# 2010 Behavioral Risk Factor Surveillance System Mississippi Annual Prevalence Report

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# Introduction

It is generally agreed among health care professionals that certain conditions and behavior patterns are associated with disease, injury and death. Some examples are cigarette smoking, physical inactivity, obesity, alcohol consumption and risky sexual behavior. The Behavioral Risk Factor Surveillance System (BRFSS) is a surveillance system designed to estimate the prevalence of these and other health risk factors in all states in the United States. The results provide a tool for evaluating health trends, assessing the risk of chronic disease, along with measuring the effectiveness of policies, programs, intervention strategies and awareness campaigns.

The BRFSS is a cooperative agreement between the Centers for Disease Control and Prevention (CDC) and the Mississippi State Department of Health. The first survey was completed in 1984 when the data was collected at one given point in time. The survey was repeated in 1988 using the same methodology. Beginning in 1990 there has been an annual survey with the data being collected monthly.

The BRFSS survey contains a core set of core questions provided by the CDC to gather comprehensive standard information nationwide. The questions are related to health status, access to health care, health awareness, lifestyle, and preventive health. Individual states are allowed to include optional module questions addressing specific issues that may be of particular interest to that state.

# Methodology

#### A. SAMPLING DESIGN

The Mississippi BRFSS is a random sample telephone survey. Utilizing the disproportionate stratified sample (DSS) design with random digit dialing and the Computer Assisted Telephone Interviewing (CATI) system, the survey has the potential to represent 93 percent of all households in Mississippi that have telephones according to BellSouth data. The sample is stratified by public health district with an approximate equal sample taken from each district. This allows for more reliable estimates at the district level. A sample size of 8,089 interviews over a 12-month period was selected to obtain a 95 percent confidence interval of  $\pm 2.5\%$  on risk factor prevalence estimates in the adult population. Prevalence estimates by individual demographic variables, comprising smaller sample sizes, do not achieve the same level of accuracy as the total sample.

## B. QUESTIONNAIRE

The questionnaire, designed through cooperative agreements with the CDC, is divided into three sections. The first section contains questions on health risk behavior; the second section contains demographic information; and the third contains optional modules covering topics of interest to the state.

#### C DATA COLLECTION

The MSDH has a contractual agreement with Southern Research Group, Inc, (SRG) a marketing research firm, to conduct the 2010 BRFSS survey in accordance with CDC requirements. SRG is contractually bound to strictly follow the CDC protocols as delineated in the "BRFSS User's Guide" and CDC numbered memos. They have over twenty years of experience with this particular study design. The data collection activities are monitored through monthly reports of the contractor to the project coordinator.

SRG contacts the residences during weekdays between 9:00 a.m. and 9:00 p.m. and Saturdays between 8:30 a.m. and 4:30 p.m. After a residence has been contacted, one adult (18 years of age or older) is randomly selected to be interviewed from all adults residing in the household. The majority of interviews are collected over a two-week period each month.

#### D. DATA ANALYSIS

The data collected by the MSDH Office of Public Health Statistics was compiled and weighted by the CDC. Weighted counts were based on the 2009 Mississippi population estimates to accurately reflect the population demographics. The weighting factor considered the number of adults and telephone lines in the household, and age, race, and sex distribution of the general population. Therefore, the estimated prevalence of any risk

factor from the survey represents the total population of Mississippi residents very well. The reader should be aware that the numbers presented in the tables of this report reflect the actual, non-weighted observations for each cell while the percentages in each cell represent the weighted prevalence.

This report presents the percentage of high-risk behavior, conditions and certain chronic diseases within each demographic group for each of the risk factors. The demographic information for persons reporting high-risk behavior, conditions or chronic disease is also presented. The demographic information collected and presented in this survey covers sex, age, race, education, household income, and employment status.

#### E. LIMITATIONS OF THE DATA

All data collection systems are subject to error, and records may be incomplete or contain inaccurate information. All information in this survey is self-reported; people may not remember essential information, a question may not mean the same thing to different respondents, and some individuals may not respond at all. It is not always possible to measure the magnitude of these errors or their impact on the data. The user must be the final arbiter in evaluating the data.

#### F. SAMPLE SIZE

Sample sizes vary by question and response category due to non-response and skip patterns within the survey instrument. Overall estimates generally have relatively small sampling errors, but estimates for certain population subgroups may be based on small numbers and have relatively large sampling errors. Interpreting estimates that are based on small numbers of respondents can mislead the reader into believing that a given finding is more precise than it actually is. When the number of events is small and the probability of such an event is small, considerable caution should be observed in interpreting the estimates or differences between groups. The BRFSS recommends not interpreting percentages where the denominator is based upon fewer than 50 non-weighted respondents. In the tables of the report, such results are marked with an asterisk that indicates a sample size less than 50.

# **Definition of Terms and Risk Factors**

## **Alcohol Consumption**

*Binge Drinking Risk Factor* - Respondents who report they have had at least five drinks on one or more occasion during the past thirty days.

Heavy Drinking Risk Factor - Male respondents who report having more than two drinks per day and female respondents who report having more than one drink per day during the past thirty days.

*Drinking and Driving* - Respondents who report they have driven a vehicle after they have had too much to drink

#### Asthma

Asthma Awareness - Respondents who report being told they have asthma by a doctor, nurse or other health professional.

*Current Asthma* - Respondents who report being told they have asthma by a doctor, nurse or other health professional and who still suffer from the condition.

# **Breast Cancer Screening**

Mammogram and Clinical Breast Examination (CBE) - Female respondents, age 40 and older, who report they have ever had a mammogram and a CBE.

Mammogram and CBE within 2 year (age 40) - Female respondents, age 40 and older, who report they have had a mammogram and a CBE within the last two years.

*Mammogram and CBE within 2 years (age 50)* - Female respondents, age 50 and older, who report they have had a mammogram and a CBE within the last two years.

#### Cervical Cancer Screening

*Pap Smear* - Female respondents, age 18 and older, who have not had a hysterectomy and who report they have ever had a pap smear.

Pap Smear Within 3 Years - Female respondents, age 18 and older, who have not had a hysterectomy and who report they have a pap smear within the last three years.

#### Colorectal Cancer Screening

*Colonoscopy or Sigmoidoscopy* - Respondents age 50 and older who report they have ever had a sigmoidoscopy or colonoscopy test.

*Blood Stool Test* – Respondents age 50 and older who report they have not had a blood stool test in the past two years.

#### Cardiovascular Disease

*Heart Attack* – Respondents who report they have ever been diagnosed with a heart attack.

*Stroke* – Respondents who report they have ever been diagnosed with a stroke.

*Coronary Heart Disease* – Respondents who report they have ever been diagnosed with angina or coronary heart disease.

#### **Diabetes**

*Diabetes Awareness* - Respondents who report they have ever been told by a doctor they have diabetes. Female respondents diagnosed with diabetes only during pregnancy are not included.

#### **Disability**

*Limited Activity* - Respondents who report that their activity is limited in any way because of physical, mental or emotional problems.

Special Equipment Requirements - Respondents who report having health problems that require the use of special equipment such as a cane, wheelchair, special bed or special telephone.

#### Exercise

Exercise in Last 30 Days - Respondents who report that, excluding their regular job, in the past 30 days they participated in any physical activity or exercise such as running, walking, calisthenics, golf, or gardening.

#### **Falls**

*Falls* – Respondents, age 45 and older, who report they have sustained one or more falls in the past three months.

*Injury From Falls* – Respondents, age 45 and older, who report that the fall limited their regular activities for at least one day or required them to see a doctor.

#### Health Insurance

*Health Care Coverage* - Respondents who report they have no health care coverage, including health insurance, Health Maintenance Organizations, or Medicare.

*Unable to See a Doctor* - Respondents who report they needed to see a doctor within the past 12 months but who were unable because of the cost.

#### Health Status

*Self-Reported Health Status* - Respondents who report that their general health status is fair or poor.

#### Healthy Days

*Physical Health* - Respondents who report their physical health was not good for more than seven days during the past month.

*Mental Health* - Respondents who report their mental health was not good for more than seven days during the past month.

Activities Limited - Respondents who report they could not perform their normal activities because of poor physical or mental health for more than seven days during the past month.

#### HIV/AIDS

*Never Tested for HIV* - Respondents age 18 to 64 who report they have never been tested for HIV, excluding tests done as part of a blood donation.

*High Risk Behavior* - Respondents age 18 to 64 who report they have used intravenous drugs, have been treated for a sexually transmitted or venereal disease, have given or received drugs or money in exchange for sexual favors, or have had anal intercourse without a condom during the past year.

#### **Immunization**

*Flu Shots* - Respondents who report they received a flu shot or the flu spray vaccine within the last twelve months.

*Pneumonia Shots* - Respondents who report they have ever received a pneumonia shot.

#### Mental Health

*Emotional Support* - Respondents who report they rarely or never get the social and emotional support they need.

*Life Satisfaction* - Respondents who report they are dissatisfied or very dissatisfied with their life.

Anxiety Disorder - Respondents who report they have ever been diagnosed with an anxiety disorder.

Depression Disorder - Respondents who report they have ever been diagnosed with a depressive disorder.

#### Oral Health

*Permanent Teeth Extracted* - Respondents who report they have had at least one of their permanent teeth extracted excluding extraction because of injury or orthodontics.

*Dental Visits* - Respondents who report that their last visit to a dentist was more than one year ago.

Last Dental Cleaning - Respondents who report that it has been more than one year ago since they have had their teeth cleaned by a dentist or a dental hygienist or they have never had their teeth cleaned by a dentist or dental hygienist.

#### **Prostate Cancer Screening**

Males, age 40 and older, who report they have ever had a prostate specific antigen (PSA) test.

#### Seat Belt Use

Respondents who report they always or nearly always wear seat belts.

#### Sleep

Respondents who report they did not get enough rest or sleep during the past 30 days.

#### Tobacco Use

*Cigarette Smoker* - Respondents who have ever smoked 100 cigarettes in their lifetime and report currently smoking every day or some days. This relates to Healthy People 2010 Objective 27.1a - Target ≤12%.

#### Weight Based on Body Mass Index (BMI)

*Healthy Weight:* - Respondents whose body mass index (BMI) is  $18.5 \le BMI \le 24.9$ . This measures Healthy People 2010 Objective 19.1 - Target  $\ge 60\%$ .

Overweight - Respondents whose body mass index (BMI) is  $25.0 \le BMI \le 29.9$ .

*Obese* - Respondents whose body mass index (BMI) ≥30.0. This measures Healthy People 2010 Objective 19.2 - Target ≤15%

# Survey Results

# **Health Status**

## **Survey Question:**

Would you say that in general your health is excellent, very good, good, fair, or poor?

The general health questions in the survey attempt to determine how people view their personal health and how well they function physically, psychologically and socially while engaged in normal, daily activities. The questions are important because they may indicate dysfunction and disability not measured in standard morbidity and mortality data.

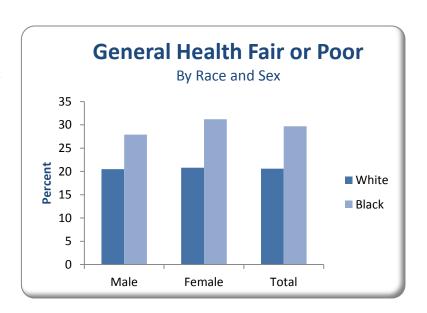


Figure 1

Both white and black females reported their health as worse than males (Figure 1). Black respondents report their health as worse than whites. Black respondents reported

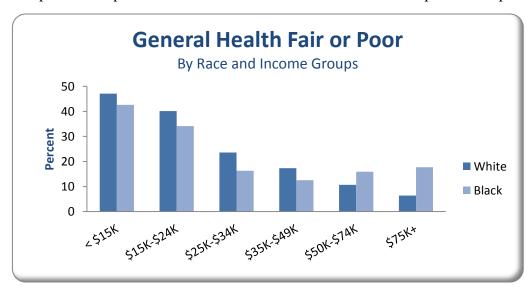


Figure 2

fair or poor health at a rate of 29.7 percent compared to 20.6 percent for whites. Older respondents reported fair or poor health at a much higher rate than the younger ones. Persons in the 18 to 24 age group reported a rate of 7.4 percent while those more than 65 years of age reported a rate of 39.8 percent (Table 1).

Table 1 General Health Fair or Poor

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	468	20.5	292	27.9	777	22.8
Female	963	20.8	712	31.2	1,707	24.5
Age Group						
18-24	9	7.2	11	8.0	20	7.4
25-34	35	13.7	42	13.7	79	13.8
35-44	61	12.1	102	29.0	166	18.1
45-54	188	20.8	181	34.5	378	25.2
55-64	348	27.0	323	50.2	685	34.3
65+	789	34.7	338	55.1	1,148	39.8
Education						
< High School Graduate	357	40.6	418	50.2	786	44.8
High School Graduate or GED	545	25.6	330	27.6	891	26.4
Some College or Technical School	351	20.6	153	20.1	518	20.5
College Graduate	176	8.3	100	20.8	284	11.2
Income						
< \$15,000	352	47.1	456	42.6	833	44.3
\$15-\$24,999	377	40.1	270	34.1	658	36.8
\$25-\$34,999	169	23.6	64	16.3	236	20.4
\$35-\$49,999	138	17.3	31	12.5	172	15.9
\$50-\$74,999	85	10.7	26	15.9	111	11.8
\$75,000+	78	6.4	13	17.7	92	7.9
Employment Status						
Employed	235	9.8	218	17.0	460	12.0
Not Employed	56	22.0	72	20.5	129	21.1
Student/Homemaker	121	14.2	43	16.3	167	14.7
Retired/Unable to Work	1,017	43.9	669	60.9	1,724	50.0
Total	1,431	20.6	1,004	29.7	2,484	23.7

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

# **Health Care Coverage**

## **Survey Question:**

Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?

The questions in this section are designed to estimate the number of people who cannot obtain the health care they need because they are not covered by a health care plan or other health insurance. People at risk are those without any coverage.

In 2010, 21.6 percent of the respondents indicated they had no health care plan compared to 20.0 percent in 2009. According to the survey, black males have the highest rate of non-coverage at 34.4 percent; black

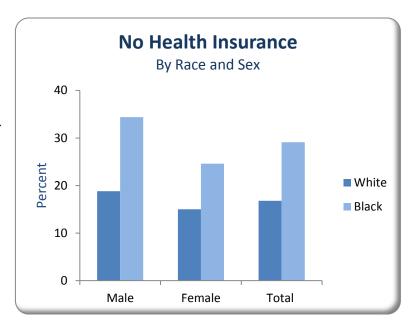


Figure 3

females were next at 24.6 percent (Figure 3). When viewed by age categories, blacks

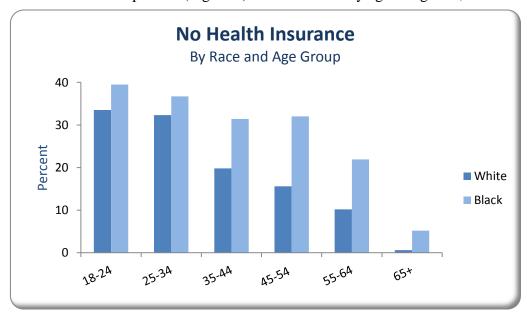


Figure 4

from the age of 18 to 24 reported the highest prevalence of no health care coverage at 39.5 percent (Figure 4).

Table 2 Respondents With No Health Care Coverage

	Wh	ite	Bla	ick	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	187	18.8	189	34.4	389	24.5	
Female	304	15.0	406	24.6	726	18.9	
Age Group							
18-24	33	33.5	46	39.5	83	37.0	
25-34	81	32.3	93	36.7	178	34.4	
35-44	97	19.8	119	31.4	223	24.7	
45-54	136	15.6	156	32.0	298	21.4	
55-64	133	10.2	151	21.9	287	13.8	
65+	10	0.6	29	5.2	43	1.8	
Education							
< High School Graduate	99	26.8	164	31.9	268	30.0	
High School Graduate or GED	198	24.9	264	33.9	469	28.8	
Some College or Technical School	124	14.6	117	29.5	252	19.9	
College Graduate	69	7.4	48	14.4	122	9.6	
Income							
< \$15,000	95	26.9	254	36.0	356	33.4	
\$15-\$24,999	140	33.1	166	29.2	314	31.6	
\$25-\$34,999	59	17.1	56	29.8	115	21.6	
\$35-\$49,999	49	14.2	29	18.9	81	16.4	
\$50-\$74,999	39	10.8	11	12.7	51	11.1	
\$75,000+	27	3.2	9	12.0	38	4.5	
Employment Status							
Employed	238	17.0	266	29.0	515	21.4	
Not Employed	88	54.9	157	54.2	252	55.2	
Student/Homemaker	76	22.3	57	39.1	135	26.1	
Retired/Unable to Work	88	5.7	112	12.3	208	8.1	
Total	491	16.8	595	29.1	1,115	21.6	

<sup>&</sup>lt;sup>1</sup>Unweighted

 $<sup>^{2}</sup>Weighted$ 

Table 3 Unable to See Doctor in Past 12 Months Because of Cost

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	178	14.6	162	24.1	352	17.7
Female	467	17.8	549	33.1	1,040	23.7
Age Group						
18-24	19	16.5	43	34.0	64	24.7
25-34	75	25.8	102	31.9	183	29.1
35-44	102	20.6	127	30.3	235	24.0
45-54	160	17.7	175	33.6	342	22.7
55-64	182	14.7	187	28.2	375	18.8
65+	105	4.2	76	11.0	188	6.2
Education						
< High School Graduate	151	31.3	223	33.1	377	31.6
High School Graduate or GED	237	22.6	272	30.0	518	25.9
Some College or Technical School	179	15.8	141	31.2	335	21.0
College Graduate	77	5.0	72	17.5	157	8.2
Income						
< \$15,000	174	38.0	325	38.3	510	38.3
\$15-\$24,999	195	33.4	200	33.3	404	33.0
\$25-\$34,999	72	19.2	65	30.5	140	23.7
\$35-\$49,999	62	16.0	28	19.3	92	16.6
\$50-\$74,999	36	8.7	17	13.2	55	9.9
\$75,000+	24	2.9	3	0.7	29	2.8
Employment Status						
Employed	223	13.5	281	26.3	516	17.8
Not Employed	78	42.8	132	43.7	216	43.5
Student/Homemaker	83	18.4	51	32.9	136	21.9
Retired/Unable to Work	260	14.9	245	24.0	520	18.1
Total	645	16.3	711	28.9	1,392	20.9

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

# **Healthy Days**

#### **Survey Question:**

- 1. Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?
- 2. Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

In both public and private medicine, the concept of health-related quality of life refers to the physical and mental health perceived by a person or a group of persons. Health care professionals have often used health-related quality of life to measure the effects of chronic illness in patients to better understand how an illness interferes with the day-to-day life activities of an individual.

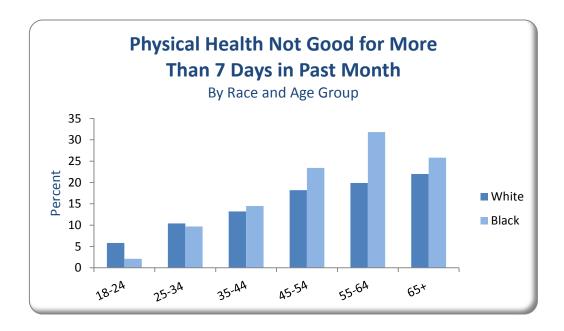


Figure 5

Similarly, health professionals use health-related quality of life to measure the effects of numerous disorders, short-term and long-term disabilities, and diseases in different populations. Tracking health-related quality of life in different populations can aid in identifying subgroups with poor physical or mental health and can help in developing policies or interventions to improve their health.

In Mississippi, the 2010 BRFSS survey showed that bad days of poor physical health tends to increase with age while the bad days of poor mental health were more evenly distributed. Table 4 shows that people in the 55 to 64 age category reported the highest percentage (23.7) of more than seven days when their physical health was not good. White respondents in this age group had a rate of 19.9 percent compared to 31.8 percent for blacks. For those 65 years of age and older, whites reported a rate of 22.0 percent compared to 25.8 for blacks.

People in the 45 to 54 year old age group had the highest percentage of seven or more days when their mental health was not good with a rate of 20.1 percent—20.2 for whites and 19.3 for blacks (Figure 6).

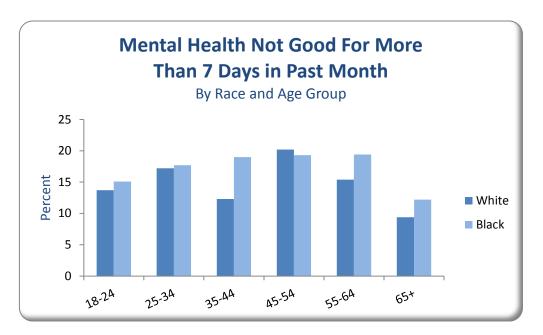


Figure 6

The highest category of respondents with more than seven days of poor mental health in the past month, are people that have incomes below \$15,000 annually with a rate of 25.6 percent: 29.6 percent for whites and 23.4 percent for blacks. People who are unemployed report a rate of 21.9 percent for more than seven days of poor mental health in the past month (Table 5).

Table 4 Physical Health Not Good for More Than 7 Days in Past Month

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	310	13.3	173	15.9	495	14.0
Female	753	18.3	415	17.7	1,189	17.9
Age Group						
18-24	7	5.8	3	2.1	11	4.1
25-34	27	10.4	27	9.7	54	9.8
35-44	72	13.2	63	14.5	138	13.4
45-54	162	18.2	121	23.4	290	19.6
55-64	271	19.9	201	31.8	481	23.7
65+	524	22.0	170	25.8	707	23.0
Education						
< High School Graduate	237	28.8	211	22.5	454	25.3
High School Graduate or GED	399	18.1	220	17.2	629	17.7
Some College or Technical School	275	16.6	97	13.4	384	15.5
College Graduate	150	8.3	59	13.7	214	9.3
Income						
< \$15,000	272	37.8	287	25.1	578	29.7
\$15-\$24,999	248	29.0	141	18.8	400	24.0
\$25-\$34,999	126	17.5	40	13.1	167	15.6
\$35-\$49,999	105	13.0	15	6.7	120	11.1
\$50-\$74,999	76	9.8	16	9.6	92	9.6
\$75,000+	78	6.6	8	6.5	86	6.4
Employment Status						
Employed	176	7.4	117	10.2	296	8.1
Not Employed	54	22.3	44	11.0	99	15.2
Student/Homemaker	88	10.4	15	5.8	105	9.3
Retired/Unable to Work	743	33.0	411	35.1	1,181	33.9
Total	1,063	15.9	588	16.9	1,684	16.1

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 5 Mental Health Not Good for More Than 7 Days in Past Month

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	199	12.2	117	12.9	328	12.6
Female	537	16.9	387	21.2	936	18.4
Age Group						
18-24	15	13.7	20	15.1	36	14.5
25-34	48	17.2	56	17.7	104	16.9
35-44	64	12.3	90	19.0	158	14.9
45-54	177	20.2	112	19.3	298	20.1
55-64	199	15.4	140	19.4	345	16.7
65+	232	9.4	84	12.2	320	10.1
Education						
< High School Graduate	149	26.5	164	23.6	319	24.9
High School Graduate or GED	255	15.5	185	16.9	443	15.8
Some College or Technical School	204	16.2	94	14.3	307	15.6
College Graduate	127	7.9	60	14.4	193	9.8
Income						
< \$15,000	175	29.6	230	23.4	417	25.6
\$15-\$24,999	170	26.3	124	19.2	300	23.1
\$25-\$34,999	87	15.0	47	15.5	134	14.9
\$35-\$49,999	88	15.1	24	11.9	113	13.9
\$50-\$74,999	59	9.7	13	8.2	73	9.6
\$75,000+	69	6.3	9	11.3	79	7.0
Employment Status						
Employed	202	10.7	152	13.3	360	11.7
Not Employed	50	24.5	60	21.1	111	21.9
Student/Homemaker	64	12.4	25	15.0	90	12.9
Retired/Unable to Work	418	21.1	266	23.0	700	21.8
Total	736	14.7	504	17.4	1,264	15.6

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 6 Activities Limited More Than 7 Days in Past Month Because of Poor Physical or Mental Health

	Wh	ite	Bla	ick	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	201	9.7	125	13.3	335	10.8
Female	474	11.9	319	14.4	808	12.7
Age Group						
18-24	4	5.9	7	4.6	11	5.2
25-34	20	8.1	28	9.3	48	8.3
35-44	44	8.4	60	13.9	106	10.2
45-54	121	13.7	94	16.6	223	14.6
55-64	185	13.7	136	21.8	329	16.4
65+	300	12.6	118	20.6	424	14.5
Education						
< High School Graduate	150	19.4	169	22.6	325	20.8
High School Graduate or GED	240	11.2	168	14.8	413	12.6
Some College or Technical School	185	13.0	70	8.8	266	11.7
College Graduate	98	5.1	37	7.6	137	5.5
Income						
< \$15,000	178	28.2	224	20.9	416	23.6
\$15-\$24,999	172	19.7	109	17.3	287	18.4
\$25-\$34,999	77	12.6	26	8.0	103	10.6
\$35-\$49,999	59	6.6	11	5.3	71	6.2
\$50-\$74,999	46	6.2	7	1.9	53	5.1
\$75,000+	40	3.3	4	2.9	44	3.1
Employment Status						
Employed	72	3.5	60	5.0	135	3.9
Not Employed	37	15.1	42	15.5	79	14.8
Student/Homemaker	58	9.6	8	4.4	67	8.2
Retired/Unable to Work	507	24.3	333	31.3	860	26.9
Total	675	10.8	444	13.9	1,143	11.8

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

# Sleep

# **Survey Question:**

During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?

According to the Centers for Disease Control and Prevention (CDC), sleep-related problems affect 50 to 70 million persons in the United States and involves all areas of life, including cognitive performance, emotional well-being, work and leisure-time activities, and general physical and mental well-being. They also report that two adults in

five sleep less than seven hours each weeknight and, for three out of eight adults, feeling sleepy during the day interferes with daily activities a few times per month.

Insufficient sleep not only affects the ability to function optimally but is also associated with an increased risk of psychiatric disorders. Sleep disturbance can also exacerbate chronic conditions, disrupt medical treatment, and add to the social disability associated

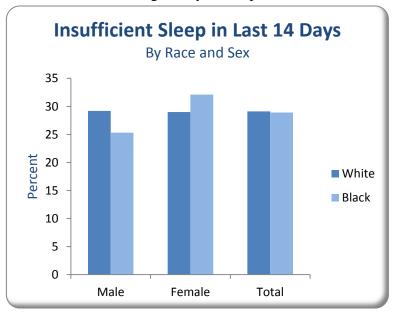


Figure 7

with a chronic illness. CDC reports that nearly two-thirds of US adults have never been asked by a physician how well they sleep.

On the 2010 BRFSS survey, 28.9 percent of adult Mississippians reported insufficient sleep in the past fourteen days. There were minimal differences reported between race and gender groups. Black females had the highest rate at 32.1 percent, white males were next with a rate of 29.2 percent, followed by white females at 29.0 percent while black males were last at 25.3 percent (Figure 7).

The highest rate of insufficient sleep among demographic categories was the group in the annual income range of \$15,000 to \$24,999 that reported a rate of 36.4 percent: Whites had a rate of 41.5 percent compared to a rate of 30.2 percent for blacks.

Table 7 Insufficient Sleep for 14 or More Days in Past Month

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	426	29.2	184	25.3	625	27.8
Female	843	29.0	528	32.1	1,395	30.0
Age Group						
18-24	35	30.1	24	18.0	62	24.3
25-34	99	37.8	97	32.8	198	35.2
35-44	180	35.6	133	34.0	320	34.9
45-54	267	31.3	173	34.2	449	32.1
55-64	321	26.5	185	31.8	515	28.2
65+	365	15.2	98	16.5	472	15.6
Education						
< High School Graduate	219	41.8	183	28.6	410	35.2
High School Graduate or GED	408	30.2	269	27.4	682	28.7
Some College or Technical School	359	30.0	150	29.4	527	29.9
College Graduate	282	22.4	109	32.1	399	24.6
Income						
< \$15,000	217	41.4	270	29.8	501	33.8
\$15-\$24,999	260	41.5	180	30.2	450	36.4
\$25-\$34,999	139	25.5	62	24.8	203	24.8
\$35-\$49,999	153	26.0	49	28.9	203	26.5
\$50-\$74,999	125	24.7	41	29.3	170	26.3
\$75,000+	207	24.5	36	42.2	246	26.6
Employment Status						
Employed	499	28.6	295	28.4	806	28.3
Not Employed	65	37.2	83	29.5	154	33.4
Student/Homemaker	135	28.8	32	23.6	169	27.2
Retired/Unable to Work	569	28.6	301	31.1	889	29.4
Total	1,269	29.1	712	28.9	2,020	28.9

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

## Tobacco Use

## **Survey Question:**

Have you smoked at least 100 cigarettes in your entire life and do you now smoke cigarettes every day, some days, or not at all?

Tobacco use is the single leading preventable cause of death in Mississippi and the United States. Each year, about one-fifth of the deaths in Mississippi are from tobaccorelated causes. Health problems related to tobacco use include cancers, lung disease, and heart disease. Over the past decade the percentage of current adult smokers has not

changed significantly. During the same period smokeless tobacco and cigar use among adults has increased. Mississippi was the first state to reach a settlement with the tobacco industry. The Mississippi State Department of Health has drafted a state tobacco plan that includes strategies to prevent initiation of tobacco use among youth, promote cessation among youth and adults, and eliminate exposure to environmental tobacco smoke

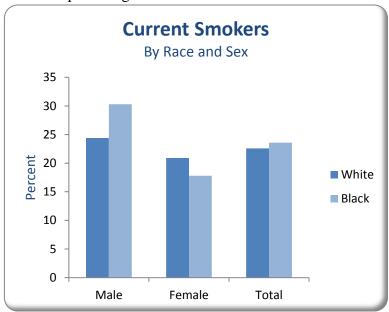


Figure 8

According to the 2010 BRFSS report, the group with the highest percentage of current smokers is white respondents in the 18 to 24 year age group who have a rate of 33.8 percent.

The second highest are blacks age 18 to 24 with a rate of 30.8 percent. The group with the lowest percentage in demographic groups for current smokers is white respondents 65 years of age and older with a rate of 8.8 percent (Table 8). Overall, the rate of current smoking in Mississippi is 22.9 percent, a decrease from 23.3 reported in 2009. The Healthy People 2010 objective is 12 percent.

**Table 8 Current Smokers** 

	Wh	ite	Bla	ck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	343	24.4	209	30.3	568	26.5
Female	588	20.9	301	17.8	902	19.7
Age Group						
18-24	36	33.8	38	31.5	75	32.7
25-34	79	28.3	68	30.8	150	29.0
35-44	128	26.2	72	17.3	205	23.3
45-54	227	27.0	124	26.4	359	26.5
55-64	244	19.0	142	22.1	394	20.1
65+	216	8.8	64	10.3	284	9.2
Education						
< High School Graduate	186	41.6	171	34.8	368	38.9
High School Graduate or GED	335	27.6	201	26.3	542	26.8
Some College or Technical School	265	23.2	105	21.3	379	23.0
College Graduate	142	9.9	33	6.0	178	8.8
Income						
< \$15,000	185	39.1	199	27.1	392	31.5
\$15-\$24,999	224	33.6	152	33.2	384	33.5
\$25-\$34,999	90	25.9	42	14.9	134	21.5
\$35-\$49,999	120	24.3	27	13.6	150	21.9
\$50-\$74,999	83	14.2	21	16.6	105	14.6
\$75,000+	107	11.5	13	8.0	125	11.1
Employment Status						
Employed	383	21.7	195	21.2	589	21.5
Not Employed	81	48.3	97	42.9	183	45.6
Student/Homemaker	82	18.0	23	16.9	108	17.6
Retired/Unable to Work	384	20.7	194	18.5	588	19.9
Total	931	22.6	510	23.6	1,470	22.9

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

# **Diabetes**

## **Survey Question:**

Have you ever been told by a doctor that you have diabetes? (Note that females diagnosed only while pregnant are excluded.)

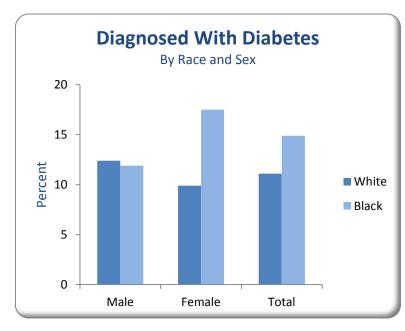


Figure 9

Diabetes was the sixth leading cause of death in Mississippi for the year 2009 with a death rate of 30.4 per 100,000 population. According to the 2010 BRFSS survey, 12.4 percent of all respondents reported being told by a doctor that they have diabetes. In 2009 the reported rate was 11.6 percent.

Black females continue to comprise the largest group having a rate of 17.5 percent followed by white males with a rate of 12.4 percent. Black

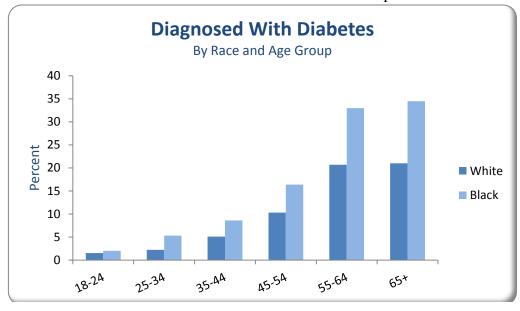


Figure 10

males reported a rate of 11.9 percent and white females were the lowest at 9.9 percent (Figure 9).

The rate of diabetes showed a marked difference by categories of education. Respondents who did not complete high school reported rates of 19.8 percent which is more than 58 percent higher than those with a high school degree. Those with a high school education reported a rate of 12.5 percent; those with some college work, a rate of 11.3 percent; and college graduates a rate of 8.9 percent. Blacks with no high school education reported a diabetes rate of 23.7 percent (Table 9).

There are obvious differences seen by age of the respondent in the rate of diabetes. Only 1.7 percent of respondents between the age of 18 and 24 reported having diabetes while 24.5 percent of those 65 and older reported they had diabetes (Figure 10).

**Table 9 Diabetes** 

	Wh	ite	Bla	ıck	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	317	12.4	143	11.9	472	12.0
Female	492	9.9	451	17.5	963	12.6
Age Group						
18-24	1	1.5	3	2.0	4	1.7
25-34	4	2.2	16	5.3	20	3.4
35-44	25	5.1	34	8.6	59	6.2
45-54	91	10.3	85	16.4	181	12.3
55-64	231	20.7	210	33.0	451	24.7
65+	454	21.0	239	34.5	710	24.5
Education						
< High School Graduate	147	15.7	234	23.7	389	19.8
High School Graduate or GED	275	12.1	184	12.9	471	12.5
Some College or Technical School	226	11.4	95	11.7	328	11.3
College Graduate	160	8.2	81	12.2	246	8.9
Income						
< \$15,000	146	16.1	260	21.1	418	19.3
\$15-\$24,999	155	17.2	144	15.2	306	16.2
\$25-\$34,999	98	12.3	55	11.1	155	11.7
\$35-\$49,999	115	12.4	33	9.2	151	11.5
\$50-\$74,999	76	9.5	21	13.0	97	10.2
\$75,000+	92	6.7	9	7.9	104	6.8
Employment Status						
Employed	191	6.5	132	8.6	331	7.2
Not Employed	11	2.5	33	8.1	44	5.6
Student/Homemaker	65	6.7	24	8.2	91	7.0
Retired/Unable to Work	541	23.8	404	31.7	967	26.6
Total	809	11.1	594	14.9	1,435	12.4

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

# **Breast Cancer Screening**

# **Survey Question:**

A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram?

A mammogram and a breast examination by a medical professional (clinical breast exam or CBE) are recommended yearly by the American Cancer Society and the National Cancer Advisory Board for women over the age of 40. The American Cancer

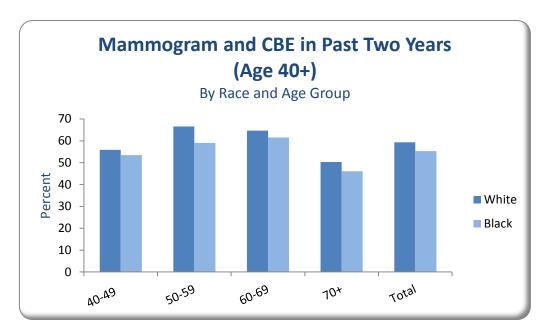


Figure 11

Society states that women between the ages of 20 and 39 should have a clinical breast examination every three years, and all women over age 20 should do breast self examinations (BSE) every month

The MSDH breast and cervical cancer program has established a goal to reduce breast cancer deaths to no more than 24.0 per 100,000 female population. In 2006, the death rate for breast cancer was 28.0 with a rate of 28.2 for white females and 27.8 for blacks. In 2007 the overall breast cancer death rate was 25.8 per 100,000 with whites having a rate of 27.7 while blacks had a rate of 27.3. In 2008 the death rate was 28.0 for whites and 26.7 for blacks for an overall rate of 27.5. The overall rate remained the same for 2009 with whites showing a rate of 26.8 and blacks showing an increase with a death rate of 30.4.

The 2010 BRFSS survey indicated that 80.8 percent of the women in Mississippi age 40 and above had ever had a mammogram and a clinical breast examination (CBE). In women age 50 and older, white respondents had a mammogram and CBE within two years at a rate of 60.5 percent compared to a rate of 56.2 percent for blacks.

### Year 2010 National Health Objective

Increase to at least 70.0 percent the proportion of women aged 50 and older who have received a clinical breast examination and mammogram within the preceding one to two years.

2010 BRFSS data revealed that 59.1 percent of Mississippi women aged 50 and older have received a clinical breast examination and mammogram within the preceding one to two years.

Centers for Disease Control surveys reveal that early detection of breast cancer has increased considerably in recent years, but in 1993 in the United States, only 47 percent of the women aged 50-64 years and 39 percent of women aged 70 years or older reported having a recent mammogram.

The Breast and Cervical Cancer Early Detection Program follows the National Cancer Advisory Board recommendations; however, because of increased incidence and mortality among older women, the program targets women aged 50 to 64.

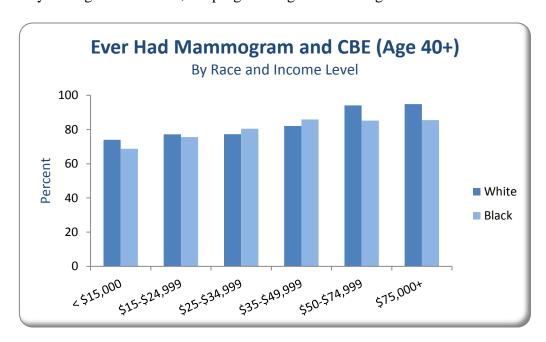


Figure 12

Table 10 Ever Had Mammogram and CBE (Females Age 40+)

	Wh	ite	Bla	ıck	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Age Group						
40-49	311	75	221	67	549	72.0
50-59	612	92	386	81	1,009	87.7
60-69	759	90	276	82	1,046	87.3
70+	928	81	216	70	1,157	78.2
Education						
< High School Graduate	285	68.9	291	61.8	584	65.2
High School Graduate or GED	898	82.5	395	75.2	1,303	79.8
Some College or Technical School	721	84.5	198	81.3	936	83.6
College Graduate	702	91.6	212	85.8	931	90.3
Income						
< \$15,000	370	74.0	392	68.8	771	70.8
\$15-\$24,999	435	77.2	278	75.6	723	76.3
\$25-\$34,999	286	77.3	112	80.5	404	78.5
\$35-\$49,999	316	82.1	92	85.9	413	83.3
\$50-\$74,999	299	94.1	64	85.2	364	92.3
\$75,000+	426	94.9	50	85.5	482	93.2
<b>Employment Status</b>						
Employed	850	87.5	417	78.4	1,286	84.7
Not Employed	72	76.4	71	61.7	146	68.2
Student/Homemaker	344	82.9	52	63.2	401	79.5
Retired/Unable to Work	1,339	81.8	557	75.0	1,921	79.4
Total	2,610	84.0	1,099	74.4	3,761	80.8

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 11 Had CBE and Mammogram In Past 2 Years (Females 50+)

	Wh	White Black		То	tal	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Age Group						
50-59	441	67	296	59	743	63.9
60-69	544	65	201	62	752	63.5
70+	577	50	148	46	734	49.2
Education						
< High School Graduate	154	41.7	175	46.5	331	44.1
High School Graduate or GED	524	56.2	211	51.5	741	54.7
Some College or Technical School	437	62.3	120	64.9	562	62.4
College Graduate	444	74.7	137	76.8	590	75.3
Income						
< \$15,000	200	45.4	215	46.0	419	45.6
\$15-\$24,999	248	50.2	158	55.0	408	51.8
\$25-\$34,999	186	57.7	70	65.3	257	59.2
\$35-\$49,999	185	59.3	67	80.0	256	64.7
\$50-\$74,999	183	72.9	34	82.2 <sup>*</sup>	218	74.0
\$75,000+	260	82.1	32	80.8*	294	82.0
Employment Status						
Employed	477	72.8	217	62.2	701	69.5
Not Employed	33	50.7	33	47.0	67	49.2
Student/Homemaker	189	55.9	23	33.4	213	52.1
Retired/Unable to Work	861	54.9	371	56.9	1,245	55.4
Total	1,562	60.5	645	56.2	2,229	59.1

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

<sup>\*</sup> Observations < 50

# **Cervical Cancer Screening**

# **Survey Question:**

A Pap test is a test for cancer of the cervix. Have you ever had a Pap test?

According to the National Cancer Institute (NCI), cervical cancer—once one of the most common cancers affecting U.S. women—now ranks 14th in frequency. Because precancerous lesions found by Pap smears can be treated and cured before they develop into cancer, and because cervical cancer is often detected before it becomes advanced, the incidence and death rates for this disease are relatively low. According to the most recent data the incidence rate for cervical cancer was 8.1 cases per 100,000 women per year in the United States. The mortality rate was 2.4 deaths per 100,000 women per year. In 2010, an estimated 12,200 women in the United States will be diagnosed with cervical cancer, and an estimated 4,210 will die of the disease. In contrast, the lifetime risk of cervical cancer would be an estimated 3.7 percent in the absence of cervical cancer screening.

There is ample epidemiological evidence to suggest that screening can reduce the number of deaths from cervical cancer. Invasive cervical cancer is preceded in a large proportion of cases by pre-cancerous changes in cervical tissue that can be identified with a Pap test. If cervical cancer is detected early, the likelihood of survival is almost 100 percent with appropriate treatment and follow-up. Risk is substantially decreased among former smokers in comparison to continuing smokers.

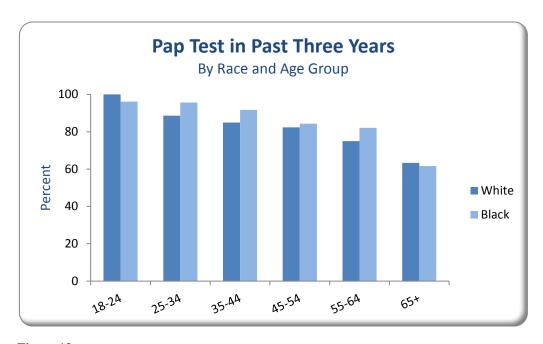


Figure 13

#### Year 2010 National Health Objectives

1. Increase to at least 97.0 percent the proportion of women aged 18 and older who have ever received a Pap test.

2010 BRFSS data indicate that 93.2 percent of Mississippi women aged 18 and older has received a Pap test (Table 12). This figure represents a slight decrease from 94.2 percent reported in 2008 and also a decrease from 94.5 percent reported in 2006.

2. Increase to at least 90.0 percent the proportion of women aged 18 and older who have received a Pap test within the preceding one to three years.

The 2010 BRFSS data indicate that 85.3 percent of Mississippi women aged 18 and older have received a Pap test within the preceding one to three years which is an increase from 80.8 percent reported in 2008.

The rate of Pap screening within three years among women ages 65 and older was substantially lower with a rate of 62.7 percent being reported. White females reported a slightly higher rate at 63.3 percent than did black females who reported a rate of 61.3 percent.

Table 12 Female Respondents Who Have Ever Had a Pap Test<sup>3</sup>

	White		Black		Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Age Group						
18-24	47	75.0	53	85.7	103	78.1
25-34	171	95.7	178	97.4	354	95.8
35-44	238	99.4	224	95.1	470	97.5
45-54	311	98.0	213	93.5	532	95.6
55-64	359	97.4	210	93.8	572	96.2
65+	520	94.3	179	84.9	710	91.3
Education						
< High School Graduate	161	92.7	251	89.4	417	90.2
High School Graduate or GED	456	90.2	386	93.2	851	91.4
Some College or Technical School	472	95.4	228	91.9	717	93.9
College Graduate	558	96.3	199	97.3	769	95.7
Income						
< \$15,000	190	94.5	382	91.8	579	91.5
\$15-\$24,999	256	89.9	268	94.7	535	91.9
\$25-\$34,999	175	95.1	120	93.1	299	94.4
\$35-\$49,999	200	98.7	82	99.0	284	98.8
\$50-\$74,999	221	97.4	57	99.8	279	96.6
\$75,000+	347	96.7	45	86.2*	396	95.2
Employment Status						
Employed	746	94.2	499	95.5	1,262	94.4
Not Employed	85	94.3	125	93.4	213	92.9
Student/Homemaker	277	93.7	91	86.0	374	91.7
Retired/Unable to Work	544	94.7	348	90.1	910	92.8
Total	1,652	94.2	1,065	93.0	2,763	93.2

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

<sup>&</sup>lt;sup>3</sup> Denominator is females who have never had a hysterectomy

<sup>\*</sup> Observations < 50

Table 13 Had a Pap Test in Past 3 Years

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Age Group						
18-24	47	100.0*	49	96.2	99	98.3
25-34	149	88.6	169	95.7	323	91.9
35-44	208	84.9	204	91.7	418	87.4
45-54	252	82.4	179	84.3	438	82.9
55-64	267	75.0	168	82.1	435	76.9
65+	320	63.3	107	61.6	432	62.7
Education						
< High School Graduate	88	63.8	183	79.4	275	72.6
High School Graduate or GED	328	77.6	312	88.4	647	82.9
Some College or Technical School	364	87.1	201	90.5	574	87.5
College Graduate	467	88.7	187	96.7	663	91.0
Income						
< \$15,000	108	64.2	291	80.0	401	74.9
\$15-\$24,999	163	71.5	228	91.0	398	81.9
\$25-\$34,999	133	84.3	115	97.1	250	88.5
\$35-\$49,999	162	84.0	75	96.3	239	87.5
\$50-\$74,999	186	88.9	55	95.0	242	90.5
\$75,000+	319	93.2	43	95.5 <sup>*</sup>	366	93.6
Employment Status						
Employed	638	88.3	454	93.1	1,106	90.2
Not Employed	58	77.2	102	88.4	162	83.3
Student/Homemaker	218	86.8	71	89.4	294	87.2
Retired/Unable to Work	334	64.7	255	78.0	599	70.2
Total	1,248	83.1	883	89.0	2,163	85.3

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

<sup>&</sup>lt;sup>3</sup> Denominator is females who have never had a hysterectomy

<sup>\*</sup> Observations < 50

# **Prostate Cancer Screening**

#### **Survey Question:**

A Prostate-Specific Antigen test, also called a PSA test, is a blood test used to check men for prostate cancer. Have you ever had a PSA test?

According to the American Cancer Society (ACS) prostate cancer is the most common type of cancer found in American men, other than skin cancer. The ACS estimates that there will be about 217,730 new cases of prostate cancer in the United States as of 2010 and about 32,050 men will die of the disease. Prostate cancer is the second leading cause of cancer death in men; lung cancer is the first. It is estimated that one man in six will have prostate cancer during his lifetime, and one in thirty-six will die of this disease. More than two million men in the United States who have had prostate cancer at some point are still surviving. Because it is being detected earlier, the death rate for prostate cancer is decreasing.

The Centers for Disease Control reports that the incidence of prostate cancer in the United States increased by 1.1 percent per year from 1995 through 2003. The incidence of prostate cancer remained level during this period among African-Americans. Deaths from prostate cancer in the United States decreased significantly by 4.0 percent per year from 1994 to 2003. More than 65 percent of all diagnosed prostate cancers are found in men aged 65 years or older. African-American men die of prostate cancer more often than do men in any other racial/ethnic group.

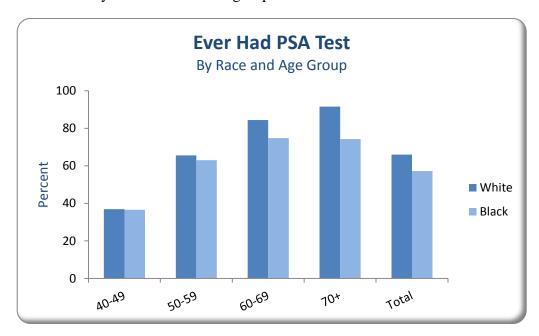


Figure 14

In 2009 the death rate in Mississippi among males for prostate cancer was 21.7 per 100,000: 18.0 for whites and 27.6 for blacks.

Prostate cancer is most common in men aged 65 years and older, who account for approximately 80 percent of all cases of prostate cancer. Digital rectal examination (DRE) and the prostate-specific antigen (PSA) test are two commonly used methods for detecting prostate cancer.

The 2010 BRFSS survey for Mississippi indicated that 62.6 percent of males more than 40 years of age reported ever having had a PSA test. The overall rate for white respondents was 66.0 percent while blacks reported a rate of 57.2 percent. There was a greater difference in rates for men age 60 and older. In the 60-69 age category, the screening rate for whites was 84.4 percent compared to 74.8 percent for blacks and for men 70 and older, whites had a rate of 91.6 percent while blacks had a rate of 74.3 percent.

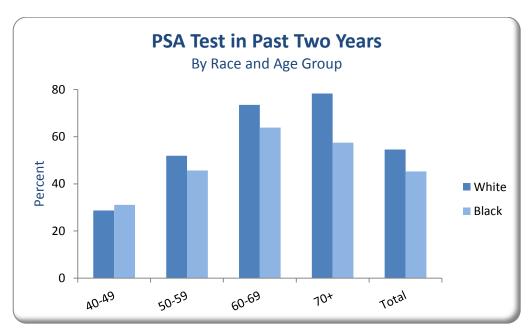


Figure 15

Only 51.0 percent of males over 40 years of age reported having a PSA test within the past two years. The rate for white respondents was 54.6 percent compared to 45.3 percent for blacks. There was a conspicuous difference by race in rates for men more than 70 years of age. White males reported a rate of 78.3 percent while in the black group the rate was on 57.5 percent.

Table 14 Ever Had a PSA Test (Males Age 40+)

	White		Bla	ıck	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Age Group						
40-49	92	36.9	40	36.6	139	36.7
50-59	256	65.6	133	63.0	396	63.7
60-69	376	84.4	114	74.8	498	82.3
70+	420	91.6	95	74.3	522	86.5
Education						
< High School Graduate	128	52.1	119	52.3	252	51.9
High School Graduate or GED	321	58.4	120	48.4	447	54.3
Some College or Technical School	314	69.1	88	72.5	412	69.4
College Graduate	380	75.8	54	64.9	442	72.3
Income						
< \$15,000	64	48.5	103	53.7	176	51.6
\$15-\$24,999	198	71.5	99	57.7	300	63.2
\$25-\$34,999	138	73.6	51	51.1	193	65.4
\$35-\$49,999	190	65.3	39	71.6	232	64.0
\$50-\$74,999	174	70.7	33	68.2 <sup>*</sup>	208	69.8
\$75,000+	266	67.6	21	55.7 <sup>*</sup>	295	66.5
Employment Status						
Employed	439	58.2	136	52.6	586	55.8
Not Employed	25	38.2	19	37.0 <sup>*</sup>	45	37.5
Student/Homemaker	3	53.1*	0	0.0*	3	53.1*
Retired/Unable to Work	676	80.3	226	65.7	919	75.2
Total	1,144	66.0	382	57.2	1,555	62.6

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

<sup>\*</sup>Observations < 50

Table 15 Had PSA Test in Past 2 Years (Males 40+)

	White		Bla	ıck	Tot	al
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Age Group						
40-49	69	28.7	29	31.1	103	29.3
50-59	205	51.9	96	45.7	307	49.2
60-69	329	73.5	96	63.9	430	70.8
70+	356	78.3	74	57.5	434	72.1
Education						
< High School Graduate	94	35.1	84	35.7	181	34.9
High School Graduate or GED	263	47.1	91	36.8	359	43.1
Some College or Technical School	268	57.7	76	64.3	351	58.4
College Graduate	333	66.8	43	55.9	381	63.1
Income						
< \$15,000	48	34.1	74	35.7	129	35.0
\$15-\$24,999	152	53.2	73	45.8	225	47.5
\$25-\$34,999	107	54.1	39	41.4	150	50.2
\$35-\$49,999	161	52.9	31	61.4	195	52.5
\$50-\$74,999	159	64.0	29	60.3 <sup>*</sup>	188	62.2
\$75,000+	239	59.8	19	48.2 <sup>*</sup>	264	58.4
Employment Status						
Employed	368	48.0	105	44.9	481	46.2
Not Employed	19	26.7	11	23.0*	30	24.2
Student/Homemaker	3	53.1*	0	0.0*	3	53.1 <sup>*</sup>
Retired/Unable to Work	568	67.2	178	49.3	758	60.9
Total	959	54.6	295	45.3	1,274	51.0

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

<sup>\*</sup> Observations < 50

# **Colorectal Cancer Screening**

### **Survey Question:**

A 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?

According to the CDC, of cancers that affect both men and women, colorectal cancer is the second leading cause of cancer-related deaths in the United States and the third most common cancer in men and in women. In 2007, the most recent year available, 142,672 people in the United States were diagnosed with colorectal cancer, including 72,755 men and 69,917 women. 53,219 people in the United States died from colorectal cancer, including 27,004 men and 26,215 women.

In the past 15 years there have been fewer cases of colorectal cancer with a consequent decrease in death rates. Screening tests help identify polyps that can be removed before they develop into cancer. When detected early the cancer is easier to cure. Improved treatment protocols have also contributed to the decrease in mortality.

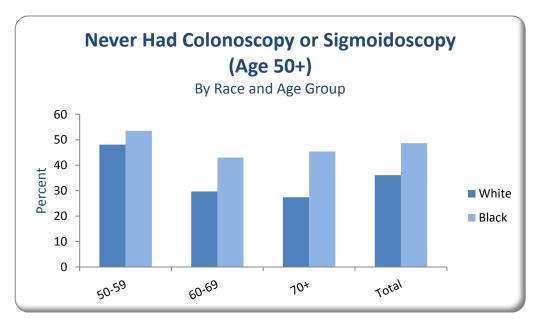


Figure 16

Risk factors for CRC may include age, personal and family history of polyps or colorectal cancer, inflammatory bowel disease, inherited syndromes, physical inactivity (colon only), obesity, alcohol use and a diet high in fat and low in fruits and vegetables.

Fecal Occult Blood Testing and sigmoidoscopy are widely used to screen for CRC, along with barium enema and colonoscopy tests.

In 2009, the death rate for colorectal cancer in Mississippi was 98.5 per 100,000 among people age sixty-five and older; in 2008 it was 97.9. Regular screening, beginning at age 50, is the key to preventing colorectal cancer. The U.S. Preventive Services Task Force (USPSTF) recommends screening for colorectal cancer using high-sensitivity fecal occult blood testing, sigmoidoscopy, or colonoscopy beginning at age 50 years and continuing until age 75 years.

The 2010 BRFSS data for Mississippi indicates that 40.0 percent of those surveyed had never had sigmoidoscopy or colonoscopy examination which is an improvement from 43.1 percent that was reported in the 2008 survey. The survey showed that black respondents were more than 1.3 times more likely to have never had an examination.

The rate for blacks was 48.7 percent compared to 36.1 percent for whites. Blacks who are age 70 or older were 1.7 times more likely to have never had a sigmoidoscopy or colonoscopy: 45.4 for blacks and 27.4 for whites (Figure 16 and Table 16).

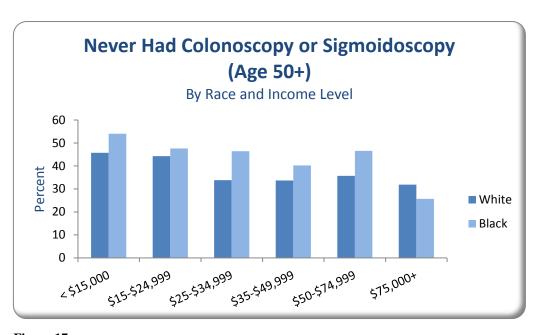


Figure 17

Table 16 Never Had Colonoscopy or Sigmoidoscopy (Age 50+)

	White		Bla	ıck	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	470	38.8	250	53.5	741	43.3
Female	852	33.9	507	45.3	1,376	37.4
Age Group						
50-59	481	48.1	361	53.5	856	50.2
60-69	391	29.7	205	43.0	605	33.2
70+	450	27.4	191	45.4	656	32.3
Education						
< High School Graduate	249	49.5	309	56.1	568	53.0
High School Graduate or GED	475	37.6	266	52.4	752	42.1
Some College or Technical School	333	35.9	103	39.8	444	37.0
College Graduate	263	28.4	74	33.7	346	30.0
Income						
< \$15,000	219	45.7	300	54.0	530	50.4
\$15-\$24,999	296	44.3	186	47.6	490	45.7
\$25-\$34,999	141	33.8	77	46.4	220	37.3
\$35-\$49,999	163	33.7	43	40.2	209	35.5
\$50-\$74,999	133	35.7	30	46.6	164	37.4
\$75,000+	168	31.9	15	25.7	189	32.3
Employment Status						
Employed	464	42.5	235	51.9	710	45.4
Not Employed	42	46.0	69	69.6	113	59.0
Student/Homemaker	119	33.0	40	59.0	160	37.6
Retired/Unable to Work	695	31.5	411	43.5	1,130	35.3
Total	1,322	36.1	757	48.7	2,117	40.0

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 17 No Blood Stool Test in Past 2 Years (Age 50+)

	Wh	ite	Bla	ıck	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	1,018	81.5	401	83.3	1,449	82.1
Female	2,149	82.6	912	84.3	3,101	83.2
Age Group						
50-59	919	88.7	564	86.9	1,504	88.0
60-69	1,016	80.0	397	81.0	1,436	80.4
70+	1,232	75.8	352	81.0	1,610	77.2
Education						
< High School Graduate	446	83.0	473	83.2	932	83.3
High School Graduate or GED	1,108	83.4	432	88.3	1,562	85.0
Some College or Technical School	808	79.7	214	82.4	1,041	80.4
College Graduate	799	82.3	190	77.6	1,005	81.5
Income						
< \$15,000	449	82.9	474	83.4	941	82.9
\$15-\$24,999	568	78.4	349	88.2	931	82.7
\$25-\$34,999	374	82.0	131	81.2	514	82.1
\$35-\$49,999	424	83.2	96	84.9	526	83.7
\$50-\$74,999	343	81.2	60	79.9	407	81.2
\$75,000+	472	83.9	44	74.2	524	83.2
Employment Status						
Employed	980	86.8	405	88.4	1,406	87.4
Not Employed	88	91.5	86	91.5	176	91.6
Student/Homemaker	288	81.9	54	85.2	344	82.1
Retired/Unable to Work	1,807	78.2	765	80.1	2,617	78.9
Total	3,167	82.1	1,313	83.9	4,550	82.7

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

## **Immunization**

## **Survey Question:**

A flu shot is an influenza vaccine injected in your arm. During the past 12 months, have you had a flu shot or have you had a flu vaccine that was sprayed in your nose?

Influenza and pneumonia was the ninth leading cause of death in Mississippi for 2009 producing a death rate of 19.6 per 100,000 populations.

The *Healthy People 2010* goal for influenza vaccinations is that 90 percent of the non-institutionalized people age 65 and older have been vaccinated in the preceding twelve months. The target for those in the 18 to 64 age group who are non-institutionalized is 60 percent. Influenza vaccine can prevent the disease and its complications. In the elderly, the vaccine is less effective in disease prevention, but reduces severity of disease and the incidence of complications and death. It is an important intervention to reduce hospitalizations due to complications of influenza. Influenza vaccine is recommended for all persons 65 years of age and older, and for those with chronic health problems which put them at risk for complications.

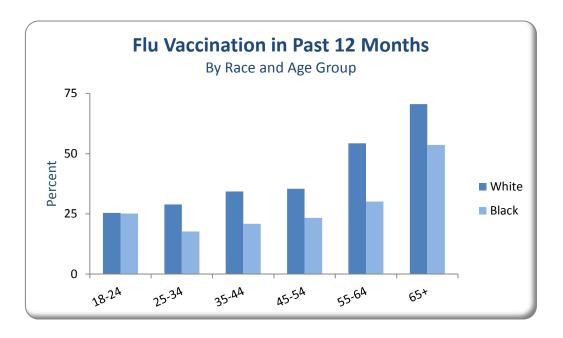


Figure 18

In the 2010 BRFSS survey, 64.8 percent of the respondents age 65 and older reported they had received the influenza vaccine in the last 12 months. The proportion

vaccinated in this age group reflected a substantial difference according to race: 69.5 percent of whites reported having been vaccinated compared to only 51.9 percent for blacks. For the total population the vaccination rates showed little difference with respect to gender: 34.1 percent of the males and 39.0 percent of the females reported receiving a flu vaccination in the past 12 months.

Only 27.6 percent of the respondents said that they had ever received a pneumonia vaccination. Respondents over the age of 65 reported a vaccination rate of 67.6 percent. As was the case with influenza vaccinations there was a marked difference with respect to race: 73.4 percent for whites but only 51.1 percent for blacks.

Table 18 Flu Vaccination in Past 12 Months

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	912	41.0	233	24.4	1,169	35.1
Female	1,921	46.0	576	28.2	2,537	39.5
Age Group						
18-24	24	25.4	20	25.1	47	25.3
25-34	93	28.9	55	17.7	150	24.1
35-44	179	34.3	82	20.9	268	29.5
45-54	293	35.4	130	23.3	436	31.2
55-64	653	54.3	199	30.1	861	46.9
65+	1,583	70.6	318	53.6	1,927	66.3
Education						
< High School Graduate	347	32.9	236	26.3	591	29.3
High School Graduate or GED	913	41.8	267	25.2	1,200	35.2
Some College or Technical School	766	43.8	145	26.2	922	37.8
College Graduate	802	49.3	160	30.0	986	44.5
Income						
< \$15,000	371	41.1	262	22.9	644	29.2
\$15-\$24,999	476	42.0	202	29.0	688	35.2
\$25-\$34,999	342	47.0	91	22.9	439	37.9
\$35-\$49,999	351	39.0	56	25.2	414	35.0
\$50-\$74,999	317	44.7	53	36.9	373	42.6
\$75,000+	493	46.5	42	31.3	545	44.4
Employment Status						
Employed	902	40.2	259	21.3	1,186	33.9
Not Employed	58	16.4	34	13.9	97	15.1
Student/Homemaker	247	31.3	34	26.6	285	30.1
Retired/Unable to Work	1,622	61.6	481	43.1	2,133	55.0
Total	2,833	43.6	809	26.5	3,706	37.4

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 19 Flu Vaccination in Past 12 Months (Age 65+)

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	489	72.4	95	52.4	595	67.6
Female	1,094	69.4	223	54.3	1,332	65.4
Education						
< High School Graduate	257	65.2	150	47.8	412	56.3
High School Graduate or GED	593	72.1	86	56.6	690	69.4
Some College or Technical School	395	72.2	32	58.9	430	69.7
College Graduate	335	70.4	49	67.2	391	70.1
Income						
< \$15,000	279	70.0	132	49.4	417	59.1
\$15-\$24,999	322	68.4	75	56.5	403	64.4
\$25-\$34,999	220	75.6	25	47.9 <sup>*</sup>	247	71.5
\$35-\$49,999	190	68.0	13	55.1 <sup>*</sup>	205	67.3
\$50-\$74,999	112	66.0	7	54.5 <sup>*</sup>	120	65.7
\$75,000+	124	70.2	12	79.1 <sup>*</sup>	139	71.6
Employment Status						
Employed	171	63.2	28	52.2	205	62.1
Not Employed	14	67.3 <sup>*</sup>	3	27.7*	17	46.6 <sup>*</sup>
Student/Homemaker	139	59.1	5	29.8*	144	55.3
Retired/Unable to Work	1,255	73.2	282	55.5	1,557	68.3
Total	1,583	70.6	318	53.6	1,927	66.3

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

<sup>\*</sup>Observations < 50

Table 20 Ever Had Pneumonia Vaccination

	White		Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	704	29.0	203	23.9	924	26.9
Female	1,587	31.8	464	21.3	2,088	28.1
Age Group						
18-24	7	8.8	14	14.9	22	11.8
25-34	26	9.3	46	18.3	73	13.3
35-44	54	11.4	46	14.0	105	12.4
45-54	161	20.2	93	18.2	263	20.0
55-64	437	37.4	174	28.0	618	34.5
65+	1,598	73.4	290	51.1	1,915	67.6
Education						
< High School Graduate	342	33.7	228	28.2	579	30.8
High School Graduate or GED	787	32.5	210	20.4	1,011	27.3
Some College or Technical School	618	31.5	107	19.2	739	27.6
College Graduate	541	26.6	122	24.2	679	25.9
Income						
< \$15,000	388	44.0	256	25.6	655	31.9
\$15-\$24,999	444	40.6	161	23.0	619	31.8
\$25-\$34,999	297	35.8	74	27.6	376	32.5
\$35-\$49,999	292	30.7	38	11.1	336	25.8
\$50-\$74,999	210	28.9	29	13.6	240	24.9
\$75,000+	256	18.7	26	27.3	284	19.5
Employment Status						
Employed	449	17.2	154	15.4	615	16.5
Not Employed	45	11.4	39	13.9	89	13.8
Student/Homemaker	210	21.5	31	16.5	243	19.9
Retired/Unable to Work	1,582	62.1	442	41.5	2,059	54.9
Total	2,291	30.5	667	22.5	3,012	27.6

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 21 Ever Had Pneumonia Vaccination (Age 65+)

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	470	73.6	87	52.6	567	68.3
Female	1,128	73.3	203	50.2	1,348	67.2
Education						
< High School Graduate	260	67.9	131	45.8	397	56.7
High School Graduate or GED	590	72.4	83	57.4	682	69.6
Some College or Technical School	417	79.5	26	45.2	450	75.3
College Graduate	328	72.7	50	65.4	383	70.7
Income						
< \$15,000	288	76.0	127	48.9	422	62.1
\$15-\$24,999	332	71.1	70	53.1	409	65.4
\$25-\$34,999	225	79.7	23	49.9 <sup>*</sup>	252	75.4
\$35-\$49,999	199	74.0	16	64.0 <sup>*</sup>	217	73.4
\$50-\$74,999	112	70.6	5	43.1*	117	67.2
\$75,000+	119	70.0	9	68.5 <sup>*</sup>	129	68.7
Employment Status						
Employed	150	58.3	20	41.9	173	54.3
Not Employed	13	63.2 <sup>*</sup>	5	37.3 <sup>*</sup>	18	48.2 <sup>*</sup>
Student/Homemaker	155	69.1	6	26.4*	162	62.9
Retired/Unable to Work	1,275	76.4	259	53.7	1,557	70.3
Total	1,598	73.4	290	51.1	1,915	67.6

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

<sup>\*</sup>Observations < 50

# Overweight and Obesity

### **Survey Question:**

There is no survey question that solicits the respondent to provide his body mass index (BMI) rather it is calculated from the reported height and weight. See the "Definitions" section for the formula.

The proportion of overweight persons has increased substantially during the past twenty years. Morbidity related to being overweight is the second leading cause of death in the United States and causes approximately 300,000 deaths each year. Overweight persons substantially increase their risk of illness from hypertension, high cholesterol, Type 2 diabetes, heart disease and stroke, gallbladder disease, cancer of the endometrium, breast, prostate and colon as well as arthritis. Overweight people may also suffer from social stigmatization, discrimination and low self-esteem.

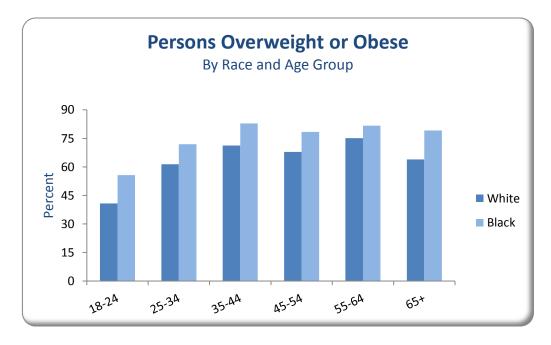


Figure 19

Weight may be controlled by dietary changes such as decreasing caloric intake and by increasing physical activity. According to the 2010 BRFSS study 68.8 percent of those surveyed in Mississippi reported themselves as being either overweight (BMI  $\geq$  25) or obese (BMI  $\geq$ 30). The rate for whites was 65.5 percent compared to 75.1 percent for blacks (Table 25). In year 2009 the self-reported rate was 70.3 percent and in 2008 it was 67.5 percent.

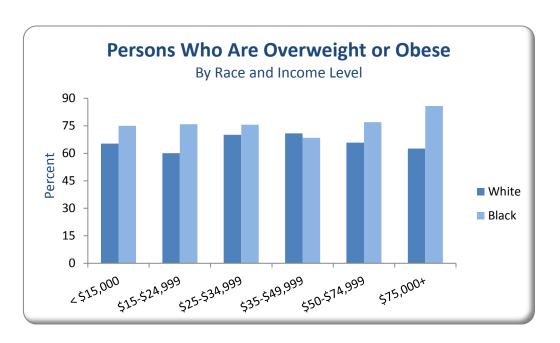


Figure 20

Table 22 Overweight or Obese

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	1,341	73.8	559	70.5	1,944	72.6
Female	1,954	57.5	1,439	79.2	3,440	65.1
Age Group						
18-24	42	40.8	65	55.7	111	48.3
25-34	178	61.4	205	71.9	389	65.5
35-44	346	71.3	308	82.9	666	75.0
45-54	534	67.9	419	78.4	976	71.6
55-64	846	75.1	525	81.7	1,387	77.2
65+	1,340	63.9	467	79.2	1,833	67.5
Education						
< High School Graduate	429	63.9	530	71.3	976	67.9
High School Graduate or GED	1,076	66.4	700	73.5	1,802	69.5
Some College or Technical School	912	67.2	421	80.1	1,359	71.0
College Graduate	873	63.5	345	76.1	1,240	65.9
Income						
< \$15,000	396	62.5	686	78.4	1,104	72.5
\$15-\$24,999	561	66.7	507	71.6	1,088	69.3
\$25-\$34,999	389	71.1	211	77.7	609	73.2
\$35-\$49,999	469	70.1	178	90.8	655	75.3
\$50-\$74,999	401	66.1	121	74.4	527	67.9
\$75,000+	634	67.0	95	81.0	739	68.2
Employment Status						
Employed	1,363	67.7	847	77.0	2,243	70.6
Not Employed	116	57.7	193	62.8	316	60.7
Student/Homemaker	270	50.8	101	65.9	378	54.7
Retired/Unable to Work	1,544	69.6	855	81.3	2,443	73.7
Total	3,295	65.5	1,998	75.1	5,384	68.8

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 23 Obese

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	598	34.7	258	33.9	874	34.1
Female	886	27.3	881	49.1	1,786	34.8
Age Group						
18-24	15	14.6	35	28.3	51	20.8
25-34	86	30.6	118	38.4	207	33.7
35-44	182	38.4	193	50.1	376	41.3
45-54	268	33.8	268	50.3	547	39.3
55-64	405	35.4	302	46.8	716	39.0
65+	527	25.2	219	33.6	757	27.3
Education						
< High School Graduate	215	32.9	323	42.2	544	37.0
High School Graduate or GED	451	30.7	394	40.1	861	34.8
Some College or Technical School	436	34.6	237	43.8	681	36.8
College Graduate	381	27.1	183	42.7	571	30.3
Income						
< \$15,000	193	34.1	414	46.4	619	41.5
\$15-\$24,999	259	33.0	305	43.9	574	38.4
\$25-\$34,999	172	30.7	112	37.7	286	32.8
\$35-\$49,999	223	34.1	93	49.8	319	37.8
\$50-\$74,999	188	32.2	64	38.7	252	33.2
\$75,000+	286	30.2	44	43.3	334	31.4
Employment Status						
Employed	632	31.7	470	40.4	1,110	34.3
Not Employed	51	29.3	104	34.7	156	31.3
Student/Homemaker	121	23.6	65	45.0	190	28.7
Retired/Unable to Work	678	33.1	500	48.2	1,202	38.4
Total	1,484	30.9	1,139	41.9	2,660	34.5

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

## **Asthma**

#### **Survey Question:**

Have you ever been told by a doctor, nurse, or other health professional that you had asthma? If yes: Do you still have asthma?

According to the U. S. Department of Health and Human Services, Healthy People 2010 publication, asthma is a serious and growing health problem. Asthma is a chronic lung disease that affects more than 17 million Americans. The disease is characterized by inflammation of the airways with intermittent bronchospasm which is a narrowing of the bronchial tubes. The inflammation makes the airways smaller making it more difficult for air to move in and out of the lung. In some cases, breathing may be so labored that an asthma attack becomes life-threatening.

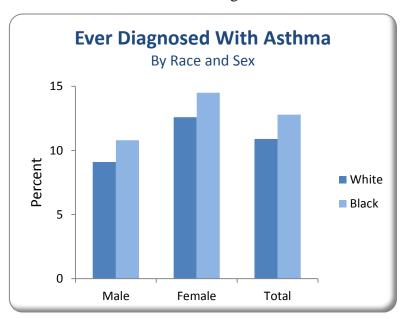


Figure 21

Most of the problems caused by asthma could be averted if persons with asthma and their health care providers managed the disease according to established guidelines. Effective management of asthma comprises four major components: controlling exposure to factors that trigger asthma episodes, adequately managing asthma with medicine, monitoring the disease by using objective measures of lung

function and educating asthma patients to become partners in their own care. Such prevention efforts are essential to interrupt the progression from disease to functional limitation and disability and to improve the quality of life for persons with asthma.

In Mississippi, the 2010 BRFSS survey revealed that 11.6 percent of the respondents said that they had ever had asthma, a minimal decrease from 12.4 percent reported in 2009 which was an increase from 11.2 percent in 2008. The black rate in 2010 was 12.8 percent compared to 10.9 percent for white respondents. Women reported a higher rate than men (Figure 21 and Table 22).

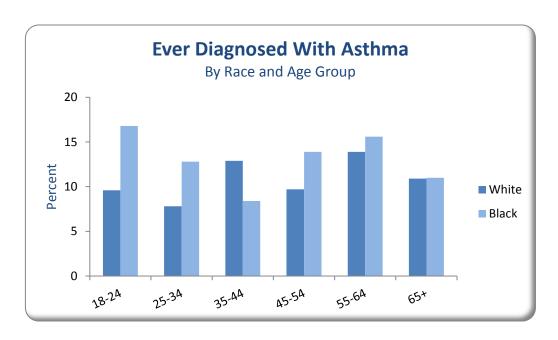


Figure 22

Table 24 Ever Diagnosed With Asthma

	White		Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	180	9.1	84	10.8	270	9.5
Female	442	12.6	275	14.5	732	13.4
Age Group						
18-24	10	9.6	23	16.8	34	12.9
25-34	28	7.8	40	12.8	70	10.1
35-44	65	12.9	40	8.4	107	11.0
45-54	88	9.7	77	13.9	170	11.1
55-64	161	13.9	101	15.6	266	14.4
65+	266	10.9	78	11.0	351	10.9
Education						
< High School Graduate	129	16.9	114	13.2	247	15.0
High School Graduate or GED	177	9.9	123	12.8	303	10.9
Some College or Technical School	173	11.7	73	14.4	255	13.0
College Graduate	143	8.9	49	10.0	197	8.9
Income						
< \$15,000	131	18.2	150	16.7	289	17.3
\$15-\$24,999	124	15.4	95	14.2	221	14.6
\$25-\$34,999	61	9.9	35	15.1	98	11.8
\$35-\$49,999	68	10.2	18	7.6	88	9.5
\$50-\$74,999	47	7.8	11	3.8	60	7.1
\$75,000+	87	8.3	7	5.9	95	7.8
Employment Status						
Employed	193	9.4	109	9.9	309	9.5
Not Employed	24	10.3	45	15.4	73	14.2
Student/Homemaker	61	11.0	21	15.9	83	12.0
Retired/Unable to Work	343	13.9	183	15.6	535	14.4
Total	622	10.9	359	12.8	1,002	11.6

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 25 Currently Have Asthma

	White		Black		Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	102	4.5	53	6.1	157	4.9
Female	312	8.5	212	10.5	537	9.3
Age Group						
18-24	5	3.6	16	11.3	22	7.3
25-34	15	3.8	23	6.3	40	5.2
35-44	36	6.9	31	6.2	68	6.5
45-54	60	6.5	52	8.9	113	7.1
55-64	110	9.7	80	12.0	194	10.4
65+	186	7.3	63	9.0	255	7.8
Education						
< High School Graduate	93	10.8	92	8.9	187	9.6
High School Graduate or GED	120	5.9	88	8.1	211	6.7
Some College or Technical School	113	6.8	47	9.1	167	7.9
College Graduate	88	5.4	38	7.9	129	5.8
Income						
< \$15,000	101	13.7	117	12.0	224	12.6
\$15-\$24,999	81	8.9	69	9.0	151	8.7
\$25-\$34,999	40	5.3	24	10.5	66	7.3
\$35-\$49,999	41	5.6	13	5.4	55	5.5
\$50-\$74,999	27	4.3	6	2.0	34	4.0
\$75,000+	54	5.0	3	2.0	57	4.5
Employment Status						
Employed	107	5.0	72	6.3	183	5.3
Not Employed	16	6.7	31	8.6	50	8.7
Student/Homemaker	39	5.8	12	9.5	52	6.6
Retired/Unable to Work	252	10.0	150	12.1	409	10.7
Total	414	6.6	265	8.5	694	7.2

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

#### Exercise

#### **Survey 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?

On average, physically active people outlive those who are inactive. Regular physical activity helps to maintain the functional independence of older adults and enhances the quality of life for people of all ages. The role of physical activity in preventing coronary heart disease (CHD) is of particular importance, given that CHD is the leading cause of death and disability in the United States and in Mississippi. Physically inactive people are almost twice as likely to develop CHD as persons who engage in regular physical activity. The risk posed by physical inactivity is almost as high as several well-known CHD risk factors such as cigarette smoking, high blood pressure and high blood cholesterol. Physical inactivity is more prevalent than any other of these risk factors.

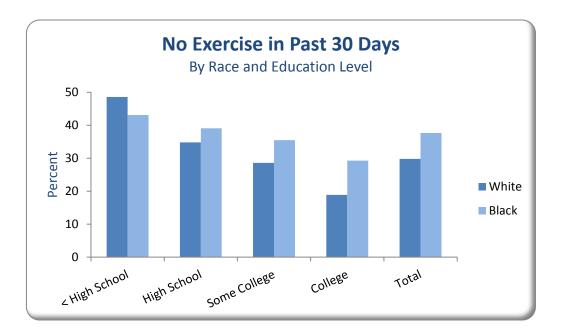


Figure 23

Regular physical activity is important for people who have joint or bone problems and has been shown to improve muscle function, cardiovascular function, and physical performance. People with osteoporosis may respond positively to regular physical activity, particularly weight-bearing activities such as walking and especially when combined with appropriate drug therapy and calcium intake.

In Mississippi, 33.0 percent of the population is reported as not participating in any physical activity outside of work in the past 30 days. People with less education (Figure 23) and in lower income levels (Figure 24) reported the highest percentage of physical inactivity.



Figure 24

Table 26 No Exercise in Past 30 Days

	White		Black		Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	534	27.1	261	34.4	813	29.4
Female	1,320	32.8	798	42.4	2,157	36.3
Age Group						
18-24	18	17.2	34	24.7	54	20.6
25-34	65	23.5	98	40.2	166	30.6
35-44	130	26.5	158	38.7	293	30.4
45-54	292	33.3	223	42.4	529	36.4
55-64	456	35.7	270	43.3	738	38.1
65+	888	36.6	269	42.5	1,176	38.1
Education						
< High School Graduate	354	47.2	342	50.8	707	48.7
High School Graduate or GED	699	36.2	415	44.1	1,127	39.5
Some College or Technical School	463	28.1	182	31.5	664	29.1
College Graduate	335	19.4	117	21.1	465	20.0
Income						
< \$15,000	348	50.9	422	51.0	790	51.3
\$15-\$24,999	383	43.4	277	40.9	674	42.1
\$25-\$34,999	205	29.2	100	31.9	311	30.1
\$35-\$49,999	209	23.6	67	30.5	278	24.8
\$50-\$74,999	168	21.7	32	20.6	202	21.2
\$75,000+	197	19.4	23	17.9	221	18.8
Employment Status						
Employed	568	24.3	387	34.0	970	27.3
Not Employed	73	34.1	103	41.3	181	37.7
Student/Homemaker	179	25.4	51	27.6	234	26.3
Retired/Unable to Work	1,030	42.3	514	48.4	1,576	44.6
Total	1,854	30.0	1,059	38.7	2,970	33.0

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

## **Oral Health**

## **Survey Question:**

- 1. How long has it been since you last visited a dentist or a dental clinic for any reason?
- 2. How many of your permanent teeth have been removed because of tooth decay or gum disease?
- 3. How long has it been since you had your teeth cleaned by a dentist or dental hygienist?

Oral health is an essential and integral component of health throughout life. According Healthy People 2010, poor oral health and untreated oral diseases and conditions can have a significant impact on quality of life. Millions of people in the United States are at high risk for oral health problems. Oral and facial pain affects a substantial proportion of the general population.

A full dentition is defined as having 28 natural teeth, exclusive of third molars and teeth removed for

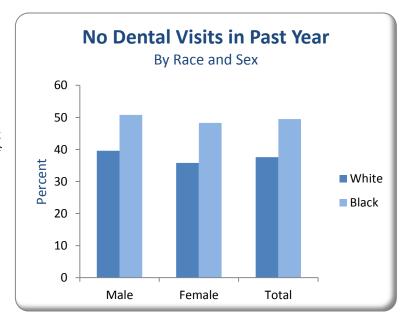


Figure 25

orthodontic treatment or as a result of trauma. Most persons can keep their teeth for life with optimal personal, professional and preventive practices.

Early tooth loss has been shown to be a predictor of eventual edentulism. As teeth are lost, the ability to chew and speak decreases along with the ability to function properly socially. The 2010 national goal for adults who have never had permanent teeth extracted is 42 percent.

According to the 2010 BRFSS Survey for Mississippi, 56.1 percent of the respondents reported having one or more of their permanent teeth removed. In 2008 the rate was 58.1 percent.

Older people reported the loss of permanent teeth much more frequently than their younger counterparts (Figure 27). Only 17.1 percent of respondents in the 18-24 age category reported the loss of permanent teeth while 83.9 percent in the over age 65

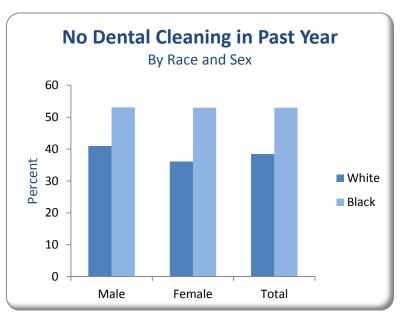


Figure 26

category reported losing permanent teeth. The rate for white respondents reporting tooth loss was 51.8 percent; for blacks it was 64.3 percent.

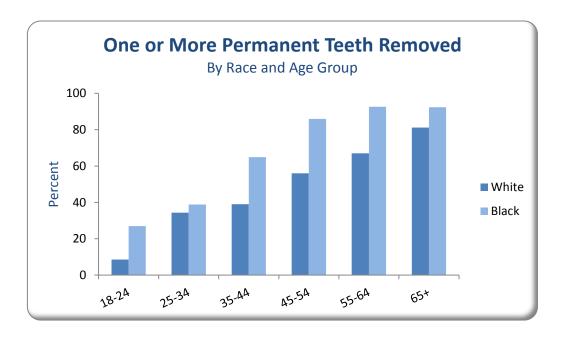


Figure 27

Oral health diseases such as tooth decay and periodontal diseases are common health problems in Mississippi, yet 41.9 percent of respondents from the 2010 BRFSS Survey reported that they have not seen a dentist within the last twelve months (Figure 25). Failure to see a dentist within the past year was observed most frequently among white respondents who less than a high school education with a rate of 69.1 percent. Next were

black respondents who have less that a high school education 68.0 percent, followed by whites who report an annual income of less than \$15,000 with a rate of 63.5 percent (Table 27).

As has been the case historically, people with incomes above \$75,000 per year reported the lowest number of visits outside a year with a rate of 18.5 percent. The survey revealed that as the income of the respondents decreases, so also the number of visits to a dentist within a year decreases. With respect to race, 50.8 percent of the black males reported visits to a dental facility more than one year ago compared to 39.6 percent for white males. The rate for black females was 48.3 percent while white females reported a rate of 35.8 percent (Table 27).

Table 27 No Dental Visits in Past Year

	White		Black		Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	747	39.6	442	50.8	1,219	43.5
Female	1,305	35.8	996	48.3	2,341	40.4
Age Group						
18-24	36	38.2	44	37.2	83	37.5
25-34	111	40.6	118	45.2	233	42.5
35-44	180	34.4	169	42.5	359	37.6
45-54	321	35.5	283	53.1	616	41.7
55-64	431	33.9	385	56.6	829	40.9
65+	969	42.9	429	69.6	1,425	49.8
Education						
< High School Graduate	483	69.1	524	68.0	1,025	68.4
High School Graduate or GED	775	46.0	504	47.0	1,298	46.7
Some College or Technical School	512	35.1	262	47.5	795	39.2
College Graduate	277	19.9	146	33.5	435	23.3
Income						
< \$15,000	454	63.6	596	63.5	1,072	63.1
\$15-\$24,999	485	57.0	389	52.3	891	55.1
\$25-\$34,999	245	42.7	125	47.6	377	44.5
\$35-\$49,999	219	35.0	73	33.2	299	35.7
\$50-\$74,999	150	26.5	33	24.3	183	25.6
\$75,000+	168	18.5	28	24.2	196	18.6
Employment Status						
Employed	627	31.3	469	39.9	1,116	34.3
Not Employed	110	60.7	171	56.5	288	58.6
Student/Homemaker	209	34.3	82	47.3	294	37.0
Retired/Unable to Work	1,102	46.0	710	62.8	1,852	52.1
Total	2,052	37.6	1,438	49.5	3,560	41.9

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 28 More Than One Year Since Last Dental Cleaning

	White		Black		Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	627	41.0	392	53.1	1,042	45.2
Female	1,030	36.1	903	53.0	1,966	42.2
Age Group						
18-24	39	41.0	52	42.2	94	41.2
25-34	124	46.3	141	51.6	269	48.3
35-44	195	37.9	197	48.3	401	41.8
45-54	304	36.5	287	58.8	604	44.5
55-64	397	34.1	334	60.2	740	41.7
65+	593	35.2	275	66.6	884	42.1
Education						
< High School Graduate	284	72.1	415	73.3	710	72.3
High School Graduate or GED	604	48.1	484	53.9	1,104	50.8
Some College or Technical School	467	37.7	244	47.7	729	40.9
College Graduate	298	21.8	149	36.6	457	25.3
Income						
< \$15,000	275	66.7	509	71.2	798	69.0
\$15-\$24,999	379	61.8	360	54.6	755	58.5
\$25-\$34,999	201	43.7	119	51.8	325	46.6
\$35-\$49,999	223	37.7	73	35.7	302	38.3
\$50-\$74,999	156	29.8	43	29.5	199	29.3
\$75,000+	186	20.3	27	23.9	214	20.3
Employment Status						
Employed	622	33.9	489	45.0	1,129	37.7
Not Employed	101	68.0	171	60.7	278	63.7
Student/Homemaker	173	35.3	69	48.5	245	37.9
Retired/Unable to Work	759	43.2	559	66.6	1,347	51.5
Total	1,657	38.5	1,295	53.0	3,008	43.6

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 29 Have Had at Least One Permanent Tooth Extracted

	White		Black		Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	1,152	51.8	589	60.0	1,786	54.6
Female	2,280	51.9	1,481	68.1	3,816	57.6
Age Group						
18-24	11	8.5	33	26.9	45	17.1
25-34	98	34.3	128	38.8	229	35.8
35-44	196	39.0	258	64.9	466	49.2
45-54	477	56.0	452	85.9	952	65.9
55-64	825	67.0	600	92.6	1,445	74.9
65+	1,818	81.2	585	92.4	2,441	83.9
Education						
< High School Graduate	593	75.8	655	81.1	1,267	78.0
High School Graduate or GED	1,291	64.5	744	67.1	2,065	65.7
Some College or Technical School	955	53.5	361	49.0	1,345	52.3
College Graduate	588	29.3	304	57.9	913	35.6
Income						
< \$15,000	578	83.1	751	73.7	1,353	76.0
\$15-\$24,999	722	69.0	536	68.2	1,283	68.4
\$25-\$34,999	422	60.9	209	65.8	644	63.5
\$35-\$49,999	454	58.3	152	62.6	614	59.4
\$50-\$74,999	335	44.9	98	47.5	437	45.2
\$75,000+	386	30.8	77	50.5	471	33.4
Employment Status						
Employed	1,051	41.5	775	58.1	1,859	47.1
Not Employed	129	51.2	193	54.7	329	53.0
Student/Homemaker	325	39.1	94	43.0	424	40.0
Retired/Unable to Work	1,923	77.8	1,003	87.0	2,981	81.0
Total	3,432	51.8	2,070	64.3	5,602	56.1

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

## Cardiovascular Disease

### **Survey Question:**

Has a doctor, nurse, or other health professional ever told you that you had any of the following: A heart attack, also called a myocardial infarction? Angina or coronary heart disease? A stroke?

Cardiovascular disease (CVD) includes coronary heart disease, stroke, complications of hypertension, and diseases of the arterial blood vessels. In addition to causing almost half of all deaths in Mississippi, CVD is a major cause of premature, permanent disability among working adults. Stroke alone disables almost 2,000 Mississippians each year. In the 2010 BRFSS survey approximately 10.4 percent of Mississippi adults or more than 227,000 people report having some kind of

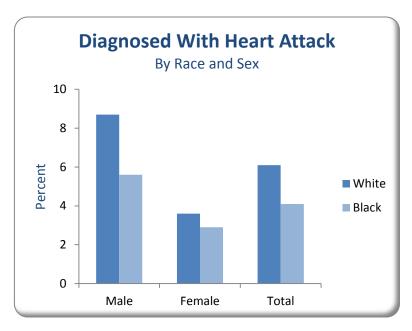
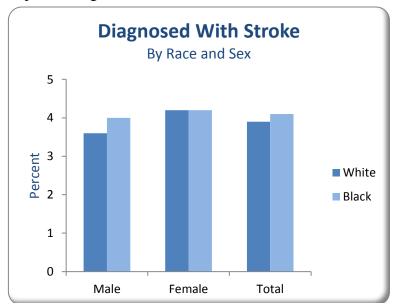


Figure 28



CVD, such as coronary heart disease, angina, previous heart attack, or stroke.

In 2009 Mississippi reported 7,487 deaths from heart disease and 1,422 from cerebrovascular disease (stroke). The two combined accounted for more than thirty-one percent of all the deaths reported that year and almost forty-one percent of

Figure 29

the total from the ten leading causes of death.

The 2010 BRFSS survey revealed that 12.8 percent of the population 65 years of age or older reported that they have been diagnosed as having had a heart attack: 13.6 for white respondents and 10.7 for blacks. The second highest age group that reported being diagnosed with a heart attack was the 55 to 64 category. Both whites and blacks reported a rate of 9.4 percent (Table 30).

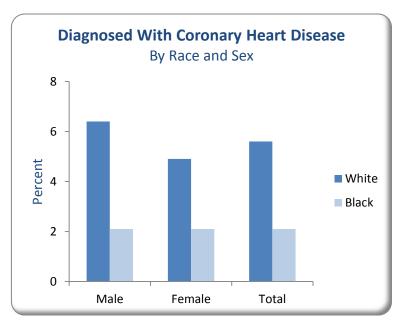


Figure 30

Table 31 shows that the rate for those who had been diagnosed with a stroke age 65 and greater was 9.8 percent for whites and 9.5 percent for blacks. In the 55 to 64 group the rates were 4.5 and 9.2 for whites and blacks respectively.

Those in the older age groups also reported a higher rate of coronary artery disease. Those age 65 and older reported a rate of 11.2 percent with white respondents having a rate of 12.6 percent compared to 6.7 for blacks. The 55 to 64 age category had an overall rate of 9.9 percent: 11.1 for whites and 6.7 for blacks (Table 32).

Table 30 Ever Diagnosed With a Heart Attack

	White		Bla	ıck	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	239	8.7	64	5.6	308	7.5
Female	216	3.6	84	2.9	307	3.5
Age Group						
18-24	1	1.7	1	2.2	2	1.9
25-34	0	0.0	1	0.3	2	0.5
35-44	9	2.7	6	2.3	16	2.5
45-54	43	6.0	23	4.1	68	5.3
55-64	103	9.4	52	9.4	159	9.5
65+	299	13.6	64	10.7	367	12.8
Education						
< High School Graduate	107	10.8	71	9.5	181	10.1
High School Graduate or GED	165	7.1	39	2.8	206	5.3
Some College or Technical School	113	6.0	25	2.7	143	5.2
College Graduate	69	3.3	12	2.1	83	3.0
Income						
< \$15,000	97	10.8	70	6.0	172	7.7
\$15-\$24,999	116	10.7	44	7.5	164	9.2
\$25-\$34,999	55	7.7	5	1.5	60	5.2
\$35-\$49,999	49	6.0	4	0.9	53	4.6
\$50-\$74,999	39	3.8	3	0.8	42	3.0
\$75,000+	40	3.3	0	0.0	40	2.8
Employment Status						
Employed	62	2.7	23	1.5	85	2.2
Not Employed	11	3.6	7	2.9	21	4.1
Student/Homemaker	23	2.9	4	1.3	28	2.5
Retired/Unable to Work	359	14.5	114	10.4	481	13.1
Total	455	6.1	148	4.1	615	5.4

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 31 Ever Diagnosed With a Stroke

	White		Bla	ıck	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	111	3.6	61	4.0	180	3.9
Female	211	4.2	121	4.2	339	4.2
Age Group						
18-24	1	1.5	0	0.0	1	0.7
25-34	3	0.8	1	0.1	5	0.8
35-44	8	1.7	8	1.7	18	1.8
45-54	27	3.3	40	7.7	68	4.7
55-64	59	4.5	68	9.2	132	6.1
65+	224	9.8	64	9.5	294	9.7
Education						
< High School Graduate	79	7.6	82	7.7	164	7.7
High School Graduate or GED	115	4.1	55	3.0	173	3.7
Some College or Technical School	81	4.1	27	3.5	114	4.0
College Graduate	46	2.2	18	2.6	67	2.5
Income						
< \$15,000	81	7.9	90	6.4	179	7.1
\$15-\$24,999	83	8.2	43	5.2	131	6.9
\$25-\$34,999	40	4.9	6	1.0	46	3.3
\$35-\$49,999	29	2.6	5	1.1	35	2.2
\$50-\$74,999	20	2.2	8	4.3	28	2.7
\$75,000+	15	1.4	2	0.4	17	1.2
Employment Status						
Employed	34	1.1	27	1.6	63	1.3
Not Employed	7	2.1	7	1.0	16	1.7
Student/Homemaker	23	2.9	4	1.7	30	3.2
Retired/Unable to Work	257	10.1	144	10.9	409	10.5
Total	322	3.9	182	4.1	519	4.0

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 32 Ever Diagnosed With Coronary Artery Disease

	White		Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	184	6.4	32	2.1	224	5.0
Female	257	4.9	70	2.1	336	3.9
Age Group						
18-24	0	0.0	0	0.0	0	0.0
25-34	1	0.4	1	0.1	2	0.2
35-44	12	2.2	4	0.6	19	1.9
45-54	36	4.3	12	1.5	48	3.2
55-64	120	11.1	41	6.7	166	9.9
65+	272	12.6	44	6.7	325	11.2
Education						
< High School Graduate	66	6.7	32	3.0	101	4.8
High School Graduate or GED	160	5.9	38	2.0	200	4.2
Some College or Technical School	132	6.5	20	1.8	162	5.3
College Graduate	82	4.1	12	1.7	96	3.5
Income						
< \$15,000	77	8.9	50	3.0	132	5.2
\$15-\$24,999	115	9.7	25	2.4	144	6.1
\$25-\$34,999	63	8.4	7	1.6	73	5.8
\$35-\$49,999	56	6.8	4	1.3	61	5.3
\$50-\$74,999	36	3.9	0	0.0	36	2.9
\$75,000+	42	2.9	2	1.3	46	2.8
Employment Status						
Employed	73	2.4	13	0.8	88	1.9
Not Employed	4	1.8	6	0.7	11	1.3
Student/Homemaker	37	2.9	2	0.8	41	2.4
Retired/Unable to Work	327	13.9	81	5.6	420	11.1
Total	441	5.6	102	2.1	560	4.4

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

## **Disability**

#### **Survey Question:**

Are you limited in any way in any activities because of physical, mental, or emotional problems?

Traditionally, the health status of persons with disabilities has been associated with medical care, rehabilitation services and long-term care financing according to Healthy People 2010. A number of health care professionals believe that these are misconceptions resulting in a lack of emphasis on health promotion that target people with disabilities and has led to an increase in secondary conditions such as social, emotional, family and community problems.

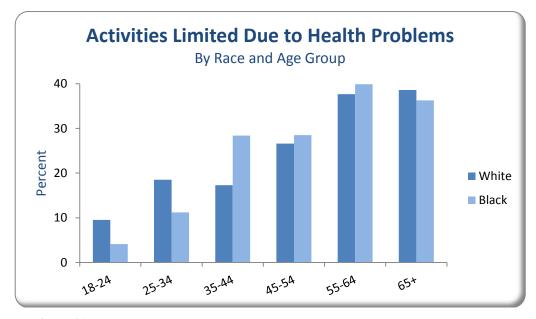


Figure 31

According to the Centers for Disease control and Prevention (CDC), people who have activity limitations report having had more days of pain, depression, anxiety, and sleeplessness and fewer days of vitality during the previous month than people not reporting activity limitations. In view of the increased rates of disability, it is important to target activities and services that address all aspects of health and well-being, as well as providing access to medical care. For an older person with a disability, it is important to target conditions that may threaten their well-being.

There are few data systems that identify those with disabilities as a sub-population. Despite the paucity of data, some disparities between people with and without disabilities have been noted. These disparities include excess weight, reduced physical activity,

increased stress, and less frequent mammograms for women over age 55 years with disabilities.

In the 2010 BRFSS survey, 25.3 percent of Mississippians reported that their activities were limited because of health problems compared to 24.1 percent in 2009. White respondents reported a rate of 26.3 percent, up from 24.7 in 2009 while blacks reported a rate of 23.7 percent, which remained essentially unchanged from the rate reported in 2009. Figure 31 reflects the fact that these limitations increase with age for both races. People over the age of 65 report a rate of 38.1 percent (38.6 for whites and 36.3 for blacks) but the 18-24 age group had a rate of only 7.3 percent (9.5 for white and 4.1 for blacks).

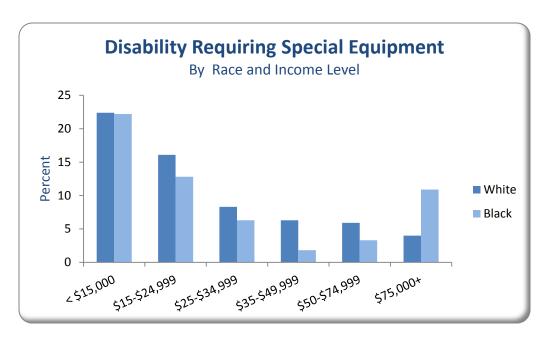


Figure 32

Only 10.6 percent of the population has health problems that require special equipment such as a wheelchair, special bed, cane or special telephone. Figure 32 shows that those with lower incomes tend to require special equipment for health problems.

Table 33 Activities Limited Due to Physical, Mental or Emotional Problems

	Wh	White		ıck	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	564	25.3	238	24.1	825	24.7
Female	1,196	27.2	555	23.3	1,785	25.9
Age Group						
18-24	11	9.5	6	4.1	19	7.3
25-34	47	18.5	35	11.2	83	15.4
35-44	99	17.3	96	28.4	200	21.4
45-54	246	26.6	150	28.5	407	27.0
55-64	477	37.7	268	39.9	759	38.5
65+	878	38.6	232	36.3	1,132	38.1
Education						
< High School Graduate	332	42.7	262	31.6	608	37.4
High School Graduate or GED	585	27.6	284	24.7	880	26.2
Some College or Technical School	503	28.0	152	19.3	677	25.6
College Graduate	338	17.3	93	17.1	440	16.8
Income						
< \$15,000	366	51.7	383	37.1	770	42.2
\$15-\$24,999	393	44.8	187	24.4	597	35.3
\$25-\$34,999	221	32.5	50	12.8	275	24.5
\$35-\$49,999	196	21.9	22	8.5	220	18.1
\$50-\$74,999	145	19.0	19	8.4	166	16.7
\$75,000+	162	12.6	19	18.8	182	13.1
Employment Status						
Employed	351	13.9	125	10.0	484	12.4
Not Employed	68	24.9	53	14.6	127	20.2
Student/Homemaker	152	20.7	26	10.2	180	17.9
Retired/Unable to Work	1,186	52.7	587	56.7	1,814	54.2
Total	1,760	26.3	793	23.7	2,610	25.3

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 34 Health Problems Requiring Special Equipment

	White		Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	224	9.1	133	13.4	370	10.5
Female	519	9.7	321	12.7	857	10.8
Age Group						
18-24	2	0.8	1	1.1	3	0.9
25-34	10	3.5	12	3.5	22	3.4
35-44	19	4.4	43	14.2	65	8.0
45-54	82	9.3	64	11.9	150	10.2
55-64	148	12.0	136	21.7	290	15.0
65+	480	20.6	195	33.4	692	24.0
Education						
< High School Graduate	183	18.8	183	21.1	378	20.0
High School Graduate or GED	233	8.7	159	13.2	399	10.5
Some College or Technical School	209	10.7	67	8.2	283	9.9
College Graduate	117	5.3	45	8.8	166	6.0
Income						
< \$15,000	203	22.4	231	22.2	449	22.4
\$15-\$24,999	165	16.1	100	12.8	275	14.7
\$25-\$34,999	71	8.3	22	6.3	95	7.5
\$35-\$49,999	62	6.3	8	1.8	70	5.0
\$50-\$74,999	43	5.9	5	3.3	48	5.2
\$75,000+	45	4.0	6	10.9	51	4.7
Employment Status						
Employed	55	2.2	30	2.4	85	2.2
Not Employed	13	3.7	20	3.6	35	3.8
Student/Homemaker	65	6.1	14	4.5	81	5.7
Retired/Unable to Work	609	25.9	390	39.4	1,025	30.8
Total	743	9.4	454	13.0	1,227	10.6

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

# **Alcohol Consumption**

#### **Survey Question:**

Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on an occasion?

Excessive drinking has consequences for virtually every part of the human body. The wide range of alcohol-induced disorders is due, among other factors, to differences in the amount, duration, and patterns of alcohol consumption, as well as differences in genetic vulnerability to particular alcohol-related consequences.

Alcohol use has been linked with a substantial proportion of injuries and deaths from motor vehicle crashes, falls, fires and drowning. It also is a factor in homicide, suicide, marital violence and child abuse and has been associated with high risk sexual behavior. Persons who drink even relatively small amounts of alcoholic beverages may contribute to alcohol-related death and injury in occupational incidents especially if they drink before operating a vehicle. In 2008 alcohol use was associated with 38 percent of all motor vehicle crash fatalities, according to the Mississippi Office of Highway Safety.

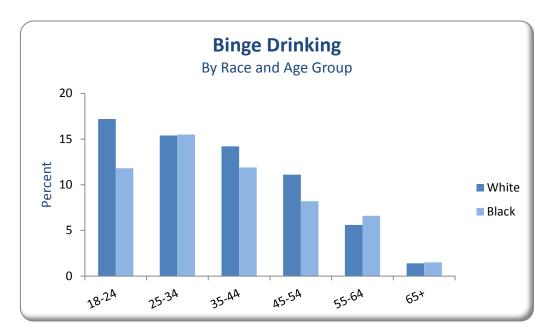


Figure 33

Historically the BRFSS Survey has revealed that the group with the highest rate of binge drinking has been white males in the 18-24 age category. In the 2010 survey the rate for this group was 16.6 percent. Since 1999 when the rate of binge drinking for this group was reported to be 33.5 percent, the survey has shown an overall decline within

this age segment. In 2002 the rate was 24.0 percent, in 2003 it was 26.7, in 2004 it was 24.5, in 2005 it was 21.2, in 2008 it was 16.6, and in 2009 it was 15.4.

The 2010 survey revealed that males were 3.4 times more likely to indulge in binge drinking than females. Only 4.7 percent of female respondents said they had five or more drinks on one occasion during the last thirty days compared to 15.8 percent for males.

Table 35 At Risk From Binge Drinking

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	192	15.4	77	17.5	272	15.8
Female	113	5.2	63	3.7	179	4.7
Age Group						
18-24	18	17.2	10	11.8	29	14.7
25-34	39	15.4	24	15.5	63	15.0
35-44	68	14.2	31	11.9	103	13.5
45-54	84	11.1	37	8.2	121	9.7
55-64	67	5.6	29	6.6	97	5.9
65+	28	1.4	9	1.5	37	1.4
Education						
< High School Graduate	26	7.2	44	11.3	70	9.1
High School Graduate or GED	82	8.2	50	12.9	132	10.0
Some College or Technical School	84	10.0	29	7.5	117	9.3
College Graduate	113	12.9	17	5.6	132	11.0
Income						
< \$15,000	16	6.6	39	7.8	56	7.3
\$15-\$24,999	42	7.5	39	11.7	82	9.3
\$25-\$34,999	23	8.2	25	15.3	48	10.8
\$35-\$49,999	40	6.7	14	15.0	54	8.6
\$50-\$74,999	45	10.0	5	2.3	51	8.5
\$75,000+	106	16.1	6	11.1	114	15.3
Employment Status						
Employed	213	14.5	74	10.8	291	13.1
Not Employed	19	8.1	26	16.4	47	12.9
Student/Homemaker	15	6.7	7	3.6	22	5.8
Retired/Unable to Work	58	3.6	33	6.6	91	4.5
Total	305	10.0	140	10.0	451	9.9

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 36 At Risk From Chronic Drinking

	White		Bla	ıck	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	77	4.1	27	4.7	105	4.2
Female	75	2.7	25	1.7	100	2.3
Age Group						
18-24	2	1.5	1	0.7	3	1.1
25-34	12	3.7	7	4.4	19	3.9
35-44	23	4.4	17	5.4	41	4.7
45-54	25	3.6	14	3.3	39	3.3
55-64	47	3.7	10	1.8	57	3.1
65+	43	2.4	3	0.8	46	2.0
Education						
< High School Graduate	12	2.3	15	2.7	27	2.5
High School Graduate or GED	37	2.9	21	4.4	58	3.4
Some College or Technical School	41	4.2	9	2.1	51	3.5
College Graduate	62	3.4	7	2.1	69	3.0
Income						
< \$15,000	9	2.1	9	1.6	19	1.9
\$15-\$24,999	27	3.9	14	3.3	41	3.5
\$25-\$34,999	14	2.5	8	6.4	22	4.0
\$35-\$49,999	23	4.4	12	8.9	35	5.4
\$50-\$74,999	21	3.4	5	2.4	26	3.1
\$75,000+	40	4.2	1	0.7	41	3.6
Employment Status						
Employed	72	3.9	31	4.3	103	3.9
Not Employed	12	5.8	6	2.1	19	3.7
Student/Homemaker	11	2.2	3	2.7	14	2.3
Retired/Unable to Work	57	2.4	12	1.5	69	2.0
Total	152	3.4	52	3.1	205	3.2

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

## **Drinking and Driving**

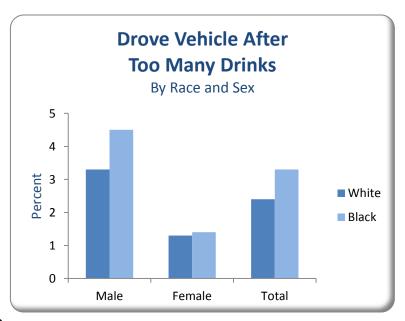
### **Survey Question:**

During the past month, how many times have you driven when you have had perhaps too much to drink?

The National Highway Traffic Safety Administration (NHTSA) reports that in 2008 there were 11,773 alcohol-related motor vehicle fatalities in the United States. In the same year Mississippi reported 251 such fatalities which accounted for approximately 34.0 percent of all vehicular deaths that year which remained unchanged from 2007.

Between 2003 and 2007 NHTSA further reported that, on Mississippi roadways, there were 1,558 traffic fatalities in which the crash victims registered a blood alcohol content of 0.08 percent or more. This is an average of 311 fatalities per year and accounts for approximately 42 percent of all traffic fatalities during the five-year period.

In Mississippi, males were much more likely than females to have driven after having too much to drink according to the 2010 BRFSS report. The rate for males was 3.9 percent compared to only 1.4 for females. White males were more than 2.5 times more likely to drive after excessive drinking than white females: black males were 3.2 times more likely than were black females.



The demographic group that reported the highest rate

Figure 34

of drinking and driving was black respondents age 25 to 34 with a rate of 6.3 percent. The next highest group was blacks in the 18 to 24 age group who showed a rate of 5.8 percent. The third highest group was whites 18 to 24 who reported a rate of 5.0 percent.

Table 37 Report Driving While Having Too Much to Drink in Past Month\*

	White		Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	19	3.3	11	4.5	31	3.9
Female	9	1.3	3	1.4	13	1.4
Age Group						
18-24	3	5.0	3	5.8	6	5.1
25-34	1	1.5	4	6.3	5	3.5
35-44	6	2.3	1	0.6	9	2.5
45-54	10	3.9	2	1.5	12	3.1
55-64	5	1.0	3	2.2	8	1.3
65+	3	1.5	1	1.0	4	1.4
Education						
< High School Graduate	2	3.6	2	6.2	4	4.8
High School Graduate or GED	7	1.8	4	2.4	11	2.0
Some College or Technical School	12	4.5	6	5.1	19	4.6
College Graduate	7	1.2	2	0.8	10	1.6
Income						
< \$15,000	2	2.0	3	3.9	5	3.2
\$15-\$24,999	8	4.8	5	7.0	14	6.2
\$25-\$34,999	1	2.1	3	2.5	4	2.2
\$35-\$49,999	4	1.7	0	0.0	4	1.1
\$50-\$74,999	2	2.9	0	0.0	2	2.0
\$75,000+	9	2.5	0	0.0	10	2.7
Employment Status						
Employed	21	2.9	8	3.6	30	3.3
Not Employed	0	0.0	3	5.0	4	3.2
Student/Homemaker	1	2.1	1	2.8	2	2.2
Retired/Unable to Work	6	1.8	2	0.5	8	1.4
Total	28	2.4	14	3.3	44	2.8

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

<sup>\*</sup> Denominator is those who report drinking

### **Falls**

#### **Survey Question:**

- 1. The next question asks about a recent fall. By a fall, we mean when a person unintentionally comes to rest on the ground or another lower level. In the past three months, how many times have you fallen?
- 2. How many of these falls caused an injury? By an injury, we mean the fall caused you to limit your regular activities for at least a day or to go see a doctor.

Unintentional falls are the seventh leading cause of injury death among people age 45 to 54, and are fourth in the 55 to 64 age group. Falls are the leading cause of injury deaths and serious injuries among people age 65 and older, the fastest growing segment of the population in the United States. From to 2000 to 2040, the number of people age 65 and older is projected to increase from 35 million to 77 million. For people age 85 and above, the relative growth rates are even faster.

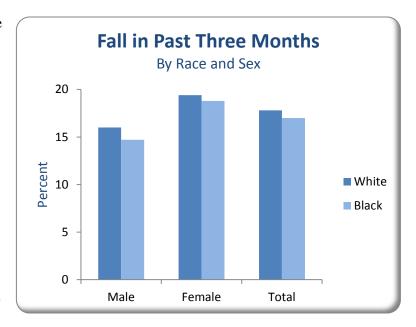


Figure 35

Recent studies have shown that in the United States, one of every three people age 65 years and older falls each year. In 2001, about 11,600 people age 65 and above died and 1.6 million were treated in emergency departments for fall-related injuries. Of those who fall, 20 to 30 percent suffer moderate to severe injuries such as fracture or head trauma that reduce mobility and independence, and increase the risk of premature death. The prevalence of falls that result in any injury is not known. The direct cost of fall injuries in 1994 for people age 65 and older was \$27.3 billion.

One of the strongest predictors of a fall is having sustained a previous fall. A fall is often a marker of increasing fragility, functional decline, or neurological impairment and may indicate the need for a secondary prevention strategy such as hip protectors to guard against hip fractures.

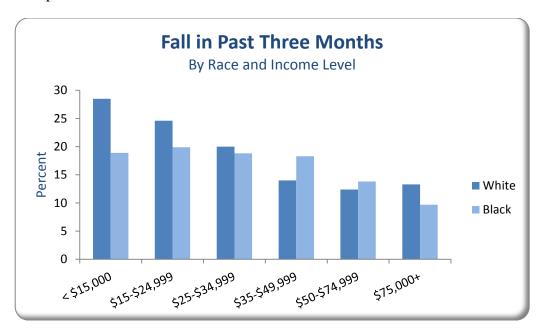


Figure 36

In the 2010 BRFSS survey for Mississippi, the question related to falls was only asked of those who were 45 year old or older. Of those, 17.5 percent reported that they had sustained a fall in the past three months. There were negligible differences between the races: white respondents reported a rate of 17.8 percent while blacks reported a rate of 17.0.

Lower income groups reported a higher rate of falls than those with incomes in the upper group. Those with incomes less that \$15 thousand annually had a rate of 23.1 percent and those in the \$15 to \$25 thousand annually reported a rate of 22.3 percent while those with incomes greater that \$75 thousand annually experienced a rate of only 12.8 percent (See Figure

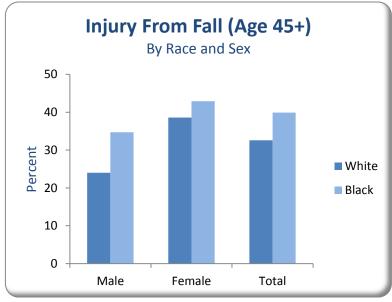


Figure 37

38 and Table 38). Females, at 19.2 percent, reported a higher rate of falls than males who had a rate of 15.4 percent (Figure 35).

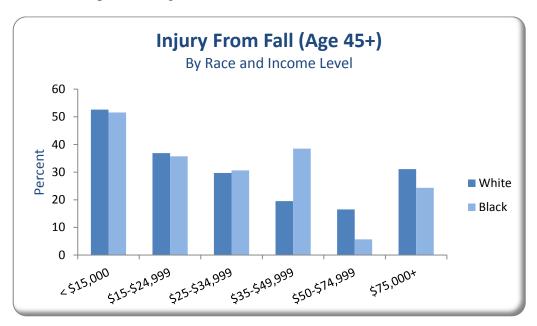


Figure 38

Of those who reported a fall, 34.4 percent said that they sustained an injury from the fall. As was the case with falls, those in the lower income groups had the higher rates of injury as did females in the survey. More than 51 percent of those with incomes less than \$15 annually reported receiving an injury from the fall and 39.6 percent of the females reported an injury from a fall compared to 26.7 percent for males (See Figures 37, 38 and Table 39).

Table 38 Report a Fall in Past 3 Months (Age 45+)

	White		Bla	ck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	246	16.0	76	14.7	331	15.4
Female	570	19.4	228	18.8	810	19.2
Age Group						
45-54	149	16.5	93	17.0	248	16.4
55-64	241	19.1	112	18.8	360	19.1
65+	426	17.9	99	15.2	533	17.1
Education						
< High School Graduate	142	24.4	120	18.9	269	21.6
High School Graduate or GED	264	17.3	99	16.3	369	16.8
Some College or Technical School	218	18.2	45	18.2	267	18.1
College Graduate	191	15.0	40	13.2	235	14.5
Income						
< \$15,000	165	28.5	132	18.9	307	23.1
\$15-\$24,999	177	24.6	82	19.9	263	22.3
\$25-\$34,999	99	20.0	31	18.8	131	19.2
\$35-\$49,999	81	14.0	17	18.3	99	14.6
\$50-\$74,999	68	12.4	9	13.8	77	12.6
\$75,000+	101	13.3	9	9.7	111	12.8
Employment Status						
Employed	171	10.9	66	14.4	239	11.6
Not Employed	19	14.7	23	15.3	42	14.8
Student/Homemaker	79	20.3	9	9.9	89	18.6
Retired/Unable to Work	545	24.0	205	19.6	768	22.7
Total	816	17.8	304	17.0	1,141	17.5

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 39 Report Injury From a Fall in Past 3 Months (Age 45+)\*

	White		Bla	ıck	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	62	24.0	25	34.7	90	26.7
Female	198	38.6	97	42.9	298	39.6
Age Group						
45-54	52	35.4	38	41.2	91	36.7
55-64	87	36.4	46	42.2	136	38.1
65+	121	27.0	38	34.8	161	28.5
Education						
< High School Graduate	59	50.5	54	50.3	114	49.2
High School Graduate or GED	79	31.6	39	41.2	121	34.6
Some College or Technical School	75	29.2	16	23.3	92	27.6
College Graduate	47	24.9	13	33.6	61	26.0
Income						
< \$15,000	72	52.6	66	51.6	142	51.3
\$15-\$24,999	58	36.9	26	35.7	84	35.6
\$25-\$34,999	27	29.7	8	30.6	35	29.8
\$35-\$49,999	18	19.5	6	38.5 <sup>*</sup>	25	24.8
\$50-\$74,999	17	16.5	1	5.7*	18	14.3
\$75,000+	26	31.1	3	24.3*	29	30.3
Employment Status						
Employed	44	25.3	20	34.3	64	28.1
Not Employed	6	33.7*	9	39.4 <sup>*</sup>	15	36.6
Student/Homemaker	22	35.0	3	47.8 <sup>*</sup>	25	35.9
Retired/Unable to Work	187	35.3	90	43.0	283	36.9
Total	260	32.6	122	39.9	388	34.4

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

<sup>\*</sup> Denominator is those who report a fall in past 3 months

#### Seat Belt Use

#### **Survey Question:**

How often do you use seat belts when you drive or ride in a car? Would you say always, nearly always, sometimes, seldom or never?

The Centers for Disease Control and Prevention reports that motor vehicle-related injuries kill more children and young adults than any other single cause in the United States. According to the National Highway Traffic Safety Administration (NHTSA) in 2009, the use of seat belts in passenger vehicles saved an estimated 12,713 lives in the United States. Seat belts have saved over 72,000 lives during the 5-year period from 2005 through 2009. An additional 3,688 lives would have been saved in 2009 if all unrestrained passenger vehicle occupants age five and older involved in fatal crashes had worn their seat belts

The NHTSA further reports that one of the most effective measures a person can take to prevent injury and death in a crash is to be appropriately restrained in rear- or forward-facing child safety seats, booster seats, or seat belts. NHTSA estimates that lap-shoulder seat belts, when used correctly, reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light-

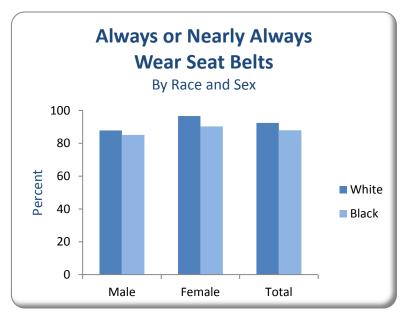


Figure 39

truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent. Research on the effectiveness of child safety seats has found them to reduce fatal injury by 71 percent for infants less than one year old and by 54 percent for toddlers one to four years old in passenger cars. For infants and toddlers in light trucks the corresponding reductions are 58 percent and 59 percent, respectively

The Agency also states that child restraints saved an estimated 425 lives of children under the age of five and if the use of child restraints had been 100 percent, another 96 lives could have been saved.

In 2009, according to the Mississippi Office of Highway Safety (MOHS), 68.9 percent of the traffic fatalities in Mississippi were from unbelted occupants. The MOHS classifies non-fatal traffic injuries into three categories from most severe (A-level) to least severe (C-level). According to the latest MOHS Highway Safety and Performance Plan, there were 488 A-level injuries in 2008 and almost half or 46.5 percent were belted and prevented from more serious injury or death. There were 4,751 B-level injures and of these, 79.4 percent were using belts. In the C-level category there were 13,714 non-fatal injuries and 93.6 percent of those were wearing safety belts. The Plan concluded that seat belt usage significantly reduces the risk of serious injury and death.

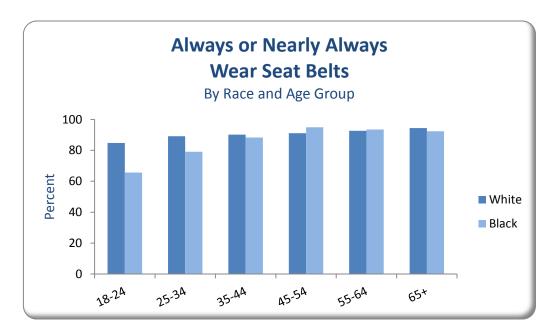


Figure 40

The 2010 BRFSS survey in Mississippi revealed that 91.0 of the respondents say that they always or nearly always wear a seat belt when they either drive of ride in a car. Females report that they use seat belts more often than men. Women had a usage rate of 94.4 percent compared to 87.2 percent for men (Figure 39). Younger respondents reported a higher rate of non-usage that older respondents. In the 18 to 24 age group, 79.3 percent said that they always or nearly always use seat belts while those age 65 and older reported a rate of 94.7 percent (Figure 40).

Table 40 Always or Nearly Always Wear Seat Belts

	White		Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	1,585	87.8	679	85.1	2,322	87.2
Female	3,373	96.6	1,707	90.3	5,166	94.4
Age Group						
18-24	86	83.7	88	73.3	181	79.3
25-34	270	90.0	236	82.8	517	87.4
35-44	477	92.5	345	91.3	841	92.0
45-54	778	93.8	492	94.3	1,301	94.1
55-64	1,176	94.8	607	91.8	1,805	93.9
65+	2,156	94.9	603	93.9	2,802	94.7
Education						
< High School Graduate	632	89.7	663	83.0	1,315	86.6
High School Graduate or GED	1,571	90.8	829	85.8	2,435	88.8
Some College or Technical School	1,342	92.1	476	92.2	1,861	92.3
College Graduate	1,406	95.4	412	92.5	1,861	94.8
Income						
< \$15,000	625	95.4	811	87.2	1,464	90.4
\$15-\$24,999	830	90.0	584	85.8	1,443	88.3
\$25-\$34,999	551	89.3	250	89.3	814	89.3
\$35-\$49,999	648	91.7	194	90.2	854	91.3
\$50-\$74,999	589	92.7	145	94.7	741	93.2
\$75,000+	921	93.8	113	93.1	1,055	93.9
Employment Status						
Employed	1,889	90.1	973	89.0	2,916	89.9
Not Employed	188	91.0	238	78.3	439	84.2
Student/Homemaker	532	96.7	137	85.6	678	93.9
Retired/Unable to Work	2,342	95.1	1,032	92.0	3,439	94.1
Total	4,958	92.4	2,386	87.9	7,488	91.0

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 41 Sometimes, Seldom or Never Wear Seat Belts

	Wh	ite	Bla	ıck	To	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	174	12.0	69	14.5	247	12.5
Female	115	3.4	133	9.6	251	5.6
Age Group						
18-24	16	16.3	27	25.5	43	20.2
25-34	30	9.7	35	17.1	65	12.3
35-44	36	7.5	35	8.5	74	7.9
45-54	51	6.1	30	5.6	82	5.8
55-64	54	5.2	40	8.0	95	6.1
65+	101	5.1	34	6.0	137	5.2
Education						
< High School Graduate	47	10.3	70	16.7	119	13.2
High School Graduate or GED	103	9.1	75	13.9	180	11.0
Some College or Technical School	80	7.9	32	7.6	113	7.6
College Graduate	58	4.6	25	7.3	85	5.2
Income						
< \$15,000	29	4.5	66	12.5	97	9.5
\$15-\$24,999	58	9.9	65	13.8	124	11.5
\$25-\$34,999	35	10.6	23	10.6	59	10.6
\$35-\$49,999	42	8.3	12	9.7	55	8.6
\$50-\$74,999	34	7.2	7	5.3	42	6.8
\$75,000+	55	6.2	4	6.6	59	6.1
Employment Status						
Employed	154	9.7	82	10.8	239	9.9
Not Employed	15	8.9	29	21.1	44	15.5
Student/Homemaker	16	3.3	15	14.2	33	6.0
Retired/Unable to Work	104	4.8	75	7.8	181	5.8
Total	289	7.5	202	11.9	498	8.9

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

# HIV/AIDS

### **Survey Question:**

- 1. Have you ever been tested for HIV?
- 2. Are any of these statements is true? You are a man who has had sex with other men, even just one time. You have taken street drugs by needle, even just one time. You traded sex for money or drugs, even just one time.

Acquired Immunodeficiency Syndrome (AIDS) received designation as a legally

reportable disease in July 1983. By 1990, AIDS had become the tenth leading cause of death in the United States. Individuals engaging in certain risky behaviors have greater risk of contracting AIDS. These behaviors include sharing needles or syringes, having unprotected sex (anal, oral or vaginal), having multiple sex partners, having a history of sexually transmitted diseases, abusing intravenous drugs and having sex with a person

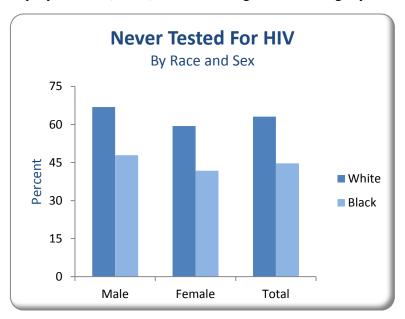


Figure 41

engaged in one of these risky behaviors. AIDS is a life threatening condition representing the later stages of infection with the human immunodeficiency virus (HIV). Infection with HIV results in slow, progressive damage to the immune system and certain other organ systems. As the immune system weakens, certain opportunistic infections and cancers develop that are not normally seen in healthy individuals resulting in severe and frequently fatal illnesses.

In 2009, the estimated number of diagnoses of AIDS in the United States and dependent areas was 34,993. Of these, 34,247 were in the 50 states and District of Columbia and 747 were in U.S. dependent areas. Of the total estimated cases in the U.S. 25,847 were in males and 8,400 in females, plus 13 cases estimated in children under age 13. Mississippi reported 610 new cases of HIV in 2009 and there were 9,214 people with HIV living in the state.

Questions about HIV and AIDS were only asked of persons between the ages of 18 and 64. One of the questions was whether the respondent had ever been tested for the AIDS virus. In 2010, 55.6 percent of the respondents reported that they had never been tested. White respondents were more likely to have never been tested than blacks: 63.1 percent to 44.7. The rate for white respondents who have never been tested was 66.9 percent for males and 59.4 percent for females. For blacks, the rates were 47.9 percent for males and 41.8 for females. (Figure 41 and Table 42).

On the question of whether the respondents had participated in high risk behavior, blacks with a rate of 8.4 percent were three times as likely to have participated as whites

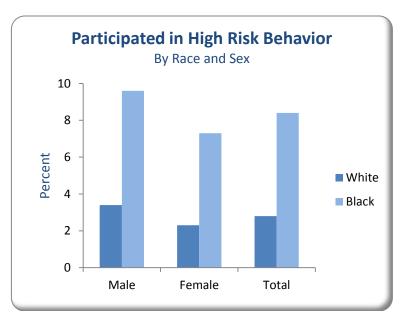


Figure 42

who had a rate of 2.8 percent. In the gender category, black males who reported a rate of 9.6 percent were higher than any of the other gender groups for engaging in high risk behavior. The next highest group was black females with a rate of 7.3 percent followed by white males at 3.4 percent. White females reported the lowest rate of risky behavior with a rate of 2.3 percent (Figure 42 and Table 43).

Table 42 Never Tested for HIV (Age 18-64)

	White		Bla	ıck	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	721	66.9	315	47.9	1,054	59.1
Female	1,265	59.4	664	41.8	1,951	52.2
Age Group						
18-24	63	61.6	53	50.4	119	56.1
25-34	145	51.7	77	32.5	224	42.7
35-44	275	58.0	125	31.4	406	47.3
45-54	561	68.5	277	54.7	853	63.4
55-64	942	75.5	447	67.2	1,403	72.9
Education						
< High School Graduate	178	55.2	213	46.0	394	49.8
High School Graduate or GED	611	70.6	385	48.4	1,007	60.4
Some College or Technical School	540	60.0	214	39.5	767	52.1
College Graduate	657	62.3	165	42.8	835	56.6
Income						
< \$15,000	152	56.6	288	41.1	446	45.3
\$15-\$24,999	261	59.5	259	43.4	525	50.1
\$25-\$34,999	205	64.6	119	47.3	328	56.3
\$35-\$49,999	281	62.9	95	48.8	380	58.0
\$50-\$74,999	319	68.8	57	31.5	380	58.9
\$75,000+	525	63.2	52	40.3	584	59.7
Employment Status						
Employed	1,194	64.8	479	41.8	1,693	56.3
Not Employed	102	45.3	117	44.2	221	43.6
Student/Homemaker	211	59.9	57	49.2	273	56.9
Retired/Unable to Work	477	67.6	323	51.6	813	60.5
Total	1,986	63.1	979	44.7	3,005	55.6

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 43 Participated in High Risk Behavior in Past 12 Months (Age 18-64)

	White		Bla	ıck	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	18	3.4	41	9.6	59	5.5
Female	29	2.3	77	7.3	107	4.2
Age Group						
18-24	9	10.3	19	13.7	29	12.1
25-34	10	3.5	26	9.6	36	5.8
35-44	13	2.7	21	8.5	34	4.7
45-54	9	1.2	28	5.3	37	2.5
55-64	6	0.4	24	4.5	30	1.6
Education						
< High School Graduate	10	8.3	32	11.5	42	9.6
High School Graduate or GED	7	1.5	45	7.9	52	4.4
Some College or Technical School	15	3.3	28	9.2	44	5.4
College Graduate	15	1.8	13	5.1	28	2.5
Income						
< \$15,000	5	2.5	50	12.6	55	9.1
\$15-\$24,999	10	4.1	32	7.3	42	5.6
\$25-\$34,999	6	4.7	14	11.3	20	7.6
\$35-\$49,999	6	2.1	3	2.6	9	2.2
\$50-\$74,999	1	0.0	4	3.8	6	1.5
\$75,000+	9	1.5	1	9.1	10	2.4
Employment Status						
Employed	24	2.1	51	7.3	76	3.9
Not Employed	7	9.0	21	9.5	28	8.9
Student/Homemaker	10	5.1	10	9.9	20	6.2
Retired/Unable to Work	6	1.0	36	9.8	42	4.7
Total	47	2.8	118	8.4	166	4.8

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

## **Emotional Support and Life Satisfaction**

#### **Survey Question:**

- 1. How often do you get the social and emotional support you need?
- 2. In general, how satisfied are you with your life?

The National Institute of Mental Health states that while mental disorders are common in the United States, their burden of illness is particularly concentrated among those who experience disability due to serious mental illness. The National Survey on Drug Use and Health (NSDUH), defines serious mental illness as: 1) a mental, behavioral, or emotional disorder (excluding developmental and substance use

disorders), 2) diagnosable currently or within the past year, 3) of sufficient

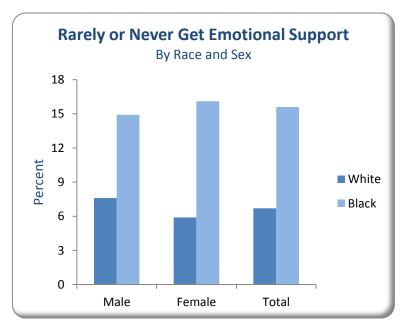


Figure 43

duration to meet diagnostic criteria specified within the *Diagnostic and Statistical Manual of Mental Disorders*, and 4) resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities

The 2009 BRFSS survey in Mississippi indicated that an estimated 7.1 percent of Mississippians, experienced serious psychological distress during the previous year. Within the 18 to 24 year age group, 9.6 percent of Mississippians were estimated to have experienced serious psychological distress in the prior year.

The 2010 BRFSS survey showed that 10.0 percent of the respondents said that they rarely or never get the emotional support they need which remained unchanged from the rate in 2008. Blacks were more than twice as likely to report no emotional support with a rate of 15.6 percent compared to a rate of 6.7 percent for whites. The difference was similar in the 18-24 age group where 14.9 percent of black respondents reported no emotional support compared to only 7.6 percent for whites (Table 44). The segment that

reported the highest rate was those whose annual income was below \$15,000 per year with a rate of 21.1 percent (Table 44).

There were 5.7 percent in the 2010 survey who said that they were either dissatisfied or very dissatisfied with life. Blacks at a rate of 7.0 percent were more likely to report dissatisfaction than white respondents who had a rate of 4.7 percent (Figure 45).

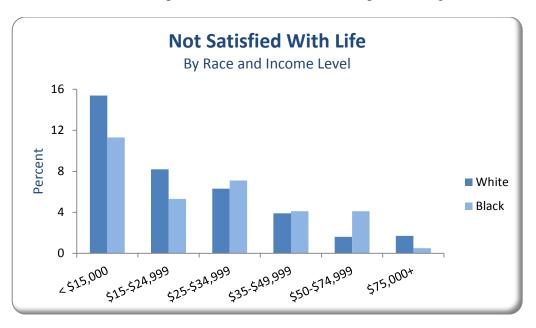


Figure 44

The category of people who reported the highest rate of not being satisfied with life were whites reporting less than \$15,000 annual income and blacks who are unemployed who reported a rate a rate of 15.4 percent (Table 44). The second highest group who said they were dissatisfied with life was whites who are unemployed with a rate of 14.2 percent (Table 45).

Table 44 Rarely or Never Get Emotional Support

	White		Black		Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	151	7.6	113	14.9	281	10.5
Female	244	5.9	273	16.1	529	9.5
Age Group						
18-24	5	4.7	19	16.9	26	11.1
25-34	14	4.9	39	18.4	54	10.3
35-44	29	5.2	42	11.3	72	7.3
45-54	67	8.2	76	15.2	153	11.3
55-64	91	7.6	93	14.3	190	9.7
65+	186	8.1	115	18.8	309	10.9
Education						
< High School Graduate	92	12.2	139	23.0	236	18.0
High School Graduate or GED	159	8.6	160	17.9	329	12.5
Some College or Technical School	102	7.5	53	12.2	163	9.0
College Graduate	42	2.1	32	6.1	80	3.5
Income						
< \$15,000	100	19.0	179	21.3	287	21.1
\$15-\$24,999	107	11.8	101	17.2	216	14.5
\$25-\$34,999	43	6.7	34	17.8	80	11.0
\$35-\$49,999	38	5.2	13	8.7	55	7.0
\$50-\$74,999	16	2.6	10	5.9	27	3.4
\$75,000+	23	2.1	6	3.7	30	2.3
Employment Status						
Employed	96	4.6	109	12.3	212	7.5
Not Employed	25	11.1	61	25.0	88	18.7
Student/Homemaker	30	4.4	24	16.1	54	7.1
Retired/Unable to Work	244	10.7	190	15.9	454	12.9
Total	395	6.7	386	15.6	810	10.0

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 45 Dissatisfied or Very Dissatisfied With Life

	White		Black		Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	74	4.6	48	5.5	130	5.3
Female	163	4.8	140	8.3	310	6.0
Age Group						
18-24	3	3.1	5	3.2	9	3.2
25-34	10	3.4	30	9.6	41	6.1
35-44	36	7.8	32	6.8	71	7.9
45-54	57	6.1	49	9.2	111	7.2
55-64	69	4.9	39	5.9	111	5.3
65+	62	2.3	33	5.0	97	3.0
Education						
< High School Graduate	50	8.1	61	10.2	112	9.0
High School Graduate or GED	79	4.9	70	6.9	152	5.7
Some College or Technical School	63	5.5	36	5.7	107	6.1
College Graduate	45	2.6	20	4.8	68	3.3
Income						
< \$15,000	73	15.4	98	11.3	180	13.2
\$15-\$24,999	65	8.2	40	5.3	108	6.8
\$25-\$34,999	30	6.3	12	7.1	42	6.5
\$35-\$49,999	18	3.9	7	4.1	27	5.1
\$50-\$74,999	11	1.6	7	4.1	18	2.2
\$75,000+	14	1.7	1	0.5	15	1.5
Employment Status						
Employed	56	2.5	48	4.2	108	3.4
Not Employed	28	14.2	41	15.4	72	14.9
Student/Homemaker	16	3.9	10	3.4	26	3.7
Retired/Unable to Work	136	7.2	89	8.1	233	7.6
Total	237	4.7	188	7.0	440	5.7

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

## **Anxiety and Depression**

#### **Survey Question:**

- 1. Has a doctor or other healthcare provider ever told you that you had an anxiety disorder (including acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, phobia, posttraumatic stress disorder, or social anxiety disorder)?
- 2. Has a doctor or other healthcare provider ever told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?

Affective disorders, which encompass major depression and manic depressive illness, constitute a second category of severe mental illness. The World Health Organization found major depression to be the leading cause of disability among adults in developed nations such as the United States. About 6.5 percent of women and 3.3 percent of men will have major depression in any year. Manic depressive illness affects around one percent of adults, with comparable rates of occurrence in men

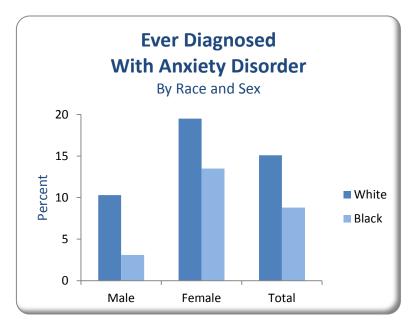


Figure 45

and women. A high rate of suicide is associated with such mood disorders.

Anxiety disorders encompass several discrete conditions, including panic disorder, obsessive-compulsive disorder, posttraumatic stress disorder, and phobia. More common than other mental disorders, anxiety disorders affect as many as 19 million people in the United States annually. Anxiety disorders, which include generalized anxiety disorder, are common in all cultures. Twenty-four percent of the population will experience an anxiety disorder, many with concurrent substance abuse disorders.

Almost all adults will at some time experience a tragedy or times of profound sadness, grief, or distress. Major depressive disorder, however, differs both quantitatively and qualitatively from episodes of normal sadness or grief. Depression disrupts the lives of depressed persons and their families and reduces economic productivity. Depression also can result in suicide and has an especially severe impact on women.

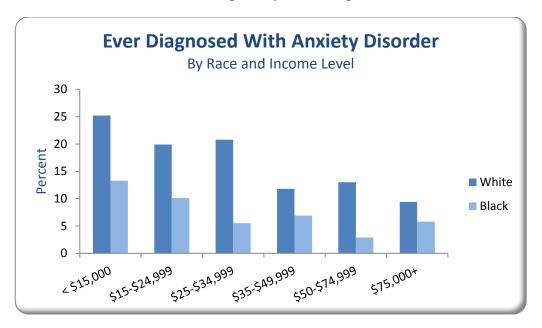


Figure 46

Depression also has a negative impact on the economy, costing the United States over \$40 billion each year, both in diminished productivity and in use of health care resources. In the workplace, depression is a leading cause of absenteeism and diminished productivity. Although only a minority seek professional help to relieve a mood disorder, depressed people are significantly more likely than others to visit a physician for some other reason.

In Mississippi, the 2010 BRFSS report revealed that 12.9 percent said that they had been told by a health professional that they have an anxiety disorder. Whites reported a rate of 15.1 percent while blacks reported a rate of 8.8 percent. People in the lower income groups had higher rates than those with higher incomes (Figure 48 and Table 46). Also the rate for females at

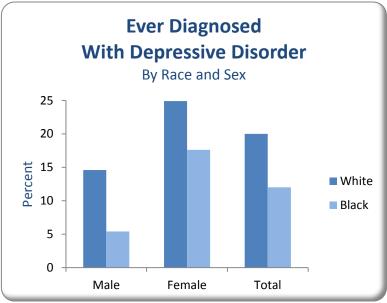


Figure 47

17.4 percent was more than double that of males who had a rate of 7.8 percent.

With respect to depressive disorders, 17.1 percent of those surveyed said they had been diagnosed with this condition. As was the case with anxiety disorders, women showing a rate of 22.2 percent were almost twice as likely to have been diagnosed as men who reported a rate of 11.4 percent (Figure 49). Similarly, the respondents in lower

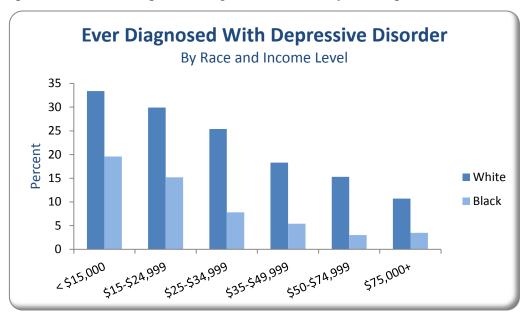


Figure 48

income categories reported a higher rate of diagnosed depression than those in the upper income groups. The group with the highest rate of depression was whites whose income was less than \$15 thousand annually with a rate of 33.4 percent (Figure 50 and Table 47).

Table 46 Ever Diagnosed With Anxiety Disorder

	White		Black		Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	173	10.3	38	3.1	219	7.8
Female	588	19.5	247	13.5	857	17.4
Age Group						
18-24	17	18.4	6	5.6	24	12.3
25-34	57	17.9	21	5.6	79	12.8
35-44	90	16.1	44	9.1	138	13.6
45-54	157	16.6	76	13.5	240	15.3
55-64	209	15.0	84	12.3	301	14.4
65+	231	9.5	52	7.3	290	9.0
Education						
< High School Graduate	126	18.7	79	10.8	212	14.7
High School Graduate or GED	240	16.1	108	8.7	354	13.0
Some College or Technical School	224	17.0	55	6.6	288	13.9
College Graduate	169	11.2	43	9.2	219	10.8
Income						
< \$15,000	144	25.2	134	13.3	285	17.4
\$15-\$24,999	155	19.9	70	10.1	230	15.1
\$25-\$34,999	105	20.8	17	5.5	125	14.6
\$35-\$49,999	88	11.8	9	6.9	99	10.4
\$50-\$74,999	78	13.0	6	2.9	84	10.5
\$75,000+	86	9.4	11	5.8	99	9.1
Employment Status						
Employed	221	11.0	61	4.6	288	8.8
Not Employed	56	27.7	26	10.2	85	17.9
Student/Homemaker	85	16.2	12	5.3	99	13.6
Retired/Unable to Work	397	19.5	184	16.2	600	18.5
Total	761	15.1	285	8.8	1,076	12.9

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted

Table 47 Ever Diagnosed With Depressive Disorder

	White		Black		Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	232	14.6	64	5.4	303	11.4
Female	830	24.9	321	17.6	1,164	22.2
Age Group						
18-24	27	27.3	8	7.7	39	19.5
25-34	64	19.4	45	11.0	110	15.8
35-44	109	20.1	59	13.1	170	17.2
45-54	202	21.5	92	14.0	296	18.4
55-64	306	23.2	113	17.3	425	21.4
65+	354	13.7	66	8.8	425	12.5
Education						
< High School Graduate	173	28.3	136	17.3	313	22.9
High School Graduate or GED	338	18.6	123	12.0	465	15.7
Some College or Technical School	299	23.5	80	9.9	387	19.5
College Graduate	248	14.8	44	8.1	296	12.9
Income						
< \$15,000	205	33.4	189	19.6	402	24.8
\$15-\$24,999	226	29.9	98	15.2	326	22.3
\$25-\$34,999	147	25.4	29	7.8	178	18.2
\$35-\$49,999	123	18.3	10	5.4	135	14.7
\$50-\$74,999	103	15.3	5	3.0	110	13.0
\$75,000+	123	10.7	7	3.5	131	9.7
Employment Status						
Employed	312	14.7	78	5.3	395	11.6
Not Employed	63	33.8	44	14.4	109	22.9
Student/Homemaker	104	19.9	17	10.4	123	17.5
Retired/Unable to Work	581	27.1	244	23.1	836	25.5
Total	1,062	20.0	385	12.0	1,467	17.1

<sup>&</sup>lt;sup>1</sup>Unweighted

<sup>&</sup>lt;sup>2</sup>Weighted