Scott County, Mississippi Community Health Needs Assessment

2013

Lackey Memorial Hospital

Forest, MS

SNODGRASS RESEARCH GROUP

Executive Summary:

Scott County Community Health Needs Assessment 2013

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, a focus group of was 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, and a Focus Group, we found a high level of consistency across data sources.

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 Scott County, with the exception of *Environmental Health*, 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	**Scott County**	United States
Percent of adults with inadequate fruit and vegetable Consumption	82.9%	**86%**	75.86%
Percent of adults reporting no leisure time physical activity	32.79%	**35%**	23.41%
Obesity (Body Mass Index greater than 30)	35.58%	**38%**	27.29%
Percent of adults diagnosed with diabetes	12.31%	**12.9%**	8.95%
Percent of adults who regularly smoke cigarettes	23.6%	**28%**	18.56%
Teen Birth Rate (per 1,000 births)	65.1	**92.9**	41.2
Infant Mortality Rate (per 1,000 births)	10.36	**11.77**	6.71

The following priority list is based on primary data which was cross validated with secondary (existing) data. Although the secondary data may illuminate health needs not discovered in primary data collection, the needs put forth by the community have been shown to be critical. In developing a priority list, the assumption is that community opinion about community health issues is *the* critical component to facilitate "buy in" when community benefit implementation strategies are formulated. Thus, the following top five health needs are presented.

Priorities:

1. **Strengthen Health Education in the community, especially among low income and Hispanic groups.**

2. **Address Lifestyle-Related Health Problems and subsequent Chronic Disease Management through education and cultural change. Focusing on the following:**
    a. **Obesity**
    b. **Diabetes**
    c. **Hypertension**

3. **Improve Children's health (vaccinations, screenings, nutrition, etc) with special attention to low income and Hispanic children**

4. **Create effective programs to address Teen Pregnancy, Prenatal Care for young mothers**

5. **Develop collaborations between mental health service providers, schools, and churches to better address "sub-clinical" emotional health needs, especially among youth and elderly.**

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Introduction

In response to federal requirements for *not-for-profit* hospitals, as mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA), Lackey Memorial Hospital contracted Snodgrass Research Group (See Appendix A for further background and qualifications), to conduct a comprehensive assessment of the healthcare needs of the Scott County, Mississippi health service region.

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)
- A focus group of individuals representing the most underserved and/or vulnerable population groups in this community (qualitative)

Community Defined

When assessing health needs of a community, the "community" must first be defined. Some hospitals, (e.g., specialty hospitals) may define their community in terms of groups of people or demographic categories. 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.

Lackey Memorial Hospital is located in the town of Forest, located in Scott County, MS. The town of Morton, in west Scott County is also home to a hospital (Scott Regional), and although the service areas of each hospital overlap, the primary patient mix for each facility is typically drawn from their own municipalities. Yet, because county-level health data is more reliable and accessible, for the purposes of this needs assessment, *Scott County* will be considered the "community" of focus. An overview of demographic information of Forest and Scott County is presented in Table 1.

Community Demographics

Table 1: Demographic Information: Forest, Scott County, and Mississippi

People QuickFacts	Forest	Scott County	Mississippi
Population, 2012 estimate	5,710	28,250	2,984,926
Population, 2010 (April 1) estimates base	5,684	28,264	2,967,299
Population, percent change, April 1, 2010 to July 1, 2012	0.5%	Z	0.6%
Population, 2010	5,684	28,264	2,967,297
Persons under 5 years, percent, 2010 Forest; 2012 Scott	9.1%	8.2%	7.1%
Persons under 18 years, percent, 2010; 2012	28.7%	27.3%	25.5%
Persons 65 years and over, percent, 2010; 2012	11.5%	12.9%	12.8%
Female persons, percent, 2010; 2012	50.7%	51.4%	51.4%
White alone, percent, 2010; 2012(a)	31.3%	59.2%	59.1%
Black or African American alone, percent, 2010; 2012 (a)	48.5%	38.1%	37.0%
American Indian and Alaska Native alone, percent, 2010; 2012 (a)	0.4%	0.7%	0.5%
Asian alone, percent, 2010; 2012 (a)	0.2%	0.4%	0.9%
Native Hawaiian and Other Pacific Islander alone, percent, 2010; 2012 (a)	0.8%	0.5%	0.0%
Two or More Races, percent, 2010; 2012	2.2%	1.2%	1.1%
Hispanic or Latino, percent, 2010; 2012 (b)	23.7%	10.6%	2.7%
White alone, not Hispanic or Latino, percent, 2010; 2012	27.1%	50.7%	58.0%

Living in same house 1 year & over, percent, 2007-2011	81.5%	85.3%	85.2%
Foreign born persons, percent, 2007-2011	17.1%	6.5%	2.2%
Language other than English spoken at home, percent age 5+, 2007-2011	25.4%	9.5%	3.9%
High school graduate or higher, percent of persons age 25+, 2007-2011	65.9%	70.5%	80.3%
Bachelor's degree or higher, percent of persons age 25+, 2007-2011	11.5%	9.6%	19.7%
Veterans, 2007-2011	314	1,511	209,408
Mean travel time to work (minutes), workers age 16+, 2007-2011	14.7	23.1	23.9
Housing units, 2010	2,135	11,462	1,274,719
Homeownership rate, 2007-2011	63.6%	81.9%	70.6%
Housing units in multi-unit structures, percent, 2007-2011	15.3%	4.0%	13.4%
Median value of owner-occupied housing units, 2007-2011	$77,000	$62,700	$99,200
Households, 2007-2011	1,944	9,791	1,085,062
Persons per household, 2007-2011	2.79	2.84	2.64
Per capita money income in the past 12 months (2011 dollars), 2007-2011	$17,767	$17,435	$20,521
Median household income, 2007-2011	$36,224	$36,999	$38,718
Persons below poverty level, percent, 2007-2011	25.5%	21.7%	21.6%
Business QuickFacts	Forest	Scott County	Mississippi
Private nonfarm establishments, 2011		483	58,592
Private nonfarm employment, 2011		9,574	887,772
Private nonfarm employment, percent change, 2010-2011		0.1%	0.6%
Nonemployer establishments, 2011		1,475	198,171
Total number of firms, 2007	461	1,806	225,977
Black-owned firms, percent, 2007	S	18.9%	18.0%
American Indian- and Alaska Native-owned firms, percent, 2007	F	F	0.3%
Asian-owned firms, percent, 2007	F	F	1.8%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	F	F	0.0%
Hispanic-owned firms, percent, 2007	F	2.4%	0.8%
Women-owned firms, percent, 2007	S	S	26.9%
Manufacturers shipments, 2007 ($1000)	D	1,057,520	59,869,456
Merchant wholesaler sales, 2007 ($1000)	26,787	41,172	23,003,585
Retail sales, 2007 ($1000)	153,725	235,128	33,751,407
Retail sales per capita, 2007	$25,434	$8,050	$11,552
Accommodation and food services sales, 2007 ($1000)	14,551	19,732	7,045,097

		0	
Geography QuickFacts	Forest	Scott County	Mississippi
Land area in square miles, 2010	13.08	609.19	46,923.27
Persons per square mile, 2010	434.6	46.4	63.2
FIPS Code	25340	123	28

(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
F: Fewer than 100 firms

Source U.S. Census Bureau: State and County QuickFacts.
(http://quickfacts.census.gov/qfd/states/28/28123.html)
Data derived from Population Estimates, American Community Survey, Census of Population and Housing, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits

Overview of Community Health Needs Assessment Methods and Process

As noted above, 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, a focus group of was 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.

This report provides a detailed synopsis of the information gleaned from this process.

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—each playing an important role in the community. These informants are well aware of healthcare issues facing those they serve.

Method

Each interview was structured similarly, and averaged 90 minutes. Questions were open-ended, and designed to capture the informants' perception and ranking 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 and subsequently, these notes were transcribed, categorized thematically, and summarized.

Key Informants	Position	Affiliation
Cindy Adkins, RN	School Nurse	Forest Municipal School District
Audrey Boyd	Service Coordinator	Forest Housing Authority
Nancy Chambers	Mayor	City of Forest, MS
Jeff Fountain	Business Owner	Citizen of Forest, MS
Rebecca James, M.D.	Medical Director- Region VI	Mississippi Dept. of Health
Alethea Krutz, MS, LPC	Licensed Professional Counselor	Weems Community Mental Health (Scott County)
John P. Lee, M.D.	Family Practice Physician	Community Care Clinic
Leler McCarty, LSW	Social Worker	Mississippi Dept. of Health
Bingham Moncrief	Superintendent of Education	Scott County School District
Tim Sorey	County Supervisor	Scott County, MS
Heather Taylor, CFNP	Nurse Practitioner, Certified Diabetes Educator	Lackey Pediatric Clinic/Community Care Clinic
Reggie Williams	Director of Missions	Scott Co. Baptist Assn
Kathy Latham	Crisis Center Director	Crisis Pregnancy Services

Results of Interviews

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 more interesting information. 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:

The first open-ended question posed to each respondent was "In general, what health issues do you see as greatest for this community?" Each respondent responded with up to five "issues" they deemed as critical to the community's health status. These issues were categorized and compared in terms of "number of mentions" (i.e., how many times was each issue mentioned across informants). The table below depicts the results of this tabulation.

Greatest Health Needs	Number of Mentions
1. Obesity – Unhealthy Diet – Sedentary Lifestyle, including Pediatric Obesity	12
2. Teen pregnancy/unsafe sex, Low Income Single Mothers, Unskilled Parenting	7
3. Early childhood care – Vaccinations etc, Developmental Screenings, Behavioral Health, Dental Care	7
4. Diabetes	6
5. Lack of Preventive Care, Apathy, Lack of Health Education	6
Hypertension	5
Drug Use	4
Smoking	3
HIV/STDs	3
Eldercare, Cost of Meds for elderly, Case Management Needs	3
Cancer	2
Osteoarthritis	1
Hispanic health needs – with communication aid	1
Crisis focused mental health – acute mental crisis	1

- Lifestyle-Related Health Problems
    - Obesity
    - Diabetes
    - Hypertension
- Children and Youth/Adolescent Issues
    - Early childhood care
    - Teen Pregnancy

- Public Health
    - Lack of preventive care, lack of health education, apathy

Potential Root Causes:

- **Poverty**: Often, it was noted, that poverty plays a role in making it more difficult to afford healthcare services and especially medications. Low Income also tends to be associated with short term priorities. Preventive care/routine checkups are not typically viewed as one of these 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. Traditional southern foods tend to be high in fat and sugar, boosting overall caloric intake. The "family unit" was also brought into question. With hectic lifestyles being the norm, fast food drive through windows have supplanted cooking at home. Most of the causal blame for obesity was placed, simply, on the lack of concern amongst the population. In other words, it has become "normal" to be obese. Teen pregnancy was also noted to have become to some extent, the "norm" in Scott County.
- **Lack of education** about the relevance and importance of preventive care and healthy lifestyles.

- **Systems related**: Children's "lifestyle-related" health issues, to a large extent, find their root cause in the home and school *systems* in which children live. An "Inadequate family structure" was noted. 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.

Proposed Solutions/Programs:

- More collaboration between mental health and primary care providers, possibly work toward integrating care. Partner with mental health agencies to provide community education.
- Make preventive care affordable and where possible, incentivize patients for getting their check-ups.

- Work to eliminate culturally based “fears” regarding medical treatment/preventive care.
- 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 for children and adults.
- Involve Churches in the education and marketing of healthy lifestyles

Barriers:

- Ingrained social norms change very slowly.
- Cultural lack of concern
- Cost – will solutions be affordable?
- Language barriers among Hispanic population
- Illegal immigrants may not participate in programs or screenings if <u>any</u> information is being collected.

Focus Group

Method

To extend the base of knowledge gleaned from key informant interviews, a focus group was held on the campus of Lackey Memorial Hospital on Thursday May 23, 2013. There were seven volunteer participants. Participants were recruited by direct invitation based on their individual work with the underserved population, including the elderly, low-income, minority, and the very young.

Focus Group Participant	Affiliation	Title / Area of Special Knowledge
Constance Slaughter-Harvey, Esq.	Scott County And Legacy Education and Community Empowerment Foundation, Inc.	Youth Court Prosecutor Founder and Board President. Works daily for the betterment of troubled youth.
Denise Hawkins, RN	Sta-Home Health Agency	Home Health Nurse—Board certified in Gerontology, also works with Pediatric population
Beverly Hollingsworth	Various/Retired	Former Educator Retired, Admin. Asst. University Of Mississippi Medical Center
Bobby McKay	Harperville Baptist Church Lackey Memorial Hospital	Pastor Volunteer Chaplain
Gregory Nicks	Scott County Schools	Retired Educator, Currently, Transportation Director and Test Coordinator
Bruce Robinson	Mt. Olivet Baptist Church Robinson Electric Co.	Bi-Vocational Pastor, Regional Businessman, Parent of child with Cystic Fibrosis
Sean D. Self, RN	Mississippi Home Care	Director of Behavioral Health

The focus group was introduced to the facilitator, 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

The bullet lists that follow summarize the consensus of the focus group.

Assets/Strengths

- Multiple home health agencies.
- Free clinic at Forest Baptist Church on the third Saturday once a month.
- The availability of mental health Clinics is helpful. Especially the elder given the co f co-morbidity with diabetes--usually depression.
- Diabetes educators and diabetic foot specialists see patients weekly.
- Multiple primary care clinics throughout the county.
- The Medical staff in Forrest, (at hospital and clinics, etc), are also community members. They take ownership in the community; these are our church members and relatives.
- High quality of care at Lackey Memorial
- Several Doctors from Jackson come once a week for specialty care
- Excellent Family Practitioners. They are easy to relate to.
- Excellent Physical Therapy—they also go to the schools to work with student athletes
- Emergency Response from ambulance, fire dept., etc. is excellent.

"One of the strengths for our family is to have the small clinics that are available throughout the community. This makes it personal, private, accessible."

Weaknesses / Areas needing Improvement regarding service availability

- Safety net services need coordination, including churches and civic outreach groups.
- More robust mental health services are needed for children and youth. Perhaps school based, for those without diagnoses.
- No public transportation.
- "One weakness in our healthcare is reputation. People say if you have a heart attack, don't stop in Scott County. It's a PR problem; the quality of care is actually excellent. The poor reputation was accurate 15-20 years ago, but now the service and care is great. Lackey does need some good PR Work."

" Obviously, the poverty level is a huge issue in this county. That transcends race and gender. You see these homes, and you know they can't afford their medications, food, power bills. Once you identify a problem, what then? Everyone is tapped out."

At Risk Populations

- "If we could to anything to work on weaknesses in service we need to work on the education system. Particularly Hispanic students. Not sure of the quality of Spanish (foreign language) classes being taught in the schools, or the English as second language classes. The Hispanic students aren't in good situation to catch up. It's not a friendly environment. There aren't interpreters at meetings and lines of communication aren't open well enough to parents and families."
- AED's should be in schools and
- Each school needs its own nurse.
- "There are places to play, but over the summer we don't have a "facility" here to help kids"
- "Youth who get in trouble don't have a family structure. Generally a young mother. "How can a child teach a child how to be an adult?"
- Better sex education programs are needed to stem early pregnancies. "It's not just a low income and minority thing, it's about immaturity. We've lost several generations because we want things instantly. Students haven't learned how to work toward future goals, it's all immediate survival and pleasure."
- "We need training for young parents, who desperately need help and knowledge. Young fathers are even more clueless about what it means to be a father."
- Re: poverty and emotional health. "Spiritual needs aren't being met. These kids are hurting and they've got no foundation from which to draw from, and they've got no positive outlet."

- "It's all connected, if a kid's hungry for food it's hard to reach that kid. "Poverty is colorblind"
- "So many of these young people are depressed. There's something that "mentally, keeps them off track" Anger and a sense of entitlement. They don't even recognize their anger, because it's so prevalent in their homes and on the street."
- Children may not have a diagnosis, but desperately need help to handle daily emotional struggles. We need psychology in the schools.

Public Safety:

- The general public needs emergency preparedness training. During Katrina, the churches did well in their response. Emergency management personnel have a plan, but the general public needs to be more aware of what's going on.
- Resources Needed: Leaders need to be made aware of the problems.

Priorities of Focus Group Consensus:

1. Obesity/Diabetes (lifestyle related)
2. Children's health (vaccinations, screenings, nutrition, etc) with special attention to low income and Hispanic children
3. Teen pregnancy as well as young parent training for teen mothers and fathers
4. Emotional health of youth (to facilitate better life choices)
5. Elderly need assistance (transportation, case management, meals)

Conclusions

Regarding the qualitative information gleaned from the Key Informant Interviews and the Focus Group, it was concluded that there was a high level of crossover between the concerns of each group. The general consensus was that Scott County offers a reasonable array of quality health services, considering its population.

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.

Clearly, 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.

Community Healthcare Resource List for Scott County

Source: Directory of MS Health Facilities October 2010, State of Mississippi Department of Health
http://www.msdh.state.ms.us/msdhsite/_static/resources/451.pdf

Licensed Hospitals

S. E. Lackey Critical Access Hospital & Swingbed
330 North Broad Street / Post Office Box 428
Forest, MS 39074
Phone: (601) 469-4151
Donna Riser, Administrator
Licensed Beds: 35
25 Acute, 10 Geriatric Psychiatric
License #13-033
Non-Accredited

Scott Regional Hospital
317 Highway 13 South / P.O. Box 259
Morton, MS 39117
Phone: (601) 732-6301
Michael Edwards, Administrator
Licensed Beds: 25
25 Acute
10 Geriatric Psychiatric
License #13-306
Non-Accredited

Nursing Homes

Lackey Convalescent Home
266 First Avenue / Post Office Box 428
Forest, MS 39074
Phone: (601) 469-4151 ext 3190
Joseph S. McNulty, III, Licensee
Donna Riser, Administrator
Non Profit
Non-Participating
Capacity: 20

MS Care Center of Morton
96 Old Highway 80 East / P.O. Box 459
Morton, MS 39117
Phone: (601) 732-6361
Scott County LTC, Inc., Licensee
Betty J. McCurdy, Administrator

Proprietary
Medicaid/Medicare
Capacity: 120
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

BeeHive Homes of Forest
410 Townsend Road
Forest, MS 39074
Phone: (601) 469-9476
John M. Mayfield, Licensee
Capacity: 12

Magnolia Manor
410 First Street
Forest, MS 39074
Phone: (601) 469-4389
Paulette H. Butler, 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

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

Camellia Home Health
2080 S. Frontage Road, Suite 103
Vicksburg, MS 39180
Phone: (601) 638-6606
Skilled Nursing, Home Health Aide, Physical Therapy, Speech Therapy, Medical Social Services & Dietitian, Occupational Therapy
Counties: Claiborne, Copiah, Hinds, Leake, Madison, Rankin, Simpson, Warren, Yazoo, Issaquena, **Scott**, Sharkey & Smith
Branches: Flowood, Magee & Port Gibson
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

Gilbert's Home Health Agency
106 Riverview Drive
Flowood, MS 39232
Phone: (601) 362-7801
Skilled Nursing, Home Health Aide, Physical Therapy, Occupational Therapy, Speech Therapy, Medical Social

Services
Counties: Hinds, Madison, Rankin, Yazoo, Copiah, Simpson, Warren, **Scott**, Holmes, Sharkey, Issaquena, Leake, Lawrence, Jefferson Davis & Claiborne, Smith
Branches: Canton, Magee, Morton & Vicksburg
For Profit

Gilbert's Home Health Agency of Columbus
189 Park Creek Drive / P.O. Box 8609
Columbus, MS 39705
Phone: (662) 327-9560
Home Health Aide, Medical Social Services, Physical Therapy, Skilled Nursing, Occupational Therapy & Speech Therapy
Counties: Carroll, Chickasaw, Choctaw, Clay, Holmes, Kemper, Leake, Lowndes, Madison, Monroe, Montgomery, Neshoba, Noxubee, Oktibbeha, **Scott**, Webster & Winston
Branches: Aberdeen & Starkville
For Profit

Magna 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

Mississippi Home Care of Jackson
817 East River Place, Suite 201
Jackson, MS 39202
Phone: (601) 352-5065
Skilled Nursing, Home Health Aide, Physical Therapy, Occupational Therapy, Speech Therapy, Medical Social Service,
Counties: Claiborne, Copiah, Hinds, Leake, Madison, Rankin, **Scott**, Simpson, Smith, Warren & Yazoo
Branches: Brandon, Clinton, Forest, Hazlehurst, Madison, Magee & Yazoo City
For Profit

Sta-Home Health Agency, Inc.
406 Briarwood Drive, Bldg. 200
Jackson, MS 39206
Phone: (662) 956-5100
Home Health Aide, Occupational Therapy, Physical Therapy, Skilled Nursing, Speech Therapy, Medical Social Services
Counties: Adams, Amite, Claiborne, Copiah, Franklin, Hinds, Holmes, Jefferson, Jefferson Davis, Leake, Lincoln, Madison, Marion, Rankin, **Scott**, Simpson, Smith, Warren, Wilkinson & Yazoo
Branches: Brookhaven, Canton, Crystal Springs, Flowood, Gloster, Lexington, Madison, Magee, Natchez & Vicksburg
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

Rural Health Clinics

Clark Clinic
36 Second Street
Morton, MS 39117
Phone: (601) 732-8612

Community Health Clinic
330 North Broad Street
Forest, MS 39074
Phone: (601) 463-4771

Forest Family Practice Clinic
#1 Medical Lane
Forest, MS 39074
Phone: (601) 469-4861

Morton Family Medical Clinic
317 Hwy 13 South
Morton, MS 39117
Phone: (601) 732-7114

Rush Family Practice
24489 Hwy 80
Lake, MS 39092
Phone: (601) 775-3264

Total Care Clinic
526 Deerfield Lane, Suite C
Forest, MS 39074
Phone: (601) 469-0291

Federally Qualified Health Centers

East Central Mississippi Health Care:
Sebastopol Medical and Dental Clinic
1488 Highway 487
Sebastopol, MS 39359
Phone: 601-625-7403

Other Health Related Community Assets/Services

Ambulance Services

Life Care EMS	8463 Hwy 35 N, Sebastopol, MS 39359	601-625-0386
	125 Lackey Rd, Forest, MS 39074	601-469-0306
	351 State St, Morton, MS 39117	601-732-6266

Audiologists
Beltone Hearing Aid Service
215 2nd St E, Forest, MS 39074
601-469-1819

Chiropractors

Eady Chiropractic
500 W 3rd St, Forest, MS 39074
601-469-3030

Mental Health Services

Lackey Memorial Hospital Behavioral Health
330 North Broad Street, Forest, MS 39074 601-469-4124

Weems Community Mental Health Center
3717 Hwy 80 W, Forest, MS 39074 601-469-2211 or 601-483-4821

Rehabilitation Services

Lackey Memorial Hospital Swing Bed Program 601-469-4151
33 N. Broad Street, Forest, MS 39074

Ms Care Center—Trinity Rehabilitation 601-732-6361
96 Old Hwy East, Morton, MS 39117

Scott Regional Hospital Swing Bed Program 601-732-6301
317 Hwy 13 S, Morton, MS 39117

Community Outreach Centers

Multi-County Community Center 601-469-3061
111 W 3rd St, Forest, MS 39074

Scott Service Center 601-469-3911
200 Cleveland, Forest, MS 39074

Human Services

Scott County Dept. of Human Services 601-469-4762
521 Airport Rd, Forest, MS 39074

Secondary Analysis of Existing Data

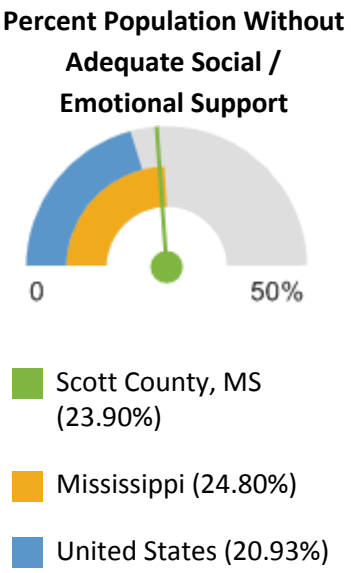
Social & Economic Factors

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.

Adequate 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 of 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	Percent Population Without Adequate Social / Emotional Support
Scott County, MS	20,462	4,890	**23.90%**
Mississippi	2,184,616	541,785	24.80%
United States	229,932,154	48,120,965	20.93%



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: 2005-11. Accessed using the Health Indicators Warehouse.. Source geography: County.

Population in Poverty (100% FPL)

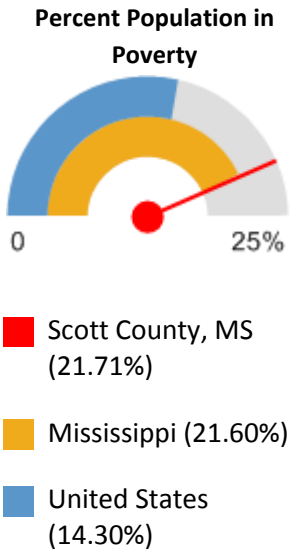
Poverty is considered a *key driver* of health status.

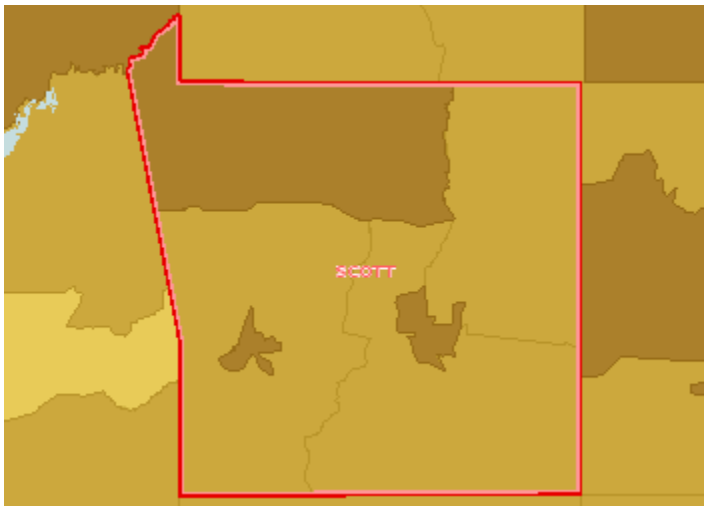
Within the report area 21.71% or 5,998 individuals are living in households with income below the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

Report Area	Total Population	Population in Poverty	Percent Population in Poverty
Scott County, MS	27,633	5,998	**21.71%**
Mississippi	2,860,440	617,805	21.60%
United States	298,788,000	42,739,924	14.30%

Note: This indicator is compared with the state average.

Data Source: US Census Bureau, American Community Survey: 2007-11. Source geography: Tract.





Population Below the Poverty Level, Percent by Tract, 2007-11

- Over 21.0%
- 12.1 - 21.0%
- 6.1 - 12.0%
- Under 6.1%
- No Data or Data Suppressed

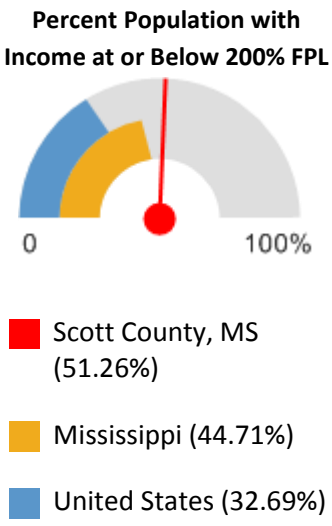
Population in Poverty (200% FPL)

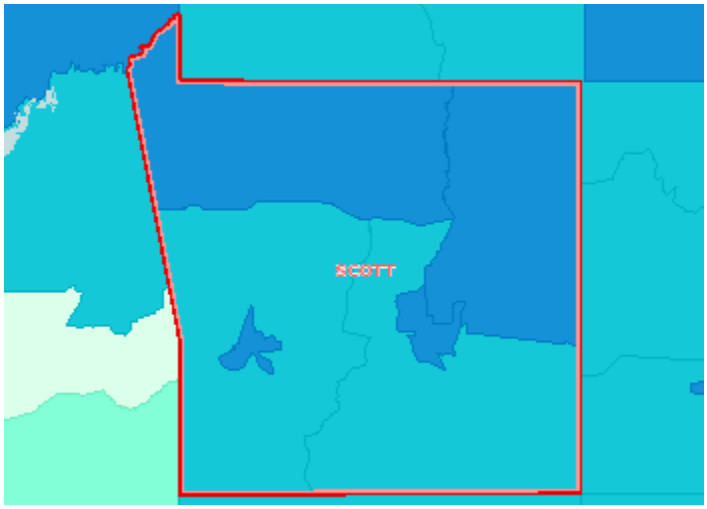
In the report area 51.26% or 14,165 individuals are living in households with income below 200% of the Federal Poverty Level (FPL). This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

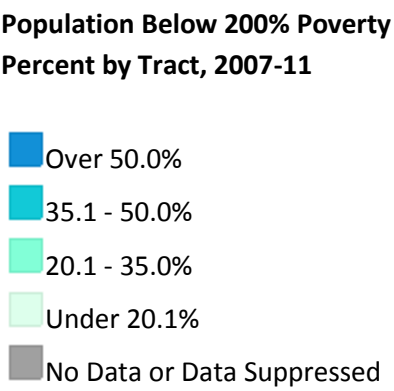
Report Area	Total Population	Population with Income at or Below 200% FPL	Percent Population with Income at or Below 200% FPL
Scott County, MS	27,633	14,165	**51.26%**
Mississippi	2,860,440	1,278,926	44.71%
United States	298,788,000	97,686,536	32.69%

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

Data Source: US Census Bureau, American Community Survey: 2007-11. Source geography: Tract.



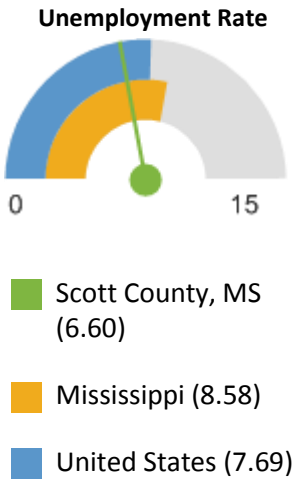




Unemployment Rate

Total unemployment in the report area for the month of June, 2013, was 873, or 6.60% of the civilian noninstituionalized 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
Scott County, MS	13,278	12,405	873	**6.60**
Mississippi	1,308,314	1,196,015	112,299	8.58
United States	157,195,791	145,112,518	12,083,273	7.69



Note: This indicator is compared with the state average.

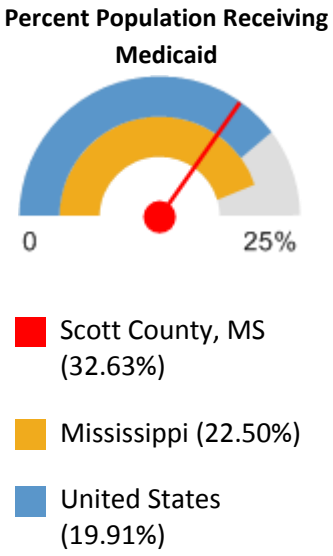
Data Source: US Department of Labor, Bureau of Labor Statistics: 2013-July. Source geography: County.

Population Receiving Medicaid

This indicator reports the percentage of the population that is enrolled in Medicaid. 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	Population (for Whom Insurance Status is Determined)	Population Receiving Medicaid	Percent Population Receiving Medicaid
Scott County, MS	28,274	7,328	**32.63%**
Mississippi	2,969,120	667,906	22.50%
United States	309,231,232	51,335,184	19.91%

Note: This indicator is compared with the state average.



Data Source: US Census Bureau, American Community Survey: 2009-11. Source geography: PUMA.

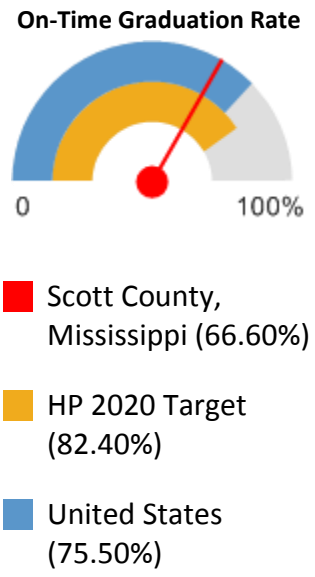
High School Graduation Rate

This indicator reports the average freshman graduate rate, which measures the percentage of students receiving their high school diploma within four years. This indicator is relevant because low levels of education are often linked to poverty and poor health.

Report Area	Average Freshman Base Enrollment	Estimated Number of Diplomas Issued	On-Time Graduation Rate
Scott County, Mississippi	446	297	**66.60**
Mississippi	39,536	24,505	**62**
United States	4,024,345	3,039,015	**75.50**
HP 2020 Target			>82.4

Note: This indicator is compared with the Healthy People 2020 Target. No breakout data available.

Data Source: The University of Wisconsin, Population Health Institute, County Health Rankings, 2012 and the U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data, Public School Universe Survey Data, 2005-06, 2006-07 and 2007-08. Source geography: County.

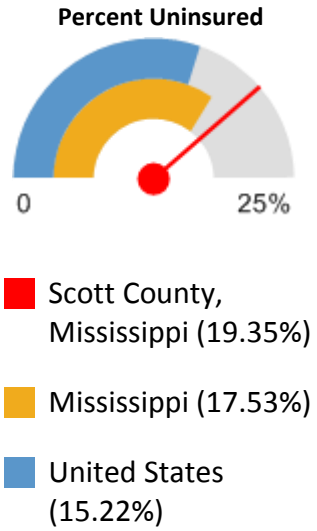


Uninsured Population (Total)

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)	Number Uninsured	Percent Uninsured
Scott County, Mississippi	28,274	5,386	**19.35%**
Mississippi	2,969,120	520,554	17.53%
United States	309,231,232	46,282,216	15.22%

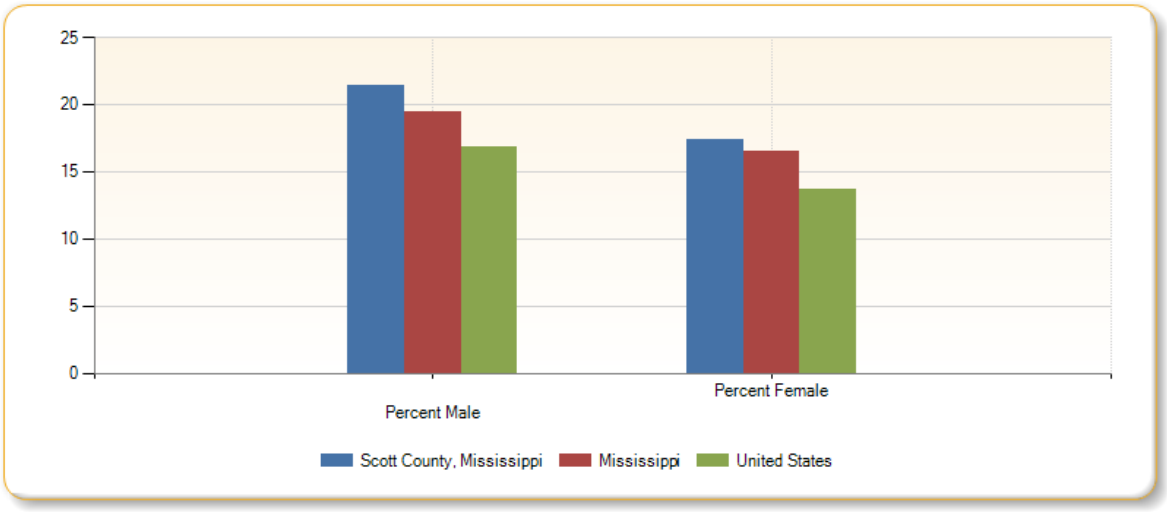


Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, 2008-2010 American Community Survey 3-Year Estimates. Source geography: PUMA.

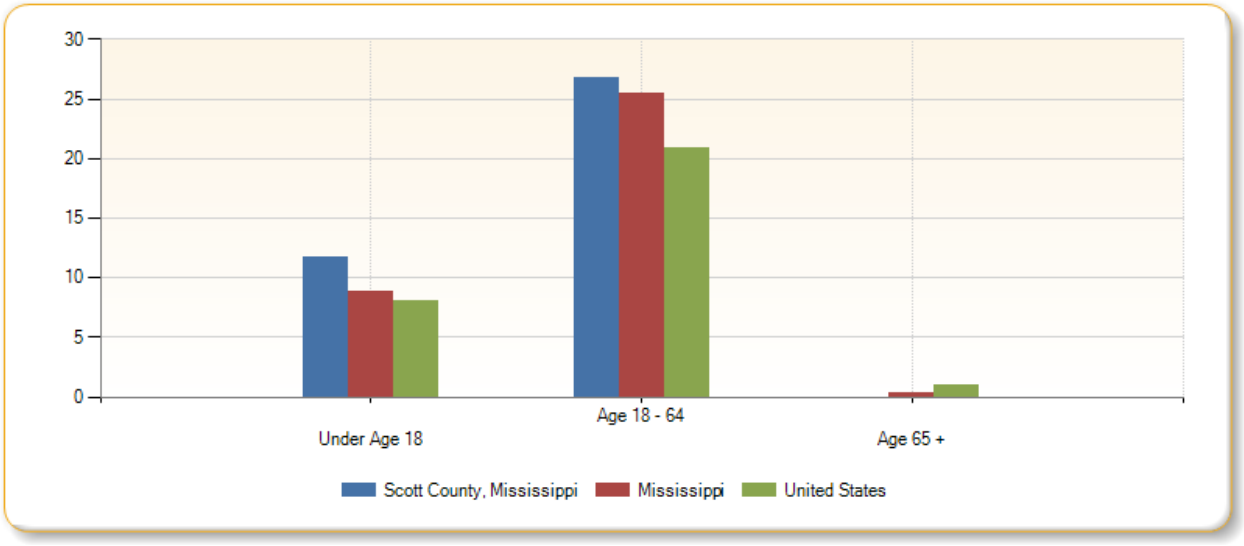
Uninsured Population by Gender

Report Area	Total Male	Total Female	Percent Male	Percent Female
Scott County, Mississippi	2,873	2,513	21.47%	17.38%
Mississippi	270,721	249,833	19.52%	16.50%
United States	24,979,664	21,302,552	16.84%	13.68%



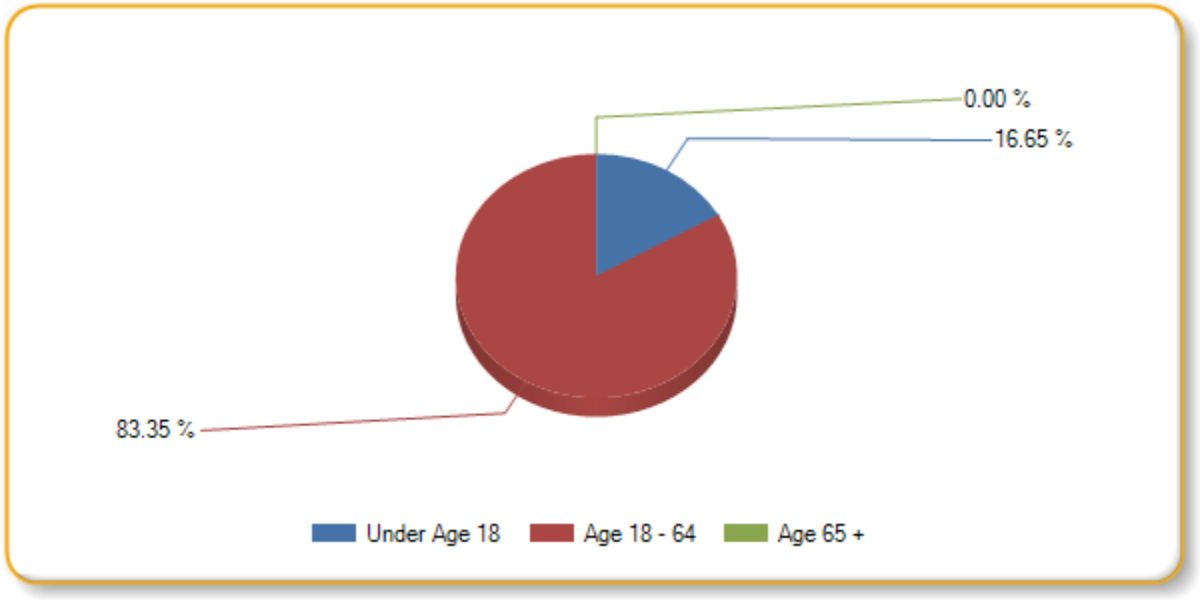
Uninsured Population by Age Group, Percent

Report Area	Under Age 18	Age 18 - 64	Age 65
Scott County, Mississippi	11.71%	26.73%	0%
Mississippi	8.89%	25.42%	0.34%
United States	8.04%	20.92%	0.97%



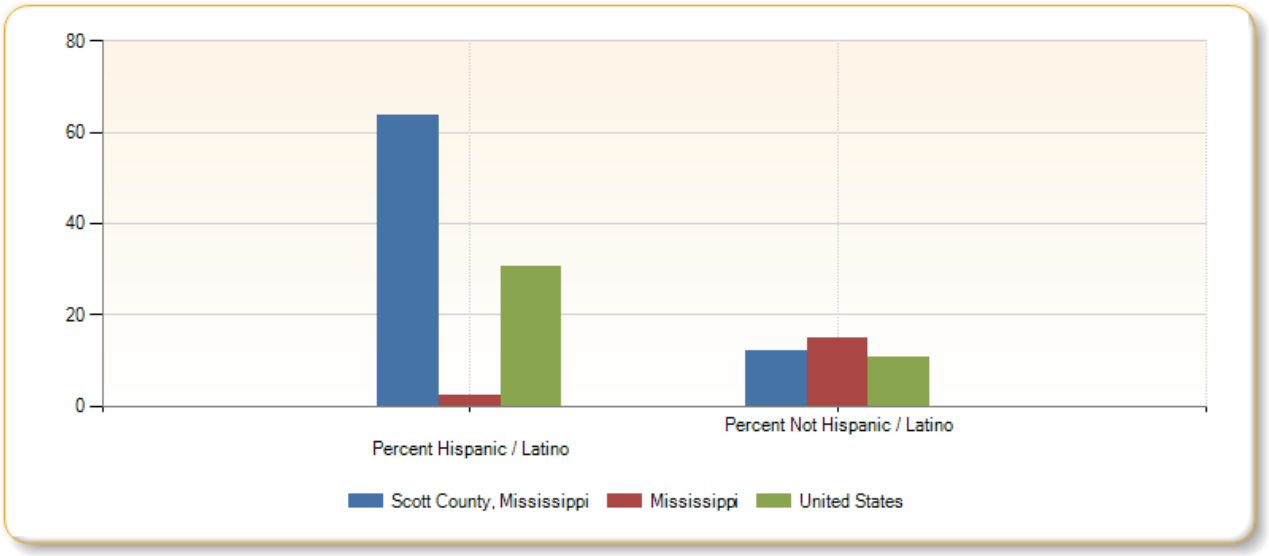
Uninsured Population by Age Group, Total

Report Area	Under Age 18	Age 18 - 64	Age 65
Scott County, Mississippi	897	4,489	0
Mississippi	66,949	452,347	1,258
United States	5,940,027	39,963,048	379,139



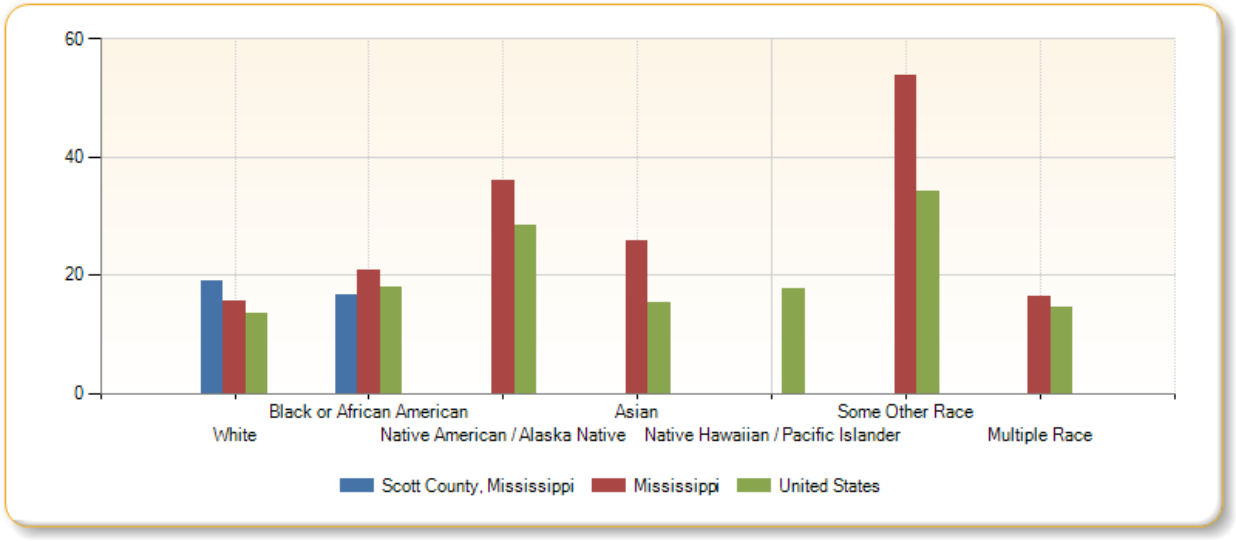
Uninsured Population by Ethnicity Alone

Report Area	Total Hispanic / Latino	Total Not Hispanic / Latino	Percent Hispanic / Latino	Percent Not Hispanic / Latino
Scott County, Mississippi	1,880	1,686	63.56%	11.94%
Mississippi	33,102	249,911	2.19%	14.78%
United States	15,296,271	20,704,240	30.60%	10.67%



Uninsured Population 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
Scott County, Mississippi	18.97%	16.71%	no data	no data	no data	no data	no data
Mississippi	15.55%	20.73%	36.11%	25.91%	no data	53.78%	16.47%
United States	13.41%	17.91%	28.52%	15.31%	17.64%	34.17%	14.56%



Clinical Care

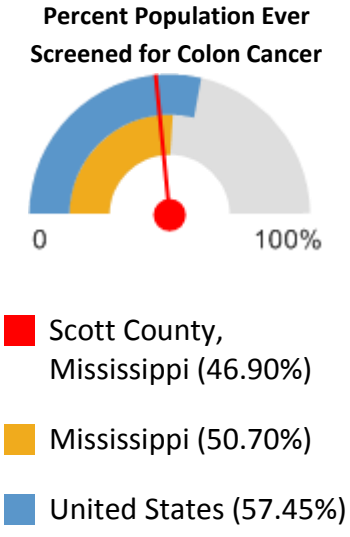
A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of uninsurance, financial hardship, transportation barriers, cultural competency, and coverage limitations affect access.

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.

Colon Cancer Screening (Sigmoid/Colonoscopy)

This indicator reports the percentage of adult men aged 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	Male Population Age 50	Estimated Population Ever Screened for Colon Cancer	Percent Population Ever Screened for Colon Cancer
Scott County, Mississippi	3,696	1,733	**46.90%**
Mississippi	389,298	197,374	50.70%
United States	41,994,838	24,124,869	57.45%



Note: This indicator is compared with the state average. No breakout data available.

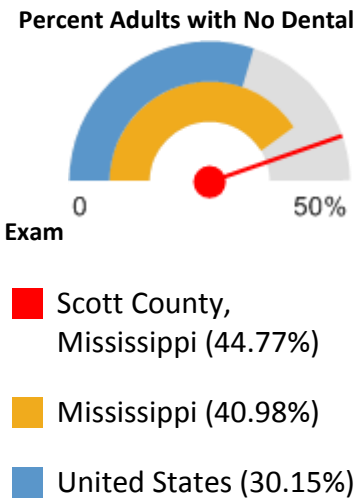
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2004-2010. Source geography: County.

Dental Care Utilization (Adult)

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
Scott County, Mississippi	20,462	9,161	**44.77%**
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.



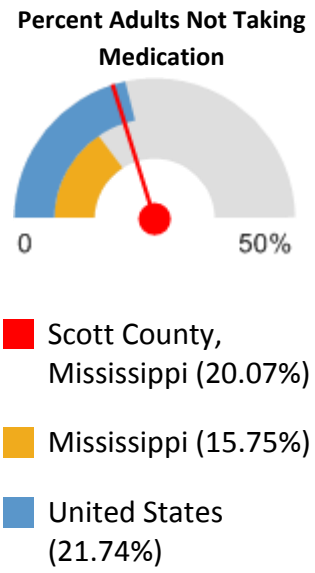
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

High Blood Pressure Management

This indicator reports the percentage of adults aged 18 and older who self-report that they are not taking medication for their high blood pressure. 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
Scott County, Mississippi	20,462	4,106	**20.07%**
Mississippi	2,199,741	346,512	15.75%
United States	235,375,690	51,175,402	21.74%

Note: This indicator is compared with the state average.



Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

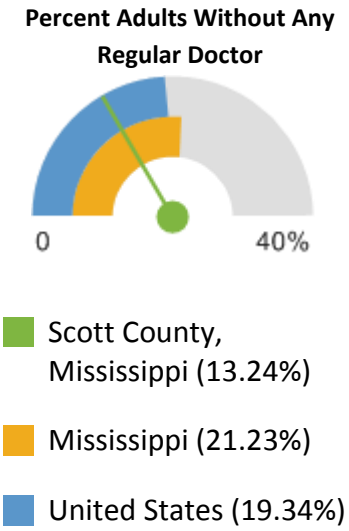
Lack of a Consistent Source of Primary Care

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	Total Population (Age 18)	Total Adults Without Any Regular Doctor	Percent Adults Without Any Regular Doctor
Scott County, Mississippi	20,462	2,710	**13.24%**
Mississippi	2,199,741	467,095	21.23%
United States	235,375,690	45,514,047	19.34%

Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.



Health Behaviors

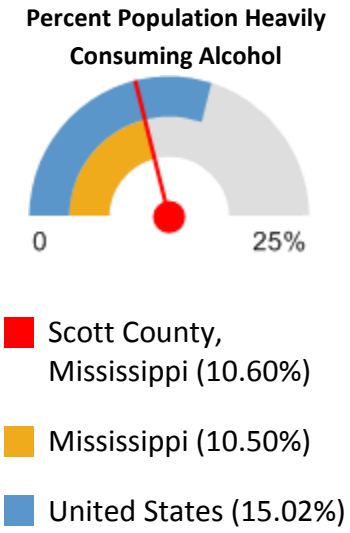
Health behaviors such as poor diet, a lack of exercise, and substance abuse contribute to poor health status.

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 for men and one drink per day 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 Population Heavily Consuming Alcohol	Percent Population Heavily Consuming Alcohol
Scott County, Mississippi	20,462	2,169	**10.60%**
Mississippi	263,332	27,650	10.50%
United States	89,135,163	13,385,866	15.02%

Note: This indicator is compared with the state average. No breakout data available.



Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011. Source geography: County.

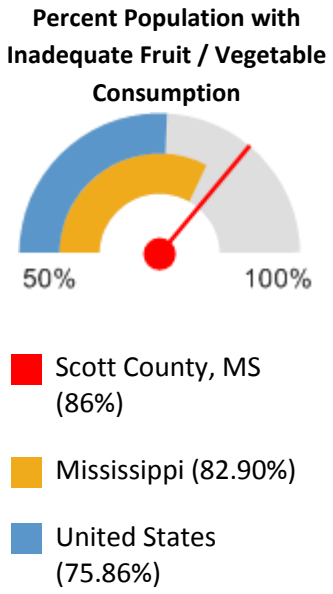
Fruit/Vegetable Consumption

In the report area an estimated 18,071, or 86% 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	Estimated Population with Inadequate Fruit / Vegetable Consumption	Percent Population with Inadequate Fruit / Vegetable Consumption
Scott County, MS	21,013	18,071	**86%**
Mississippi	273,576	226,795	82.90%
United States	116,676,632	88,508,989	75.86%

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: 2005-09. Accessed using the Health Indicators Warehouse.. Source geography: County.

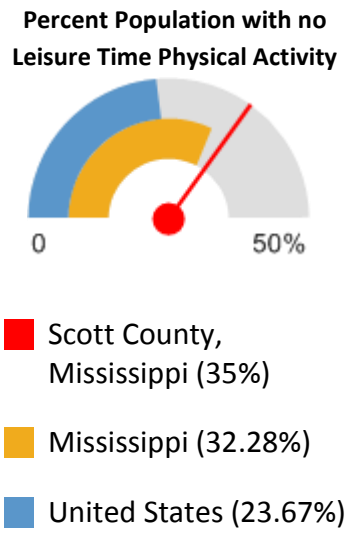


Physical Inactivity (Adult)

This indicator reports the percentage of adults aged 20 and older who 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
Scott County, Mississippi	20,316	7,192	**35%**
Mississippi	2,092,596	682,636	32.28%
United States	223,602,200	53,553,398	23.67%

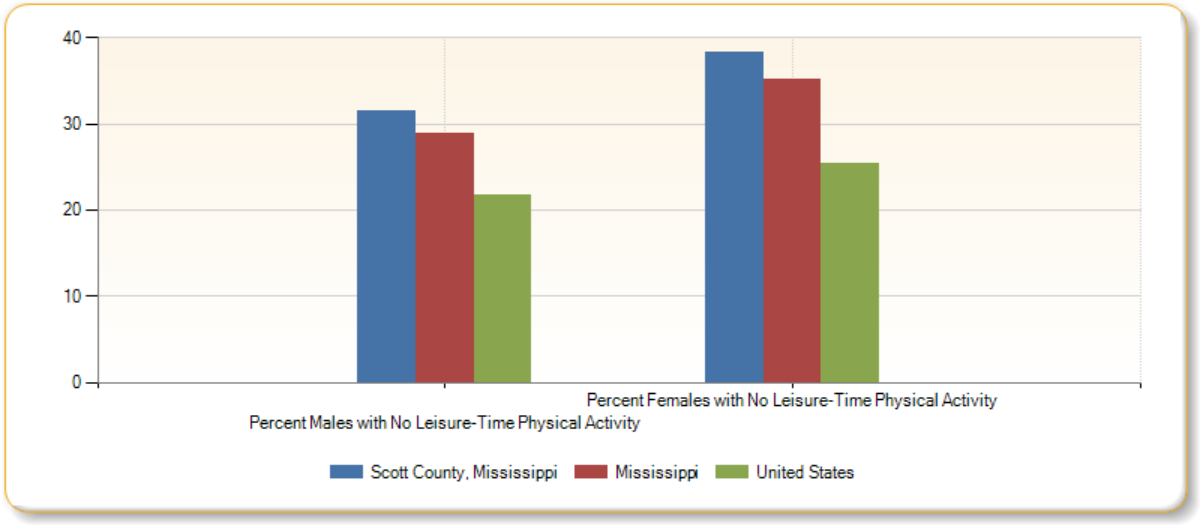
Note: This indicator is compared with the state average.



Data Source: Centers for Disease Control and Prevention, National Diabetes Surveillance System, 2009. Source geography: County.

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
Scott County, Mississippi	3,135	31.50%	4,058	38.30%
Mississippi	288,946	28.95%	393,690	35.21%
United States	23,736,266	21.73%	29,817,193	25.41%



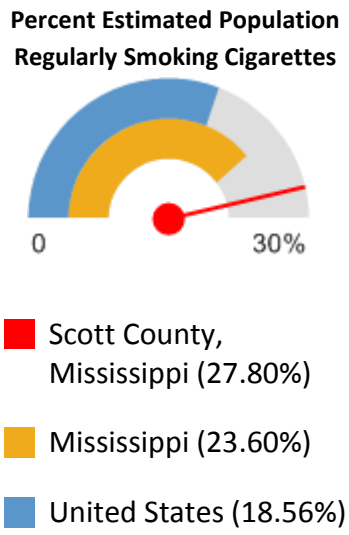
Tobacco Usage (Current Smokers)

This indicator reports the percentage of adults aged 18 and older who 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	Estimated Population Regularly Smoking Cigarettes	Percent Estimated Population Regularly Smoking Cigarettes
Scott County, Mississippi	20,462	5,688	**27.80%**
Mississippi	2,184,616	515,569	23.60%
United States	229,932,154	42,664,071	18.56%

Note: This indicator is compared with the state average. No breakout data available.

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011. Source geography: County.



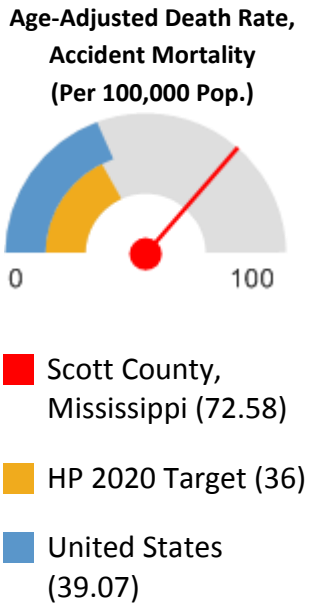
Health Outcomes

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.

Accident Mortality

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, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Accident Mortality (Per 100,000 Pop.)
Scott County, Mississippi	28,162	21	73.15	**72.58**
Mississippi	2,941,441	1,740	59.15	**59.61**
United States	303,844,430	121,217	39.89	**39.07**
HP 2020 Target				<= 36.0

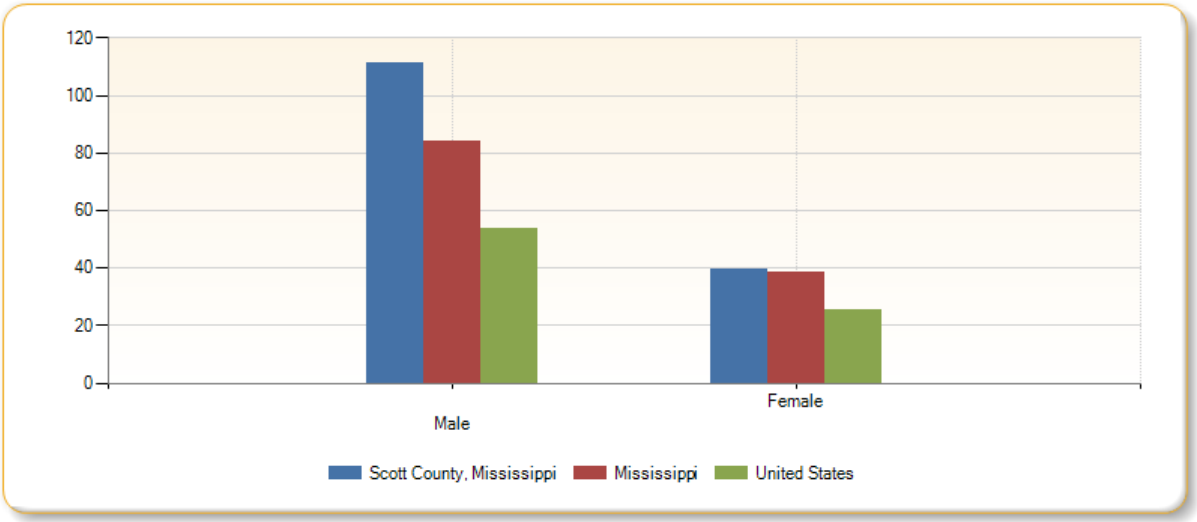


Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. . Accessed through CDC WONDER.
Source geography: County.

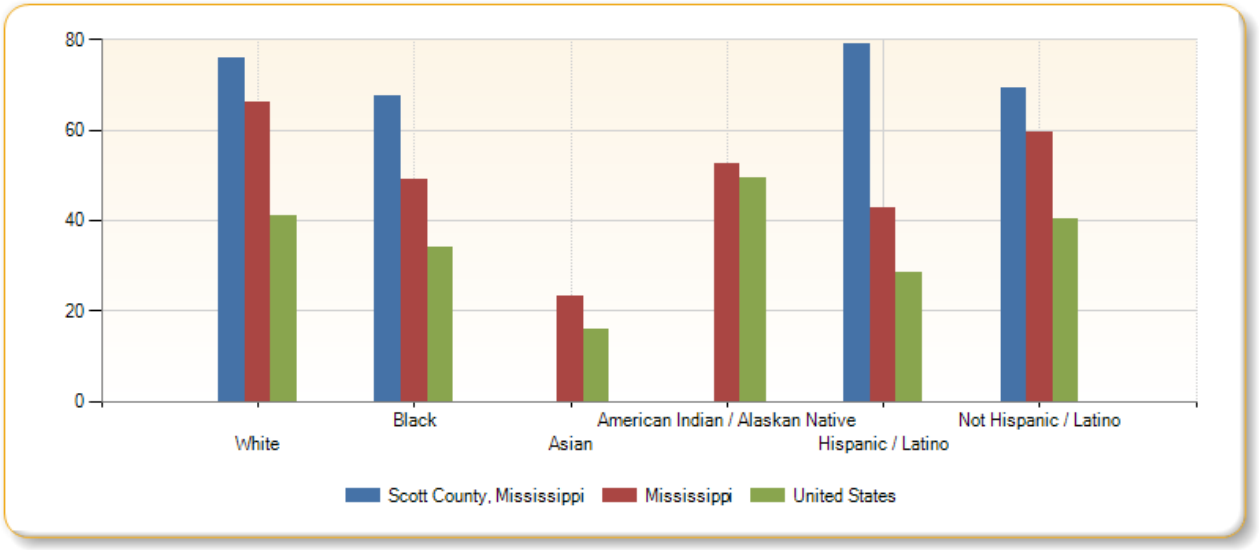
Population by Gender, Accident Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Scott County, Mississippi	111.22	39.28
Mississippi	83.90	38.26
United States	53.82	25.53



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

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Scott County, Mississippi	75.82	67.45	no data	no data	78.92	69.31
Mississippi	66.08	48.87	23.19	52.37	42.65	59.68
United States	40.99	34.09	15.81	49.50	28.49	40.45



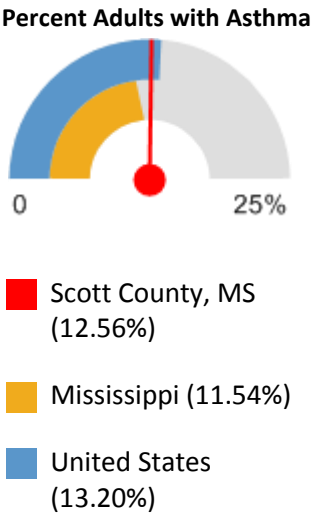
Asthma Prevalence

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	Total Population (Age 18)	Total Adults with Asthma	Percent Adults with Asthma
Scott County, MS	20,462	2,570	**12.56%**
Mississippi	2,199,741	253,824	11.54%
United States	235,375,690	31,061,484	13.20%

Note: This indicator is compared with the state average.

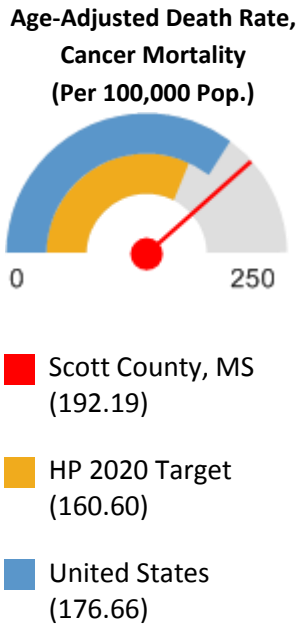
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System: 2006-10. Additional data analysis by CARES.. Source geography: County.



Cancer Mortality

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, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Cancer Mortality (Per 100,000 Pop.)
Scott County, MS	28,162	54	193.17	**192.19**
Mississippi	2,941,441	6,161	209.46	**203.64**
United States	303,844,430	566,121	186.32	**176.66**
HP 2020 Target				<= 160.6



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

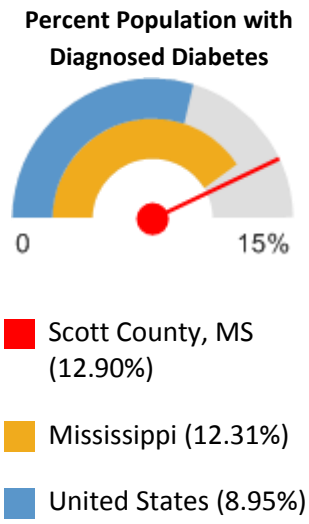
Data Source: Centers for Disease Control and Prevention, National Vital Statistics System: 2006-10. Accessed using CDC WONDER.. Source geography: County.

Diabetes Prevalence

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	Percent Population with Diagnosed Diabetes
Scott County, MS	19,920	2,749	**12.90%**
Mississippi	2,122,279	280,648	12.31%
United States	228,834,127	21,876,232	8.95%

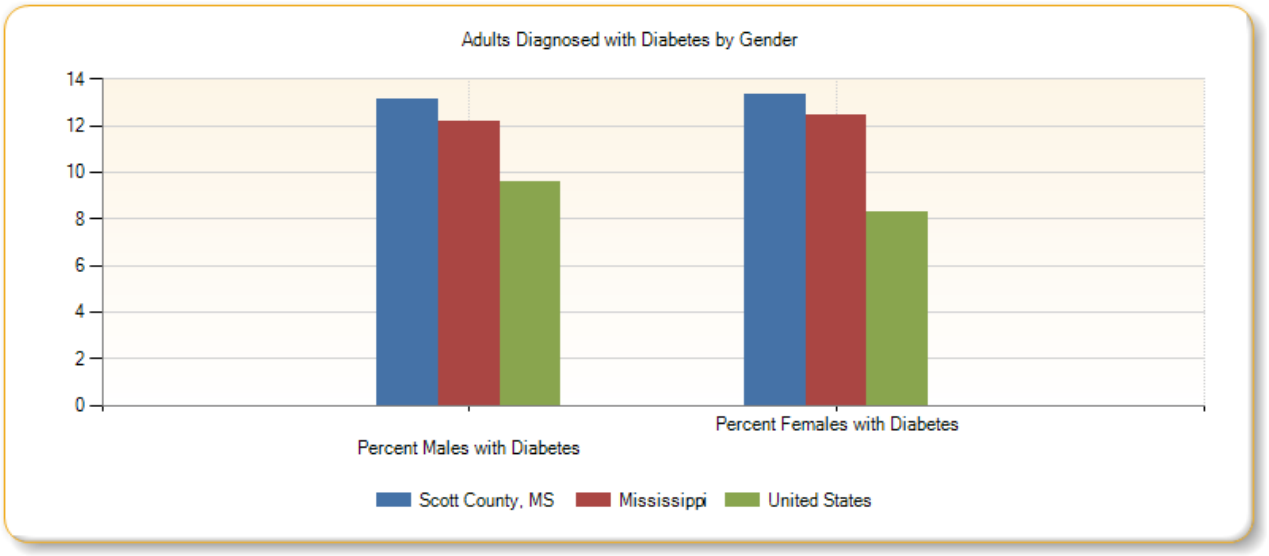
Note: This indicator is compared with the state average.



Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Diabetes Atlas: 2010. Source geography: County.

Adults Diagnosed with Diabetes by Gender

Report Area	Total Males with Diabetes	Percent Males with Diabetes	Total Females with Diabetes	Percent Females with Diabetes
Scott County, MS	1,305	13.10%	1,520	13.30%
Mississippi	252,986	12.18%	301,376	12.41%
United States	21,395,214	9.56%	21,148,216	8.28%

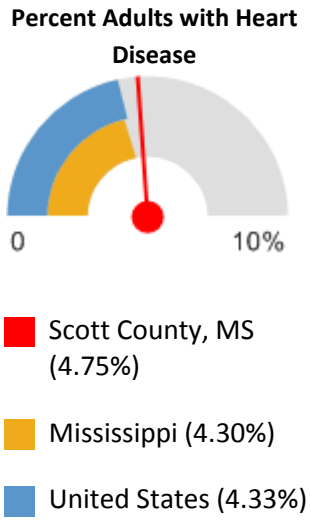


Heart Disease Prevalence

There were 971, or 4.75% of adults aged 18 and older who 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	Total Population (Age 18)	Total Adults with Heart Disease	Percent Adults with Heart Disease
Scott County, MS	20,462	971	**4.75%**
Mississippi	2,199,741	94,657	4.30%
United States	235,375,690	10,183,713	4.33%

Note: This indicator is compared with the state average.



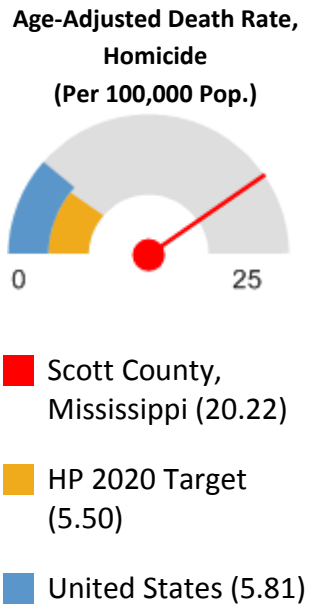
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System: 2006-10. Additional data analysis by CARES.. Source geography: County.

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, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Homicide (Per 100,000 Pop.)
Scott County, Mississippi	28,162	5	18.46	**20.22**
Mississippi	2,941,441	299	10.15	**10.29**
United States	303,844,430	17,564	5.78	**5.81**
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 Center for Health Statistics, Underlying Cause of Death, 2006-2010. . Accessed through CDC WONDER.
Source geography: County.

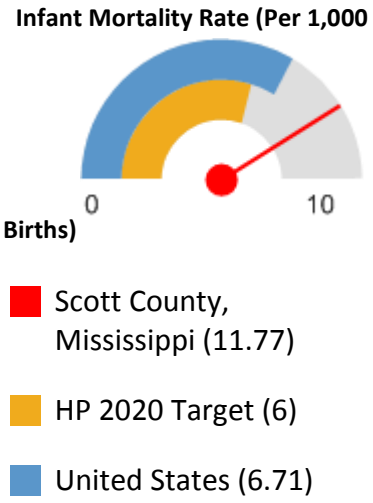
Infant Mortality

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)
Scott County, Mississippi	3,567	42	**11.77**
Mississippi	307,997	3,190	**10.36**
United States	58,600,996	393,074	**6.71**
HP 2020 Target			<= 6.0

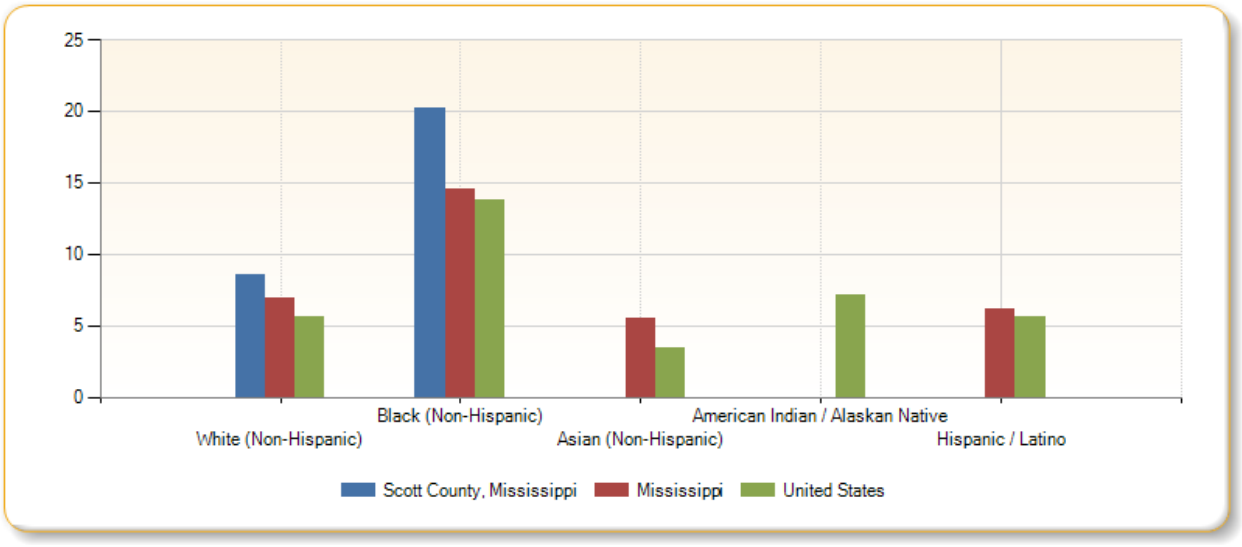
Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: Centers for Disease Control and Prevention, National Vital Statistics System, 2003-2009. Source geography: County.



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

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Asian (Non-Hispanic)	American Indian / Alaskan Native	Hispanic / Latino
Scott County, Mississippi	8.52	20.21	no data	no data	no data
Mississippi	6.93	14.58	5.56	no data	6.20
United States	5.58	13.76	3.44	7.17	5.65



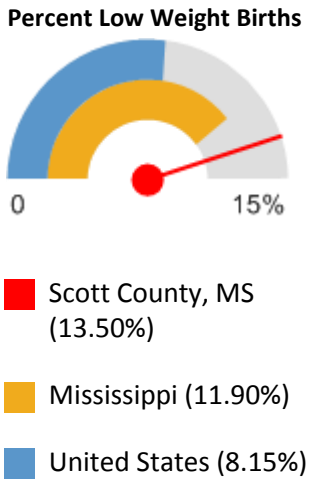
Low Birth Weight

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	Number Low Weight (< 2500g) Births	Percent Low Weight Births
Scott County, MS	3,567	482	**13.50%**
Mississippi	307,997	36,652	11.90%
United States	29,300,498	2,387,855	8.15%

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, National Vital Statistics System: 2003-09. Accessed using CDC WONDER.. Source geography: County.



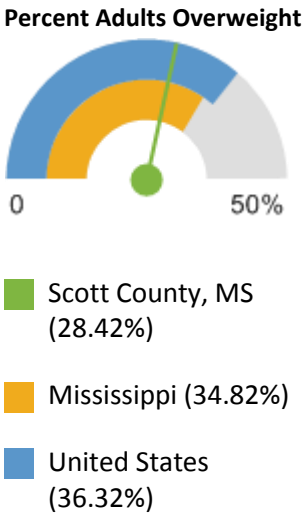
Overweight (Adult)

28.42% 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.

Report Area	Total Population (Age 18)	Total Adults Overweight	Percent Adults Overweight
Scott County, MS	20,462	5,815	**28.42%**
Mississippi	2,199,741	765,888	34.82%
United States	235,375,690	85,495,735	36.32%

Note: This indicator is compared with the state average.

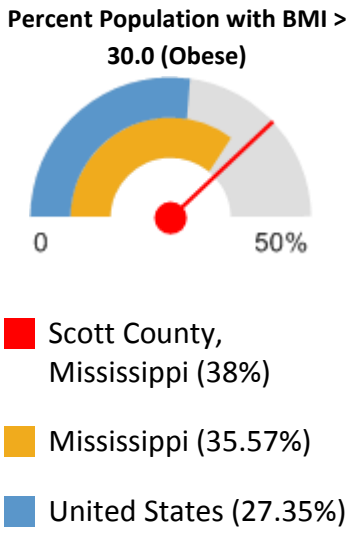
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System: 2006-10. Additional data analysis by CARES.. Source geography: County.



Obesity (Adult)

This indicator reports the percentage of adults aged 20 and older who self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese). This indicator is relevant because excess weight is a prevalent problem in the U.S.; it indicates an unhealthy lifestyle and puts individuals at risk for further health issues.

Report Area	Total Population Age 20	Population with BMI > 30.0 (Obese)	Percent Population with BMI > 30.0 (Obese)
Scott County, Mississippi	20,347	7,732	**38%**
Mississippi	2,092,562	742,910	35.57%
United States	223,576,989	61,460,308	27.35%

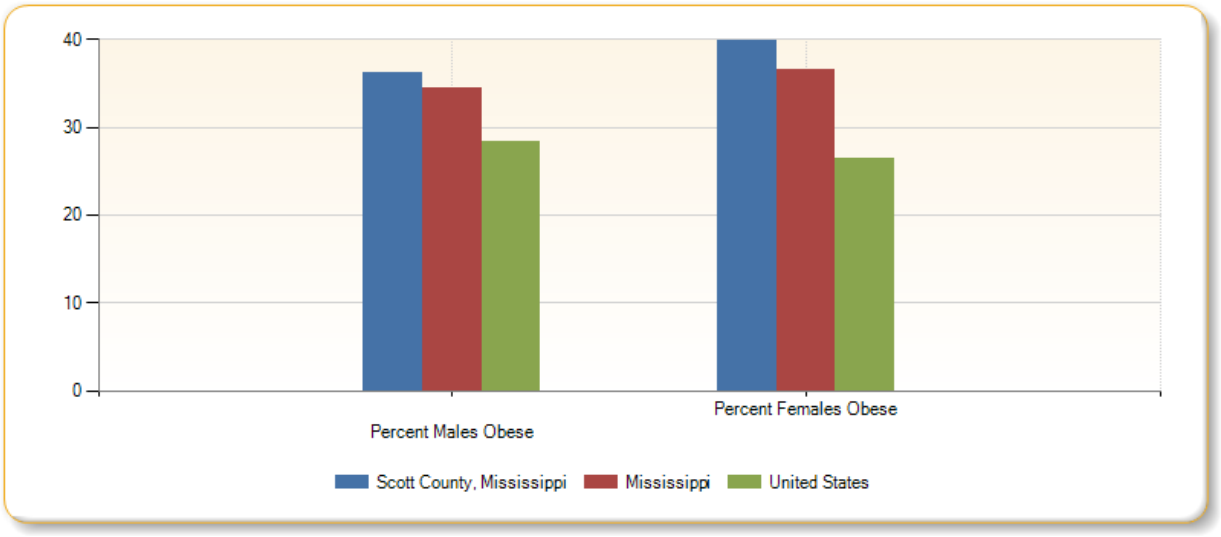


Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Diabetes Surveillance System, 2009. Source geography: County.

Adult Obesity by Gender

Report Area	Total Males Obese	Percent Males Obese	Total Females Obese	Percent Females Obese
Scott County, Mississippi	3,616	36.20%	4,116	39.90%
Mississippi	343,360	34.43%	399,548	36.63%
United States	31,008,901	28.30%	30,451,365	26.37%



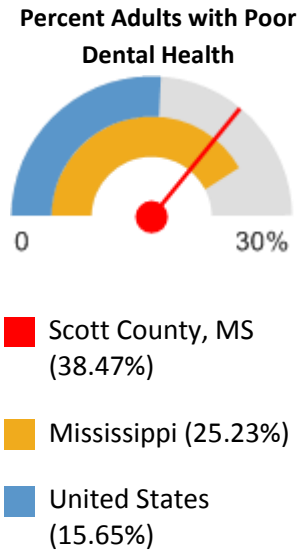
Poor Dental Health

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
Scott County, MS	20,462	7,872	**38.47%**
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: 2006-10. Additional data analysis by CARES.. Source geography: County.



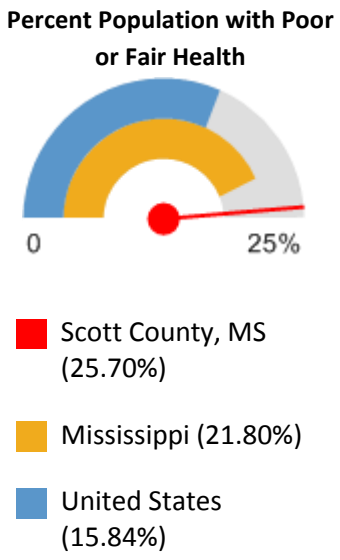
Poor General Health

Within the report area 25.70% 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	Percent Population with Poor or Fair Health
Scott County, MS	20,462	5,259	**25.70%**
Mississippi	2,184,616	476,246	21.80%
United States	229,932,154	36,429,871	15.84%

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

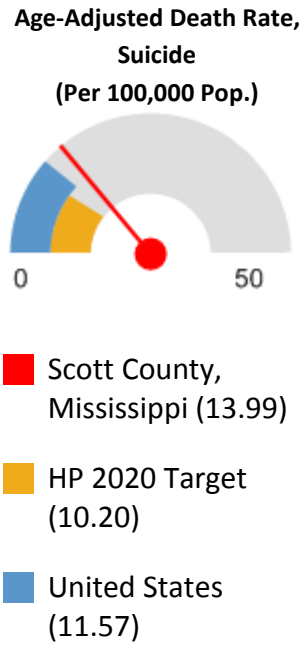
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System: 2005-11. Accessed using the Health Indicators Warehouse.. Source geography: County.



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, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Suicide (Per 100,000 Pop.)
Scott County, Mississippi	28,162	4	12.78	**13.99**
Mississippi	2,941,441	380	12.91	**13**
United States	303,844,430	35,841	11.80	**11.57**
HP 2020 Target				<= 10.2



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

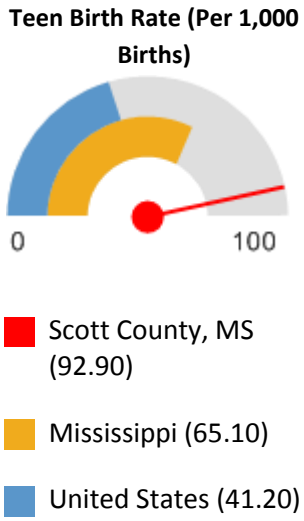
Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. . Accessed through CDC WONDER.
Source geography: County.

Teen Births

This indicator reports the rate of total births to women under the 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 Births)
Scott County, MS	7,212	670	**92.90**
Mississippi	751,644	48,932	65.10
United States	72,071,117	2,969,330	41.20

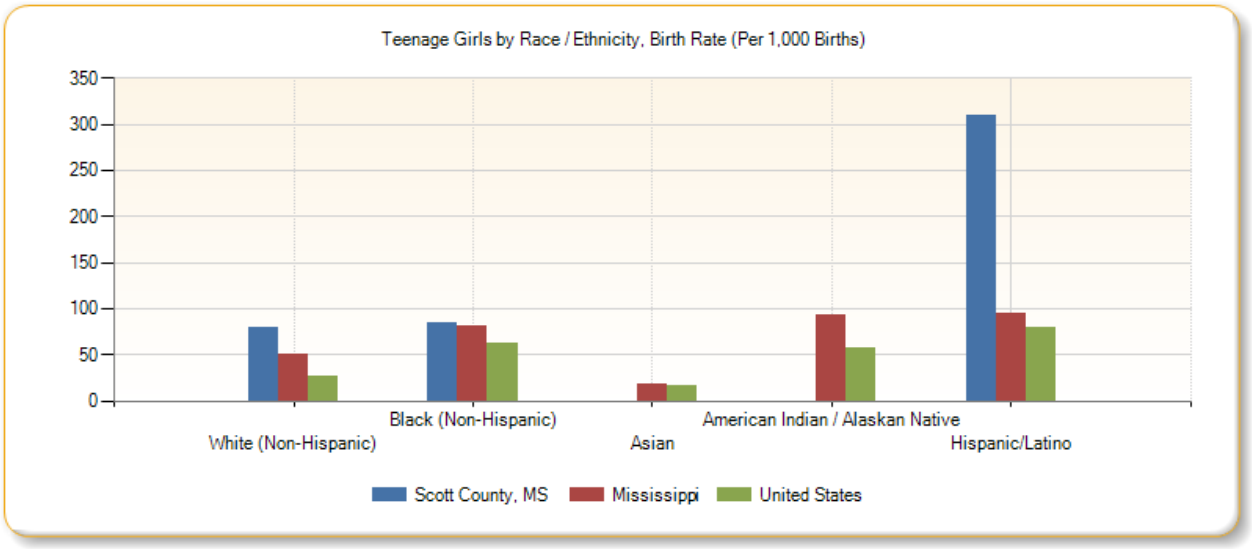
Note: This indicator is compared with the state average.



Data Source: Centers for Disease Control and Prevention, National Vital Statistics System: 2003-09. Accessed using CDC WONDER.. Source geography: County.

Teenage Girls by Race / Ethnicity, Birth Rate (Per 1,000 Births)

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Asian	American Indian / Alaskan Native	Hispanic/Latino
Scott County, MS	79.40	84.50	no data	no data	309.50
Mississippi	49.70	81.50	18.10	93.10	93.90
United States	26.30	62.40	16.70	57.50	79.70



*Leading Health Indicators Report prepared by http://assessment.communitycommons.org on July 12, 2013

County Health Rankings

"We know that much of what influences our health happens outside of the doctor's office—in our schools, workplaces and neighborhoods. The *County Health Rankings & Roadmaps* program helps communities create solutions that make it easier for people to be healthy in their own communities, focusing on specific factors that we known affect health, such as education and income. Having health insurance and quality health care are important to our health, but we need leadership and action beyond health care. Ranking the health of nearly every county in the nation, the *County Health Rankings* illustrate **what we know** when it comes to what's making people sick or healthy. The *County Health Roadmaps* **show what we can do** to create healthier places to live, learn, work and play. The Robert Wood Johnson Foundation collaborates with the University of Wisconsin Population Health Institute to bring this groundbreaking program to cities, counties and states across the nation."

"The *County Health Rankings & Roadmaps* program includes the *County Health Rankings* project, launched in 2010, and the newer *County Health Roadmaps* project that mobilizes local communities, national partners and leaders across all sectors to improve health. The Roadmaps project includes grants to local coalitions and partnerships among policymakers, business, education, public health, health care, and community organizations; grants to national organizations working to improve health; recognition of communities whose promising efforts have led to better health; and customized technical assistance on strategies to improve health."

Scott county health ranking 62 of 81 counties in Mississippi

Below is the County Health Ranking for Scott County. Issues of concern noted in Key Informant Interviews and Focus Group have been highlighted.

Scott County

Source: www.countyhealthrankings.org	Scott County	Error Margin	Mississippi	National Benchmark*	Rank (of 81)
Health Outcomes					62
Mortality					62
Premature death	12,764	11,268-14,260	10,214	5,317	
Morbidity					63
Poor or fair health	26%	22-30%	22%	10%	

Source: www.countyhealthrankings.org	Scott County	Error Margin	Mississippi	National Benchmark*	Rank (of 81)
Poor physical health days	4.6	3.7-5.4	4.1	2.6	
Poor mental health days	4.5	3.5-5.4	4.1	2.3	
Low birthweight	13.3%	12.1-14.4%	12.0%	6.0%	
Health Factors					65
Health Behaviors					77
Adult smoking	28%	23-34%	24%	13%	
Adult obesity	38%	33-43%	36%	25%	
Physical inactivity	35%	31-40%	33%	21%	
Excessive drinking	11%	7-16%	11%	7%	
Motor vehicle crash death rate	51	41-61	28	10	
Sexually transmitted infections	1,008		722	92	
Teen birth rate	90	83-97	62	21	
Clinical Care					81
Uninsured	27%	24-29%	21%	11%	
Primary care physicians**	4,722:1		1,920:1	1,067:1	
Dentists**	4,080:1		2,569:1	1,516:1	
Preventable hospital stays	131	118-143	91	47	
Diabetic screening	79%	71-87%	82%	90%	

Source: www.countyhealthrankings.org	Scott County	Error Margin	Mississippi	National Benchmark*	Rank (of 81)
Mammography screening	53%	43-62%	59%	73%	
Social & Economic Factors					39
High school graduation**	73%		74%		
Some college	35%	29-40%	56%	70%	
Unemployment	8.7%		10.7%	5.0%	
Children in poverty	35%	27-43%	32%	14%	
Inadequate social support	25%	21-30%	25%	14%	
Children in single-parent households	50%	39-61%	44%	20%	
Violent crime rate	233		280	66	
Physical Environment					61
Daily fine particulate matter	12.7	12.6-12.9	12.4	8.8	
Drinking water safety	16%		8%	0%	
Access to recreational facilities	7		7	16	
Limited access to healthy foods**	9%		10%	1%	
Fast food restaurants	68%		54%	27%	
* 90th percentile, i.e., only 10% are better. ** Data should not be compared with prior years due to changes in definition. Note: Blank values reflect unreliable or missing data					2013

Scott County Health Priorities

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

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 Scott County, with the exception of *Environmental Health*, 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	**Scott County**	United States
Percent of adults with inadequate fruit and vegetable Consumption	82.9%	**86%**	75.86%
Percent of adults reporting no leisure time physical activity	32.79%	**35%**	23.41%
Obesity (Body Mass Index greater than 30)	35.58%	**38%**	27.29%
Percent of adults diagnosed with diabetes	12.31%	**12.9%**	8.95%
Percent of adults who regularly smoke cigarettes	23.6%	**28%**	18.56%
Teen Birth Rate (per 1,000 births)	65.1	**92.9**	41.2
Infant Mortality Rate (per 1,000 births)	10.36	**11.77**	6.71

The following priority list is based on primary data which was cross validated with secondary (existing) data. Although the secondary data may illuminate health needs not discovered in primary data collection, the needs put forth by the community have been shown to be critical. In developing a priority list, the assumption is that community opinion about community health issues is *the* critical component to facilitate "buy in" when community benefit implementation strategies are formulated. Thus, the following top five health needs are presented.

Priorities:

1. **Strengthen Health Education in the community, especially among low income and Hispanic groups.**

2. **Address Lifestyle-Related Health Problems and subsequent Chronic Disease Management through education and cultural change. Focusing on the following:**
    a. **Obesity**
    b. **Diabetes**
    c. **Hypertension**

3. **Improve Children's health (vaccinations, screenings, nutrition, etc) with special attention to low income and Hispanic children**

4. **Create effective programs to address Teen Pregnancy, Prenatal Care for young mothers**

5. **Develop collaborations between mental health service providers, schools, and churches to better address "sub-clinical" emotional health needs, especially among youth and elderly.**

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:

Footnotes for Leading Health Indicators Report

Adequate 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. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). 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 maintained 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 vist the Behavioral Risk Factor Surveillance System home page.

Methodology

Indicator percentages are acquired for years 2005-2011 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) 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. For additional information about the multi-year estimates, please visit the Health Indicator Warehouse.

High School Graduation Rate

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 (2011).

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.

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 modeled 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 substate 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 Unemploted] / [Total Labor Force] * 100

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

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.

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 2007-2011. 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

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.

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 2007-2011. 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

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.

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 3 year period 2009-2011. Data are summarized to 2010 Public Use Micro Area (PUMA) 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 total 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 2010 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.

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 3 year period 2009-2011. Data are summarized to 2010 Public Use Micro Area (PUMA) 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 total 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 2010 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.

Colon Cancer Screening (Sigmoid/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. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). 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 maintained 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 vist the Behavioral Risk Factor Surveillance System home page.

Methodology

Indicator percentages are acquired for years 2004-2010 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) 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. 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 (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 vist 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.

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 vist 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 vist 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:

" 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, 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 Any Regular Doctor = ([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.

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. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). 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 maintained 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 vist the Behavioral Risk Factor Surveillance System home page.

Methodology

Indicator percentages are acquired for years 2005-2011 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) 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. 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. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). 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 maintained 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 vist 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) 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. 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 (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.

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. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). 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 maintained 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 vist the Behavioral Risk Factor Surveillance System home page.

Methodology

Indicator percentages are acquired for years 2005-2011 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) 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. 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.

Accident 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 .

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 heart disease: I11, I20-I25
- Chronic lower respiratory disease: J40-J47
- Intentional self-harm (suicide): X60-X84, Y870
- Malignant neoplasm (cancer): C00-C97
- Unintentional injury (accident): V01-X59, Y85-Y86

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.

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.

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 vist 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 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, 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 Asthma = ([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.

Cancer 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 .

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 heart disease: I11, I20-I25
- Chronic lower respiratory disease: J40-J47
- Intentional self-harm (suicide): X60-X84, Y870
- Malignant neoplasm (cancer): C00-C97
- Unintentional injury (accident): V01-X59, Y85-Y86

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.

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.

<u>Diabetes Prevalence</u>

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.

Heart Disease 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 vist 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:
" 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, 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 Heart Disease = ([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.

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 .

Methodology

Counts for this indicator represent the annual average births and deaths over the 7-year period 2003-2009. Original data was tabulated by the CDC based on information reported on birth and death certificates. 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

Data are not linked (birth and death certificates have not been matched) and thus this indicator does not account for population migration. Mortality data was acquired from the CDC WONDER query system. Birth tabulations were acquired from the Health Indicators Warehouse. For more information, about these sources, including data inclusion requirements and subject definitions, please visit the Health Indicator Warehouse indicator page or refer to the CDC WONDER Underlying Cause of Death documentation.

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.

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 .

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 heart disease: I11, I20-I25
- Chronic lower respiratory disease: J40-J47
- Intentional self-harm (suicide): X60-X84, Y870
- Malignant neoplasm (cancer): C00-C97
- Unintentional injury (accident): V01-X59, Y85-Y86

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.

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.

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 .

Methodology

Counts for this indicator represent the annual average births and deaths over the 7-year period 2003-2009. Original data was tabulated by the CDC based on information reported on birth and death certificates. 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

Data are not linked (birth and death certificates have not been matched) and thus this indicator does not account for population migration. Mortality data was acquired from the CDC WONDER query system. Birth tabulations were acquired from the Health Indicators Warehouse. For more information, about these sources, including data inclusion requirements and subject definitions, please visit the Health Indicator Warehouse indicator page or refer to the CDC WONDER Underlying Cause of Death documentation.

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.

Overweight (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 vist 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:

"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, 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 Overweight = ([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.

Obesity (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.

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 vist 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. BRFSS survey data are analyzed by the CDC's National Center for Health Statistics (NCHS). 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 maintained 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 vist the Behavioral Risk Factor Surveillance System home page.

Methodology

Indicator percentages are acquired for years 2005-2011 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) 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. 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.

Suicide

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 .

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 heart disease: I11, I20-I25
- Chronic lower respiratory disease: J40-J47

- Intentional self-harm (suicide): X60-X84, Y870
- Malignant neoplasm (cancer): C00-C97
- Unintentional injury (accident): V01-X59, Y85-Y86

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.

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.

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