

**2008**  
**Behavioral Risk Factor Surveillance System**  
**Mississippi Annual Prevalence Report**

**Mississippi State Department of Health**  
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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, and 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 done 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 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 questions addressing specific issues that may be of interest to that particular 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. A sample size of 7,949 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 2008 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 fourteen 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 2007 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.

## **Seatbelt 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  $\leq 12\%$ .

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

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

*Overweight* - Respondents whose body mass index (BMI) is  $25.0 \leq \text{BMI} \leq 29.9$ .

*Obese* - Respondents whose body mass index (BMI)  $\geq 30.0$ . This measures Healthy People 2010 Objective 19.2 - Target  $\leq 15\%$

## ***Survey Results***

## Health Status

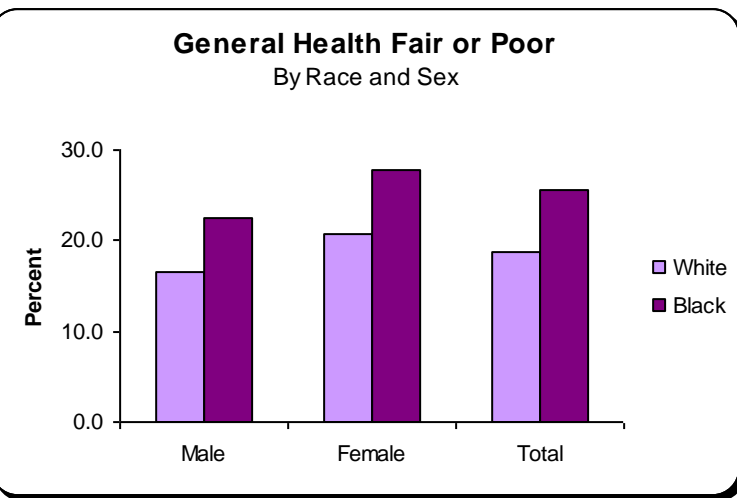
### ***Survey Question:***

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

This part of the survey attempts to determine how people look at 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 mortality data.

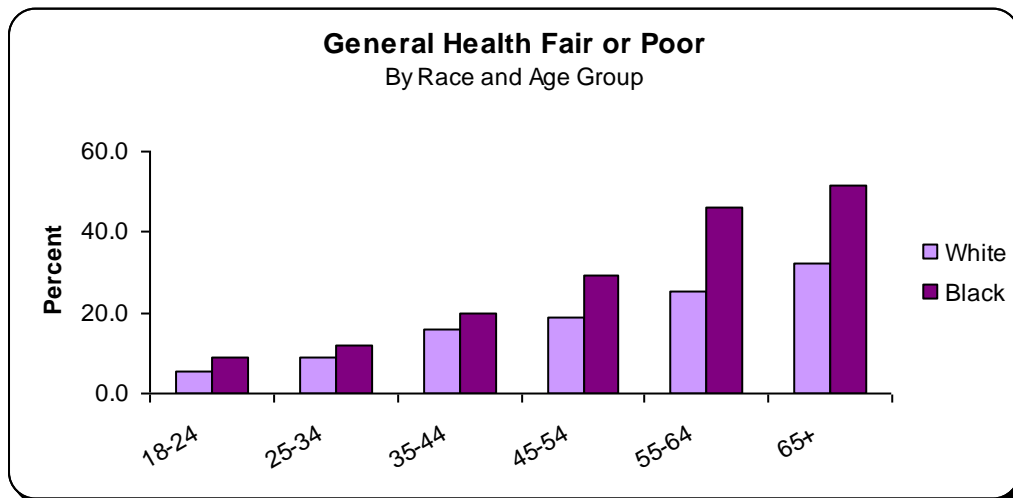
Females of both races reported their health as worse than males (Figure 1). Black respondents report their health as worse than whites. Black respondents reported fair or poor health at a rate of 25.5 percent compared to 18.7 percent for whites.

Not surprisingly, reported fair or poor health tended to increase with age.



**Figure 1**

Persons in the 18 to 24 age group reported a rate of 7.1 percent while those more than 65 years of age reported a rate of 37.5 percent (Table 1).



**Figure 2**

**Table 1 General Health Fair or Poor**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	416	16.6	222	22.5	664	18.8
Female	917	20.7	628	27.9	1,576	23.3
<b>Age Group</b>						
18-24	9	5.6	11	8.7	21	7.1
25-34	32	8.8	39	12.0	72	10.0
35-44	102	15.7	80	19.7	188	17.1
45-54	196	18.6	186	29.4	392	22.4
55-64	323	25.3	247	46.3	586	31.4
65+	668	32.0	284	51.6	973	37.5
<b>Education</b>						
< High School Graduate	344	42.6	360	43.6	720	43.0
High School Graduate or GED	522	22.4	295	25.4	832	23.7
Some College or Technical School	304	15.6	124	16.9	444	16.2
College Graduate	163	9.0	69	12.0	241	9.8
<b>Income</b>						
< \$15,000	371	55.4	387	47.3	777	50.8
\$15-\$24,999	299	34.7	217	30.0	534	32.8
\$25-\$34,999	151	20.3	53	15.2	208	18.2
\$35-\$49,999	121	14.8	30	8.5	154	13.2
\$50-\$74,999	80	8.9	17	7.0	99	8.5
\$75,000+	81	5.4	6	2.1	89	5.1
<b>Employment Status</b>						
Employed	237	7.9	193	12.5	443	9.5
Not Employed	53	27.2	70	27.8	126	27.6
Student/Homemaker	133	13.0	47	16.5	185	13.8
Retired/Unable to Work	908	45.4	539	57.4	1,481	49.8
<b>Total</b>	1,333	18.7	850	25.5	2,240	21.2

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

## Health Care Coverage

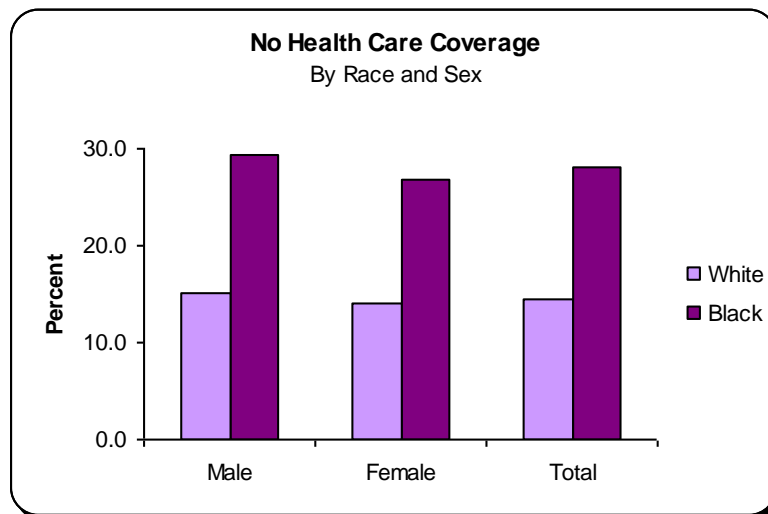
### ***Survey Question:***

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

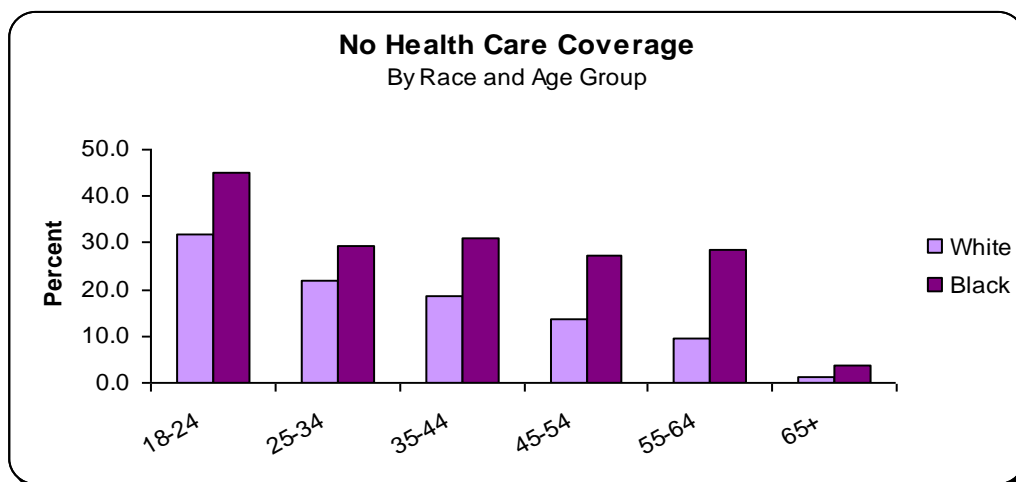
The questions in this section are designed to estimate the number of people who cannot obtain the health care they need because they are not covered by a health care plan or other health insurance. People at risk are those without any coverage.

In 2008, 19.4 percent of the respondents indicated they had no health care plan compared to 19.3

percent in 2007. According to the survey, black males have the highest rate of non-coverage at 29.3 percent; black females were next at 26.9 percent (Figure 3). When viewed by age categories, blacks from the age of 18 to 24 reported the highest prevalence of no health care coverage at 45.0 percent (Figure 4).



**Figure 3**



**Figure 4**

**Table 2 Respondents Having No Health Care Coverage**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	192	15.1	169	29.3	375	20.1
Female	357	14.1	394	26.9	771	18.8
<b>Age Group</b>						
18-24	40	31.9	53	45.0	96	38.1
25-34	86	21.9	85	29.3	178	25.6
35-44	127	18.4	105	30.8	237	22.8
45-54	140	13.7	154	27.4	304	18.4
55-64	130	9.4	142	28.5	279	14.7
65+	22	1.1	22	3.9	45	1.8
<b>Education</b>						
< High School Graduate	106	26.3	161	30.8	274	29.0
High School Graduate or GED	220	18.5	234	32.1	465	24.0
Some College or Technical School	153	13.4	121	28.3	283	18.1
College Graduate	70	7.2	46	12.7	123	9.0
<b>Income</b>						
< \$15,000	108	30.3	201	33.1	321	32.1
\$15-\$24,999	143	27.3	171	31.9	321	29.8
\$25-\$34,999	77	18.1	60	27.5	142	21.6
\$35-\$49,999	79	17.0	28	11.7	110	16.5
\$50-\$74,999	32	5.5	15	11.9	50	7.1
\$75,000+	22	1.9	7	6.1	30	2.4
<b>Employment Status</b>						
Employed	273	13.6	290	26.9	583	18.5
Not Employed	71	45.9	118	52.6	193	49.8
Student/Homemaker	102	22.3	52	41.3	160	27.2
Retired/Unable to Work	103	7.5	101	13.5	208	9.4
<b>Total</b>	<b>549</b>	<b>14.5</b>	<b>563</b>	<b>28.0</b>	<b>1,146</b>	<b>19.4</b>

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

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

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	180	10.9	154	25.4	345	15.8
Female	516	18.8	513	31.3	1,054	23.4
<b>Age Group</b>						
18-24	26	16.7	46	36.6	74	26.1
25-34	88	22.1	76	26.1	168	23.6
35-44	142	19.3	125	34.8	271	24.6
45-54	174	16.5	190	30.8	377	21.7
55-64	163	11.7	143	26.6	313	15.9
65+	100	4.8	84	14.0	187	7.2
<b>Education</b>						
< High School Graduate	147	27.3	208	34.3	364	30.9
High School Graduate or GED	257	16.1	230	27.7	496	20.7
Some College or Technical School	200	15.9	155	31.7	369	21.1
College Graduate	92	8.5	73	17.4	169	10.4
<b>Income</b>						
< \$15,000	166	38.3	267	39.2	444	38.7
\$15-\$24,999	198	33.2	215	40.1	423	36.8
\$25-\$34,999	87	17.0	55	22.6	148	19.7
\$35-\$49,999	85	12.9	35	19.3	121	14.7
\$50-\$74,999	47	8.8	18	10.9	67	9.1
\$75,000+	28	3.1	9	6.8	38	3.5
<b>Employment Status</b>						
Employed	288	12.0	296	25.7	599	16.7
Not Employed	66	34.2	102	47.9	170	42.2
Student/Homemaker	106	22.3	39	26.0	149	23.0
Retired/Unable to Work	236	15.0	228	26.0	478	18.9
<b>Total</b>	696	15.0	667	28.6	1,399	19.7

<sup>1</sup>Unweighted

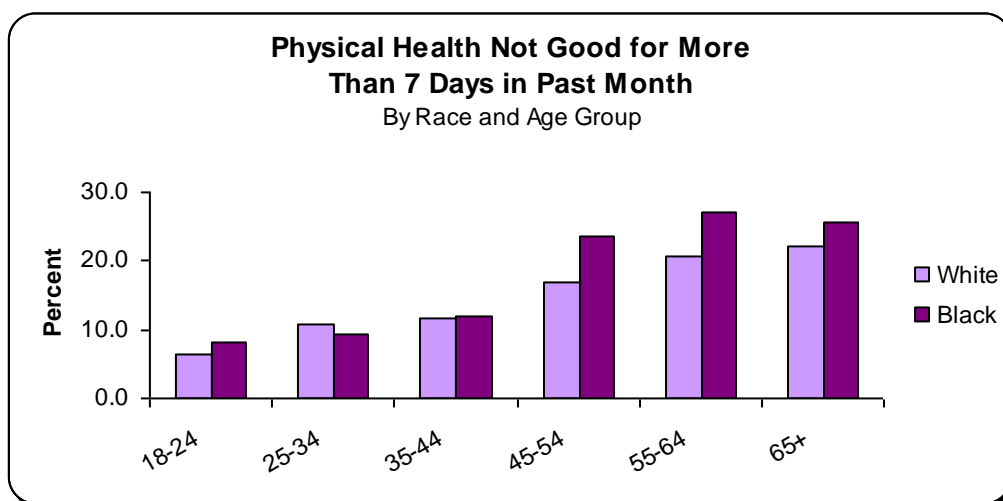
<sup>2</sup>Weighted

## 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**

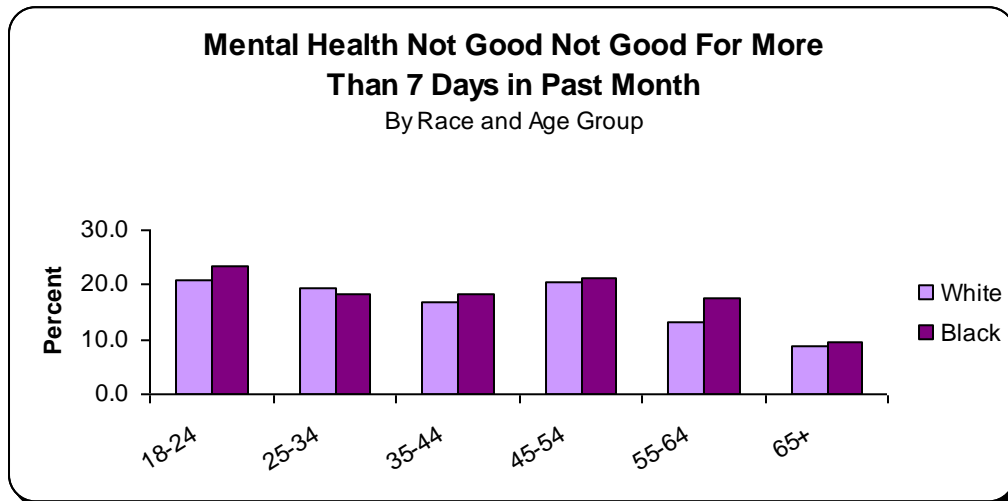
Similarly, health professionals use health-related quality of life to measure the effects of numerous disorders, short-term and long-term disabilities, and diseases in different populations. Tracking health-related quality of life in different populations can aid in identifying subgroups with poor physical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

In Mississippi, the 2008 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 65 years old and above reported the highest percentage (23.2) of more than seven days when their physical health was not good. For those 65 and older white respondents had a rate of 22.1 percent compared to 25.7 percent



for blacks. For those in the 55 to 64 age group, whites reported a rate of 20.8 percent compared to 27.0 for blacks.

People in the 18 to 24 year old age group had the highest percentage of seven or more days when their mental health was not good with a rate of 22.0 percent– 20.9 for whites and 23.5 for blacks (Figure 6).



**Figure 6**

The highest category, with seven or more days of poor mental health in the past month, are people that have incomes below \$15,000 annually with a rate of 30.0 percent: 34.8 percent for whites and 26.9 percent for blacks. People who are unemployed report a rate of 27.2 percent for seven or more 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**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	297	12.8	143	15.5	462	14.0
Female	730	18.0	358	17.5	1,105	17.8
<b>Age Group</b>						
18-24	6	6.5	10	8.3	17	7.5
25-34	43	10.8	25	9.3	68	9.9
35-44	76	11.7	52	11.9	132	12.1
45-54	181	16.8	136	23.6	328	19.5
55-64	272	20.8	137	27.0	420	22.7
65+	445	22.1	139	25.7	595	23.2
<b>Education</b>						
< High School Graduate	237	31.4	199	27.0	445	29.0
High School Graduate or GED	376	17.1	163	15.0	550	16.5
Some College or Technical School	254	13.9	84	13.4	350	14.2
College Graduate	159	9.4	54	9.8	220	9.3
<b>Income</b>						
< \$15,000	276	46.0	230	27.8	522	35.4
\$15-\$24,999	225	27.5	127	18.8	362	23.2
\$25-\$34,999	114	15.8	37	13.0	153	14.6
\$35-\$49,999	101	12.1	17	3.4	122	9.7
\$50-\$74,999	78	9.3	10	10.9	88	9.4
\$75,000+	72	5.7	8	4.2	82	5.8
<b>Employment Status</b>						
Employed	173	6.3	109	8.8	289	7.2
Not Employed	40	18.2	47	18.9	91	19.5
Student/Homemaker	102	13.7	20	7.5	124	12.1
Retired/Unable to Work	710	37.2	325	36.4	1,060	37.2
<b>Total</b>	1,027	15.5	501	16.6	1,567	16.0

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

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

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	211	12.6	102	15.9	328	13.8
Female	594	19.5	341	20.5	947	19.8
<b>Age Group</b>						
18-24	29	20.9	31	23.5	61	22.0
25-34	74	19.3	61	18.2	137	18.8
35-44	123	16.9	79	18.4	207	17.5
45-54	209	20.5	124	21.4	341	20.9
55-64	190	13.2	92	17.6	290	14.5
65+	179	8.7	54	9.6	236	8.9
<b>Education</b>						
< High School Graduate	159	28.7	138	23.4	305	26.1
High School Graduate or GED	276	16.6	156	18.0	438	17.3
Some College or Technical School	230	16.8	99	19.7	334	17.5
College Graduate	139	10.4	49	9.6	195	10.3
<b>Income</b>						
< \$15,000	182	34.8	186	26.9	378	30.0
\$15-\$24,999	154	23.5	124	22.1	284	23.0
\$25-\$34,999	102	20.3	43	16.1	148	18.6
\$35-\$49,999	84	11.3	23	9.1	110	11.0
\$50-\$74,999	85	12.0	12	12.3	97	11.7
\$75,000+	102	10.0	7	4.3	111	9.3
<b>Employment Status</b>						
Employed	283	11.7	161	14.6	452	12.6
Not Employed	43	27.2	58	26.7	103	27.2
Student/Homemaker	100	21.1	20	11.0	122	18.5
Retired/Unable to Work	378	22.1	203	25.3	596	23.3
<b>Total</b>	805	16.2	443	18.4	1,275	16.9

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 6 Activities Limited for More Than 7 Days in Past Month Because of Poor Health**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	189	8.4	94	11.4	296	9.6
Female	449	11.8	260	13.3	721	12.3
<b>Age Group</b>						
18-24	8	5.2	15	13.1	24	9.1
25-34	32	7.2	22	6.2	55	6.9
35-44	65	10.7	52	12.1	118	11.0
45-54	133	12.7	105	16.8	247	14.4
55-64	177	12.7	82	15.2	266	13.4
65+	221	10.5	77	14.4	303	11.6
<b>Education</b>						
< High School Graduate	154	22.6	144	21.3	304	21.8
High School Graduate or GED	219	10.7	109	12.0	333	11.3
Some College or Technical School	164	9.5	69	9.4	243	9.7
College Graduate	101	5.5	31	4.9	136	5.5
<b>Income</b>						
< \$15,000	187	32.8	177	21.4	374	26.0
\$15-\$24,999	154	20.5	83	13.4	243	17.1
\$25-\$34,999	71	10.8	17	6.1	90	8.9
\$35-\$49,999	50	6.8	14	2.7	67	6.0
\$50-\$74,999	53	5.6	5	4.2	58	5.2
\$75,000+	47	3.8	6	3.2	53	3.7
<b>Employment Status</b>						
Employed	91	3.2	66	5.2	161	3.9
Not Employed	39	19.7	42	19.9	83	20.3
Student/Homemaker	62	9.6	17	8.5	81	9.2
Retired/Unable to Work	444	25.0	228	26.5	688	25.7
<b>Total</b>	638	10.2	354	12.4	1,017	11.0

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

## Sleep

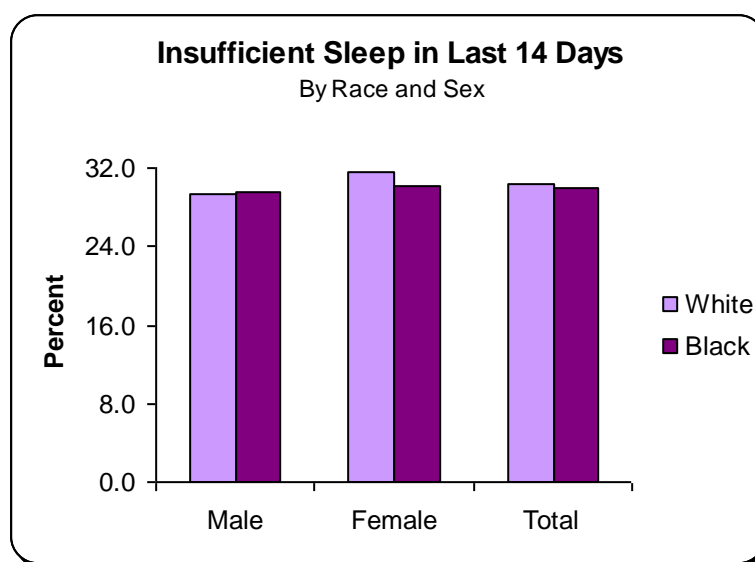
### ***Survey Question:***

***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 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 2008 BRFSS survey, 30.3 percent of adult Mississippians reported insufficient sleep in the past fourteen days. There were minimal differences reported between race and gender groups. White females had the highest rate at 31.5 percent, black females were next with a rate of 30.1 percent, followed by black males at 29.6 percent while white males were last at 29.3 percent (Figure 7).



**Figure 7**

The highest rate of insufficient sleep among demographic categories was the group with an annual income of less than \$15,000 who reported a rate of 37.7 percent. Whites reported the highest rate of any other in this category with a rate of 47.0 percent. Blacks reported a rate of 31.4 percent.

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

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	464	29.3	187	29.6	673	29.3
Female	965	31.5	474	30.1	1,468	31.1
<b>Age Group</b>						
18-24	44	31.9	39	27.1	85	29.9
25-34	154	37.9	100	36.2	262	37.4
35-44	264	40.2	112	30.3	382	36.2
45-54	315	31.0	188	34.7	513	32.2
55-64	326	26.7	136	27.2	476	27.1
65+	322	16.0	86	16.2	416	16.4
<b>Education</b>						
< High School Graduate	227	40.6	170	27.0	405	33.5
High School Graduate or GED	480	31.3	223	27.5	713	29.9
Some College or Technical School	395	29.7	171	36.7	586	32.2
College Graduate	326	26.4	96	28.8	434	26.8
<b>Income</b>						
< \$15,000	235	47.0	223	31.4	472	37.7
\$15-\$24,999	236	33.4	184	33.7	427	33.6
\$25-\$34,999	166	32.0	67	27.5	239	30.6
\$35-\$49,999	166	27.1	54	26.4	226	26.9
\$50-\$74,999	182	28.6	44	41.9	232	31.1
\$75,000+	262	27.1	32	36.4	299	28.2
<b>Employment Status</b>						
Employed	661	30.6	317	30.7	1,000	30.5
Not Employed	57	33.3	67	32.1	126	32.8
Student/Homemaker	177	31.5	38	23.1	219	29.3
Retired/Unable to Work	533	29.1	238	29.0	793	29.5
<b>Total</b>	1,429	30.4	661	29.9	2,141	30.3

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

## Tobacco Use

### ***Survey Question:***

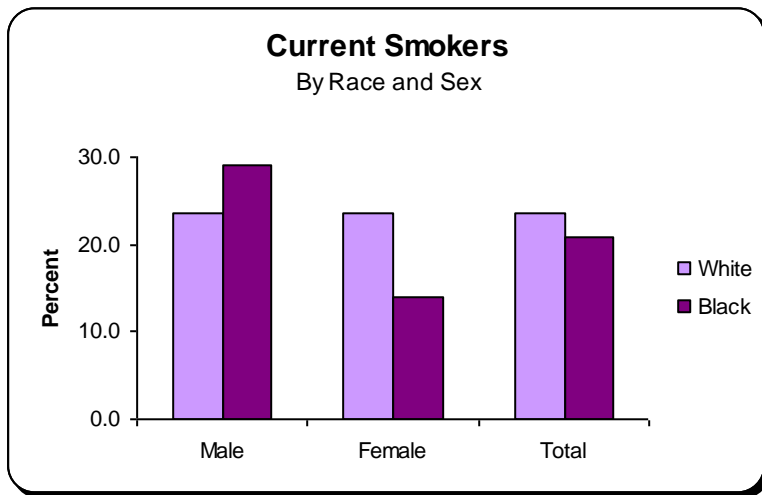
*Have you smoked at least 100 cigarettes in your entire life and do you now smoke cigarettes every day, some days, or not at all?*

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 tobacco-related 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.

According to the 2008 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 34.3 percent.

The second highest are whites age 45 to 54 with a rate of 29.7 percent. The group with the lowest percentage of current smokers is black females at 14.0 percent (Figure 8).

Overall, the rate of current smoking in Mississippi is 22.7 percent, a decrease from 23.9 reported in 2007. The Healthy People 2010 objective is 12 percent.



**Figure 8**

**Table 8 Current Smokers**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	411	23.7	185	29.0	614	25.4
Female	677	23.7	245	14.0	938	20.3
<b>Age Group</b>						
18-24	44	34.3	22	19.7	67	27.4
25-34	101	26.6	44	23.2	148	25.0
35-44	183	24.9	66	21.3	253	23.4
45-54	286	29.7	137	25.3	434	28.3
55-64	268	22.5	98	19.5	377	21.8
65+	204	10.2	60	12.3	268	10.8
<b>Education</b>						
< High School Graduate	192	41.3	151	28.4	349	34.4
High School Graduate or GED	396	27.0	161	23.1	565	25.4
Some College or Technical School	306	25.1	78	17.4	393	22.6
College Graduate	193	12.4	40	9.5	243	12.0
<b>Income</b>						
< \$15,000	182	39.7	161	26.1	353	31.5
\$15-\$24,999	218	36.2	120	23.9	343	29.8
\$25-\$34,999	126	25.7	50	18.5	180	22.9
\$35-\$49,999	135	23.9	24	10.9	164	20.4
\$50-\$74,999	147	22.0	15	9.5	165	19.4
\$75,000+	156	13.9	10	7.5	170	13.3
<b>Employment Status</b>						
Employed	520	22.9	196	19.7	729	21.6
Not Employed	74	45.2	63	35.3	139	39.2
Student/Homemaker	119	25.3	19	15.9	139	22.7
Retired/Unable to Work	374	21.3	152	17.9	544	20.5
<b>Total</b>	1,088	23.7	430	20.9	1,552	22.7

<sup>1</sup>Unweighted

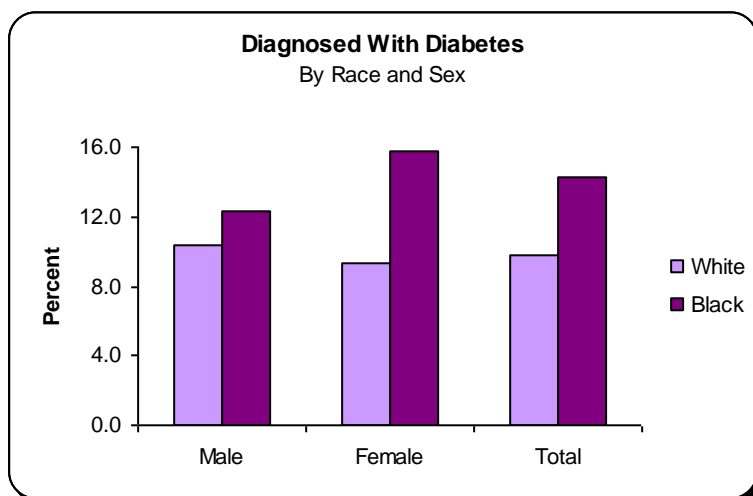
<sup>2</sup>Weighted



## Diabetes

### Survey Question:

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

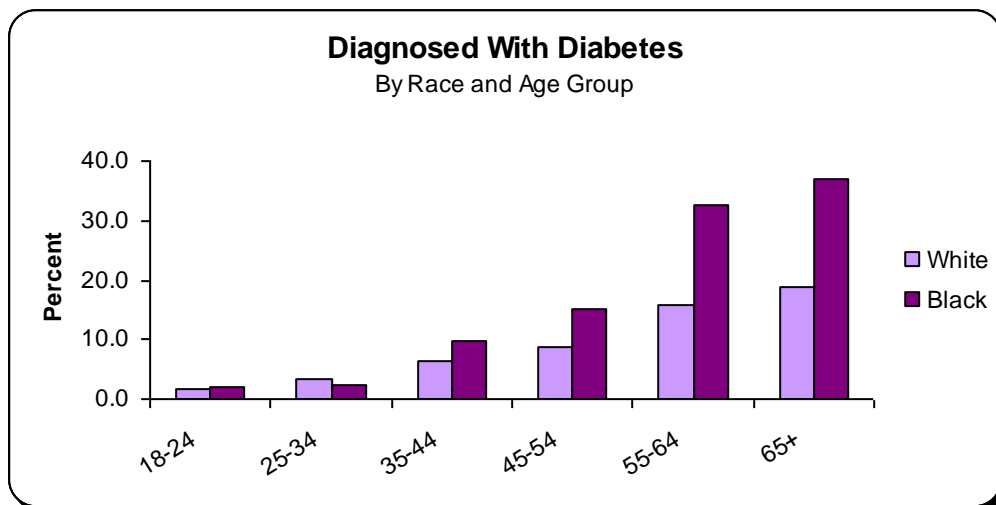


Diabetes was the eighth leading cause of death in Mississippi for the year 2007 with a death rate of 21.9 per 100,000 population. According to the 2008 BRFSS survey, 11.3 percent of all respondents reported being told by a doctor that they have diabetes. In 2007 the reported rate was 11.1 percent.

**Figure 9**

largest group having a rate of 15.8 percent followed by black males with a rate of 12.4 percent. White males reported a rate of 10.4 percent and white females were the lowest at 9.3 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 20.1 percent which is almost 75 percent higher than those with a high school degree.



**Figure 10**

Those with a high school education reported a rate of 11.5 percent; those with some college work, a rate of 9.2 percent; and college graduates a rate of 8.1 percent. Blacks with no high school education reported a diabetes rate of 25.2 percent (Table 9).

There are obvious differences seen by age of the respondent in the rate of diabetes. Only 4.4 percent of respondents under age 45 reported having diabetes while 18.0 percent of those above 45 reported they had diabetes. Respondents 65 years and older reported a rate of 23.6 percent: 18.8 percent for whites and 36.9 percent for blacks (Figure 10).

**Table 9 Ever Told by a Doctor That You Have Diabetes**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	265	10.4	140	12.3	415	11.0
Female	428	9.3	360	15.8	803	11.6
<b>Age Group</b>						
18-24	2	1.6	4	2.0	6	1.8
25-34	10	3.5	7	2.5	17	3.0
35-44	41	6.4	30	9.9	72	7.5
45-54	91	8.6	99	15.2	193	11.0
55-64	186	15.9	160	32.5	353	20.7
65+	362	18.8	199	36.9	574	23.6
<b>Education</b>						
< High School Graduate	137	15.1	207	25.0	348	20.0
High School Graduate or GED	251	10.7	152	12.4	411	11.5
Some College or Technical School	166	8.8	82	9.7	257	9.2
College Graduate	139	7.8	59	9.7	201	8.0
<b>Income</b>						
< \$15,000	133	20.3	200	23.9	338	22.6
\$15-\$24,999	144	14.0	107	13.2	258	13.7
\$25-\$34,999	91	11.3	44	12.5	135	11.4
\$35-\$49,999	78	9.2	35	9.5	114	9.1
\$50-\$74,999	70	8.8	19	9.6	90	8.9
\$75,000+	80	5.2	11	4.5	92	5.1
<b>Employment Status</b>						
Employed	198	6.7	123	7.8	326	6.9
Not Employed	17	6.2	25	7.5	43	7.2
Student/Homemaker	61	5.8	22	5.6	85	5.7
Retired/Unable to Work	417	19.7	330	35.6	763	25.1
<b>Total</b>	693	9.8	500	14.3	1,218	11.3

<sup>1</sup>Unweighted

<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 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 2005, the death rate for breast cancer was 28.5 per 100,000 female population: 27.5 for whites and 29.9 for blacks. The rate for 2006 was 28.0 with a rate of 28.2 for white females and 28.7 for blacks. In 2007 the overall death rate was 25.8 per 100,000 with whites having a rate of 27.7 while blacks had a rate of 27.3.

The 2008 BRFSS survey indicated that 79.7 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 60.3 percent compared to a rate of 57.1 percent for blacks.

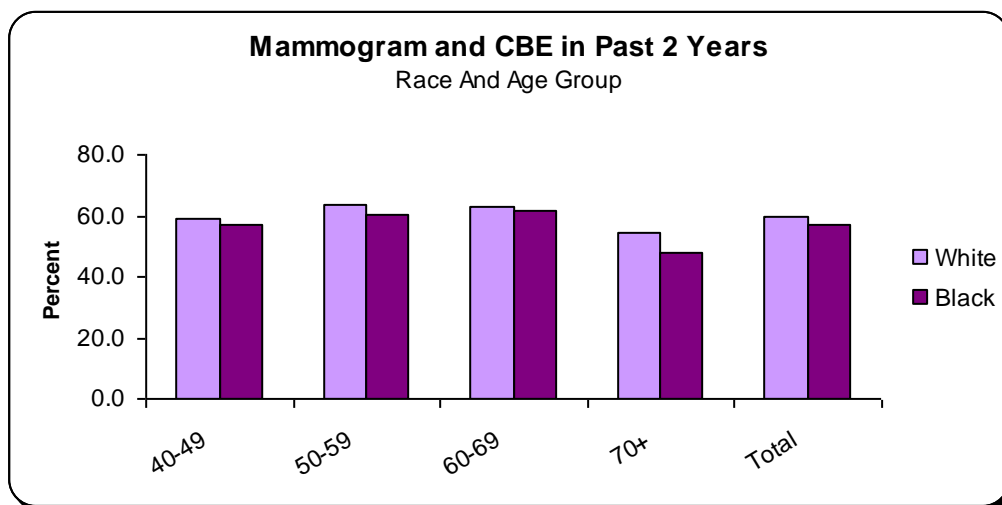


Figure 11

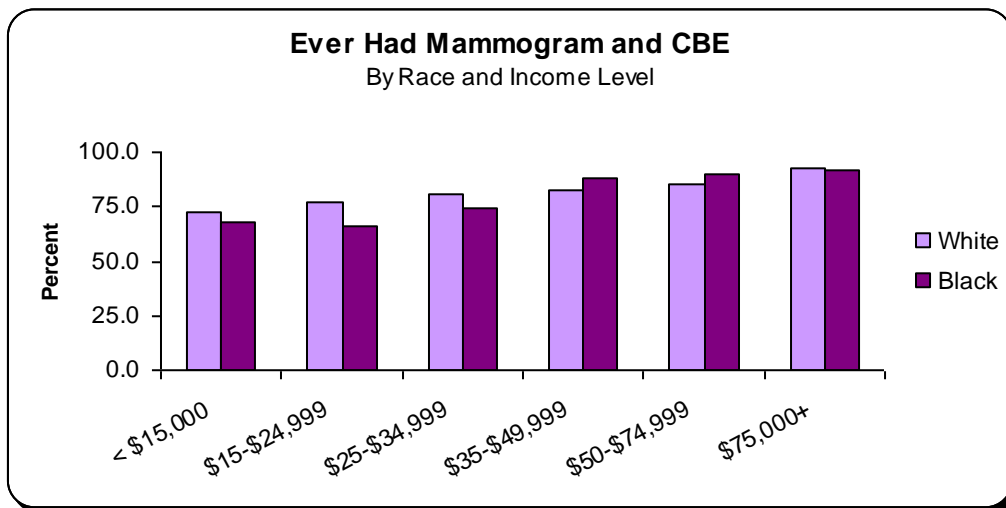
### ***Year 2010 National Health Objective***

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.

2008 BRFSS data revealed that 67.5 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 a Mammogram and CBE ( Females 40+)**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Age Group</b>						
40-49	384	77.4	239	68.2	628	73.3
50-59	606	85.6	326	77.8	942	82.8
60-69	674	88.7	213	79.4	901	86.3
70+	777	80.5	192	71.2	977	77.9
<b>Education</b>						
< High School Graduate	264	71.6	291	65.5	564	68.2
High School Graduate or GED	875	81.8	312	70.7	1,193	78.2
Some College or Technical School	678	82.4	191	80.7	877	81.6
College Graduate	623	90.3	176	85.9	812	88.8
<b>Income</b>						
< \$15,000	327	72.4	324	68.2	660	69.8
\$15-\$24,999	396	76.9	202	65.6	607	72.1
\$25-\$34,999	282	80.9	103	74.4	387	78.5
\$35-\$49,999	276	82.9	94	88.1	373	83.9
\$50-\$74,999	290	85.6	66	89.9	359	86.3
\$75,000+	441	92.9	43	91.3*	487	92.5
<b>Employment Status</b>						
Employed	852	82.9	390	71.9	1,256	78.8
Not Employed	72	75.5	46	68.4	120	72.7
Student/Homemaker	369	82.7	65	73.4	437	80.3
Retired/Unable to Work	1,146	83.8	468	76.2	1,632	81.2
<b>Total</b>	<b>2,441</b>	<b>82.9</b>	<b>970</b>	<b>73.6</b>	<b>3,448</b>	<b>79.7</b>

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 11 Mammogram and CBE in Past Two Years (Females 50+)**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Age Group</b>						
50-59	447	63.9	258	60.4	712	62.5
60-69	480	62.7	161	61.4	651	62.5
70+	515	54.2	132	47.7	650	52.1
<b>Education</b>						
< High School Graduate	141	43.7	176	48.2	321	46.1
High School Graduate or GED	530	59.4	170	53.5	703	57.7
Some College or Technical School	401	59.8	106	67.1	510	61.1
College Graduate	370	71.8	99	75.5	479	72.7
<b>Income</b>						
< \$15,000	159	40.2	192	52.3	355	46.8
\$15-\$24,999	229	51.7	113	48.1	346	50.0
\$25-\$34,999	172	57.5	56	69.6	229	60.4
\$35-\$49,999	164	59.0	50	72.8	216	62.2
\$50-\$74,999	179	71.1	40	92.9*	221	74.8
\$75,000+	253	80.0	14	67.3*	270	79.2
<b>Employment Status</b>						
Employed	452	65.7	182	62.3	643	64.7
Not Employed	32	62.0	23	56.5	55	59.4
Student/Homemaker	211	58.9	38	55.0	249	57.8
Retired/Unable to Work	746	57.3	308	54.4	1,065	56.3
<b>Total</b>	1,442	60.3	551	57.1	2,013	59.3

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

## 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 women in the United States, now ranks 14th in frequency. The NCI projects that in 2008, approximately 11,070 women in the United States will be diagnosed with cervical cancer and 3,870 will die of the disease which is about 1.3 percent of cancer-related deaths among women. 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.

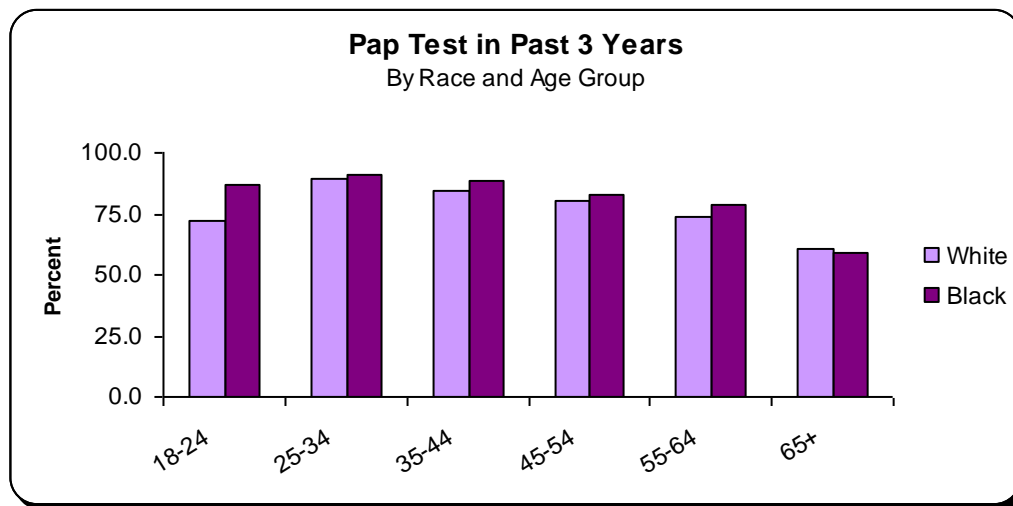


Figure 13

### ***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.

2008 BRFSS data indicate that 94.2 percent of Mississippi women aged 18 and older have received a Pap test (Table 12). This figure represents a slight decrease from 94.5 percent reported in 2006 and also a decrease from 95.6 percent reported in 2005.



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 2008 BRFSS data indicate that 80.8 percent of Mississippi women aged 18 and older have received a Pap test within the preceding one to three years which is a small decrease from 82.2 percent reported in 2006.

The rate of recent Pap screening among women ages 65 and older was substantially lower with a rate of 60.1 percent being reported. White females reported a higher rate at 60.6 percent than did black females who reported a rate of only 58.7 percent.

**Table 12 Ever Had a Pap Test (Females Age 18+)**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Age Group</b>						
18-24	49	75.6	52	86.7	105	81.1
25-34	219	97.6	165	93.8	392	96.1
35-44	318	97.7	208	97.3	537	97.1
45-54	353	99.3	238	95.6	599	97.5
55-64	349	98.2	171	98.0	525	98.2
65+	472	91.7	164	86.1	641	89.7
<b>Education</b>						
< High School Graduate	171	91.0	232	86.8	407	88.2
High School Graduate or GED	538	94.2	330	91.9	879	93.1
Some College or Technical School	489	92.5	228	94.9	736	93.1
College Graduate	567	99.1	211	99.8	790	99.2
<b>Income</b>						
< \$15,000	192	92.3	307	91.2	505	91.1
\$15-\$24,999	249	89.7	254	93.2	510	91.3
\$25-\$34,999	195	95.5	126	94.5	327	95.2
\$35-\$49,999	226	98.0	100	100.0	329	98.7
\$50-\$74,999	246	98.5	63	100.0	319	98.6
\$75,000+	391	96.9	42	100.0*	437	97.1
<b>Employment Status</b>						
Employed	843	96.9	523	97.6	1,388	96.9
Not Employed	74	96.8	90	83.0	169	88.5
Student/Homemaker	331	91.6	83	89.3	425	91.0
Retired/Unable to Work	518	93.1	305	90.0	830	91.6
<b>Total</b>	<b>1,766</b>	<b>95.0</b>	<b>1,002</b>	<b>93.3</b>	<b>2,814</b>	<b>94.2</b>

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 13 Pap Test in Past 3 Years (Females Age 18+)**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Age Group</b>						
18-24	47	72.5	52	86.7	103	79.5
25-34	202	89.7	160	90.8	370	90.3
35-44	276	84.7	187	88.9	470	85.5
45-54	280	80.4	204	82.5	490	80.8
55-64	262	74.0	140	78.5	405	75.2
65+	305	60.6	113	58.7	422	60.1
<b>Education</b>						
< High School Graduate	108	58.4	177	70.6	287	65.4
High School Graduate or GED	394	73.7	283	81.0	686	77.0
Some College or Technical School	368	76.2	205	89.5	586	80.7
College Graduate	501	92.1	190	94.0	699	92.2
<b>Income</b>						
< \$15,000	128	64.2	247	76.4	380	72.4
\$15-\$24,999	153	60.0	216	82.2	374	71.7
\$25-\$34,999	141	75.5	114	88.8	260	81.7
\$35-\$49,999	174	79.3	90	92.3	265	83.5
\$50-\$74,999	214	88.7	63	100.0	284	90.9
\$75,000+	371	92.9	41	97.7*	416	93.4
<b>Employment Status</b>						
Employed	701	84.4	472	92.2	1,188	87.0
Not Employed	57	78.4	78	77.6	139	78.3
Student/Homemaker	261	76.9	68	77.5	338	77.1
Retired/Unable to Work	353	66.7	237	67.6	594	66.9
<b>Total</b>	1,372	79.3	856	83.8	2,260	80.8

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

## 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?*

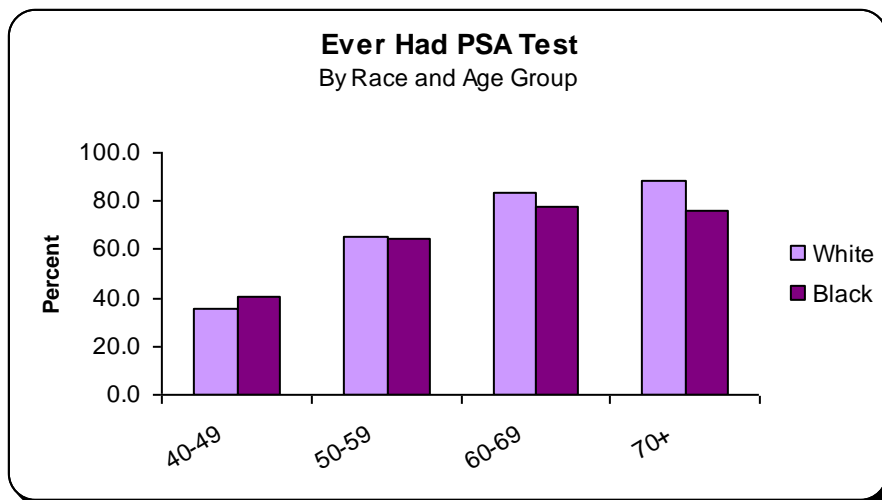
According to the American Cancer Society (ACS) prostate cancer is the most common type of cancer found in American men, other than skin cancer. The ACS estimates that there will be about 186,320 new cases of prostate cancer in the United States as of 2008 and about 28,660 men will die of the disease. 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-five 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.

In 2007 the death rate in Mississippi among males for prostate cancer was 23.5 per 100,000: 19.0 for whites and 32.2 for blacks.

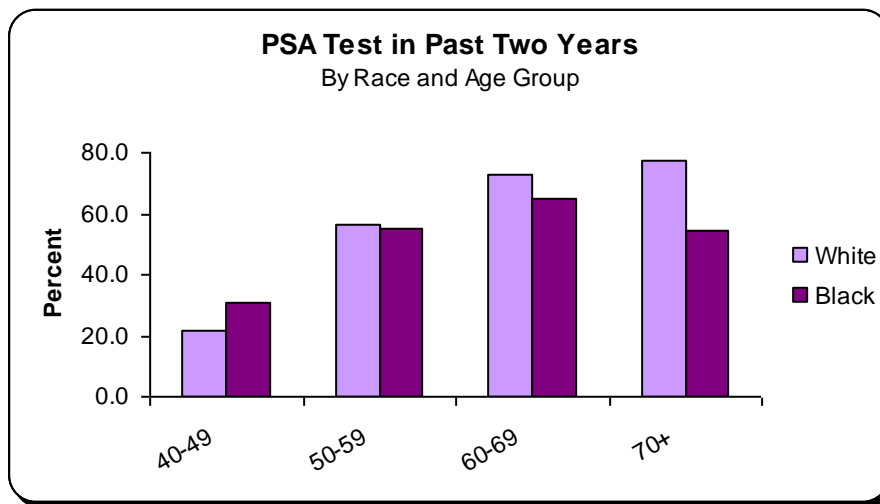
Prostate cancer is most common in men aged 65 years and older, who account for

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.



**Figure 14**

The 2008 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 64.2 percent while blacks reported a rate of 59.0 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 83.6 percent compared to 78.0 percent for blacks and for men 70 and older, whites had a rate of 88.4 percent while blacks had a rate of 76.4 percent.



**Figure 15**

Only 51.3 percent of males over 40 years of age reported having a PSA test within the past two years. The rate for white respondents was 53.4 percent compared to 47.2 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 77.7 percent while in the black group the rate was on 54.6 percent

Only 51.3 percent of males over 40 years of age reported having a PSA test within the past two years. The rate for white respondents was 53.4 percent compared to 47.2 percent for blacks. There was a conspicuous

**Table 14 Ever Had a PSA Test (Men 40+)**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Age Group</b>						
40-49	114	35.4	60	40.2	181	37.3
50-59	266	65.0	112	64.5	392	64.8
60-69	373	83.6	101	78.0	480	82.4
70+	367	88.4	69	76.4	446	85.6
<b>Education</b>						
< High School Graduate	129	53.9	98	52.9	232	53.8
High School Graduate or GED	331	63.5	118	53.5	463	60.1
Some College or Technical School	286	63.6	66	62.0	362	62.2
College Graduate	372	68.9	59	81.1	438	71.2
<b>Income</b>						
< \$15,000	70	42.4	74	47.8	152	47.2
\$15-\$24,999	153	59.5	83	50.0	241	55.4
\$25-\$34,999	155	67.2	46	53.9	207	63.4
\$35-\$49,999	186	65.9	45	74.9	236	67.2
\$50-\$74,999	170	60.0	32	83.5*	205	63.5
\$75,000+	282	70.3	22	80.2*	308	70.4
<b>Employment Status</b>						
Employed	538	58.7	147	55.7	698	57.5
Not Employed	15	33.2	13	27.9	28	29.8
Student/Homemaker	0	0.0*	0	0.0*	0	0.0*
Retired/Unable to Work	566	76.6	182	70.8	771	75.2
<b>Total</b>	<b>1,120</b>	<b>64.2</b>	<b>342</b>	<b>59.0</b>	<b>1,499</b>	<b>62.6</b>

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 15 PSA Test in Past Two Years (Men 40+)**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Age Group</b>						
40-49	74	21.9	46	30.6	124	24.7
50-59	230	56.7	95	55.0	338	56.0
60-69	327	73.0	84	64.7	417	71.3
70+	324	77.7	50	54.6	382	72.3
<b>Education</b>						
< High School Graduate	104	40.7	70	36.6	178	38.8
High School Graduate or GED	273	49.9	93	43.1	378	47.4
Some College or Technical School	253	53.9	58	53.0	319	52.9
College Graduate	323	60.6	54	70.3	383	62.1
<b>Income</b>						
< \$15,000	48	29.6	49	27.4	103	29.1
\$15-\$24,999	136	51.3	67	42.6	208	47.7
\$25-\$34,999	133	54.8	39	42.4	177	50.8
\$35-\$49,999	159	51.7	36	60.6	200	53.4
\$50-\$74,999	148	52.4	29	74.7*	179	54.8
\$75,000+	242	59.4	21	72.5*	267	60.1
<b>Employment Status</b>						
Employed	456	48.4	122	45.1	588	46.9
Not Employed	11	23.7	9	19.4	20	21.0
Student/Homemaker	0	0.0*	0	0.0*	0	0.0*
Retired/Unable to Work	487	64.7	144	56.2	652	62.5
<b>Total</b>	955	53.4	275	47.2	1,261	51.3

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

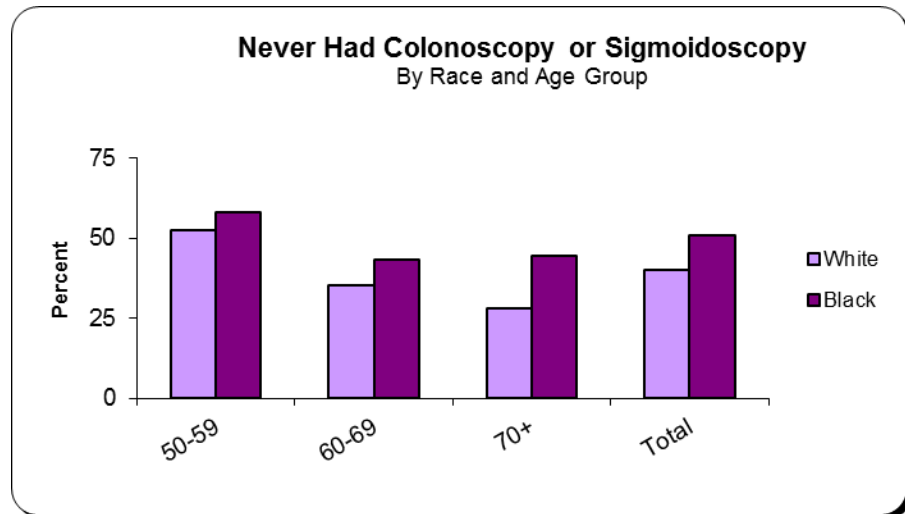
## Colorectal Cancer Screening

### ***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?*

Colorectal cancer (CRC) is the third most common cancer found in men and women in the United States. The American Cancer Society estimates that there will be about 108,070 new cases of colon cancer and 40,740 new cases of rectal cancer as of 2008 in the U. S. Together, they will result in about 49,960 deaths.

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.



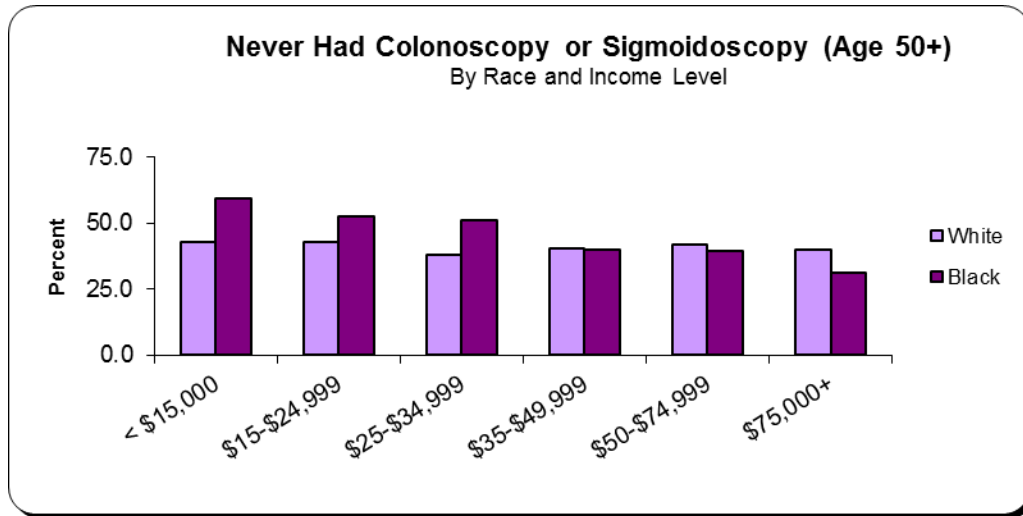
**Figure 16**

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 2007, the death rate for colorectal cancer in Mississippi was 99.8 per 100,000 among people age sixty-five and older; in 2006 it was 104.1. 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 2008 BRFSS data for Mississippi indicates that 43.1 percent of those surveyed had never had sigmoidoscopy or colonoscopy examination which is an improvement from 49.1 percent that was reported in the 2006 survey. The survey showed that black respondents were 1.3 times more likely to have never had an examination.



**Figure 17**

The rate for blacks was 51.0 percent compared to 40.1 percent for whites. Blacks who are age 70 or older were 1.6 times more likely to have never had a sigmoidoscopy or colonoscopy: 44.7 for blacks and 28.1 for whites (Figure 16 and Table 16).

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

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	493	39.9	207	52.5	717	43.2
Female	925	40.2	466	49.9	1,405	43.0
<b>Age Group</b>						
50-59	566	52.7	339	58.1	926	54.5
60-69	439	35.3	181	43.4	625	37.0
70+	413	28.1	153	44.7	571	32.1
<b>Education</b>						
< High School Graduate	226	46.7	286	57.7	520	52.4
High School Graduate or GED	517	42.0	218	54.4	741	45.2
Some College or Technical School	368	40.7	102	45.4	477	41.6
College Graduate	307	34.1	66	33.0	382	34.1
<b>Income</b>						
< \$15,000	203	42.7	256	59.5	468	51.6
\$15-\$24,999	268	42.8	170	52.5	443	46.4
\$25-\$34,999	170	37.9	66	50.9	237	40.8
\$35-\$49,999	168	40.3	46	40.1	219	40.8
\$50-\$74,999	172	41.8	26	39.5	200	41.4
\$75,000+	220	39.8	11	31.2*	234	39.0
<b>Employment Status</b>						
Employed	581	48.5	251	58.9	843	51.3
Not Employed	40	53.9	45	68.7	87	61.1
Student/Homemaker	152	43.9	33	55.6	188	45.9
Retired/Unable to Work	645	31.2	344	43.4	1,004	34.8
<b>Total</b>	1,418	40.1	673	51.0	2,122	43.1

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

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

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	939	76.2	307	76.4	1,273	76.1
Female	1,969	80.5	761	80.6	2,763	80.6
<b>Age Group</b>						
50-59	899	82.9	483	80.8	1,411	82.3
60-69	945	76.6	308	77.3	1,269	76.5
70+	1,064	74.9	277	76.5	1,356	75.0
<b>Education</b>						
< High School Graduate	400	80.2	420	81.5	836	81.0
High School Graduate or GED	1,048	79.1	330	79.0	1,393	78.9
Some College or Technical School	759	77.6	178	79.6	955	78.2
College Graduate	699	78.3	138	70.6	847	76.6
<b>Income</b>						
< \$15,000	413	78.8	388	82.6	817	80.7
\$15-\$24,999	495	76.8	248	76.5	754	76.6
\$25-\$34,999	351	76.7	105	81.8	460	77.6
\$35-\$49,999	351	76.5	74	66.1	429	74.1
\$50-\$74,999	331	78.5	62	88.3	396	80.0
\$75,000+	459	81.2	25	61.0*	491	79.9
<b>Employment Status</b>						
Employed	1,001	82.0	352	80.6	1,374	81.7
Not Employed	63	78.6	53	81.6	117	79.9
Student/Homemaker	301	82.9	53	86.1	359	83.5
Retired/Unable to Work	1,542	74.8	610	76.7	2,185	75.2
<b>Total</b>	<b>2,908</b>	<b>78.6</b>	<b>1,068</b>	<b>78.8</b>	<b>4,036</b>	<b>78.6</b>

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

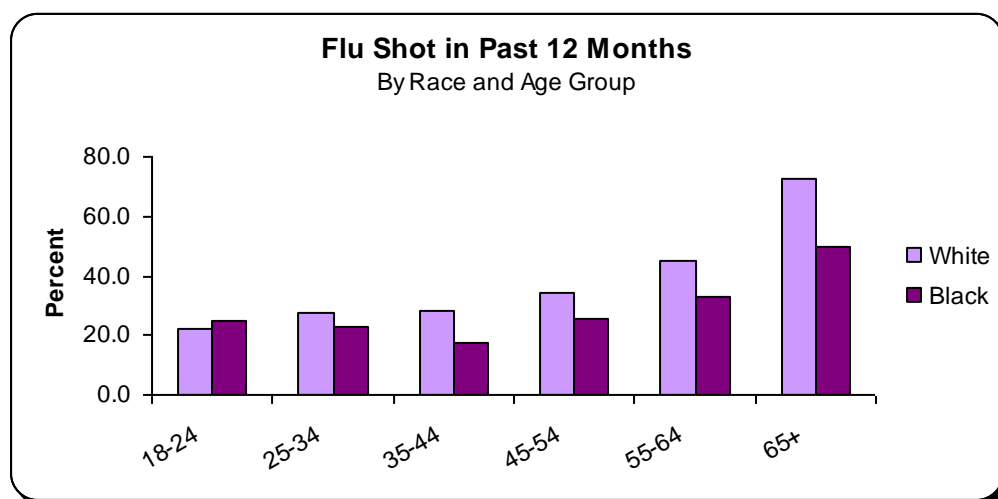
## Immunization

### ***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 2007 producing a death rate of 18.7 per 100,000 population.

The *Healthy People 2010* goal for influenza vaccinations is that 90 percent of the noninstitutionalized 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 2008 BRFSS survey, 66.7 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: 72.7 percent of whites reported having been vaccinated compared to only 49.4 percent for blacks. For the total population the vaccination rates showed little difference with respect to gender: 33.6 percent of the males and 37.4 percent of the females reported receiving a flu vaccination in the past 12 months.

Only 24.3 percent of the respondents said that they had ever received a pneumonia vaccination. Respondents over the age of 65 reported a vaccination rate of 64.8 percent. As was the case with influenza vaccinations there was a marked difference with respect to race: 71.0 percent for whites but only 46.7 percent for blacks.

**Table 18 Had a Flu Vaccination in the Past 12 Months**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	878	36.6	219	27.7	1,127	33.6
Female	1,840	43.2	510	27.3	2,382	37.4
<b>Age Group</b>						
18-24	31	22.0	23	24.6	56	23.2
25-34	120	27.4	58	22.8	180	25.3
35-44	196	28.0	70	17.8	277	25.0
45-54	352	34.0	143	25.8	504	31.0
55-64	563	45.2	163	33.0	734	41.3
65+	1,448	72.9	267	49.6	1,742	67.1
<b>Education</b>						
< High School Graduate	334	35.3	225	27.0	567	30.8
High School Graduate or GED	885	36.2	229	28.5	1,131	33.3
Some College or Technical School	721	40.3	159	27.3	902	36.4
College Graduate	776	45.6	115	25.8	906	41.0
<b>Income</b>						
< \$15,000	338	39.5	223	26.1	572	31.7
\$15-\$24,999	420	39.6	179	28.3	609	33.8
\$25-\$34,999	340	42.8	74	25.2	422	36.1
\$35-\$49,999	337	38.1	63	26.5	406	34.8
\$50-\$74,999	315	34.1	43	30.2	365	33.3
\$75,000+	521	42.5	36	28.4	562	40.7
<b>Employment Status</b>						
Employed	982	34.6	273	23.4	1,278	30.6
Not Employed	58	24.8	37	25.1	96	25.2
Student/Homemaker	271	31.1	38	22.2	317	29.1
Retired/Unable to Work	1,405	59.9	381	40.0	1,814	53.2
<b>Total</b>	<b>2,718</b>	<b>40.1</b>	<b>729</b>	<b>27.5</b>	<b>3,509</b>	<b>35.6</b>

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 19 Had a Flu Vaccination in the Past 12 Months (Age 65+)**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	456	71.6	80	49.0	550	66.3
Female	1,000	73.4	192	49.7	1,208	66.9
<b>Education</b>						
< High School Graduate	240	72.8	140	46.0	386	58.2
High School Graduate or GED	563	70.1	58	42.7	630	64.8
Some College or Technical School	363	74.1	38	69.4	412	73.9
College Graduate	289	75.4	35	62.2	328	73.5
<b>Income</b>						
< \$15,000	244	68.0	107	46.4	354	57.4
\$15-\$24,999	297	74.5	61	55.3	366	69.1
\$25-\$34,999	202	74.4	19	50.8*	222	70.9
\$35-\$49,999	167	72.6	17	75.9*	185	73.2
\$50-\$74,999	120	76.5	5	35.0*	129	73.4
\$75,000+	114	67.8	3	60.3*	117	67.2
<b>Employment Status</b>						
Employed	183	61.2	26	55.0	213	59.7
Not Employed	9	58.4	4	35.5	13	46.6
Student/Homemaker	151	72.4	15	47.1	169	69.1
Retired/Unable to Work	1,112	75.4	227	49.1	1,360	68.1
<b>Total</b>	1,456	72.7	272	49.4	1,758	66.7

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 20 Ever Had a Pneumonia Vaccination**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	656	26.2	174	18.4	851	23.3
Female	1,398	29.1	365	18.3	1,788	25.2
<b>Age Group</b>						
18-24	17	16.8	9	8.4	26	12.7
25-34	29	9.5	24	7.8	55	8.7
35-44	67	11.6	45	14.1	114	12.4
45-54	146	14.4	86	14.5	239	14.6
55-64	361	28.9	127	27.7	496	28.4
65+	1,429	72.5	245	48.7	1,698	66.5
<b>Education</b>						
< High School Graduate	315	34.6	196	26.8	518	30.3
High School Graduate or GED	744	31.0	168	15.1	926	24.7
Some College or Technical School	550	27.2	96	16.8	663	23.9
College Graduate	443	22.4	79	15.8	529	20.6
<b>Income</b>						
< \$15,000	360	45.1	186	23.2	555	31.8
\$15-\$24,999	396	38.7	136	18.6	542	28.2
\$25-\$34,999	268	30.8	55	21.2	328	27.1
\$35-\$49,999	232	26.2	45	16.6	279	22.9
\$50-\$74,999	187	18.9	19	7.8	210	16.7
\$75,000+	239	18.1	12	10.3	253	17.0
<b>Employment Status</b>						
Employed	463	15.8	130	10.2	603	13.7
Not Employed	39	25.0	37	15.8	77	19.3
Student/Homemaker	198	19.2	27	14.0	229	17.9
Retired/Unable to Work	1,352	58.5	345	39.7	1,726	52.3
<b>Total</b>	2,054	27.8	539	18.3	2,639	24.3

<sup>1</sup>Unweighted

<sup>2</sup>Weighted



**Table 21 Ever Had a Pneumonia Vaccination (Age 65+)**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	435	68.6	68	44.0	514	62.7
Female	994	72.7	177	48.5	1,184	66.3
<b>Education</b>						
< High School Graduate	233	67.6	118	41.7	355	53.2
High School Graduate or GED	553	70.3	67	49.4	628	66.3
Some College or Technical School	368	74.0	29	57.2	406	72.3
College Graduate	273	71.2	31	56.6	307	69.6
<b>Income</b>						
< \$15,000	263	73.5	91	41.8	356	57.5
\$15-\$24,999	301	76.0	63	58.1	372	70.8
\$25-\$34,999	199	73.7	15	41.5*	215	69.2
\$35-\$49,999	157	68.0	16	79.9*	174	69.5
\$50-\$74,999	113	69.9	4	24.7*	119	65.6
\$75,000+	102	59.9	0	0.0*	102	57.7
<b>Employment Status</b>						
Employed	174	59.9	19	44.5	195	57.5
Not Employed	8	54.3	4	44.0	12	49.2
Student/Homemaker	149	69.4	16	56.8	167	67.6
Retired/Unable to Work	1,097	73.9	206	46.5	1,322	66.1
<b>Total</b>	1,429	71.0	245	46.7	1,698	64.8

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

## Overweight and Obesity

### ***Survey Question:***

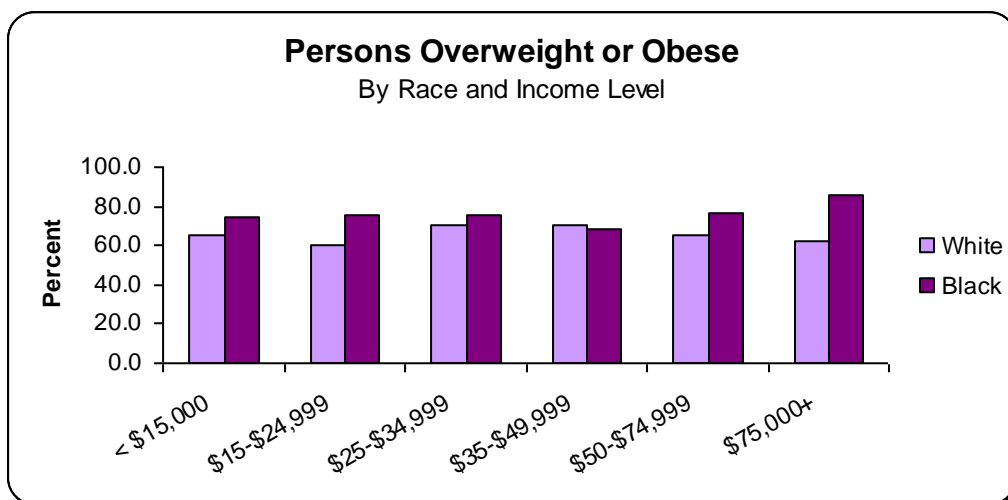
*There is no survey question that solicits the respondent to provide his body mass index (BMI) rather it is calculated from the reported height and weight. See the “Definitions” section for the formula.*

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 2008 BRFSS study 67.5 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 64.3 percent compared to 73.5 percent for blacks (Table 25). In year 2007 the self-reported rate was 68.1 percent and in 2006 it was 64.2 percent.



**Figure 20**

**Table 22 Respondents Who Are Either Overweight or Obese**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	1,420	72.4	496	67.8	1,967	71.1
Female	1,919	56.5	1,273	78.4	3,234	64.1
<b>Age Group</b>						
18-24	55	41.2	63	51.2	120	45.8
25-34	243	64.0	195	71.4	449	67.2
35-44	446	70.3	285	79.3	741	72.8
45-54	640	67.7	438	81.4	1,101	72.6
55-64	798	70.7	403	82.1	1,224	74.0
65+	1,151	61.4	374	74.7	1,546	64.8
<b>Education</b>						
< High School Graduate	418	62.2	490	75.4	922	68.7
High School Graduate or GED	1,125	64.9	612	72.2	1,763	67.9
Some College or Technical School	920	67.2	374	70.8	1,320	68.4
College Graduate	873	61.8	291	78.3	1,190	65.3
<b>Income</b>						
< \$15,000	408	65.3	539	75.0	966	71.2
\$15-\$24,999	509	60.1	451	75.9	974	68.3
\$25-\$34,999	409	70.1	202	75.6	622	72.0
\$35-\$49,999	495	70.9	164	68.5	670	70.2
\$50-\$74,999	459	65.8	113	77.0	584	68.1
\$75,000+	667	62.6	92	85.8	771	65.4
<b>Employment Status</b>						
Employed	1,601	67.0	852	75.6	2,498	69.9
Not Employed	120	64.6	135	62.5	261	63.3
Student/Homemaker	322	52.0	106	60.1	436	53.8
Retired/Unable to Work	1,295	64.1	675	78.8	2,003	69.0
<b>Total</b>	3,339	64.3	1,769	73.5	5,201	67.5

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 23 Respondents Who Are Obese**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	602	31.1	231	32.4	857	31.6
Female	900	27.8	797	48.7	1,714	35.0
<b>Age Group</b>						
18-24	28	20.1	28	21.9	57	21.0
25-34	122	29.4	109	42.0	234	33.9
35-44	237	36.9	186	48.2	430	40.8
45-54	311	32.7	256	44.6	578	36.9
55-64	382	31.4	242	48.9	633	36.1
65+	419	22.3	201	39.1	628	26.4
<b>Education</b>						
< High School Graduate	191	31.4	305	47.0	504	39.3
High School Graduate or GED	518	30.9	343	39.6	870	34.3
Some College or Technical School	425	30.7	215	37.8	655	33.2
College Graduate	366	26.0	164	41.5	538	28.8
<b>Income</b>						
< \$15,000	191	33.4	329	43.7	530	39.7
\$15-\$24,999	248	30.0	257	43.5	511	37.1
\$25-\$34,999	187	31.6	114	36.1	306	32.9
\$35-\$49,999	240	36.2	100	38.8	347	36.9
\$50-\$74,999	199	27.5	63	42.5	266	30.4
\$75,000+	279	27.4	41	37.0	322	28.3
<b>Employment Status</b>						
Employed	749	31.0	471	40.9	1,237	34.2
Not Employed	65	35.6	80	34.9	146	34.9
Student/Homemaker	138	22.4	55	30.9	197	24.3
Retired/Unable to Work	550	28.1	421	48.4	990	35.0
<b>Total</b>	1,502	29.4	1,028	41.1	2,571	33.4

<sup>1</sup>Unweighted

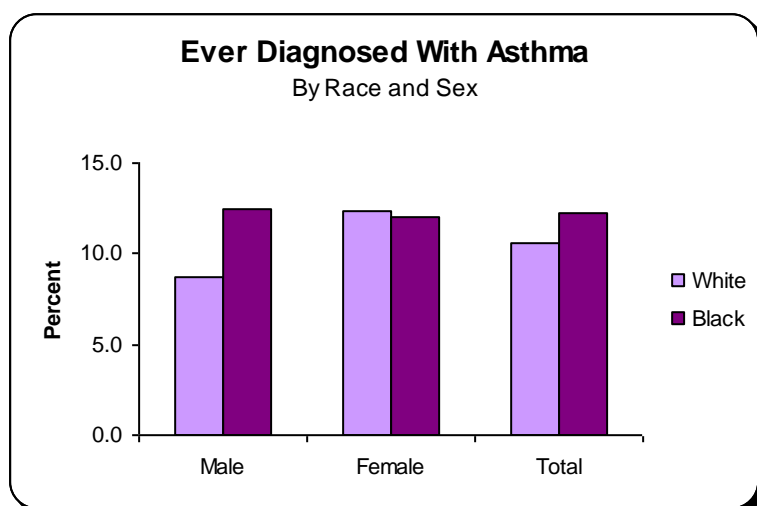
<sup>2</sup>Weighted

## 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.

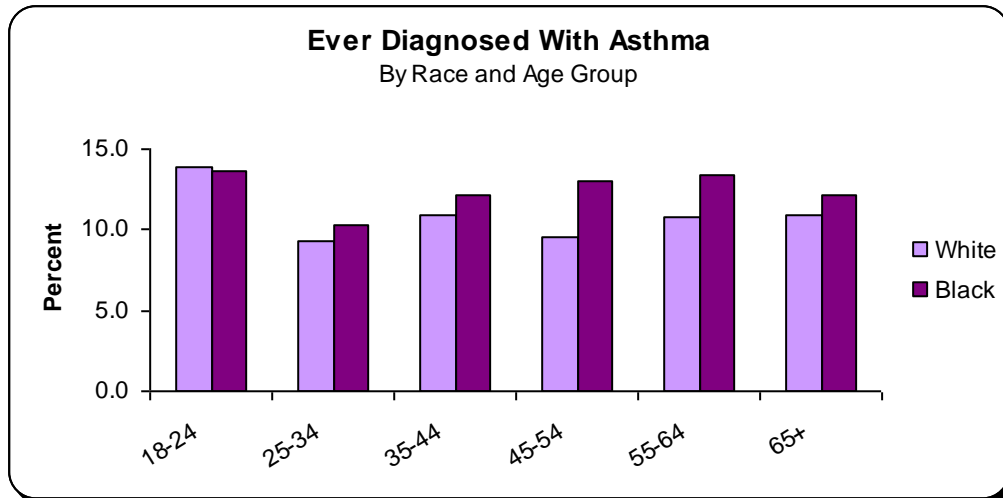


**Figure 21**

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 2008 BRFSS survey revealed that 11.2 percent of the respondents said that they had ever had asthma, a minimal increase from 11.0 percent reported in 2007 and a decrease from 11.5 percent in 2006. The black rate in 2008 was 12.2 percent compared to 10.6 percent for white respondents. Women reported a higher rate than men (Figure 21 and Table 22).



**Figure 22**

**Table 24 Ever Diagnosed With Asthma**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	171	8.7	84	12.5	263	10.0
Female	450	12.3	209	12.0	676	12.4
<b>Age Group</b>						
18-24	20	13.9	16	13.6	39	14.3
25-34	45	9.3	29	10.3	76	9.8
35-44	75	10.9	44	12.1	121	11.3
45-54	102	9.5	66	13.0	173	10.8
55-64	154	10.8	70	13.4	230	11.7
65+	225	10.9	67	12.1	294	11.1
<b>Education</b>						
< High School Graduate	101	15.3	108	16.1	212	15.6
High School Graduate or GED	202	10.5	100	12.3	309	11.3
Some College or Technical School	170	11.4	48	10.7	228	11.3
College Graduate	148	8.2	37	8.7	190	8.4
<b>Income</b>						
< \$15,000	118	16.6	106	14.1	232	15.2
\$15-\$24,999	123	14.6	76	15.5	202	15.1
\$25-\$34,999	71	12.0	20	7.3	94	10.6
\$35-\$49,999	77	12.0	29	12.0	111	12.5
\$50-\$74,999	61	8.5	7	6.3	70	8.1
\$75,000+	83	6.2	8	6.0	91	6.1
<b>Employment Status</b>						
Employed	229	8.6	91	9.3	327	8.9
Not Employed	28	16.7	26	11.7	56	14.2
Student/Homemaker	57	8.5	17	14.0	77	9.9
Retired/Unable to Work	306	15.2	159	18.9	477	16.5
<b>Total</b>	621	10.6	293	12.2	939	11.2

<sup>1</sup>Unweighted

<sup>2</sup>Weighted



**Table 25 Currently Have Asthma**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	97	4.2	54	8.0	156	5.5
Female	316	8.3	157	8.5	482	8.5
<b>Age Group</b>						
18-24	11	5.1	8	6.5	22	6.4
25-34	29	5.7	19	7.0	48	6.1
35-44	47	6.9	35	9.0	83	7.6
45-54	65	6.0	53	10.5	121	7.5
55-64	104	6.8	50	8.3	159	7.4
65+	157	7.0	45	8.3	203	7.2
<b>Education</b>						
< High School Graduate	73	10.6	83	11.4	158	11.0
High School Graduate or GED	138	6.3	74	8.5	214	7.2
Some College or Technical School	111	6.6	31	7.3	149	7.0
College Graduate	91	4.5	23	4.7	117	4.5
<b>Income</b>						
< \$15,000	95	13.3	86	12.3	186	12.7
\$15-\$24,999	81	9.2	54	10.5	138	10.0
\$25-\$34,999	46	7.1	11	3.7	59	6.3
\$35-\$49,999	50	7.1	18	7.6	70	7.2
\$50-\$74,999	32	3.8	5	2.9	37	3.5
\$75,000+	47	3.6	5	2.5	52	3.4
<b>Employment Status</b>						
Employed	136	5.0	60	5.3	198	5.0
Not Employed	14	6.7	19	8.6	34	8.3
Student/Homemaker	32	4.5	10	10.1	43	5.8
Retired/Unable to Work	231	10.3	122	14.6	362	11.9
<b>Total</b>	<b>413</b>	<b>6.3</b>	<b>211</b>	<b>8.3</b>	<b>638</b>	<b>7.0</b>

<sup>1</sup>Unweighted

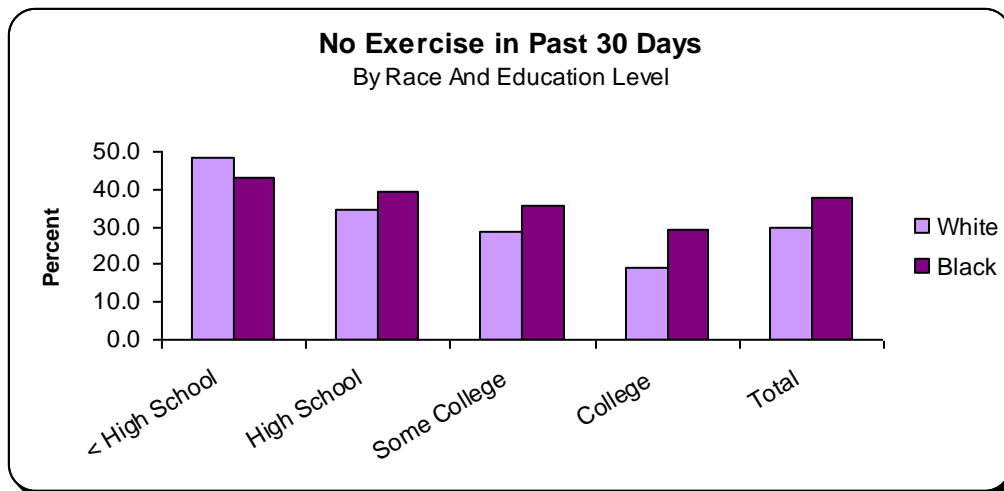
<sup>2</sup>Weighted

## 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?***

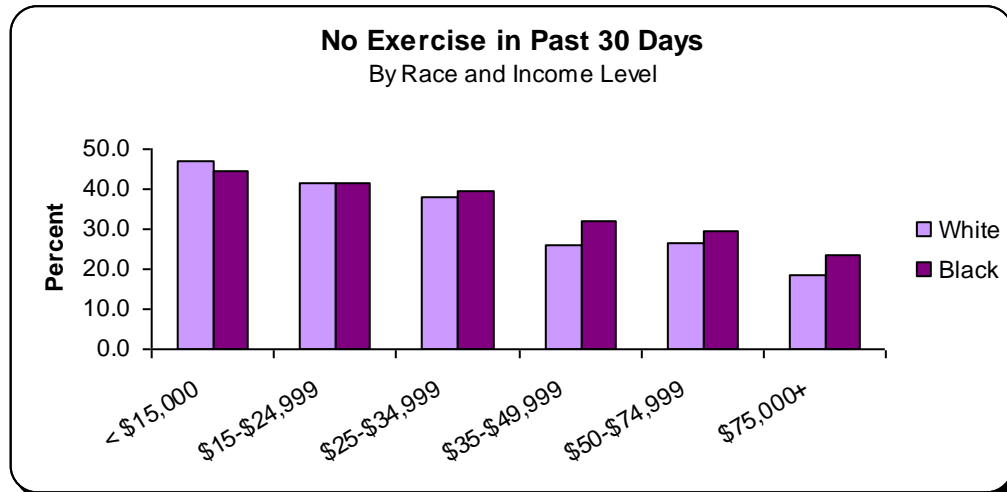
On average, physically active people outlive those who are inactive. Regular physical activity helps to maintain the functional independence of older adults and enhances the quality of life for people of all ages. The role of physical activity in preventing coronary heart disease (CHD) is of particular 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, 32.5 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**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	571	27.1	245	33.8	845	29.5
Female	1,220	32.3	721	40.9	1,966	35.3
<b>Age Group</b>						
18-24	32	23.0	40	29.5	75	26.4
25-34	99	24.0	86	33.4	188	27.3
35-44	200	28.8	143	39.3	351	32.9
45-54	323	31.4	233	37.7	570	33.8
55-64	425	33.8	218	44.3	652	36.5
65+	707	34.8	241	46.2	960	37.7
<b>Education</b>						
< High School Graduate	329	48.6	321	43.1	664	46.1
High School Graduate or GED	672	34.8	344	39.1	1,027	36.3
Some College or Technical School	483	28.6	180	35.5	681	31.2
College Graduate	305	18.9	119	29.3	433	20.7
<b>Income</b>						
< \$15,000	305	47.2	337	44.7	657	46.0
\$15-\$24,999	332	41.7	234	41.5	574	41.5
\$25-\$34,999	228	37.9	113	39.3	349	38.9
\$35-\$49,999	201	26.2	71	32.0	277	27.6
\$50-\$74,999	200	26.7	41	29.5	244	26.9
\$75,000+	218	18.4	23	23.3	244	19.0
<b>Employment Status</b>						
Employed	709	25.9	401	33.3	1,135	28.5
Not Employed	64	32.5	89	42.1	156	38.4
Student/Homemaker	192	27.3	54	34.2	251	28.9
Retired/Unable to Work	825	39.8	421	46.6	1,266	41.9
<b>Total</b>	<b>1,791</b>	<b>29.8</b>	<b>966</b>	<b>37.7</b>	<b>2,811</b>	<b>32.5</b>

<sup>1</sup>Unweighted

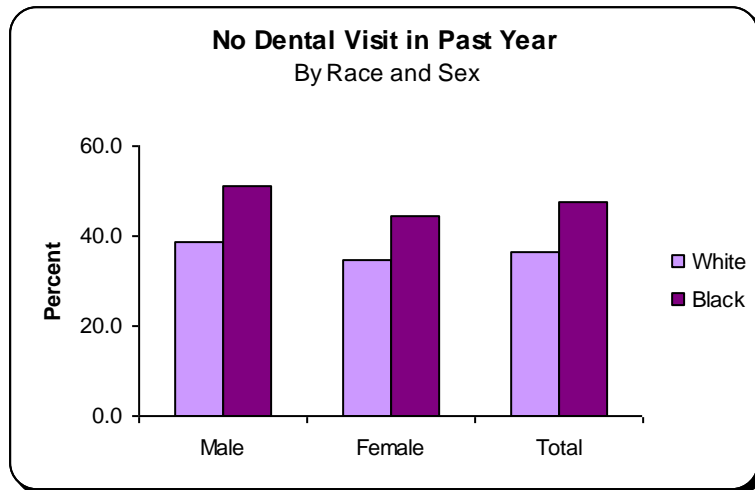
<sup>2</sup>Weighted

## Oral Health

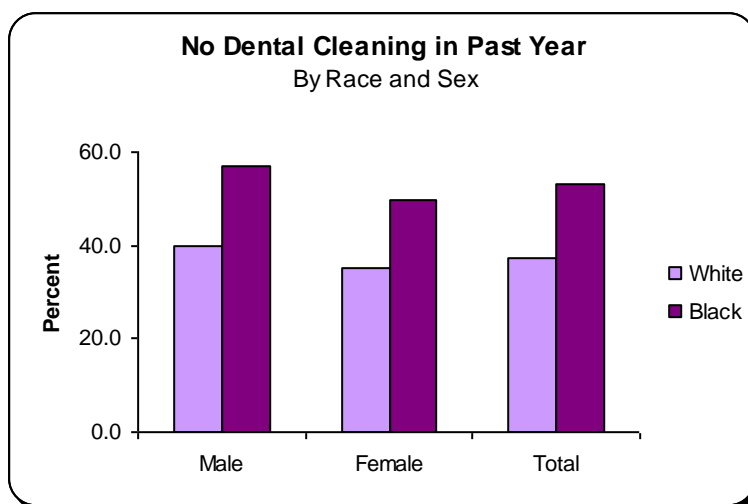
### ***Survey Question:***

- 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 to 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.



**Figure 25**



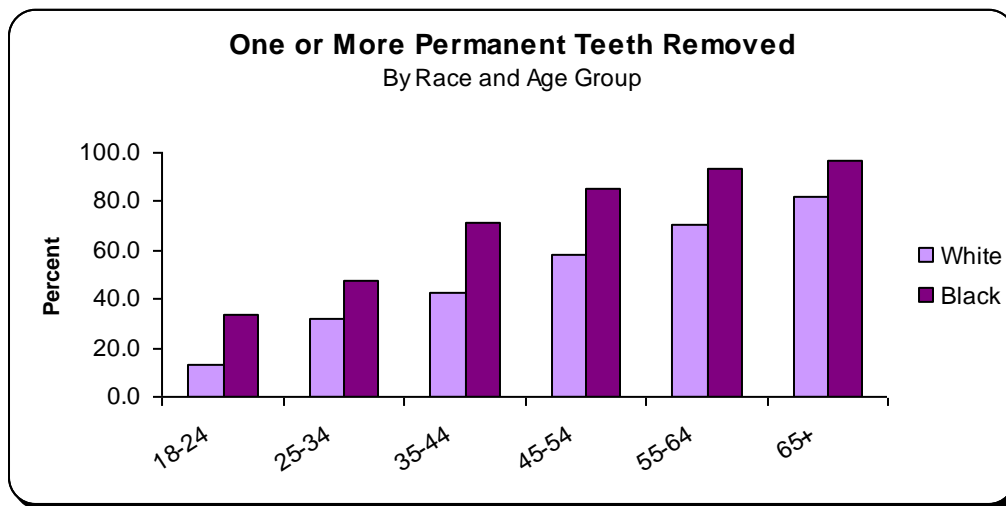
**Figure 26**

A full dentition is defined as having 28 natural teeth, exclusive of third molars and teeth removed for 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 2008 BRFSS Survey for Mississippi, 58.1 percent of the respondents reported having one or more of their permanent teeth removed. In 2006 the rate was 57.8 percent.

Older people reported the loss of permanent teeth much more frequently than their younger counterparts (Figure 27). Only 22.3 percent of respondents in the 18-24 age category reported the loss of permanent teeth while 86.0 percent in the over age 65 category reported losing permanent teeth. The rate for white respondents reporting tooth loss was 53.0 percent; for blacks it was 68.7 percent.



**Figure 27**

Oral health diseases such as tooth decay and periodontal diseases are common health problems in Mississippi, yet 40.5 percent of respondents from the 2008 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 whose annual income is less than \$15,000 per year with a rate of 69.1 percent. Next were black respondents who have less than a high school education 67.9 percent, followed by whites with less than a high school education with a rate of 61.2 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 17.1 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, 51.1 percent of the black males reported visits to a dental facility more than one year ago compared to 38.7 percent for white males. The rate for black females was 44.3 percent while white females reported a rate of 34.6 percent (Table 27).

**Table 27 No Visits to a Dental Clinic Within the Past Year**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	779	38.7	394	51.1	1,208	43.2
Female	1,324	34.6	824	44.3	2,187	38.1
<b>Age Group</b>						
18-24	37	30.5	50	42.4	90	36.4
25-34	150	37.1	106	38.8	265	38.5
35-44	242	34.7	156	44.6	406	38.0
45-54	354	35.2	252	46.6	620	39.3
55-64	457	36.4	285	55.6	759	42.0
65+	857	42.0	366	66.9	1,242	48.5
<b>Education</b>						
< High School Graduate	450	61.2	464	67.9	931	64.8
High School Graduate or GED	829	44.3	408	47.0	1,256	45.5
Some College or Technical School	505	33.7	225	39.4	751	35.8
College Graduate	316	22.0	120	30.6	450	24.2
<b>Income</b>						
< \$15,000	433	69.1	451	60.7	904	64.3
\$15-\$24,999	455	56.4	332	53.8	803	55.4
\$25-\$34,999	255	41.2	98	35.6	363	39.6
\$35-\$49,999	249	37.9	79	37.4	337	38.7
\$50-\$74,999	200	27.7	38	27.9	242	27.6
\$75,000+	188	17.2	20	16.7	211	17.1
<b>Employment Status</b>						
Employed	774	31.5	466	41.2	1,270	35.1
Not Employed	86	45.3	119	57.5	208	53.0
Student/Homemaker	245	37.8	75	41.3	328	38.6
Retired/Unable to Work	997	46.2	556	58.6	1,585	50.6
<b>Total</b>	2,103	36.6	1,218	47.4	3,395	40.5

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 28 Last Dental Cleanings More Than One Year Ago**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	655	39.8	373	56.9	1,050	45.7
Female	1,059	35.0	752	49.5	1,843	40.2
<b>Age Group</b>						
18-24	41	32.2	58	45.9	102	38.9
25-34	171	43.0	117	43.4	296	43.7
35-44	263	40.0	193	55.3	463	44.9
45-54	344	36.8	280	56.4	635	43.7
55-64	369	33.4	244	60.4	625	40.8
65+	522	34.6	229	71.1	761	42.6
<b>Education</b>						
< High School Graduate	272	62.8	369	79.7	655	71.8
High School Graduate or GED	640	45.3	395	52.3	1,051	48.4
Some College or Technical School	472	36.8	224	43.9	712	39.0
College Graduate	327	23.5	135	35.6	468	26.2
<b>Income</b>						
< \$15,000	290	73.0	400	70.4	704	71.4
\$15-\$24,999	348	62.4	322	59.4	682	61.1
\$25-\$34,999	227	45.4	108	44.8	342	45.3
\$35-\$49,999	231	40.2	86	41.2	323	41.1
\$50-\$74,999	197	29.0	37	32.7	238	30.0
\$75,000+	195	17.7	21	18.0	218	17.6
<b>Employment Status</b>						
Employed	763	33.7	507	46.9	1,293	38.3
Not Employed	84	51.0	126	64.2	215	59.6
Student/Homemaker	199	40.1	74	48.8	282	42.4
Retired/Unable to Work	668	43.4	416	65.7	1,100	50.4
<b>Total</b>	<b>1,714</b>	<b>37.3</b>	<b>1,125</b>	<b>53.0</b>	<b>2,893</b>	<b>42.8</b>

<sup>1</sup>Unweighted

<sup>2</sup>Weighted



**Table 29 One or More Permanent Teeth Extracted**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	1,219	50.8	564	69.1	1,824	56.5
Female	2,284	55.0	1,330	68.4	3,664	59.6
<b>Age Group</b>						
18-24	19	13.2	41	33.3	61	22.3
25-34	128	31.9	133	47.3	266	37.6
35-44	296	43.0	254	71.5	560	52.7
45-54	575	57.8	477	85.1	1,072	66.9
55-64	864	70.5	472	93.2	1,360	76.8
65+	1,613	82.3	508	96.9	2,149	86.0
<b>Education</b>						
< High School Graduate	576	74.6	599	81.6	1,194	77.9
High School Graduate or GED	1,326	63.1	652	68.1	2,000	64.9
Some College or Technical School	947	53.7	366	60.8	1,342	55.8
College Graduate	651	33.9	275	63.4	945	39.7
<b>Income</b>						
< \$15,000	548	78.9	612	81.6	1,187	81.0
\$15-\$24,999	645	71.1	476	68.1	1,140	69.5
\$25-\$34,999	467	63.7	209	73.4	684	66.4
\$35-\$49,999	456	56.1	172	65.9	636	57.7
\$50-\$74,999	410	51.1	106	70.4	521	54.4
\$75,000+	436	31.1	69	48.7	511	33.1
<b>Employment Status</b>						
Employed	1,258	42.7	818	64.0	2,107	49.4
Not Employed	124	58.6	145	62.8	274	61.1
Student/Homemaker	371	41.2	101	46.8	480	42.5
Retired/Unable to Work	1,747	82.2	828	89.9	2,621	84.8
<b>Total</b>	3,503	53.0	1,894	68.7	5,488	58.1

<sup>1</sup>Unweighted

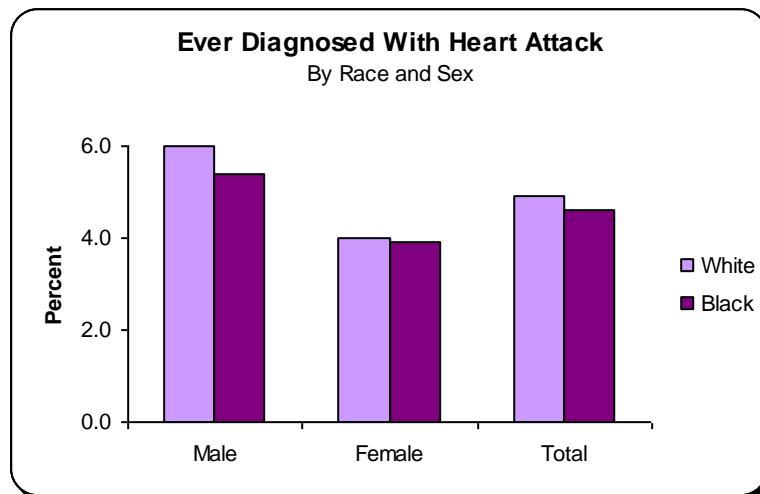
<sup>2</sup>Weighted

## Cardiovascular Disease

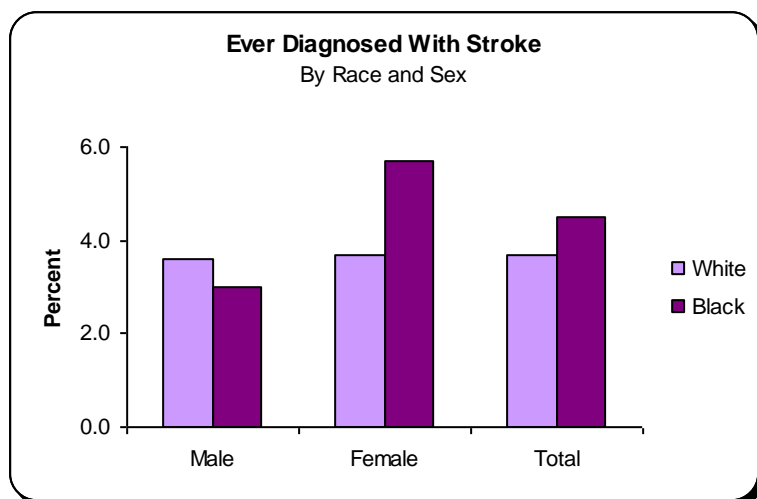
### ***Survey Question:***

*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 2008 BRFSS survey approximately 9.5 percent of Mississippi adults or 205,000 people report having some kind of CVD, such as coronary heart disease, angina, previous heart attack, or stroke.



**Figure 28**

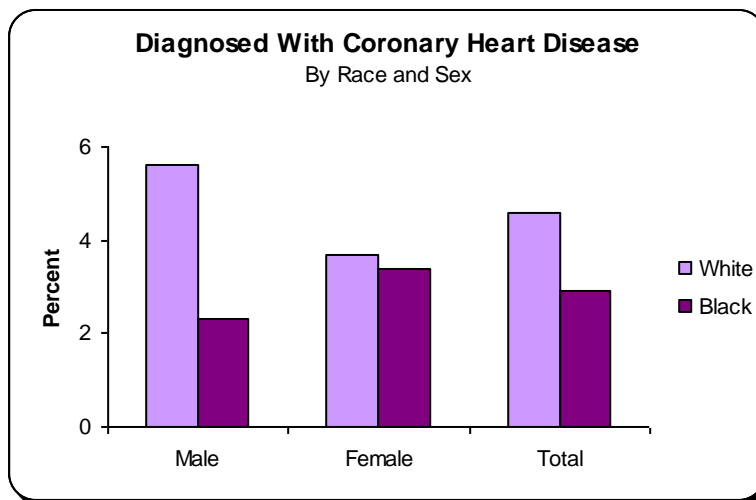


**Figure 29**

In 2007 Mississippi reported 8,584 deaths from heart disease and 1,617 from cerebrovascular disease (stroke). The two combined accounted for more than thirty-four percent of all the deaths reported that year and almost forty-four percent of the total from the ten leading causes of death.

The 2008 BRFSS survey revealed that 13.4 percent of the population 65 years of age or older reported that they have been diagnosed as having had a heart attack: 12.3 for white respondents and 16.2 for blacks. The second highest age group that reported being diagnosed with a heart attack was the 55 to 64 category. Whites reported a rate of 8.6 percent while blacks reported a rate of 10.5 for a total rate of 9.3 percent (Table 30).

Table 31 shows the rate for those who had been diagnosed with a stroke age 65 and greater was 9.9 percent for whites and 11.9 percent for blacks. In the 55 to 64 group the rates were 5.4 and 9.7 for whites and blacks respectively.



**Figure 30**

Those in the older age groups also reported a higher rate of coronary artery disease. Those age 65 and older reported a rate of 10.4 percent with white respondents having a rate of 11.7 percent compared to 7.1 for blacks. The 55 to 64 age category had an overall rate of 8.4 percent: 8.2 for whites and 8.6 for blacks (Table 32).

**Table 30 Ever Diagnosed With Heart Attack**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	197	6.0	65	5.4	274	6.0
Female	189	4.0	108	3.9	300	3.9
<b>Age Group</b>						
18-24	0	0.0	0	0.0	0	0.0
25-34	1	0.2	0	0.0	1	0.1
35-44	12	1.8	7	1.3	20	1.7
45-54	40	4.4	29	5.0	72	5.0
55-64	98	8.6	51	10.5	153	9.3
65+	233	12.3	84	16.2	324	13.4
<b>Education</b>						
< High School Graduate	84	9.9	81	8.4	167	9.1
High School Graduate or GED	140	5.7	57	4.8	202	5.5
Some College or Technical School	94	4.3	24	2.7	123	3.9
College Graduate	68	2.9	11	1.5	81	2.7
<b>Income</b>						
< \$15,000	88	11.9	82	9.2	175	10.6
\$15-\$24,999	98	10.7	37	4.6	139	7.8
\$25-\$34,999	52	6.3	9	2.2	62	4.8
\$35-\$49,999	39	4.2	5	1.1	45	3.4
\$50-\$74,999	28	2.7	2	0.9	31	2.7
\$75,000+	30	1.8	2	0.7	32	1.6
<b>Employment Status</b>						
Employed	65	1.7	24	1.8	90	1.8
Not Employed	10	4.0	6	0.5	16	1.8
Student/Homemaker	20	2.0	6	1.3	26	1.8
Retired/Unable to Work	290	14.0	137	14.5	440	14.6
<b>Total</b>	<b>386</b>	<b>4.9</b>	<b>173</b>	<b>4.6</b>	<b>574</b>	<b>4.9</b>

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 31 Ever Diagnosed With a Stroke**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	111	3.6	34	3.0	153	3.5
Female	184	3.7	126	5.7	318	4.5
<b>Age Group</b>						
18-24	0	0.0	1	2.1	1	0.9
25-34	2	0.6	3	1.3	5	0.8
35-44	13	2.0	10	2.2	24	2.1
45-54	27	2.4	27	4.1	55	3.0
55-64	70	5.4	55	9.7	128	6.6
65+	183	9.9	64	11.9	256	10.6
<b>Education</b>						
< High School Graduate	71	8.5	68	8.1	142	8.3
High School Graduate or GED	119	4.4	58	4.3	182	4.5
Some College or Technical School	67	3.0	21	2.8	93	3.0
College Graduate	38	1.8	13	2.0	54	1.8
<b>Income</b>						
< \$15,000	83	11.5	78	8.6	165	9.7
\$15-\$24,999	62	6.1	34	4.3	100	5.3
\$25-\$34,999	28	4.0	7	1.3	35	2.9
\$35-\$49,999	30	3.4	9	4.2	40	3.6
\$50-\$74,999	22	2.1	4	1.8	26	2.0
\$75,000+	19	1.0	4	2.1	24	1.2
<b>Employment Status</b>						
Employed	48	1.3	20	1.4	70	1.4
Not Employed	5	1.6	6	2.8	11	2.3
Student/Homemaker	26	2.3	8	1.9	35	2.2
Retired/Unable to Work	216	10.3	126	13.3	355	11.5
<b>Total</b>	295	3.7	160	4.5	471	4.0

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 32 Ever Diagnosed With Heart Coronary Heart Disease**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	154	5.6	30	2.3	191	4.6
Female	194	3.7	78	3.4	274	3.6
<b>Age Group</b>						
18-24	0	0.0	0	0.0	0	0.0
25-34	0	0.0	2	0.8	2	0.3
35-44	11	1.8	4	0.8	15	1.4
45-54	37	4.0	26	3.1	67	4.0
55-64	95	8.2	39	8.6	137	8.4
65+	205	11.7	35	7.1	242	10.4
<b>Education</b>						
< High School Graduate	56	7.0	38	3.6	97	5.4
High School Graduate or GED	126	5.2	41	3.4	169	4.5
Some College or Technical School	100	4.8	20	2.4	123	4.1
College Graduate	66	3.0	9	1.3	76	2.6
<b>Income</b>						
< \$15,000	74	9.5	51	4.9	130	7.1
\$15-\$24,999	71	7.6	28	3.9	101	5.8
\$25-\$34,999	42	5.2	5	1.2	47	3.6
\$35-\$49,999	32	3.3	8	1.7	40	2.8
\$50-\$74,999	29	3.2	1	0.5	30	2.6
\$75,000+	40	2.7	4	2.0	44	2.6
<b>Employment Status</b>						
Employed	69	2.1	20	1.2	90	1.7
Not Employed	6	2.9	5	0.7	11	1.5
Student/Homemaker	17	1.4	1	0.6	18	1.2
Retired/Unable to Work	256	12.7	82	8.9	346	11.7
<b>Total</b>	<b>348</b>	<b>4.6</b>	<b>108</b>	<b>2.9</b>	<b>465</b>	<b>4.0</b>

<sup>1</sup>Unweighted

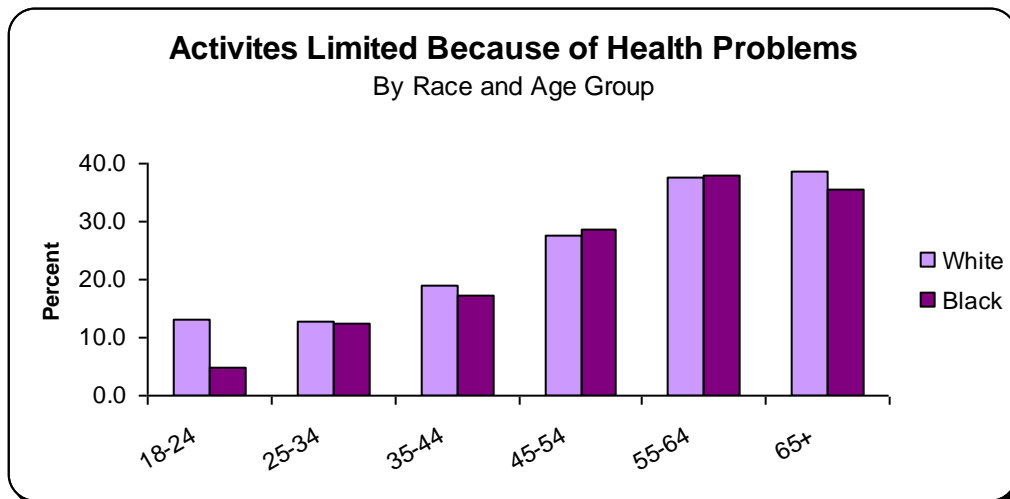
<sup>2</sup>Weighted

## 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.

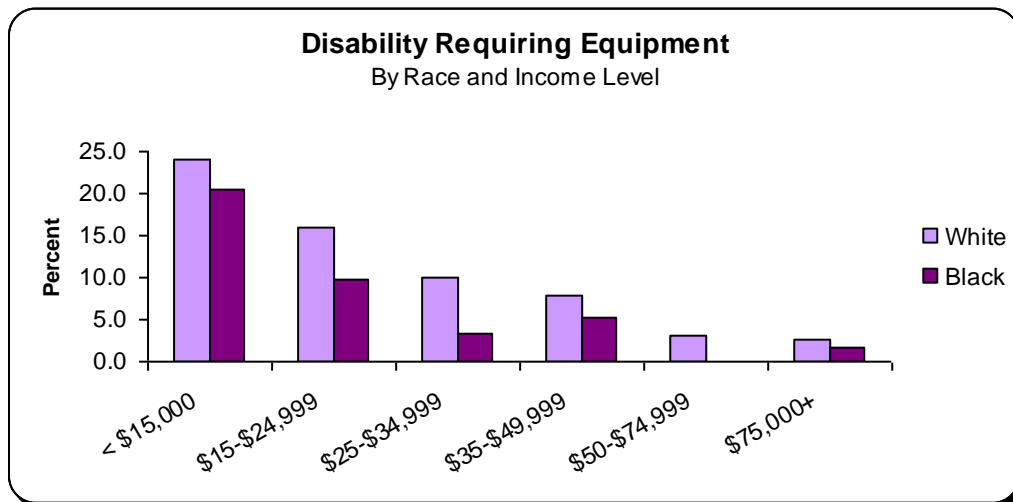


**Figure 31**

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 2008 BRFSS survey, 24.2 percent of Mississippians reported that their activities were limited because of health problems compared to 22.5 percent in 2007. White respondents reported a rate of 25.6 percent, up from 23.2 in 2007 while blacks reported a rate of 21.3 percent, which remained unchanged from the rate reported in 2007. Figure 31 reflects the fact that these limitations increase with age for both races. People over the age of 65 report a rate of 37.9 percent (38.6 for whites and 35.5 for blacks) but the 18-24 age group had a rate of only 9.6 percent (13.2 for white and 4.9 for blacks).



**Figure 32**

Only 9.1 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 Because of Physical, Mental or Emotional Problems**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	581	23.8	202	21.1	811	23.0
Female	1,173	27.4	468	21.5	1,665	25.3
<b>Age Group</b>						
18-24	15	13.2	6	4.9	22	9.6
25-34	53	12.7	31	12.5	86	12.6
35-44	137	18.8	77	17.4	218	18.1
45-54	274	27.6	179	28.7	465	28.1
55-64	475	37.5	188	37.8	678	37.7
65+	798	38.6	187	35.5	1,000	37.9
<b>Education</b>						
< High School Graduate	333	43.1	246	32.1	592	37.5
High School Graduate or GED	614	27.2	225	20.9	852	24.7
Some College or Technical School	491	26.2	124	16.8	631	23.4
College Graduate	315	16.9	75	13.5	400	16.2
<b>Income</b>						
< \$15,000	395	57.4	307	38.7	721	46.4
\$15-\$24,999	378	42.8	160	23.5	547	32.8
\$25-\$34,999	201	27.7	41	11.2	244	21.5
\$35-\$49,999	190	23.6	42	12.5	239	20.6
\$50-\$74,999	145	15.9	20	10.2	167	14.7
\$75,000+	176	12.9	11	6.6	188	12.0
<b>Employment Status</b>						
Employed	401	12.8	127	10.1	540	11.9
Not Employed	80	42.6	62	23.4	145	31.1
Student/Homemaker	158	18.0	30	9.6	191	15.8
Retired/Unable to Work	1,113	56.2	450	50.9	1,595	54.6
<b>Total</b>	<b>1,754</b>	<b>25.6</b>	<b>670</b>	<b>21.3</b>	<b>2,476</b>	<b>24.2</b>

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 34 Health Problems That Require Special Equipment**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	211	8.5	104	8.6	332	8.7
Female	428	8.7	280	11.3	720	9.6
<b>Age Group</b>						
18-24	4	4.1	0	0.0	4	2.2
25-34	12	3.1	5	2.0	17	2.6
35-44	28	4.7	27	5.1	56	4.8
45-54	77	7.7	71	11.1	155	9.1
55-64	146	11.4	99	19.8	254	14.1
65+	372	18.0	182	32.7	564	21.8
<b>Education</b>						
< High School Graduate	153	20.3	193	21.1	353	20.7
High School Graduate or GED	208	8.1	109	8.4	322	8.2
Some College or Technical School	183	8.7	51	5.8	245	8.0
College Graduate	94	4.5	31	4.5	129	4.4
<b>Income</b>						
< \$15,000	184	24.1	184	20.5	379	22.2
\$15-\$24,999	150	15.9	88	9.7	242	12.8
\$25-\$34,999	69	9.9	17	3.4	88	7.5
\$35-\$49,999	52	7.8	16	5.3	70	7.1
\$50-\$74,999	34	3.1	1	0.1	35	2.5
\$75,000+	35	2.6	3	1.7	38	2.5
<b>Employment Status</b>						
Employed	68	2.3	23	1.7	91	2.1
Not Employed	17	10.0	20	5.1	38	7.2
Student/Homemaker	53	6.2	18	4.9	72	5.9
Retired/Unable to Work	501	23.9	323	34.0	849	27.6
<b>Total</b>	639	8.6	384	10.1	1,052	9.1

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

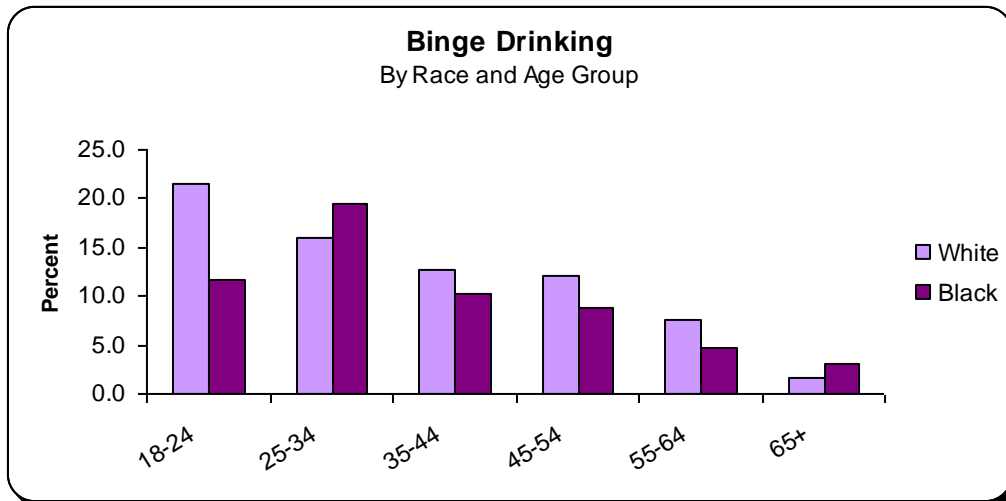
## Alcohol Consumption

### ***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 2007 alcohol use was associated with 34.2 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 2008 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 2006 it was 12.9 and in 2007 it was 19.0. Males were 2.8 times more likely to indulge in binge drinking than females. Only 5.8 percent of female respondents said they had five or more drinks on one occasion during the last thirty days compared to 16.4 percent for males.

**Table 35 At Risk From Binge Drinking**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	210	15.5	96	18.8	313	16.4
Female	142	6.8	46	4.0	192	5.8
<b>Age Group</b>						
18-24	22	21.5	11	11.7	33	16.6
25-34	54	15.9	34	19.5	90	17.2
35-44	81	12.7	24	10.3	108	11.7
45-54	94	12.0	42	8.8	139	11.1
55-64	72	7.5	20	4.8	94	6.7
65+	28	1.7	11	3.0	40	2.0
<b>Education</b>						
< High School Graduate	32	10.5	37	8.4	70	9.3
High School Graduate or GED	102	11.1	60	14.0	165	12.1
Some College or Technical School	106	12.7	27	9.3	136	11.6
College Graduate	112	9.4	18	7.7	134	9.2
<b>Income</b>						
< \$15,000	24	7.5	34	7.8	60	7.6
\$15-\$24,999	32	8.4	51	13.6	85	11.0
\$25-\$34,999	37	9.6	19	16.0	57	11.6
\$35-\$49,999	48	10.2	10	7.3	60	9.8
\$50-\$74,999	58	11.8	8	9.0	67	11.3
\$75,000+	130	15.7	6	12.6	138	15.2
<b>Employment Status</b>						
Employed	258	14.4	85	12.2	349	13.6
Not Employed	14	9.2	21	16.5	35	13.4
Student/Homemaker	27	10.3	9	9.2	39	10.1
Retired/Unable to Work	53	3.7	27	4.5	82	4.0
<b>Total</b>	352	11.0	142	10.7	505	10.8

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 36 At Risk From Heavy Drinking**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	85	4.6	35	5.5	124	4.8
Female	87	3.1	28	1.8	119	2.7
<b>Age Group</b>						
18-24	8	6.7	4	1.4	13	4.5
25-34	13	2.8	14	6.0	28	4.0
35-44	24	4.0	10	4.3	36	4.1
45-54	38	4.1	18	3.4	57	3.9
55-64	50	4.7	12	2.6	64	4.1
65+	39	2.4	5	1.1	45	2.0
<b>Education</b>						
< High School Graduate	17	4.0	24	4.6	42	4.3
High School Graduate or GED	54	4.6	23	4.5	80	4.6
Some College or Technical School	40	3.1	9	2.1	51	2.9
College Graduate	61	3.6	7	1.5	69	3.1
<b>Income</b>						
< \$15,000	11	2.8	21	3.9	34	3.5
\$15-\$24,999	23	4.1	17	3.4	43	4.0
\$25-\$34,999	18	3.6	10	8.1	30	5.4
\$35-\$49,999	20	2.9	6	3.4	26	2.9
\$50-\$74,999	26	3.9	5	1.9	31	3.4
\$75,000+	59	5.2	0	0.0	60	4.6
<b>Employment Status</b>						
Employed	115	5.1	40	4.5	158	4.9
Not Employed	8	4.2	9	4.3	18	4.7
Student/Homemaker	8	1.1	3	2.3	13	1.6
Retired/Unable to Work	41	2.1	11	1.2	54	1.8
<b>Total</b>	172	3.8	63	3.5	243	3.7

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

## Drinking and Driving

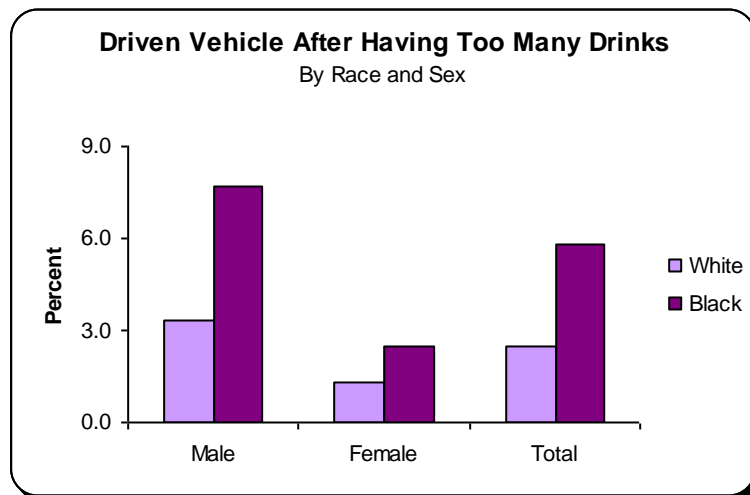
### ***Survey Question:***

*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 2007 there were 12,998 alcohol-related motor vehicle fatalities in the United States. In Mississippi that year there were 884 such fatalities which accounted for approximately 34.2 percent of all vehicular deaths that year and represented a 3.0 percent decrease from the prior year.

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 .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 than females according to the 2008 BRFSS report. The rate for males was 4.7 percent compared to only 1.6 for females. White males were 2.5 times more likely to drive after excessive drinking than white females; black males were 3.1 times more likely than were black females.



**Figure 34**

The demographic group that reported the highest rate of drinking and driving was black respondents age 18 to 24 with a rate of 7.8 percent. The next highest group was blacks in the 35 to 44 age group showed a rate of 6.9 percent. The third highest group was whites 18 to 24 who reported a rate of 6.3 percent.

**Table 37 Drove Vehicle After Drinking Too Much in Past 30 Days\***

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	24	3.3	16	7.7	41	4.7
Female	12	1.3	5	2.5	17	1.6
<b>Age Group</b>						
18-24	3	6.3	2	7.8	5	6.8
25-34	4	1.7	6	6.9	10	3.6
35-44	7	2.2	5	5.4	12	3.2
45-54	9	2.7	4	4.9	13	3.2
55-64	9	2.6	3	4.3	13	3.1
65+	4	0.7	1	1.5	5	0.8
<b>Education</b>						
< High School Graduate	1	3.3	3	5.7	4	4.5
High School Graduate or GED	12	3.6	10	7.4	23	5.1
Some College or Technical School	8	1.7	6	7.1	14	3.2
College Graduate	15	2.1	2	1.0	17	1.8
<b>Income</b>						
< \$15,000	2	7.5	8	13.9	10	11.5
\$15-\$24,999	3	1.5	4	4.2	8	3.2
\$25-\$34,999	2	1.0	1	2.3	3	1.5
\$35-\$49,999	6	1.0	6	13.5	12	4.6
\$50-\$74,999	7	3.4	1	1.0	8	2.9
\$75,000+	16	3.1	1	1.1	17	2.9
<b>Employment Status</b>						
Employed	29	2.6	14	5.2	43	3.3
Not Employed	0	0.0	4	13.6	4	8.7
Student/Homemaker	2	3.4	0	0.0	2	2.6
Retired/Unable to Work	5	1.8	3	3.3	9	2.3
<b>Total</b>	36	2.5	21	5.8	58	3.4

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

\*Denominator is those who drink

## 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 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.

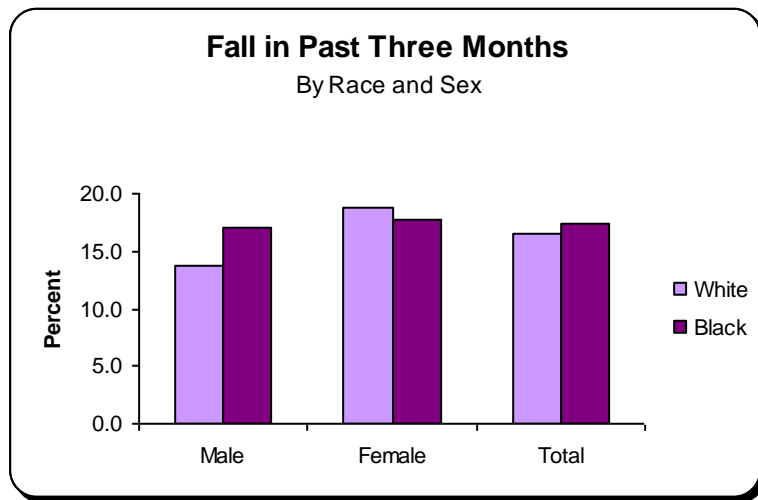


Figure 35

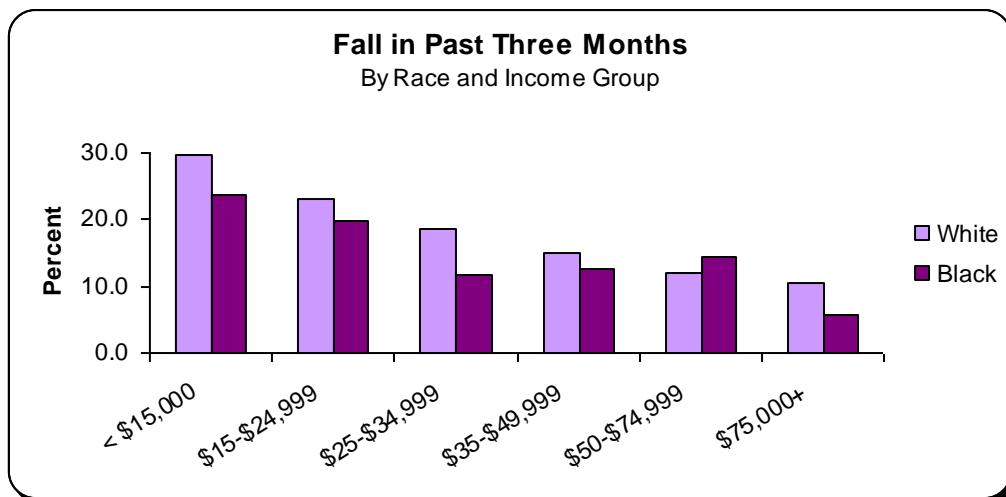


Figure 36



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.

In the 2008 BRFSS survey for Mississippi, the question related to falls was only asked to those who 45 year old or older. Of those, 16.9 percent reported that they had sustained a fall in the past three months. White respondents reported a rate of 16.5 percent while blacks reported a rate of 17.4.

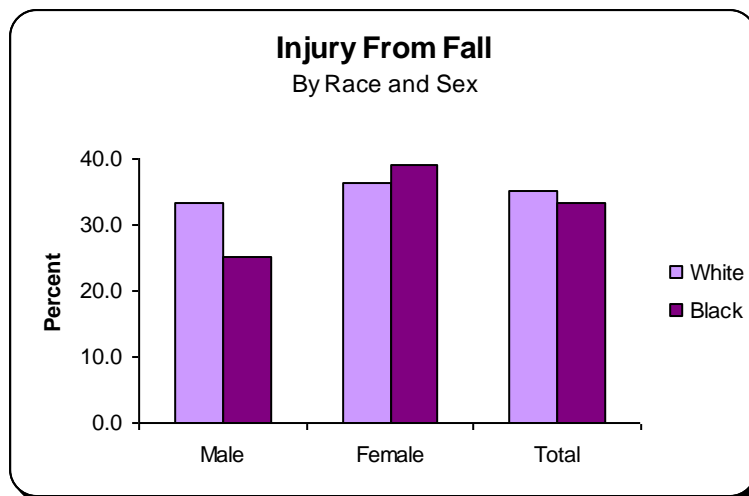


Figure 37

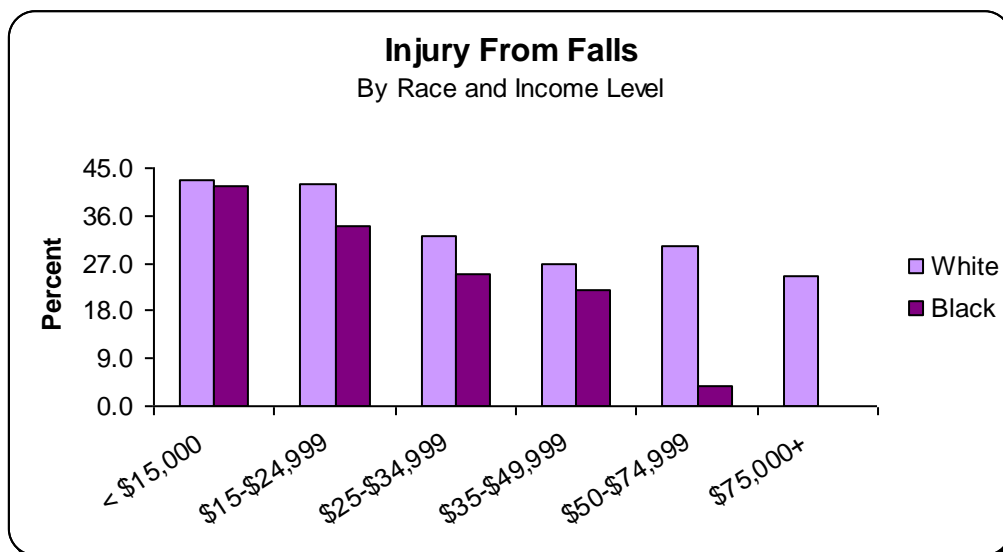


Figure 38

Lower income groups reported a higher rate of fall than those with incomes in the upper group. Those with incomes less that \$15 thousand annually had a rate of 26.8

percent and those in the \$15 to \$25 thousand annually reported a rate of 21.9 percent while those with incomes greater than \$75 thousand annually experienced a rate of only 10.2 percent (See Figure 38 and Table 38). Females at 18.5 percent reported a higher rate of falls than males who had a rate of 15.0 percent (Figure 35).

Of those who reported a fall, 34.6 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 42 percent of those with incomes less than \$15 annually reported receiving an injury from the fall and 37.4 percent of the females reported an injury from a fall compared to 30.5 percent for males (See Figures 37, 38 and Table 39).

**Table 38 Report a Fall in the Past Three Months (Age 45+)**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	207	13.8	85	17.1	304	15.0
Female	526	18.8	190	17.7	729	18.5
<b>Age Group</b>						
45-54	158	15.2	94	18.1	261	16.5
55-64	231	18.0	97	20.6	337	18.7
65+	344	16.6	84	13.6	435	15.9
<b>Education</b>						
< High School Graduate	129	24.8	113	20.0	251	22.7
High School Graduate or GED	241	14.9	79	16.0	323	15.3
Some College or Technical School	194	16.6	51	20.3	252	17.8
College Graduate	169	14.8	32	11.9	206	14.2
<b>Income</b>						
< \$15,000	156	29.7	124	23.8	289	26.5
\$15-\$24,999	142	23.1	67	19.9	215	21.9
\$25-\$34,999	92	18.5	18	11.6	112	16.6
\$35-\$49,999	81	14.9	16	12.6	99	14.2
\$50-\$74,999	68	12.1	9	14.3	78	13.0
\$75,000+	85	10.6	3	5.8	89	10.2
<b>Employment Status</b>						
Employed	168	9.6	59	10.3	233	10.0
Not Employed	17	15.8	21	28.7	38	20.9
Student/Homemaker	54	12.8	8	7.6	64	12.2
Retired/Unable to Work	493	25.0	187	23.8	697	24.8
<b>Total</b>	<b>733</b>	<b>16.5</b>	<b>275</b>	<b>17.4</b>	<b>1,033</b>	<b>16.9</b>

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 39 Report Injury From a Fall in the Past Three Months (Age 45+)<sup>3</sup>**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	64	33.4	21	25.2	88	30.5
Female	195	36.5	78	39.0	279	37.4
<b>Age Group</b>						
45-54	59	37.5	36	35.0	98	36.2
55-64	93	38.2	30	29.3	127	35.6
65+	107	30.9	33	35.1	142	31.7
<b>Education</b>						
< High School Graduate	54	44.5	41	34.6	99	40.5
High School Graduate or GED	82	32.4	28	33.5	110	32.0
Some College or Technical School	64	34.2	23	39.5	90	35.7
College Graduate	59	33.3	7	14.0	68	30.2
<b>Income</b>						
< \$15,000	63	42.6	54	41.7	121	42.3
\$15-\$24,999	62	42.1	24	34.1	89	39.7
\$25-\$34,999	25	32.3	5	25.0*	30	30.3
\$35-\$49,999	25	26.7	3	21.8*	29	25.8
\$50-\$74,999	20	30.4	1	3.8*	21	23.5
\$75,000+	19	24.6	0	0.0*	19	23.1
<b>Employment Status</b>						
Employed	44	25.6	9	11.8	54	20.7
Not Employed	8	55.2	8	38.3	16	45.3
Student/Homemaker	23	45.3	3	60.4	27	47.1
Retired/Unable to Work	183	37.4	79	40.6	269	38.6
<b>Total</b>	259	35.3	99	33.2	367	34.6

\*Sample size <50

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

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

## Seatbelt Use

### ***Survey Question:***

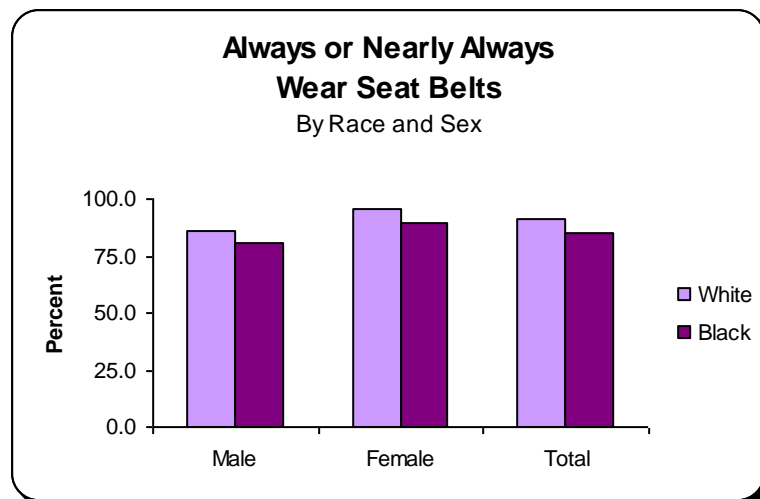
***How often do you use seat belts when you drive or ride in a car? Would you say always, nearly always, sometimes, seldom or never?***

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 the United States during 2007, safety belts saved the lives of an estimated 15,147 people over four years of age. If all passenger vehicle occupants over age 4 had worn seat belts, an additional 5,024 lives could have been saved.

The NHTSA further reports that seat belts, 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-truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent. Ejection from the vehicle is one of the most injurious events that can happen to a person in a crash. In fatal crashes in 2007, 76 percent of passenger vehicle occupants who were totally ejected from the vehicle were killed. Seat belts are effective in preventing total ejections: only one percent of the occupants reported to have been using restraints were totally ejected, compared with 31 percent of the unrestrained occupants.

Among children under age five, an estimated 382 lives were saved in 2007 by child restraint use. Of these, 358 were associated with the use of child safety seats and 24 with the use of adult seat belts. Had child safety seat use been used for all children under age five, an estimated 71 more lives could have been saved.

The Agency also reports that 28,933 occupants of passenger cars and light trucks died in motor vehicle crashes during 2007. Among these victims were 1,434 children age 15 years and under plus 4,540 people ages 16 to 20 years. Approximately half the people killed in motor vehicle crashes in 2007 were not wearing safety belts. NHTSA reports



**Figure 39**

that child safety seats reduce the risk of death in passenger cars by 71 percent for infants and by 54 percent for toddlers ages one to four.

In 2007, according to the Mississippi Office of Highway Safety (MOHS) 69.3 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 497 A-level injuries in 2007 and almost half or 45.7 percent were belted and prevented from more serious injury or death. There were 5,514 B-level injuries and of these, 77.0 percent were using belts. In the C-level category there were 15,100 non fatal injuries and 92.0 percent of those were wearing safety belts. The Plan concluded that seat belt usage significantly reduces the risk of serious injury and death.

The 2008 BRFSS survey in Mississippi revealed that 89.1 of the respondents say that they always or nearly always wear a seat belt when they either drive or ride in a car. Females report that they use seat belts more often than men. Women had a usage rate of 93.3 percent compared to 84.5 percent for men (Figure 39). Younger respondents reported a higher rate of non-usage than older respondents. In the 18 to 24 age group, 76.2 percent said that they always or nearly always use seat belts while those age 65 and older reported a rate of 93.9 percent (Figure 40).

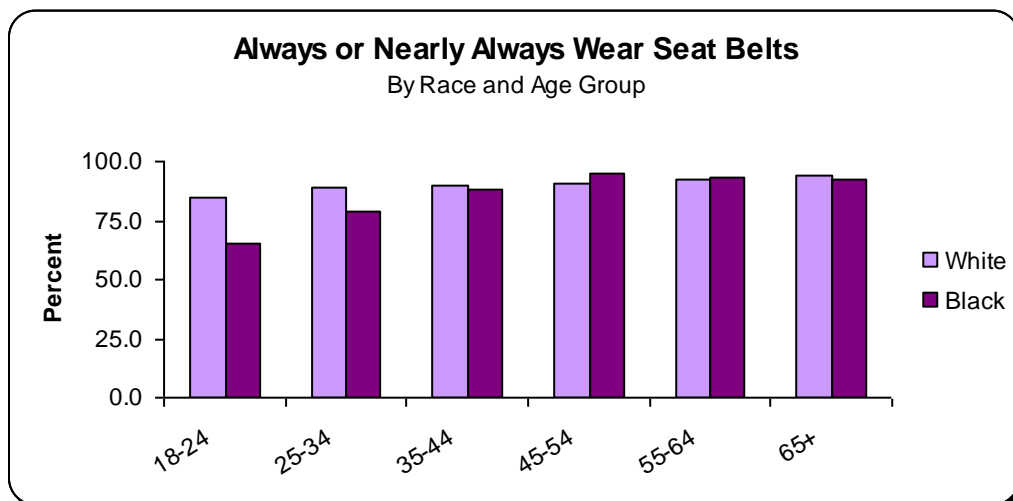


Figure 40

**Table 40 Always or Nearly Always Wear Seat Belts**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	1,674	86.1	590	80.5	2,328	84.5
Female	3,320	95.4	1,526	89.6	4,925	93.3
<b>Age Group</b>						
18-24	114	84.8	78	65.6	197	76.2
25-34	362	89.1	213	79.1	589	85.3
35-44	620	90.2	321	88.3	963	89.6
45-54	896	91.1	520	94.9	1,447	92.6
55-64	1,118	92.7	479	93.5	1,625	92.8
65+	1,867	94.4	493	92.3	2,393	93.9
<b>Education</b>						
< High School Graduate	587	84.8	592	82.5	1,200	83.6
High School Graduate or GED	1,644	89.9	732	87.1	2,410	88.8
Some College or Technical School	1,343	90.7	434	80.3	1,822	87.6
College Graduate	1,414	94.5	356	94.0	1,810	94.4
<b>Income</b>						
< \$15,000	574	86.8	655	87.3	1,255	87.2
\$15-\$24,999	754	90.7	521	82.5	1,297	86.5
\$25-\$34,999	591	93.1	225	83.3	833	89.5
\$35-\$49,999	661	90.1	207	91.1	884	90.7
\$50-\$74,999	664	89.4	132	94.3	813	90.6
\$75,000+	1,030	92.6	100	89.6	1,145	92.0
<b>Employment Status</b>						
Employed	2,216	88.8	975	85.8	3,258	87.8
Not Employed	162	85.2	168	76.2	336	79.9
Student/Homemaker	600	95.3	131	79.9	745	91.6
Retired/Unable to Work	2,012	94.6	840	91.2	2,906	93.6
<b>Total</b>	<b>4,994</b>	<b>90.9</b>	<b>2,116</b>	<b>85.4</b>	<b>7,253</b>	<b>89.1</b>

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 41 Sometimes, Seldom or Never Wear Seat Belts**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	229	13.9	98	19.5	332	15.5
Female	159	4.6	128	10.4	293	6.7
<b>Age Group</b>						
18-24	18	15.2	35	34.4	54	23.8
25-34	40	10.9	49	20.9	91	14.7
35-44	68	9.8	39	11.7	109	10.4
45-54	71	8.9	33	5.1	105	7.4
55-64	84	7.3	32	6.5	120	7.2
65+	107	5.6	37	7.7	145	6.1
<b>Education</b>						
< High School Graduate	69	15.2	70	17.5	143	16.4
High School Graduate or GED	139	10.1	80	12.9	223	11.2
Some College or Technical School	110	9.3	55	19.7	166	12.4
College Graduate	70	5.5	21	6.0	93	5.6
<b>Income</b>						
< \$15,000	61	13.2	63	12.7	127	12.8
\$15-\$24,999	60	9.3	65	17.5	126	13.5
\$25-\$34,999	37	6.9	32	16.7	70	10.5
\$35-\$49,999	50	9.9	15	8.9	66	9.3
\$50-\$74,999	61	10.6	8	5.7	69	9.4
\$75,000+	69	7.4	7	10.4	79	8.0
<b>Employment Status</b>						
Employed	226	11.2	117	14.2	350	12.2
Not Employed	16	14.8	32	23.8	49	20.1
Student/Homemaker	24	4.7	17	20.1	43	8.4
Retired/Unable to Work	122	5.4	60	8.8	183	6.4
<b>Total</b>	388	9.1	226	14.6	625	10.9

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

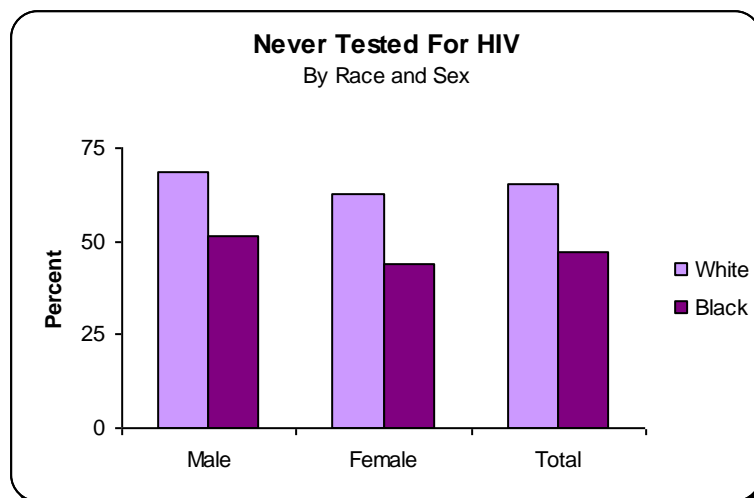


## HIV/AIDS

### ***Survey Question:***

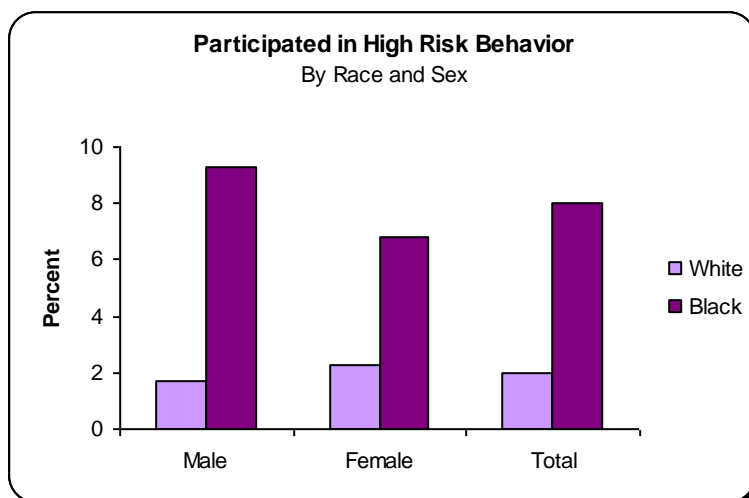
- 1. Have you ever been tested for HIV?***
- 2. Are any of these statements is true? You are a man who has had sex with other men, even just one time. You have taken street drugs by needle, even just one time. You traded sex for money or drugs, even just one time.***

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 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.



**Figure 41**

In 2007, the estimated number of diagnoses of AIDS in the United States and dependent areas was 44,084. Of these, 42,655 were in the 50 states and District of Columbia and 1,429 were in U.S. dependent areas. Of the total estimated cases in the U.S. 31,518 were in males and 10,977 in females, plus 159 cases estimated in children under age 13. Mississippi reported 611 new cases of HIV in 2007 and there were 8,806 people with HIV living in the state.



**Figure 42**

who have never been tested was 68.4 percent for males and 62.6 percent for females. For blacks, the rates were 51.3 percent for males and 43.8 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 8.0 percent were four times as likely to have participated as whites who had a rate of 2.0 percent. In the gender category, black males who reported a rate of 9.3 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 6.8 percent followed by white females at 2.3 percent. White males reported the lowest rate of risky behavior with a rate of 1.7 percent (Figure 42 and Table 43).

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 2008, almost sixty percent (58.4) of the respondents reported that they had never been tested. White respondents were more likely to have never been tested than blacks: 65.5 percent to 47.3. The rate for white respondents

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

Groups	White		Black		Total	
	Number <sup>1</sup>	Number <sup>1</sup>	Number <sup>1</sup>	Number <sup>1</sup>	Number <sup>1</sup>	Number <sup>1</sup>
<b>Sex</b>						
Male	727	67.9	237	55.4	967	63.1
Female	1,142	62.2	553	45.8	1,703	55.9
<b>Age Group</b>						
18-24	86	66.7	66	55.0	152	61.2
25-34	195	51.0	74	31.1	270	42.4
35-44	345	58.5	163	43.9	509	52.8
45-54	525	68.5	231	61.5	760	66.2
55-64	718	81.4	256	74.5	979	79.4
<b>Education</b>						
< High School Graduate	170	60.6	186	59.1	358	59.8
High School Graduate or GED	629	73.6	271	50.5	904	64.0
Some College or Technical School	492	60.9	180	45.6	675	55.6
College Graduate	576	61.9	152	47.5	729	57.6
<b>Income</b>						
< \$15,000	135	54.2	204	49.5	341	51.3
\$15-\$24,999	262	56.8	201	48.8	464	52.4
\$25-\$34,999	201	67.1	93	50.9	295	60.3
\$35-\$49,999	311	64.7	97	54.1	408	61.4
\$50-\$74,999	329	68.8	58	45.9	387	62.5
\$75,000+	456	66.9	49	43.4	508	63.6
<b>Employment Status</b>						
Employed	1,267	66.5	450	46.1	1,723	59.1
Not Employed	68	55.9	64	45.6	133	49.8
Student/Homemaker	188	60.9	59	60.2	247	60.6
Retired/Unable to Work	345	64.9	213	64.6	561	64.7
<b>Total</b>	1,869	65.0	790	50.5	2,670	59.4

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

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

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	70	7.0	63	19.3	133	11.6
Female	43	4.3	58	6.5	101	5.1
<b>Age Group</b>						
18-24	16	15.2	28	27.6	44	21.1
25-34	20	5.9	28	12.0	48	8.5
35-44	26	3.6	26	5.8	52	4.4
45-54	37	4.3	24	8.1	61	5.6
55-64	14	1.6	15	6.1	29	2.9
<b>Education</b>						
< High School Graduate	17	7.4	29	17.9	46	13.0
High School Graduate or GED	33	6.9	46	14.5	79	10.1
Some College or Technical School	30	6.3	31	11.8	61	8.2
College Graduate	33	3.0	15	4.5	48	3.5
<b>Income</b>						
< \$15,000	17	7.6	34	14.0	51	11.7
\$15-\$24,999	19	7.3	34	12.9	53	10.3
\$25-\$34,999	10	6.2	19	10.8	29	8.1
\$35-\$49,999	20	6.4	13	8.5	33	7.0
\$50-\$74,999	13	2.3	5	7.1	18	3.6
\$75,000+	19	4.0	4	15.3	23	5.5
<b>Employment Status</b>						
Employed	68	4.8	74	11.6	142	7.3
Not Employed	13	13.5	15	20.9	28	17.9
Student/Homemaker	12	7.7	6	12.1	18	9.1
Retired/Unable to Work	20	4.9	26	11.3	46	7.6
<b>Total</b>	113	5.7	121	12.7	234	8.3

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

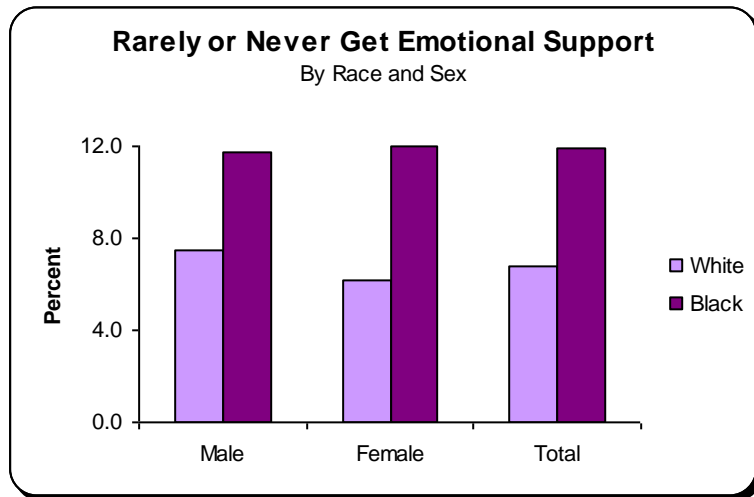
## Emotional Support and Life Satisfaction

### ***Survey Question:***

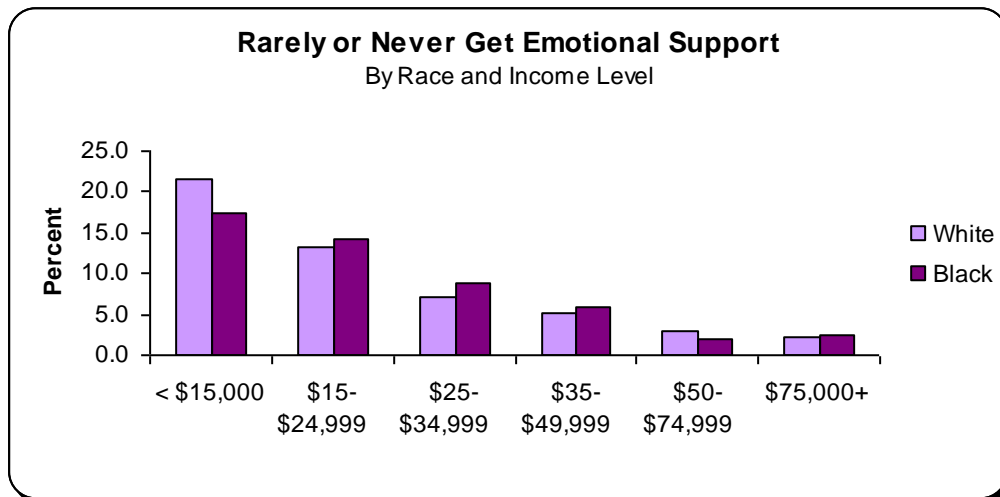
- 1. How often do you get the social and emotional support you need?*
- 2. In general, how satisfied are you with your life?*

In 2003, the President's New Freedom Commission on Mental Health report established six goals to transform the mental health system in the United States to address unmet needs and barriers to care. The first goal emphasized the need to understand that mental health is essential to overall health, and that mental health issues should be addressed with the same urgency as physical health.

The Commission also cited reports indicating that mental illnesses accounted for 24 percent of the causes of disability in the United States, Canada and Western Europe and that in the year 2000, suicide ranked 11th in cause of death among Americans



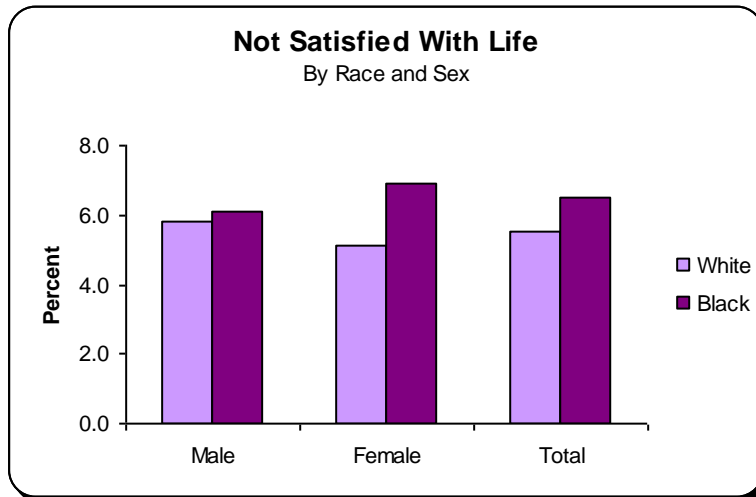
**Figure 43**



**Figure 44**

The 2004 *National Survey on Drug Use and Health* (NSDUH), which includes state-specific estimates of substance use and mental health problems based on 2003 and 2004

surveys indicated that an estimated 9.6 percent of Mississippians, aged 18 and older experienced serious psychological distress in the past year. Within the 18 to 25 year age group, 14.7 percent of Mississippians were estimated to have experienced serious psychological distress in the prior year.

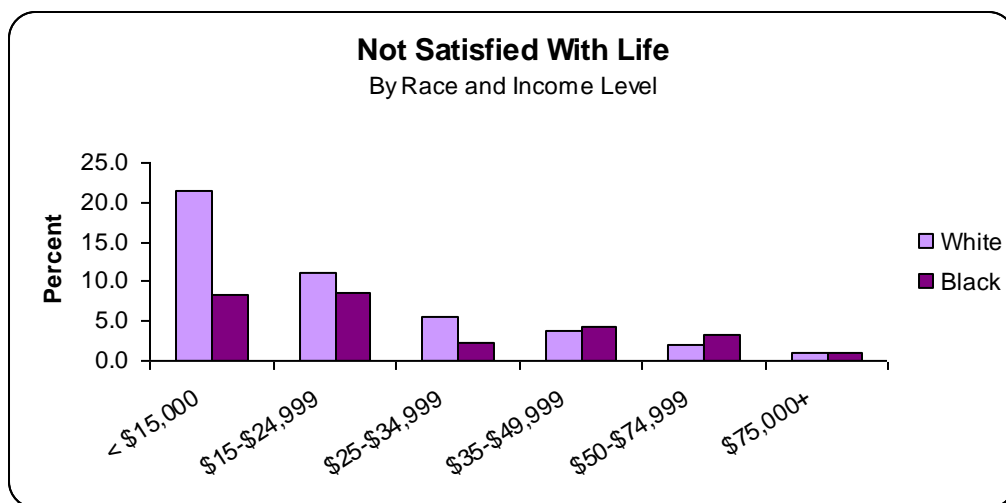


**Figure 45**

The 2008 BRFSS survey showed that 7.6 percent of the respondents said that they rarely or never get the emotional support they need. The rate in 2007 was 8.4 percent. Blacks were almost twice as likely to report no emotional support with a rate of 11.9 percent compared to a rate of 6.8 percent for whites. The difference was more pronounced in the 18-24 age group where 16.9

percent of black respondents reported no emotional support compared to only 6.0 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 19.6 percent (Table 44).

There were 5.9 percent in the 2008 survey who said that they were either dissatisfied or very dissatisfied with life. Blacks at a rate of 6.5 percent were more likely to report dissatisfaction than white respondents who had a rate of 5.5 percent (Figure 45).



**Figure 46**

The category of people who reported the highest rate of not being satisfied with life were whites who reported less than \$15,000 annual income with a rate of 21.5 percent

compared to a rate of 8.3 percent for black respondents in the same category (Table 44). The second highest group who said they were dissatisfied with life were whites who are unemployed with a rate of 21.2 percent; unemployed blacks reported a rate of 11.3 percent (Table 45).

**Table 44 Rarely or Never Get the Emotional Support Needed**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	102	6.0	60	9.9	163	7.4
Female	172	5.9	175	11.0	350	7.8
<b>Age Group</b>						
18-24	5	3.5	15	10.1	20	6.6
25-34	19	4.4	27	8.7	46	6.2
35-44	33	5.4	47	10.0	80	7.2
45-54	51	6.5	53	13.0	105	8.8
55-64	47	5.4	45	12.6	92	7.4
65+	119	9.2	48	9.9	170	9.5
<b>Education</b>						
< High School Graduate	74	14.9	73	11.7	149	13.2
High School Graduate or GED	112	6.6	81	11.5	194	8.5
Some College or Technical School	52	4.1	58	11.3	111	6.5
College Graduate	36	2.8	23	5.6	59	3.6
<b>Income</b>						
< \$15,000	79	15.6	97	15.8	178	15.9
\$15-\$24,999	75	10.0	66	11.2	141	10.5
\$25-\$34,999	26	6.8	22	10.3	48	8.1
\$35-\$49,999	23	4.1	15	6.3	38	4.7
\$50-\$74,999	12	2.0	6	3.6	18	2.4
\$75,000+	18	2.1	5	4.2	23	2.4
<b>Employment Status</b>						
Employed	91	4.4	110	9.2	201	6.1
Not Employed	11	10.2	17	13.3	29	12.3
Student/Homemaker	22	3.7	15	9.2	37	5.3
Retired/Unable to Work	149	9.8	92	12.4	244	10.8
<b>Total</b>	274	5.9	235	10.5	513	7.6

<sup>1</sup>Unweighted

<sup>2</sup>Weighted



**Table 45 Dissatisfied or Very Dissatisfied With Life**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	102	5.8	42	6.1	156	6.2
Female	173	5.1	117	6.9	293	5.7
<b>Age Group</b>						
18-24	7	4.3	9	9.7	16	6.6
25-34	17	5.3	25	7.6	44	6.5
35-44	42	7.8	24	5.6	68	7.1
45-54	69	6.3	55	7.3	128	6.9
55-64	79	5.3	31	5.0	112	5.2
65+	61	3.3	15	2.4	81	3.3
<b>Education</b>						
< High School Graduate	51	8.8	50	7.2	103	8.0
High School Graduate or GED	91	5.6	63	8.1	157	6.6
Some College or Technical School	85	5.3	30	5.4	122	5.7
College Graduate	48	4.2	16	3.3	67	4.2
<b>Income</b>						
< \$15,000	87	21.5	67	8.3	158	13.6
\$15-\$24,999	73	11.2	45	8.5	120	9.8
\$25-\$34,999	31	5.5	10	2.3	42	4.5
\$35-\$49,999	20	3.9	9	4.2	31	4.5
\$50-\$74,999	18	2.1	5	3.3	23	2.3
\$75,000+	15	1.1	2	0.9	19	1.2
<b>Employment Status</b>						
Employed	73	3.1	53	4.5	131	3.7
Not Employed	31	21.2	26	11.3	58	15.1
Student/Homemaker	18	3.4	6	3.7	24	3.4
Retired/Unable to Work	153	9.3	74	9.7	235	9.7
<b>Total</b>	<b>275</b>	<b>5.5</b>	<b>159</b>	<b>6.5</b>	<b>449</b>	<b>5.9</b>

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

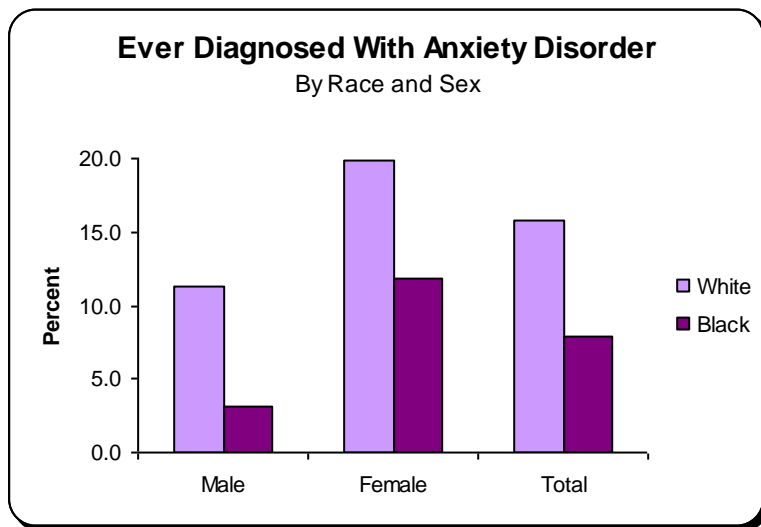
## Anxiety and Depression

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



**Figure 47**

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.

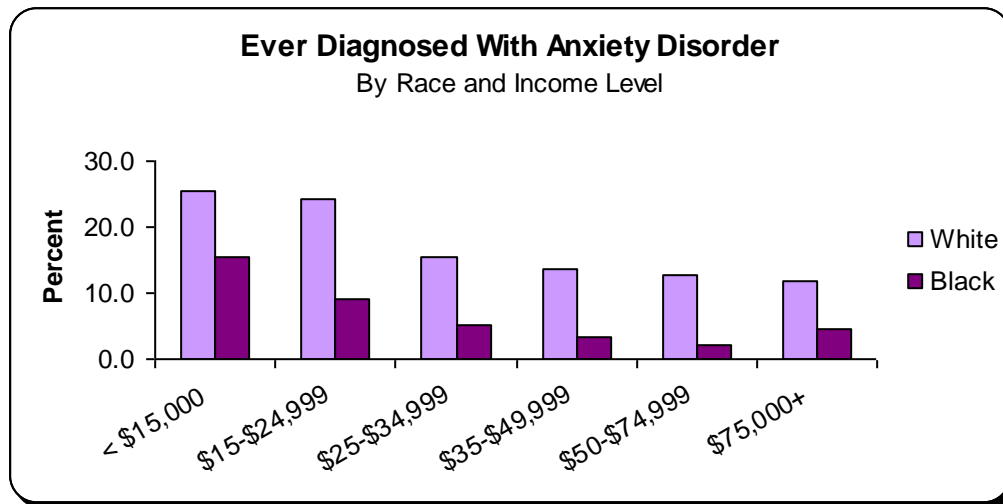


Figure 48

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.

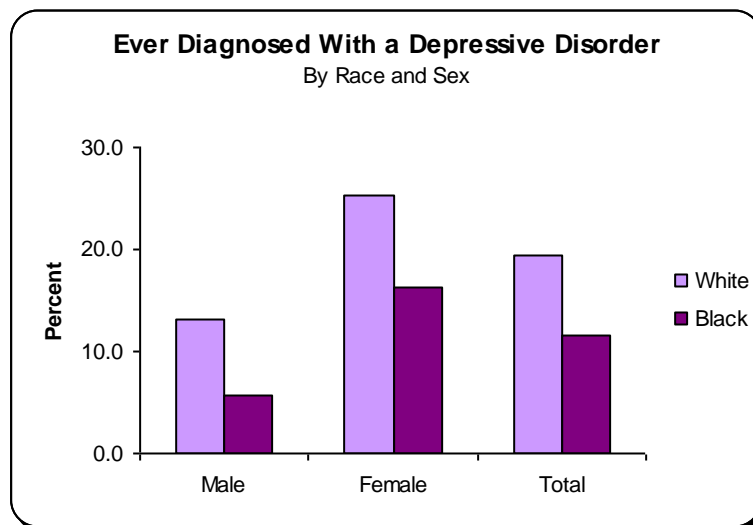
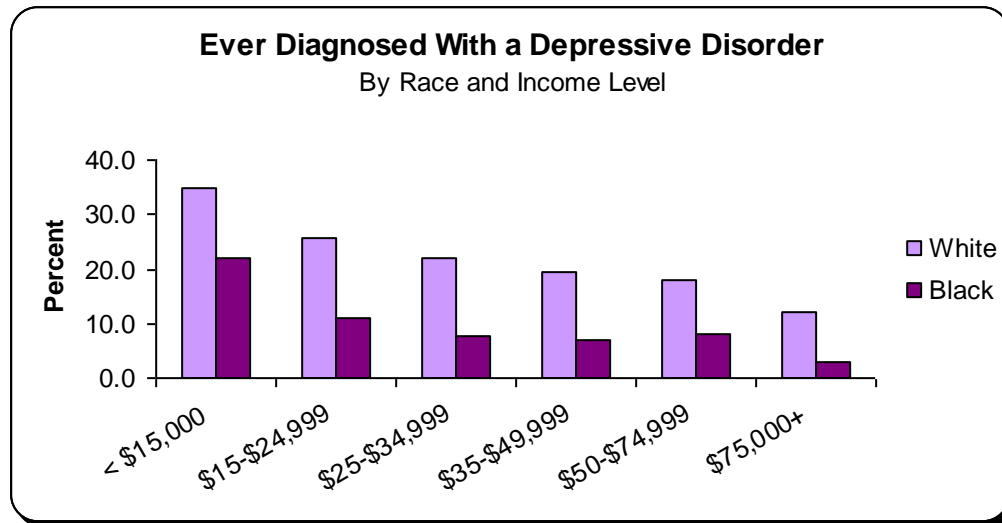


Figure 49

In Mississippi, the 2008 BRFSS report revealed that 13.1 percent said that they had been told by a health professional that they have an anxiety disorder. Whites reported a rate of 15.8 percent while blacks reported a rate of 7.9 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 17.1 percent was almost double that of males who had a rate of 8.7 percent.

With respect to depressive disorders, 16.8 percent of those surveyed said they had been diagnosed with this condition. As was the case with anxiety disorders, women who

had a rate of 22.0 percent were about twice as likely to have been diagnosed as men who reported a rate of 11.0 percent (Figure 49). Similarly, the respondents in lower income category 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 34.7 percent (Figure 50 and Table 47).



**Figure 50**

**Table 46 Ever Diagnosed With Anxiety Disorder**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	180	11.3	29	3.1	218	8.7
Female	540	19.9	205	11.8	753	17.1
<b>Age Group</b>						
18-24	20	19.5	2	1.9	22	11.8
25-34	68	18.8	22	5.8	90	13.6
35-44	98	15.8	34	7.0	133	12.5
45-54	179	19.4	73	12.7	258	17.4
55-64	184	15.3	58	11.0	248	14.2
65+	171	8.9	44	8.2	218	8.7
<b>Education</b>						
< High School Graduate	102	21.2	80	11.3	186	16.5
High School Graduate or GED	228	14.8	76	7.7	308	12.1
Some College or Technical School	209	17.2	49	6.9	264	14.0
College Graduate	181	13.6	29	5.0	212	11.6
<b>Income</b>						
< \$15,000	141	25.6	117	15.6	264	19.8
\$15-\$24,999	140	24.3	54	9.0	198	16.9
\$25-\$34,999	84	15.4	17	5.1	102	11.8
\$35-\$49,999	74	13.7	15	3.2	89	10.4
\$50-\$74,999	74	12.6	5	2.0	79	10.3
\$75,000+	118	11.9	6	4.4	125	11.0
<b>Employment Status</b>						
Employed	255	12.0	64	4.7	321	9.5
Not Employed	41	28.6	24	9.8	65	17.6
Student/Homemaker	98	18.0	16	6.3	116	15.2
Retired/Unable to Work	326	20.9	130	14.5	469	19.2
<b>Total</b>	720	15.8	234	7.9	971	13.1

<sup>1</sup>Unweighted

<sup>2</sup>Weighted

**Table 47 Ever Diagnosed With Depressive Disorder**

Groups	White		Black		Total	
	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
<b>Sex</b>						
Male	173	11.7	52	7.8	225	10.3
Female	621	24.9	239	16.2	865	21.7
<b>Age Group</b>						
18-24	22	18.2	15	11.5	37	15.0
25-34	74	18.0	35	9.0	109	14.0
35-44	124	19.0	59	12.5	183	16.4
45-54	179	21.8	68	16.0	247	19.7
55-64	209	22.4	71	17.5	281	21.0
65+	185	12.9	42	9.0	229	11.9
<b>Education</b>						
< High School Graduate	137	24.9	86	12.8	225	18.5
High School Graduate or GED	270	19.1	91	12.2	362	16.4
Some College or Technical School	212	18.0	74	14.2	286	16.8
College Graduate	175	15.6	40	8.9	215	13.7
<b>Income</b>						
< \$15,000	184	36.8	123	18.6	309	26.1
\$15-\$24,999	156	26.5	67	13.5	223	20.1
\$25-\$34,999	81	16.4	24	10.1	105	13.9
\$35-\$49,999	84	13.9	22	8.9	107	12.5
\$50-\$74,999	79	12.0	13	7.8	92	10.9
\$75,000+	119	14.9	3	2.1	122	13.2
<b>Employment Status</b>						
Employed	296	14.8	88	6.7	384	11.8
Not Employed	38	35.3	29	18.2	67	24.9
Student/Homemaker	88	17.7	16	12.0	104	16.0
Retired/Unable to Work	372	25.2	158	22.8	535	24.3
<b>Total</b>	794	18.6	291	12.2	1,090	16.2

<sup>1</sup>Unweighted

<sup>2</sup>Weighted