cholesterol (Medicare Population)

### Data Background

The Centers for Medicare & Medicaid Services (CMS), a branch of the Department of Health and Human Services (HHS), is the federal agency that runs the Medicare Program and monitors Medicaid programs offered by each state. Medicare is a type of federally-funded health insurance available to disabled persons and the population age 65 and older. CMS provides various data on the Medicare population based on claims and enrollment data.

### Methodology

Indicator percentages are acquired for 2012 from Centers for Medicare and Medicaid Services (CMS) Chronic Conditions Warehouse. The data used in the chronic condition reports are based upon CMS administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program. Beneficiaries who died during the year are included up to their date of death if they meet the other inclusion criteria. Chronic condition prevalence estimates are calculated by CMS by taking the beneficiaries with a particular condition divided by the total number of beneficiaries in our fee-for-service population, expressed as a percentage. For more information and to view the original data, please visit the CMS Chronic Conditions web page.

## HIV Prevalence

### Data Background

The National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Disease (STD), and Tuberculosis (TB) Prevention (NCHHSTP) is the branch of the Centers for Disease Control and Prevention (CDC) responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. NCHHSTP developed a set of indicators to monitor the prevalence and track its progress toward ending these diseases in each state, and regularly reports its progress. The NCHHSTEP program includes data from new patient case reports from 56 areas (all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands).

### Methodology

Cases of a given STD refer to confirmed diagnoses during a given time period. For example, the 2010 data on gonorrhea infection would include persons with laboratory-confirmed infection diagnosed between January 1, 2010 and December 31, 2010, and reported to CDC through June 8, 2011. Rates per 100,000 population were calculated for each STD. The population denominators used to compute these rates for the 50 states and the District of Columbia were based on the National Center for Health Statistics (NCHS) bridged-race population counts for the 2000–2010. These estimates are a modification of the U.S. Census Bureau population estimates in which the 31 race categories used by the Census Bureau are bridged into the five race/ethnicity groups that have been historically used to report race data for STD cases. Each rate was calculated by dividing the number of cases for the calendar year by the population for that calendar year and then multiplying the number by 100,000.

For more information, visit the NCHHSTP Atlas and click on the “About these data and footnotes” link.

### Notes

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state departments of health based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Data reported from the CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) is available by combined race and ethnicity, and is reported only for state and national data summaries. County level statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available from a local source.

## Infant Mortality

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

CDC WONDER, developed by the Centers for Disease Control and Prevention (CDC), is an integrated information and communication system for public health. Its purposes are:

1. To promote information-driven decision making by placing timely, useful facts in the hands of public health practitioners and researchers, and
2. To provide the general public with access to specific and detailed information from CDC.

CDC WONDER provides:

- Access statistical research data published by CDC, as well as reference materials, reports and guidelines on health-related topics;
- The ability to query numeric datasets on CDC's computers, via "fill-in-the blank" web pages. Public-use data sets about mortality (deaths), cancer incidence, HIV and AIDS, tuberculosis, vaccinations, natality (births), census data and many other topics are available for query, and the requested data are readily summarized and analyzed, with dynamically calculated statistics, charts and maps.

CDC WONDER data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment. For more information, please visit the CDC WONDER website.

### Methodology

Total births and infant mortality rates are 5-year averages acquired from the 2012 Health Resources and Services Administration (HRSA) Area Resource File (ARF). Total infant deaths are back-calculated based on these figures. Mortality rates represent the number of deaths to infants under age 1 per 1,000 total live births, based on the following formula:

**Rate = [Total Deaths Under Age 1] / [Total Births] * 1,000**

The ARF documentation states the following about the infant mortality data:

*The NCHS Mortality Data were obtained from the National Center for Health Statistics Detail Mortality data files, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. The number of infant deaths for a county are based on place of residence; non residents of the US are excluded. Averages are provided rather than actual data for each year because of data use restrictions required by NCHS beginning with 1989 data.*

For additional information, please review the documentation for the HRSA ARF, available for download here.

### Notes

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state departments of health based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Data reported from the CDC is available by combined race and ethnicity, and is reported here only for state and national data summaries. County level statistics by race and ethnicity are not provided for this indicator due to sample size limitations. Detailed race/ethnicity data may be available from a local source.

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when there are fewer than 10 cases in the numerator (for each county / population group combination) over the report period.

## Low Birth Weight

### Data Background

The Health Indicator Warehouse is the official repository of the nation's health data, providing public access to the information resources of the Centers for Disease Control and Prevention (CDC), the Environmental Protection Agency (EPA), the Health Resources and Services Administration (HRSA), and others. When applicable, data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment.

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

### Methodology

Counts for this indicator represent the annual average births over the 7-year period 2003-2009. Original data was tabulated by the CDC based on information reported on each birth certificate. Rates represent the number of births weighing less than 2,500 grams per 100 live births based on the following formula:

**Rate = [Births Weighting < 2500g] / [Total Births] * 100**

Data was acquired from the Health Indicators Warehouse. For more information about this source, including data inclusion requirements and subject definitions, please visit the Health Indicator Warehouse indicator page or refer to the NVSS natality public use file documention .

### Notes

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

## Mortality - Cancer

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

CDC WONDER, developed by the Centers for Disease Control and Prevention (CDC), is an integrated information and communication system for public health. Its purposes are:

1. To promote information-driven decision making by placing timely, useful facts in the hands of public health practitioners and researchers, and
2. To provide the general public with access to specific and detailed information from CDC.

CDC WONDER provides:

- Access statistical research data published by CDC, as well as reference materials, reports and guidelines on health-related topics;
- The ability to query numeric datasets on CDC's computers, via "fill-in-the blank" web pages. Public-use data sets about mortality (deaths), cancer incidence, HIV and AIDS, tuberculosis, vaccinations, natality (births), census data and many other topics are available for query, and the requested data are readily summarized and analyzed, with dynamically calculated statistics, charts and maps.

CDC WONDER data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment. For more information, please visit the CDC WONDER website.

## Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the World Health Organization.

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) * ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] * 100,000.**

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease:I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Heart Disease

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

CDC WONDER, developed by the Centers for Disease Control and Prevention (CDC), is an integrated information and communication system for public health. Its purposes are:

1. To promote information-driven decision making by placing timely, useful facts in the hands of public health practitioners and researchers, and
2. To provide the general public with access to specific and detailed information from CDC.

CDC WONDER provides:

- Access statistical research data published by CDC, as well as reference materials, reports and guidelines on health-related topics;
- The ability to query numeric datasets on CDC's computers, via "fill-in-the blank" web pages. Public-use data sets about mortality (deaths), cancer incidence, HIV and AIDS, tuberculosis, vaccinations, natality (births), census data and many other topics are available for query, and the requested data are readily summarized and analyzed, with dynamically calculated statistics, charts and maps.

CDC WONDER data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment. For more information, please visit the CDC WONDER website.

### Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the World Health Organization.

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) * ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] * 100,000.**

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease:I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

### Notes

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

#### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Homicide

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

CDC WONDER, developed by the Centers for Disease Control and Prevention (CDC), is an integrated information and communication system for public health. Its purposes are:

1. To promote information-driven decision making by placing timely, useful facts in the hands of public health practitioners and researchers, and
2. To provide the general public with access to specific and detailed information from CDC.

CDC WONDER provides:

- Access statistical research data published by CDC, as well as reference materials, reports and guidelines on health-related topics;
- The ability to query numeric datasets on CDC's computers, via "fill-in-the blank" web pages. Public-use data sets about mortality (deaths), cancer incidence, HIV and AIDS, tuberculosis, vaccinations, natality (births), census data and many other topics are available for query, and the requested data are readily summarized and analyzed, with dynamically calculated statistics, charts and maps.

CDC WONDER data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment. For more information, please visit the CDC WONDER website.

## Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the World Health Organization.

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) * ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] * 100,000.**

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease:I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time

period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Ischaemic Heart Disease

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

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- Access statistical research data published by CDC, as well as reference materials, reports and guidelines on health-related topics;
- The ability to query numeric datasets on CDC's computers, via "fill-in-the blank" web pages. Public-use data sets about mortality (deaths), cancer incidence, HIV and AIDS, tuberculosis, vaccinations, natality (births), census data and many other topics are available for query, and the requested data are readily summarized and analyzed, with dynamically calculated statistics, charts and maps.

CDC WONDER data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment. For more information, please visit the CDC WONDER website.

## Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the World Health Organization.

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) * ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] * 100,000.**

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease:I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Lung Disease

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

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- The ability to query numeric datasets on CDC's computers, via "fill-in-the blank" web pages. Public-use data sets about mortality (deaths), cancer incidence, HIV and AIDS, tuberculosis, vaccinations, natality (births), census data and many other topics are available for query, and the requested data are readily summarized and analyzed, with dynamically calculated statistics, charts and maps.

CDC WONDER data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment. For more information, please visit the CDC WONDER website.

### Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the World Health Organization.

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) * ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] * 100,000.**

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease:I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

### Notes

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

#### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Motor Vehicle Accident

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

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CDC WONDER data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment. For more information, please visit the CDC WONDER website.

## Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the World Health Organization.

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) * ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] * 100,000.**

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease:I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time

period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Stroke

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

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CDC WONDER data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment. For more information, please visit the CDC WONDER website.

## Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the World Health Organization.

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

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The specific codes used for reported mortality indicators are listed below.

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- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease:I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

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### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

# Mortality - Suicide

## Data Background

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CDC WONDER data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment. For more information, please visit the CDC WONDER website.

## Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the World Health Organization.

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

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- Cerebrovascular disease (stroke): I60-I69
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- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

### Notes

#### Data Suppression

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#### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

#### Race and Ethnicity

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## Mortality - Unintentional Injury

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including CDC WONDER , VitalStats, and the Health Indicator Warehouse .

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CDC WONDER data can be obtained grouped by various information, including state, county, gender, race, ethnicity, and educational attainment. For more information, please visit the CDC WONDER website.

### Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the World Health Organization.

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

**Mortality Rate = [SUM(Total Population) * ((Age-Adjusted Rate)/100,000)] / [SUM(Total Population)] * 100,000.**

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease:I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

### Notes

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time

period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

# Obesity

## Data Background

The Centers for Disease Control and Prevention’s National Center for Chronic Disease Prevention and Health Promotion monitors the health of the Nation and produces publically available data to promote general health. The division maintains the Diabetes Data and Trends data system, which includes the National Diabetes Fact Sheet and the National Diabetes Surveillance System. These programs provide resources documenting the public health burden of diabetes and its complications in the United States. The surveillance system also includes county-level estimates of diagnosed diabetes and selected risk factors for all U.S. counties to help target and optimize the resources for diabetes control and prevention.

*Citation: Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions (FAQ). (2012).*

## Methodology

Data for total population and estimated obese population data are acquired from the County Level Estimates of Diagnosed Diabetes, a service of the Centers for Disease Control and Prevention’s National Diabetes Surveillance Program. Diabetes and other risk factor prevalence is estimated using the following formula:

**Percent Prevalence = [Risk Factor Population] / [Total Population] * 100.**

All data are estimates modeled by the CDC using the methods described below:

The National Diabetes Surveillance system produces data estimating the prevalence of diagnosed diabetes and population obesity by county using data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) and data from the U.S. Census Bureau’s Population Estimates Program. The BRFSS is an ongoing, monthly, state-based telephone survey of the adult population. The survey provides state-specific information on behavioral risk factors and preventive health practices. Respondents were considered to have diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes. Respondents were considered obese if their body mass index was 30 or greater. Body mass index (weight [kg]/height [m]2) was derived from self-report of height and weight. Respondents were considered to be physically inactive if they answered "no" to the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors. For example, 2003, 2004, and 2005 were used for the 2004 estimate and 2004, 2005, and 2006 were used for the 2005 estimate. Estimates were restricted to adults 20 years of age or older to be consistent with population estimates from the U.S. Census Bureau. The U.S. Census Bureau provides year-specific county population estimates by demographic characteristics—age, sex, race, and Hispanic origin. .

The county-level estimates were based on indirect model-dependent estimates. The model-dependent approach employs a statistical model that “borrows strength” in making an estimate for one county from BRFSS data collected in other counties. Bayesian multilevel modeling techniques were used to obtain these estimates. Separate models were developed for each of the four census regions: West, Midwest, Northeast and South. Multilevel Poisson regression models with random effects of demographic variables (age 20–44, 45–64, 65 ; race; sex) at the county-level were developed. State was included as a county-level covariate.
*Citation: Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions (FAQ). (2012).*

Rates were age adjusted by the CDC for the following three age groups: 20-44, 45-64, 65 . Additional information, including the complete methodology and data definitions, can be found at the CDC’s Diabetes Data and Trends website.

### Notes

#### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Overweight

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. ”
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS Annual Survey Data web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

### Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2011-2012. Percentages are generated based on valid responses to the following questions:

*"About how much do you weigh without shoes?" and "About how tall are you without shoes?"*

These responses were combined to determine a respondent's Body Mass Index (BMI). BMI is calculated as weight in kilograms divided by height in meters squared. Persons with a BMI from 25.0-29.9 are considered overweight.

Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population using the methods described in the BRFSS Comparability of Data documentation.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the Behavioral Risk Factor Surveillance System home page.

### Notes

#### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

#### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Poor Dental Health

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> “... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. ”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010.*

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS Annual Survey Data web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

## Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:

>" *How many of your permanent teeth have been removed because of tooth decay or gum disease? Include teeth lost to infection, but do not include teeth lost for other reasons, such as injury or orthodontics. (If wisdom teeth are removed because of tooth decay or gum disease, they should be included in the count for lost teeth).*"

This indicator represents the percentage of respondents who indicated that they had 6 or more, including all of their permanent teeth extracted. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

**Adults Poor Dental Health = ([Indicator Percentage] / 100) * [Total Population] .**

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Poor General Health

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

> "... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. "
> *Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. Overview: BRFSS 2010*.

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the Health Indicator Warehouse, the official repository of the nation's health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit the Behavioral Risk Factor Surveillance System home page.

### Methodology

Indicator percentages are acquired for years 2006-2012 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following questions:

*"Would you say that in general your health is - Excellent, Very Good, Good, Fair, or Poor?"*

Respondents that indicated they had poor overall health are included in the count. Percentages are age-adjusted and only pertain to the non-institutionalized population over age 18. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

**[Persons with Poor Health] = ([Indicator Percentage] / 100) * [Total Population] .**

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2007-2011 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and data processing methodologies are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

### Notes

**Race and Ethnicity**
Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

**Data Suppression**
Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.

End of Report

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