

# **2013** *Behavioral Risk Factor Surveillance System Annual Prevalence Report*

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# Mississippi Behavioral Risk Factor Surveillance Survey

**2013 Prevalence Report** 

December 18, 2014



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## Introduction

Among health care professionals there is a general consensus that certain health conditions and behavior patterns have a strong correlation with disease, injury and death. Some examples are cigarette smoking, physical inactivity, obesity, and alcohol consumption. The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone surveillance system designed to estimate the prevalence of these along with other health risk factors in every state and some territories 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 (MSDH). 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, lifestyles, and preventive health. Individual states may include questions addressing specific risk factors that are of particular concern to that state.

# Methodology

#### A. SAMPLING DESIGN

The Mississippi BRFSS is a random sample telephone survey. Utilizing a disproportionate stratified sample (DSS) design with random digit dialing and the Computer Assisted Telephone Interviewing (CATI) system, the survey has the potential to represent all households in Mississippi that have telephones. A sample size of 7,453 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.

Until the 2013 survey, the BRFSS has relied exclusively on interviews of households with land line phones only. But the number of households with only cell phones increased by more than 700 percent between 2003 and 2009. Approximately three in ten American homes now have only cellular telephones; in Mississippi the rate is 35.1 percent. This trend has been especially strong among younger adults and those in social and ethnic minority groups. The 2013 Mississippi BRFSS has approximately 73 percent land line and 27 percent cell phone households in the survey.

For land line surveys, interviewers, contracted by the MSDH, contact the residences during weekdays between 9:00 a.m. and 9:00 p.m. and Saturdays between 10:00 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 of the survey year.

For cell phone surveys, the same protocol is followed except that the interviewer establishes that the person answering the phone is at least 18 years old, that it is safe for the respondent to be interviewed and that the person uses the cell phone for at least 90 percent of their telephone service. Also for cell phone surveys no random adult is selected.

#### **B. QUESTIONNAIRE**

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

#### C. DATA ANALYSIS

Since 2011 the BRFSS has utilized a different weighting method called iterative proportional fitting, also known as "raking." The procedure, while not new, has been made feasible through the development of ultra-fast computer processors. In addition to the standard age, gender, race and ethnicity variables, the use of raking allows for consideration of demographic variables such as education level, marital status, renter or owner status, and phone source. By including these additional variables into the weighting process the survey will more accurately reflect Mississippi's adult population. The data collected by the MSDH Office of Public Health Statistics was edited and weighted by the CDC. Weighted counts were based on the 2012 Mississippi population estimates to accurately reflect the population demographics.

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 weighted percentages of high-risk behaviors, conditions and certain chronic diseases by gender, age group, race, education level, annual household income, and employment status. Respondents who either refused to answer or did not know the answer to the questions on demographics were excluded from the tables. For this reason the total for each of the demographic sections may not be equal to the total for the entire table.

#### D. 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 accuracy of the data.

#### E. SAMPLE SIZE

In the 2013 BRFSS, 7,453 people were sampled: 5,465 landline surveys and 1,988 cell phone surveys. The reader should note that sample sizes by question and response category may vary because of 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 can mislead the reader into believing that a given finding is more precise than it really 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 among 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.

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# **Definition of Terms and Risk Factors**

#### **Alcohol Consumption**

*Binge Drinking Risk Factor* – Respondents who report that 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.

#### Arthritis

*Arthritis Awareness* – Respondents who have been told by a doctor or other health professional that they have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

*Limited Activity* – Respondents who report that their usual activities are limited because of joint pain caused by arthritis.

*Limited Work* – Respondents whose joint symptoms because of arthritis affect whether they can work or affects the amount and type of work they do.

The reader should note that in 2003 the definition of "arthritis" was changed. Before 2003, it included respondents who not only had been diagnosed with arthritis but also those who reported pain or stiffness in the joints for at least thirty days during the previous year.

#### Asthma

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

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

#### Cancer

*Skin Cancer Awareness* – Respondents who report that they have been told by a doctor or other health professional that they had skin cancer.

*Other Cancer Awareness* – Respondents who report that they have been told by a doctor or other health professional that they had cancer other than skin cancer.

#### Cardiovascular Disease

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

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

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

#### **Cholesterol Awareness**

*Cholesterol Checked* – Respondents who report that they have ever had their blood cholesterol checked.

*Cholesterol Checked in Past Five Years* – Respondents who report having their blood cholesterol checked within the past five years.

*Cholesterol High* – Respondents who report their blood cholesterol checked and who have been told that their blood cholesterol is high by a doctor, nurse, or other health professional.

#### COPD

*COPD Awareness* – Respondents who report that they have been diagnosed by a health professional with Chronic Obstructive Pulmonary Disease (COPD).

#### Diabetes

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

At Risk for Diabetes – Respondents age 18 to 44 who are obese and report no exercise in the past 30 days, or respondents age 45 to 64 who are either obese or report no exercise in the past 30 days, or respondents age 65 and older who are obese.

#### 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.

#### **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 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 more than seven days during the past month when their physical health was not good.

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

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

#### HIV/AIDS

*Ever Tested for HIV* – Respondents age 18 to 64 who report that they have ever been tested for HIV, excluding tests done as part of a blood donation.

*High Risk Behavior* – Respondents age 18 to 64 who report that 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.

#### Hypertension

*Hypertension Awareness* – Respondents who have ever been told they have high blood pressure by a doctor, nurse or other health professional.

*Taking Blood Pressure Medicine* – Respondents who have been told they have high blood pressure by a doctor, nurse or other health professional and who are taking medication to control it.

#### Immunization

*Flu Shots* – Respondents who report receiving a flu shot or the flu spray vaccine within the last twelve months.

*Pneumonia Shots* – Respondents who report ever receiving a vaccination for pneumonia.

#### **Kidney Disease**

*Kidney Disease* – Respondents who have been diagnosed by a healthcare professional with kidney disease.

#### **Mental Health**

*Depression Awareness* – Respondents who report they have been diagnosed by a health professional with depression.

#### **Physical Activity**

*Highly Active* – Respondents who report doing enough physical activity to meet the 300-minute per week (or vigorous equivalent) aerobic recommendation.

*Active* – Respondents who report doing 150 - 300 minutes per week (or vigorous equivalent) of physical activity.

*Insufficiently Active* – Respondents who report doing insufficient physical activity (11–149 minutes per week).

Inactive - Respondents who report doing no physical activity.

#### **Seat Belts Usage**

Respondents who report that they always or nearly alwayswear seat belts.

#### Sleep

*Inadequate Sleep* – Respondents age 18 - 21 who report less than eight hours of sleep per day and respondents age 22 and older who report less than seven hours per day.

#### **Tobacco Use**

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*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 2020* Objective 27 – Target  $\leq 12\%$ .

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

*Body Mass Index (BMI)* – Weight in kilograms divided by height in meters squared  $(kg/m^2)$ .

*Healthy Weight* – Respondents whose BMI is  $18.5 \le BMI \le 24.9$ . This measures *Healthy People 2020* Objective 19.1 – Target  $\ge 60\%$ .

*Overweight* – Respondents whose BMI is  $25.0 \le BMI \le 29.9$ .

*Obese* – Respondents whose BMI is  $\geq$ 30.0. This measures *Healthy People 2020* Objective 19.2 – Target  $\leq$ 15%.

**Survey Results** 

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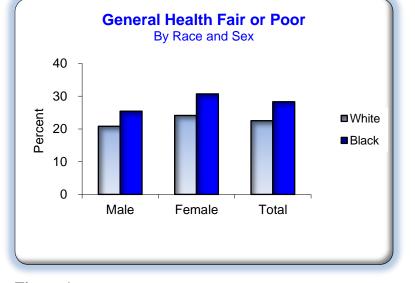
# **Health Status**

#### 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 and mortality data.

With respect to race and gender, black females reported the highest percentage



#### Figure 1

of health that was fair or poor with a rate of 30.7 percent (Figure 1). Black respondents overall report their health as worse than whites. Black respondents reported fair or poor health at a rate of 28.3 percent compared to 22.5 percent for whites.

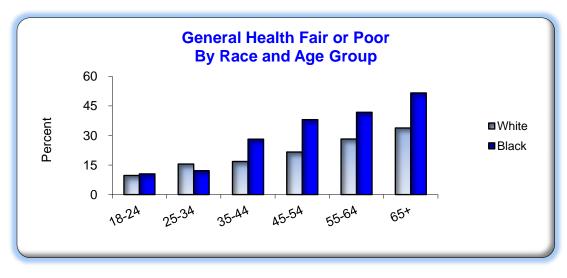


Figure 2

Not surprisingly, reported fair or poor health tended to increase with age. Persons in the 18 to 24 age group reported a rate of only 9.8 percent while those more than 65 years of age reported a rate of 38.3 percent (Figure 2 and Table 1).

	White Black		То	tal		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	413	20.8	233	25.4	663	22.2
Female	808	24.1	677	30.7	1,509	26.6
Age Group						
18-24	16	9.7	21	10.5	37	9.8
25-34	49	15.4	40	12.1	91	13.7
35-44	58	16.8	78	28.1	145	21.6
45-54	157	21.6	154	38.0	318	27.2
55-64	278	28.2	265	41.8	551	32.7
65+	660	34.1	347	51.6	1,020	38.3
Education						
< High School Graduate	279	45.9	336	47.2	627	45.5
High School Graduate or GED	469	24.7	320	29.2	801	26.5
Some College or Technical School	297	19.0	145	17.4	448	18.2
College Graduate	171	7.4	105	14.7	285	9.6
Income						
< \$15,000	297	51.1	388	43.9	694	46.4
\$15-\$24,999	301	37.5	211	28.3	523	33.0
\$25-\$34,999	132	23.3	65	19.1	200	21.0
\$35-\$49,999	104	12.7	33	11.7	138	12.1
\$50-\$74,999	89	12.6	22	10.5	113	12.1
\$75,000+	65	6.2	14	9.4	83	6.8
Employment Status						
Employed	183	8.4	174	14.7	368	10.7
Not Employed	55	36.1	77	29.7	135	32.3
Student/Homemaker	92	17.9	35	14.8	131	16.8
Retired/Unable to Work	890	46.4	621	57.0	1,531	50.0
Total	1,221	22.5	910	28.3	2,172	24.5

#### Table 1: General Health Fair or Poor

<sup>1</sup>Unw eighted

# Health Care Coverage

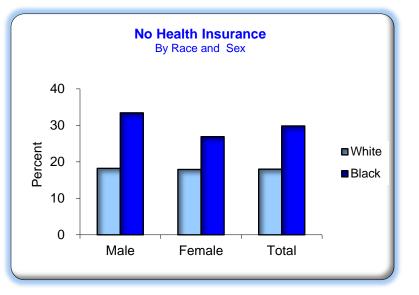
#### Survey Question:

# *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.

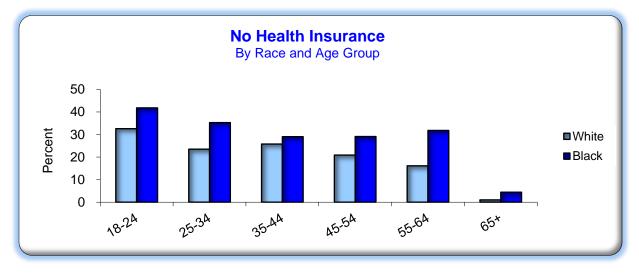
In 2013, 23.2 percent of the respondents indicated they had no health care plan. According to the survey, black males have the highest rate of non-coverage at 33.4 percent; black females were next at 26.9 percent (Figure 3).

When viewed by age categories,





blacks from the age of 25 to 34 reported the highest prevalence of no health care coverage at 41.8 percent (Figure 4).



#### Figure 4

Another factor that adversely affects the health status is access to medical care and in 2013, 21.8 percent of Mississippians said they were unable to see a doctor at some point in the prior twelve months because of cost. Blacks (29.0 percent) were more than one and one-half times as likely to have not seen a doctor due to cost as whites (16.8 percent). Also females of both races were much more likely to experience this phenomenon than males: 32.2 percent for black females to 25.1 percent males. The rate for white females was 21.1 percent; white males reported a rate of 12.2 percent.

The survey revealed that one of the biggest barriers to access is income. Not surprisingly, those in the lower income ranges reported the greatest difficulty in gaining access to care (Figure 5).

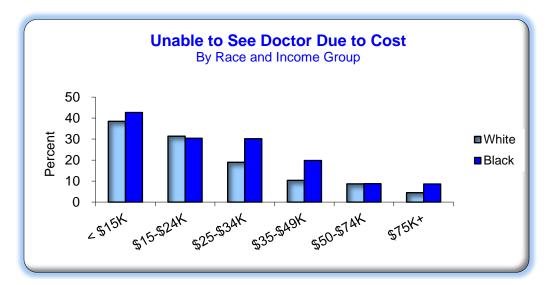


Figure 5

	Wh	White		ick	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	220	18.2	188	33.4	435	24.7	
Female	304	17.8	365	26.9	688	21.8	
Age Group							
18-24	60	32.6	59	41.8	122	37.1	
25-34	80	23.6	93	35.3	186	30.6	
35-44	92	25.8	75	29.0	181	28.6	
45-54	131	20.9	140	29.1	278	24.5	
55-64	134	16.1	157	31.8	298	21.4	
65+	25	1.0	26	4.4	52	1.9	
Education							
< High School Graduate	101	33.6	127	32.5	244	35.0	
High School Graduate or GED	199	22.0	225	32.6	437	27.0	
Some College or Technical School	136	14.0	123	32.3	265	19.9	
College Graduate	86	7.3	76	13.1	173	9.8	
Income							
< \$15,000	118	34.0	214	38.4	341	37.1	
\$15-\$24,999	151	32.3	180	37.2	344	35.7	
\$25-\$34,999	71	25.5	58	34.5	136	30.0	
\$35-\$49,999	55	11.4	27	17.5	88	14.4	
\$50-\$74,999	32	8.1	8	7.9	43	8.4	
\$75,000+	23	4.5	7	7.0	30	4.8	
Employment Status							
Employed	271	19.3	252	29.8	547	24.0	
Not Employed	91	57.6	135	59.4	234	59.3	
Student/Homemaker	67	24.0	45	34.5	120	28.9	
Retired/Unable to Work	95	7.2	116	16.8	216	10.8	
Total	524	18.0	553	29.8	1,123	23.2	

#### Table 2: Have No Kind of Health Insurance

<sup>1</sup>Unw eighted <sup>2</sup>Weighted

	White Black		То	tal		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	176	12.3	161	25.1	353	17.6
Female	417	21.1	483	32.2	916	25.6
Age Group						
18-24	38	19.3	44	27.7	83	23.3
25-34	77	20.9	103	35.5	187	28.3
35-44	101	26.1	82	29.7	196	28.8
45-54	146	20.9	147	33.9	298	25.8
55-64	141	14.3	183	30.6	327	19.7
65+	87	5.0	81	11.5	170	6.6
Education						
< High School Graduate	106	27.0	168	34.7	283	31.6
High School Graduate or GED	215	19.6	237	28.7	462	23.8
Some College or Technical School	169	15.6	139	30.6	315	20.6
College Graduate	101	7.3	99	15.8	206	10.1
Income						
< \$15,000	146	38.5	263	42.7	416	41.2
\$15-\$24,999	168	31.4	190	30.4	369	31.5
\$25-\$34,999	72	19.0	62	30.2	139	24.0
\$35-\$49,999	54	10.4	33	19.8	89	13.9
\$50-\$74,999	41	8.7	16	8.8	58	8.5
\$75,000+	33	4.5	9	8.6	42	5.0
Employment Status						
Employed	246	14.2	248	26.2	511	19.2
Not Employed	77	44.8	114	50.2	196	48.1
Student/Homemaker	54	17.6	40	26.3	98	21.2
Retired/Unable to Work	215	16.3	239	26.7	460	19.9
Total	593	16.8	644	29.0	1,269	21.8

#### Table 3: Unable to See Doctor in Past 12 Months at Some Point Due to Cost

<sup>1</sup>Unw eighted

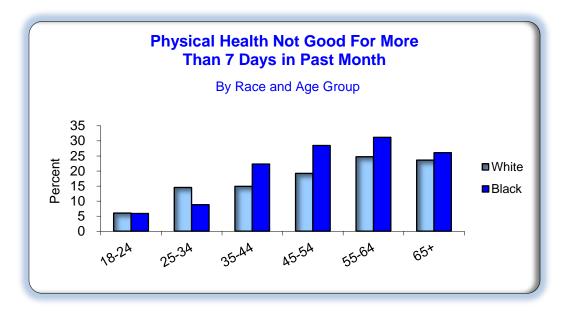
# **Healthy Days**

#### 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 use health-related quality of life to measure the effects of chronic illness in patients and to better understand how an illness interferes with the day-to-day life activities of an individual. 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.



#### Figure 6

In Mississippi, the 2013 BRFSS survey showed that days of poor physical health tends to increase with age while days of poor mental health were more evenly distributed among age groups. Figure 6 shows that people age 55-64 reported the highest percentage (27.4) of more than seven days when their physical health was not good. Respondents age 65 and older

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reported a slightly lower rate of 24.3 percent. In the 55 to 64 group, white respondents had a rate of 24.7 percent compared to 31.2 percent for blacks. For those 65 and older, whites reported a rate of 23.8 percent compared to 26.1 percent for blacks.

Those in the 35 to 44 year age group along with those 45 to 54 years old age had the highest percentage of seven or more days when their mental health was not good with a rate of 21.3 percent. Table 5 contains the details for both age groups.

The group with the highest rate for days of poor mental health was people whose annual income is less than \$15,000 per year with a rate of 30.2 percent: 33.8 percent for whites and 27.8 percent for blacks (Figure 7). The second highest category is the unemployed who report a rate of 31.3 percent. White respondents in this category had a rate of 36.4 percent; blacks a rate of 26.7 percent.





	Wh	White Black		То	tal	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	297	15.3	154	17.9	467	16.2
Female	658	21.2	412	20.4	1,089	20.8
Age Group						
18-24	12	6.0	9	5.9	21	5.8
25-34	43	14.5	30	8.8	74	11.6
35-44	56	14.9	60	22.3	123	18.0
45-54	143	19.2	114	28.5	262	22.2
55-64	240	24.7	183	31.2	434	27.4
65+	458	23.8	167	26.1	635	24.3
Education						
< High School Graduate	187	32.5	207	33.3	404	32.5
High School Graduate or GED	340	19.2	197	19.8	546	19.3
Some College or Technical School	248	15.8	91	11.6	345	14.4
College Graduate	179	10.8	70	9.8	257	10.5
Income						
< \$15,000	250	43.6	263	34.8	519	38.0
\$15-\$24,999	204	24.4	136	16.6	350	20.8
\$25-\$34,999	99	18.4	47	16.1	150	17.4
\$35-\$49,999	83	12.0	9	2.1	93	8.6
\$50-\$74,999	75	10.8	20	9.2	99	10.6
\$75,000+	71	7.7	10	6.9	82	7.7
Employment Status						
Employed	148	6.6	99	9.3	255	7.7
Not Employed	49	30.9	54	20.1	106	24.9
Student/Homemaker	65	12.5	20	9.9	89	11.8
Retired/Unable to Work	691	38.9	391	40.8	1,100	39.5
Total	955	18.3	566	19.3	1,556	18.6

#### Table 4: Poor Physical Health for More Than 7 Days in Past Month

<sup>1</sup>Unw eighted

	White Black		То	tal		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	171	11.4	107	16.4	290	13.2
Female	488	20.0	316	20.5	819	20.1
Age Group						
18-24	28	14.5	23	12.3	51	13.1
25-34	56	16.3	53	20.0	111	17.6
35-44	78	19.5	65	23.9	151	21.3
45-54	137	19.0	113	26.4	254	21.3
55-64	175	17.5	108	17.1	291	17.6
65+	184	9.7	59	9.6	248	9.7
Education						
< High School Graduate	108	26.0	122	23.0	237	24.3
High School Graduate or GED	241	16.2	149	17.6	397	16.8
Some College or Technical School	197	15.2	95	19.6	296	16.4
College Graduate	113	8.6	56	11.4	177	9.4
Income						
< \$15,000	160		186	27.8	353	30.2
\$15-\$24,999	141	23.3	105	17.5	255	20.7
\$25-\$34,999	81	15.6	36	14.6	120	15.1
\$35-\$49,999	66	10.2	17	12.5	83	10.6
\$50-\$74,999	47	8.2	21	19.2	70	10.3
\$75,000+	73	9.8	11	10.8	85	9.8
Employment Status						
Employed	182	9.8	130	13.4	324	11.1
Not Employed	59	36.4	58	26.7	120	31.3
Student/Homemaker	63	17.4	26	22.0	91	18.3
Retired/Unable to Work	354	22.3	208	24.0	571	22.8
Total	659	15.8	423	18.6	1,109	16.8

#### Table 5: Poor Mental Health for More Than 7 Days in Past Month

<sup>1</sup>Unw eighted

	White Black		То	tal		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	195	24.6	103	32.2	308	27.2
Female	399	25.6	278	25.3	690	25.6
Age Group						
18-24	6	8.4	12	16.4	18	11.5
25-34	30	22.8	25	19.6	55	20.6
35-44	43	21.7	42	27.3	94	25.5
45-54	110	31.6	97	43.8	211	36.3
55-64	165	34.8	113	30.6	283	33.4
65+	239	25.9	90	28.5	333	26.4
Education						
< High School Graduate	126	40.5	145	45.6	280	42.8
High School Graduate or GED	203	27.8	123	23.7	330	25.9
Some College or Technical School	159	20.3	68	22.8	231	20.8
College Graduate	106	14.6	42	12.2	152	13.9
Income						
< \$15,000	171	44.8	188	40.6	364	42.1
\$15-\$24,999	131	31.4	89	23.0	228	28.2
\$25-\$34,999	64	27.2	27	24.3	93	26.1
\$35-\$49,999	49	15.4	7	6.0	56	12.2
\$50-\$74,999	41	12.7	12	12.2	55	12.8
\$75,000+	45	14.7	8	14.4	53	14.2
Employment Status						
Employed	65	8.9	57	11.0	127	10.0
Not Employed	42	40.0	36	34.5	80	37.2
Student/Homemaker	32	12.6	15	22.8	49	15.5
Retired/Unable to Work	454	45.2	270	48.5	736	46.4
Total	594	25.2	381	28.0	998	26.2

#### Table 6: Activity Limited for More Than 7 Days Due to Poor Physical or Mental Health

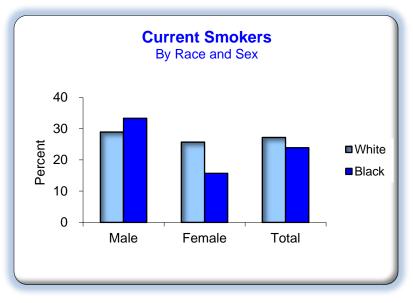
<sup>1</sup>Unw eighted

# **Tobacco Use**

#### Survey Question:

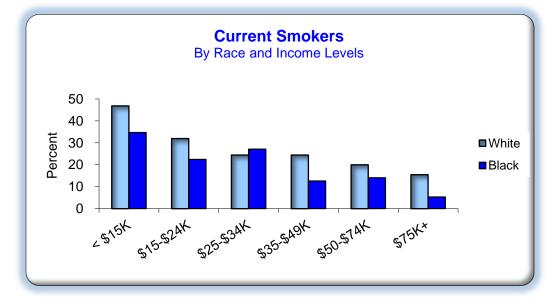
## Have you smoked at least 100 cigarettes in your entire life and do you now smoke cigarettes every day, some days, or not at all?

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



#### Figure 9

among youth, promote cessation among youth and adults, and eliminate exposure to environmental tobacco smoke.

According to the 2013 BRFSS report, the group with the highest percentage of current smokers is black males at 32.0 percent followed by white males at 26.1 percent and white females at 25.2 percent. The group with the lowest percentage of current smokers is black females at 17.1 percent (Figure 8).

Overall, the rate of current smoking in Mississippi is 24.9 percent. The *Healthy People* 2020 objective is 12 percent.

	White		Bla	ick	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	349	26.1	189	32.0	556	28.1
Female	520	25.2	261	17.1	796	22.1
Age Group						
18-24	52	29.6	28	22.2	83	26.4
25-34	105	34.3	60	26.2	167	30.1
35-44	113	31.0	64	25.8	181	28.4
45-54	199	33.9	95	23.6	302	30.0
55-64	202	21.4	124	25.2	337	23.0
65+	197	11.3	78	18.2	280	13.1
Education						
< High School Graduate	148	40.0	150	40.0	305	39.2
High School Graduate or GED	296	27.7	150	20.7	456	25.0
Some College or Technical School	258	24.7	100	19.7	366	23.1
College Graduate	166	13.2	49	10.2	223	12.6
Income						
< \$15,000	184	46.9	188	34.7	381	39.5
\$15-\$24,999	162	31.8	105	22.4	275	27.1
\$25-\$34,999	95	24.5	46	27.1	147	26.4
\$35-\$49,999	101	24.5	27	12.6	129	20.3
\$50-\$74,999	103	19.9	16	14.0	123	18.7
\$75,000+	112	15.5	12	5.3	124	13.9
Employment Status						
Employed	402	25.8	146	19.6	561	23.5
Not Employed	73	54.7	76	41.4	152	46.9
Student/Homemaker	58	18.2	19	18.7	82	19.4
Retired/Unable to Work	335	22.6	206	25.5	552	23.7
Total	869	25.6	450	23.8	1,352	24.9

#### Table 7: Current Smokers

<sup>1</sup>Unw eighted

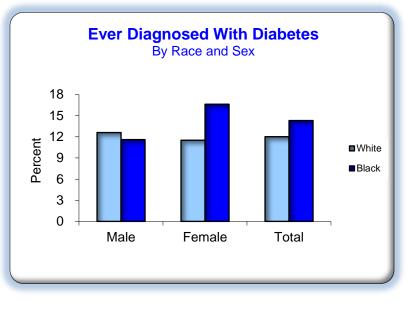
# Diabetes

#### Survey Question:

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

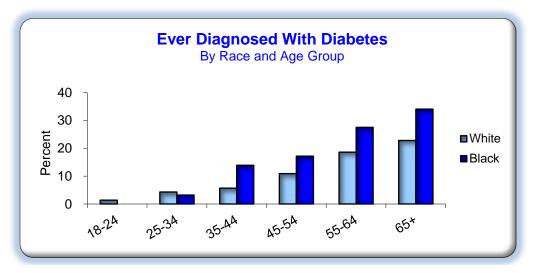
Diabetes was the sixth leading cause of death in Mississippi for the year 2012 with a death rate of 34.8 per 100,000 population. According to the 2013 BRFSS survey, 12.4 percent of all respondents reported being told by a doctor that they have diabetes

Black females continue to comprise the largest group having a rate of 16.6 percent followed by white males with a rate of 12.6 percent. Black males and white females reported a rate of 11.6 percent. (Figure 10).





The rate of diabetes continues to show a pronounced difference by categories of education.



#### Figure 11

Respondents who did not complete high school reported rates of 19.4 percent which is more than 27 percent higher than the next highest education category. Those with a high school

Mississippi Behavioral Risk Factor Surveillance Survey 2013

education reported a rate of 14.1 percent; those with some college work, a rate of 10.3 percent; and college graduates a rate of 8.1 percent (Table 8).

There are also obvious differences seen by age of the respondent in the rate of diabetes. Only 0.7 percent of respondents under age 24 reported having diabetes while those age 65 and above reported a rate of 25.5percent: 22.9 percent for whites and 34.1 percent for blacks (Figure 11).

	White Black		То	tal		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	296	12.6	140	11.6	444	12.0
Female	448	11.6	432	16.6	895	13.6
Age Group						
18-24	5	1.4	0	0.0	5	0.7
25-34	12	4.3	10	3.2	25	4.2
35-44	25	5.7	38	13.9	67	9.1
45-54	82	10.9	89	17.2	173	12.9
55-64	183	18.6	177	27.5	368	21.8
65+	435	22.9	257	34.1	698	25.5
Education						
< High School Graduate	125	16.2	202	22.4	335	19.4
High School Graduate or GED	253	13.2	184	15.5	446	14.1
Some College or Technical School	201	11.6	99	8.1	303	10.3
College Graduate	161	7.8	85	9.5	249	8.1
Income						
< \$15,000	131	15.0	225	19.2	361	17.4
\$15-\$24,999	155	17.5	131	14.4	292	16.3
\$25-\$34,999	87	13.3	50	10.5	141	12.5
\$35-\$49,999	85	12.1	28	7.9	113	10.4
\$50-\$74,999	81	11.1	17	9.1	101	10.8
\$75,000+	93	7.2	25	14.6	119	8.2
Employment Status						
Employed	169	6.9	121	8.5	298	7.5
Not Employed	12	5.1	27	8.4	40	6.8
Student/Homemaker	49	7.0	21	4.4	74	7.0
Retired/Unable to Work	511	23.7	401	30.3	921	26.0
Total	744	12.0	572	14.3	1,339	12.9

#### Table 8: Diagnosed With Diabetes

<sup>1</sup>Unw eighted <sup>2</sup>Weighted

Mississippi Behavioral Risk Factor Surveillance Survey 2013

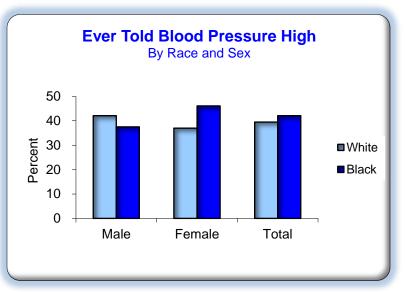
# **Hypertension Awareness**

#### Survey Question:

## Have you ever been told by a doctor, nurse or other health professional that you have high blood pressure? (Females reporting hypertension only during pregnancy are excluded.)

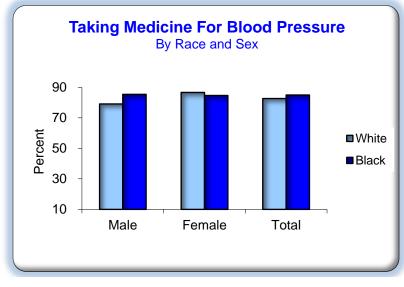
Early detection of high blood pressure allows treatment that can prevent many complications of the disease. Untreated high blood pressure increases the risk of stroke, heart attack and kidney failure. High blood pressure can be controlled by losing weight, taking medication, exercising, not smoking, managing stress and lowering sodium and alcohol intake.

Two indicators of hypertension in Mississippi are available in this report: a) respondents who have ever been





told they have high blood pressure by a health care professional and b) respondents who are



#### Figure 11

taking medication to control high blood pressure.

The 2013 BRFSS survey indicates that approximately 40.3 percent of the people surveyed in Mississippi have been told they have high blood pressure by a health care professional.

Blacks were slightly more likely to be hypertensive than whites. The overall rate of hypertension among blacks in Mississippi was 42.1 percent compared to 39.5 for whites. Black females in the survey reported a rate of 46.1 percent rate for hypertension compared to 37.0 percent of the white females (Figure 12). White males, on the other hand, reported a rate of 42.1 percent compared to a rate of 37.5 percent for black males.

	White Black		То	tal		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	890	42.1	363	37.5	1,283	40.1
Female	1,450	37.0	1,122	46.1	2,606	40.4
Age Group						
18-24	18	9.2	13	8.7	33	9.4
25-34	49	16.8	54	15.6	108	16.6
35-44	111	26.9	113	38.5	231	31.1
45-54	270	37.6	269	60.4	550	45.5
55-64	548	56.5	462	72.6	1,025	61.9
65+	1,335	66.9	565	77.9	1,922	69.6
Education						
< High School Graduate	339	50.1	458	57.8	813	53.3
High School Graduate or GED	789	41.2	479	39.4	1,283	40.0
Some College or Technical School	614	37.5	262	34.6	886	36.7
College Graduate	591	32.3	279	35.9	892	33.0
Income						
< \$15,000	327	42.2	515	52.8	853	48.2
\$15-\$24,999	441	50.2	352	40.9	806	45.7
\$25-\$34,999	258	41.0	132	32.3	397	38.0
\$35-\$49,999	273	36.7	97	38.8	372	36.4
\$50-\$74,999	275	41.2	77	31.8	361	39.8
\$75,000+	331	29.6	73	42.4	411	31.2
Employment Status						
Employed	691	30.6	440	32.8	1,156	31.4
Not Employed	63	29.5	99	28.1	164	28.2
Student/Homemaker	158	24.6	59	19.6	225	23.5
Retired/Unable to Work	1,420	61.6	874	71.3	2,320	64.7
Total	2,340	39.5	1,485	42.1	3,889	40.3

#### Table 9: Ever Told Blood Pressure High

<sup>1</sup>Unw eighted

	White Black		То	tal		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	766	79.1	321	85.4	1,109	80.6
Female	1,315	86.7	1,032	84.7	2,374	85.3
Age Group						
18-24	4	34.9*	3	27.8*	7	29.2*
25-34	28	55.3	31	50.8	61	51.9
35-44	75	66.1	86	73.8	166	69.8
45-54	215	79.7	242	88.4	465	83.1
55-64	486	87.3	434	95.1	933	90.3
65+	1,264	93.7	548	97.7	1,831	94.7
Education						
< High School Graduate	303	81.8	428	90.4	741	84.9
High School Graduate or GED	718	84.7	438	86.7	1,167	85.2
Some College or Technical School	533	80.9	224	75.1	764	78.6
College Graduate	520	84.0	257	84.1	797	84.1
Income						
< \$15,000	286	77.2	467	84.8	762	81.9
\$15-\$24,999	398	85.2	320	82.2	726	82.6
\$25-\$34,999	237	87.3	119	86.6	359	83.8
\$35-\$49,999	244	84.9	86	89.7	332	86.6
\$50-\$74,999	238	78.5	73	92.0	319	81.1
\$75,000+	285	80.1	64	75.5	355	79.4
Employment Status						
Employed	571	77.4	372	75.1	961	76.0
Not Employed	38	51.7	83	80.6	122	66.5
Student/Homemaker	141	79.9	48	68.5	194	73.2
Retired/Unable to Work	1,324	90.3	840	95.6	2,187	92.4
Total	2,081	82.7	1,353	85.0	3,483	83.0

 Table 10: Taking Blood Pressure Medication<sup>3</sup>

<sup>1</sup>Unweighted <sup>2</sup>Weighted

\* Sample Size<50

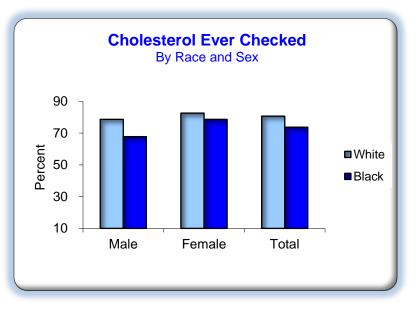
# **Cholesterol Awareness**

#### Survey Question:

## Have you ever had your blood cholesterol checked?

Persons having elevated blood cholesterol levels experience twice the risk of developing coronary heart disease. Studies reveal that small reductions in cholesterol levels are effective in reducing risks.

For those with high cholesterol readings, changes in diet along with increasing physical activity will reduce the level approximately 75 percent of the time. The National Cholesterol



#### Figure 14

Education Program recommends that healthy adults more than twenty years old have their blood

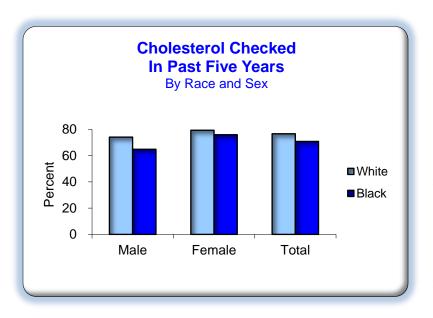


Figure 15

cholesterol levels checked at least once every five years.

The 2013 survey revealed that 77.9 percent of the respondents reported that they have had their blood cholesterol checked (Figure 14) and 74.3 percent reported that it had been checked in the past five years (Figure 15). White respondents were more likely to have had their cholesterol checked within five years reporting a rate of 76.7 percent than blacks who reported a rate of 70.8 percent (Table 12).

Black male respondents reported the lowest rate for

examinations within the past five years with a rate of 64.9 percent. Of those who have ever had their cholesterol checked, 42.0 percent said they have been told their blood cholesterol is high but for the age group 65 and above, the rate was 58.9 percent.

	White		Bla	ack	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	1,523	78.7	558	67.8	2,139	74.6
Female	2,585	82.6	1,533	78.7	4,183	80.9
Age Group						
18-24	63	37.8	73	45.3	140	41.8
25-34	221	65.3	178	61.9	408	63.3
35-44	330	80.2	233	79.3	585	79.5
45-54	630	85.4	398	85.9	1,051	85.4
55-64	962	94.3	549	86.2	1,541	91.6
65+	1,885	97.2	644	95.3	2,559	96.7
Education						
< High School Graduate	442	75.0	515	73.2	977	73.5
High School Graduate or GED	1,262	80.0	663	71.1	1,958	76.3
Some College or Technical School	1,081	80.2	434	71.8	1,540	77.5
College Graduate	1,311	87.8	473	85.1	1,828	86.5
Income						
< \$15,000	466	69.7	613	69.5	1,095	69.3
\$15-\$24,999	646	78.3	498	74.3	1,167	76.0
\$25-\$34,999	428	81.1	216	66.2	658	75.3
\$35-\$49,999	514	80.8	166	84.6	691	81.5
\$50-\$74,999	521	81.2	147	93.3	684	83.8
\$75,000+	873	90.1	142	91.7	1,032	90.3
Employment Status						
Employed	1,598	77.6	791	70.1	2,445	74.8
Not Employed	130	69.3	155	61.9	294	65.2
Student/Homemaker	306	62.2	111	64.9	433	63.5
Retired/Unable to Work	2,063	94.2	1,021	87.7	3,124	91.6
Total	4,108	80.7	2,091	73.7	6,322	77.9

#### Table 11: Ever Had Cholesterol Checked

<sup>1</sup>Unw eighted

	White		Bla	ick	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	1,431	74.0	532	64.9	2,016	70.4
Female	2,449	79.3	1,468	75.9	3,980	77.8
Age Group						
18-24	55	33.2	65	40.3	124	37.2
25-34	199	59.3	165	57.4	373	58.2
35-44	303	74.9	225	77.6	548	75.5
45-54	588	80.6	382	83.5	992	81.3
55-64	915	90.4	529	83.8	1,472	88.1
65+	1,805	96.1	618	93.6	2,451	95.5
Education						
< High School Graduate	421	71.5	485	70.3	924	70.1
High School Graduate or GED	1,176	74.3	640	68.5	1,848	71.9
Some College or Technical School	1,032	76.9	411	68.0	1,465	74.0
College Graduate	1,240	84.6	458	83.3	1,741	83.7
Income						
< \$15,000	428	63.7	582	66.4	1,025	65.0
\$15-\$24,999	613	74.7	477	70.8	1,112	72.5
\$25-\$34,999	403	77.9	211	64.5	626	72.2
\$35-\$49,999	487	77.8	161	81.8	658	78.7
\$50-\$74,999	499	77.0	146	93.2	660	80.0
\$75,000+	832	85.9	137	89.1	986	86.5
Employment Status						
Employed	1,505	73.2	756	66.3	2,313	70.5
Not Employed	116	61.8	143	57.3	268	59.4
Student/Homemaker	280	56.8	109	64.5	405	60.2
Retired/Unable to Work	1,969	92.0	979	86.4	2,985	89.7
Total	3,880	76.7	2,000	70.8	5,996	74.3

Table 12: Cholesterol Checked in Past 5 Years

<sup>1</sup>Unw eighted <sup>2</sup>Weighted

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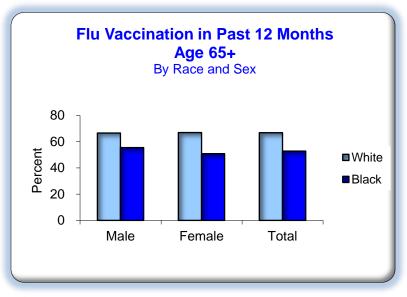
# Immunization

#### 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 tenth leading cause of death in Mississippi for 2012 producing a death rate of 18.7 per 100,000 in population.

The *Healthy People 2020* 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 not institutionalized is 80 percent. Influenza vaccine can prevent the disease and its complications. In the elderly, the



#### Figure 16

vaccine is less effective in disease prevention, but reduces severity of disease and the incidence of complications and death. Vaccination 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.

In the 2013 BRFSS survey, 63.1 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 marked difference according to race: 66.8 percent of whites reported having been vaccinated compared to only 52.8 percent for blacks (Figure 17). For the total population, females reported higher vaccination in the past twelve months with a rate of 39.8 percent compared to 34.6 percent for males (Figure 16).

Only 30.1 percent of the respondents said that they had ever received a pneumonia vaccination. Respondents over the age of 65 reported a vaccination rate of 66.2 percent. As with influenza vaccinations rates on those 65 years of age and older, there was a marked difference with respect to race for pneumonia vaccinations: 71.9 percent for whites but only 48.7 percent for blacks (Table 15).

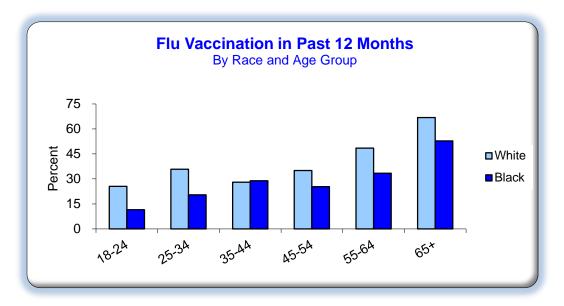


Figure 17

	White		Bla	ack	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	782	38.9	202	25.8	1,008	34.6
Female	1,513	46.0	594	29.6	2,135	39.8
Age Group						
18-24	43	25.5	16	11.5	61	19.2
25-34	117	35.8	52	20.4	173	29.6
35-44	128	28.0	73	28.9	213	29.6
45-54	261	35.0	113	25.3	381	31.3
55-64	475	48.5	199	33.4	688	43.5
65+	1,266	66.8	338	52.8	1,615	63.1
Education						
< High School Graduate	235	32.4	227	32.9	473	33.4
High School Graduate or GED	702	41.6	233	25.7	949	35.6
Some College or Technical School	616	43.5	156	24.0	779	37.2
College Graduate	738	49.8	178	31.6	936	44.5
Income						
< \$15,000	235	32.4	244	26.9	486	29.8
\$15-\$24,999	366	40.4	182	26.5	563	34.7
\$25-\$34,999	251	43.9	78	21.9	331	34.8
\$35-\$49,999	298	45.0	58	31.5	361	40.4
\$50-\$74,999	284	40.8	59	30.4	350	38.4
\$75,000+	478	48.7	50	36.4	535	46.9
Employment Status						
Employed	746	36.6	245	23.6	1,011	32.2
Not Employed	51	22.0	43	22.0	97	22.0
Student/Homemaker	182	36.2	34	18.2	225	30.6
Retired/Unable to Work	1,311	58.4	473	40.1	1,804	52.2
Total	2,295	42.5	796	27.9	3,143	37.3

#### Table 13: Flu Vaccination in Past 12 Months

<sup>1</sup>Unw eighted

	White		Bla	ack	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	388	66.3	84	55.5	478	63.4
Female	878	67.1	254	50.8	1,137	62.9
Education						
< High School Graduate	178	61.3	150	54.9	330	58.2
High School Graduate or GED	465	67.0	92	50.8	563	64.1
Some College or Technical School	309	68.7	46	48.0	355	65.6
College Graduate	311	69.3	48	53.4	362	66.9
Income						
< \$15,000	162	63.0	124	49.2	288	55.5
\$15-\$24,999	258	67.1	75	52.1	337	62.6
\$25-\$34,999	163	69.6	31	71.4	196	70.2
\$35-\$49,999	157	67.5	15	73.4*	172	67.9
\$50-\$74,999	120	70.8	18	57.8*	138	69.9
\$75,000+	129	67.3	8	49.6*	137	66.0
Employment Status						
Employed	116	54.6	25	44.5	143	53.7
Not Employed	2	9.1	4	25.2*	6	14.5
Student/Homemaker	98	65.5	9	32.9*	108	62.3
Retired/Unable to Work	1,047	69.4	299	54.3	1,354	65.0
Total	1,266	66.8	338	52.8	1,615	63.1

# Table 14: Flu Vaccination in Past 12 Months: Age 65+

<sup>1</sup>Unw eighted

<sup>2</sup>Weighted

\*Sample size <50

	White		Bla	ick	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	621	33.0	167	23.3	806	29.7
Female	1,265	34.2	492	23.9	1,780	30.4
Age Group						
18-24	31	20.6	18	17.5	52	20.2
25-34	38	15.8	25	8.6	65	12.4
35-44	51	15.2	56	20.3	112	17.7
45-54	136	22.2	89	25.9	231	23.5
55-64	292	31.2	155	27.9	452	30.1
65+	1,334	71.8	314	48.7	1,666	66.2
Education						
< High School Graduate	264	43.4	188	30.2	458	36.6
High School Graduate or GED	630	36.5	205	21.2	848	30.9
Some College or Technical School	496	29.9	132	21.8	632	27.3
College Graduate	490	28.5	133	21.4	641	26.8
Income						
< \$15,000	271	42.8	240	29.4	515	34.1
\$15-\$24,999	361	41.4	146	20.0	516	31.2
\$25-\$34,999	227	38.1	64	18.4	299	32.1
\$35-\$49,999	224	30.2	39	24.2	266	28.2
\$50-\$74,999	198	27.8	44	21.6	248	26.7
\$75,000+	245	22.9	27	17.2	273	22.0
Employment Status						
Employed	337	18.7	140	14.3	492	17.3
Not Employed	38	22.9	44	21.1	84	22.1
Student/Homemaker	145	27.1	28	14.4	178	23.7
Retired/Unable to Work	1,363	62.1	445	42.9	1,827	55.2
Total	1,886	33.6	659	23.7	2,586	30.1

#### **Table 15: Ever Had Pneumonia Vaccination**

<sup>1</sup>Unw eighted

	White		Bla	ick	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	394	69.4	69	44.5	470	63.3
Female	940	73.6	245	51.9	1,196	68.3
Education						
< High School Graduate	197	72.0	124	46.6	324	60.1
High School Graduate or GED	495	71.7	95	55.2	598	69.0
Some College or Technical School	315	71.2	50	42.3	367	66.9
College Graduate	322	72.6	44	55.6	371	70.0
Income						
< \$15,000	188	69.2	114	48.6	305	58.5
\$15-\$24,999	274	72.9	73	49.1	352	66.4
\$25-\$34,999	169	74.4	28	60.6*	200	72.9
\$35-\$49,999	159	70.7	14	51.7*	173	66.0
\$50-\$74,999	118	73.2	19	66.9*	138	72.6
\$75,000+	123	70.8	7	60.3*	130	69.9
Employment Status						
Employed	103	53.8	17	31.3*	122	51.3
Not Employed	3	36.3	7	38.0*	10	36.9
Student/Homemaker	104	69.8	11	28.0*	116	64.7
Retired/Unable to Work	1,121	75.4	278	50.7	1,414	68.7
Total	1,334	71.8	314	48.7	1,666	66.2

#### Table 16: Ever Had Pneumonia Vaccination: Age 65+

<sup>1</sup>Unw eighted

<sup>2</sup>Weighted

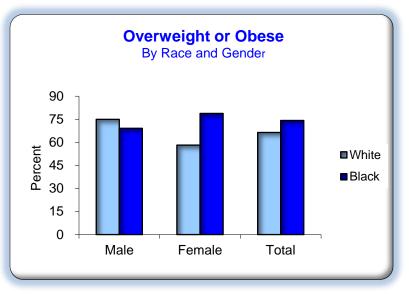
\*Sample size <50

# **Overweight and Obesity**

#### Survey Question:

There is no survey question that solicits the respondent to provide his body mass index (BMI) rather it is calculated from the selfreported 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, gall bladder disease, cancer of the endometrium, breast, prostate and colon as well





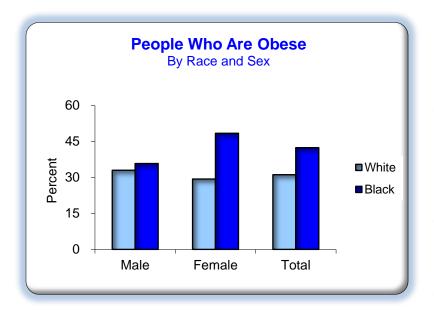


Figure 19

as arthritis. Overweight people may also suffer from social stigmatization, discrimination and low self-esteem.

Weight may be controlled by dietary changes such as decreasing caloric intake and by increasing physical activity. According to the 2013 BRFSS study 69.2 percent of those surveyed reported themselves as being either overweight (BMI  $\geq$ 25) or obese (BMI  $\geq$ 30). The rate for whites was 66.4 percent compared to 74.2 percent for blacks (Table 17).

The total obesity rate for 2013 was 35.2 percent: 31.1 for

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whites and 42.4 for blacks (Table 18). Black females reported the highest rate of obesity at 48.4 percent and black males reported the second highest rate at 35.8 percent. Black respondents in the 45 to 54 age group have the highest rate of obesity at 58.7 percent compared to a rate of 40.0 for whites in the same age category.

	White		Bla	ick	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	1,353	74.9	513	69.1	1,913	72.7
Female	1,605	58.1	1,334	78.7	2,978	65.9
Age Group						
18-24	71	40.3	78	51.6	151	45.8
25-34	195	62.9	208	74.7	412	68.4
35-44	288	68.7	220	82.4	525	74.2
45-54	502	75.2	355	84.0	874	77.6
55-64	703	72.8	479	79.9	1,204	75.0
65+	1,194	68.2	494	72.3	1,704	69.2
Education						
< High School Graduate	336	68.2	438	72.7	794	70.7
High School Graduate or GED	933	67.9	626	75.3	1,584	70.9
Some College or Technical School	807	66.2	383	71.1	1,204	67.6
College Graduate	878	63.5	398	80.1	1,303	67.8
Income						
< \$15,000	350	65.1	579	76.7	943	72.0
\$15-\$24,999	471	66.3	457	74.0	945	70.3
\$25-\$34,999	317	66.4	198	68.1	524	66.6
\$35-\$49,999	401	67.9	151	78.6	560	70.9
\$50-\$74,999	404	71.3	120	74.1	535	71.7
\$75,000+	615	65.9	120	87.6	746	69.0
Employment Status						
Employed	1,290	68.2	753	75.6	2,087	70.7
Not Employed	102	62.0	164	73.0	271	67.1
Student/Homemaker	215	51.6	96	55.3	321	54.1
Retired/Unable to Work	1,348	68.9	827	78.0	2,202	72.2
Total	2,958	66.4	1,847	74.2	4,891	69.2

#### Table 17: People Who Are Overweight or Obese

<sup>1</sup>Unw eighted

	White		Bla	ack	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	576	33.0	256	35.8	853	33.9
Female	755	29.3	819	48.4	1,591	36.4
Age Group						
18-24	32	20.3	43	26.8	76	23.3
25-34	93	30.6	122	39.7	220	35.0
35-44	147	36.0	131	45.7	284	39.2
45-54	281	40.0	235	58.7	527	46.6
55-64	329	32.5	268	45.4	605	36.8
65+	447	25.5	272	37.8	725	28.4
Education						
< High School Graduate	156	31.4	279	46.3	448	38.8
High School Graduate or GED	434	34.9	355	43.6	800	38.3
Some College or Technical School	365	30.2	233	38.4	603	32.6
College Graduate	375	27.2	207	41.0	591	30.7
Income						
< \$15,000	180	34.0	372	47.5	559	41.5
\$15-\$24,999	215	34.5	286	46.9	509	40.6
\$25-\$34,999	143	29.0	104	37.1	253	32.6
\$35-\$49,999	172	30.0	92	49.4	264	35.2
\$50-\$74,999	198	34.3	53	30.4	258	33.9
\$75,000+	262	29.3	53	35.2	317	29.8
Employment Status						
Employed	606	31.2	425	40.6	1,051	34.7
Not Employed	51	34.2	106	51.7	159	42.3
Student/Homemaker	102	26.8	49	20.7	155	25.1
Retired/Unable to Work	571	31.7	490	49.0	1,073	37.6
Total	1,331	31.1	1,075	42.4	2,444	35.2

#### Table 18: People Who Are Obese

<sup>1</sup>Unw eighted

# Asthma

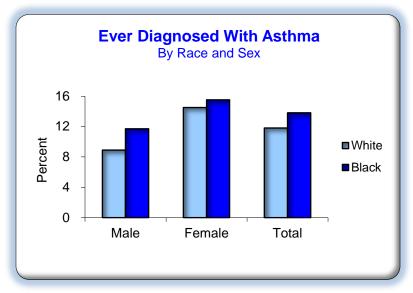
#### Survey Question:

# 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 2020* publication, asthma is a serious and growing health problem. Asthma is a chronic inflammatory disorder of the airways

characterized by episodes of reversible breathing problems due to airway narrowing and obstruction. These episodes can range in severity from mild to life threatening. Symptoms of asthma include wheezing, coughing, chest tightness, and shortness of breath. In some cases, the breathing may be so labored that an asthma attack becomes life-threatening.

Most of the problems caused by asthma could be averted if persons with asthma and their health care providers

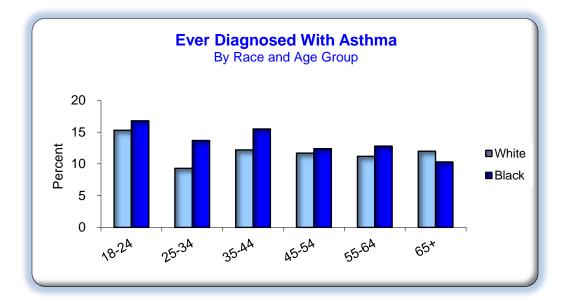




managed the disease according to established guidelines. Effective management of asthma comprises four major components: controlling exposure to factors that trigger asthma episodes, adequately managing asthma with medicine, monitoring the disease by using objective measures of lung function and educating 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 2013 BRFSS survey revealed that 12.5 percent of the respondents said that they had ever had asthma. As has been true in recent years, blacks reported a higher rate of asthma, 13.8 percent, than whites who had a rate of 11.8 percent. Women reported a higher rate (15.0 percent) than men (9.9 percent).

Table 19 contains the figures related to the various rates.





	White		Bla	ick	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	139	8.9	90	11.7	236	9.9
Female	407	14.5	256	15.5	675	15.0
Age Group						
18-24	30	15.3	28	16.8	59	16.2
25-34	33	9.3	42	13.7	76	10.8
35-44	49	12.2	38	15.5	93	13.9
45-54	74	11.7	65	12.4	142	11.8
55-64	119	11.2	86	12.8	210	12.1
65+	239	11.9	84	10.3	326	11.4
Education						
< High School Graduate	98	19.3	97	14.5	199	16.8
High School Graduate or GED	159	10.4	119	16.7	283	13.0
Some College or Technical School	159	11.3	59	10.4	221	11.1
College Graduate	129	8.9	69	12.1	204	9.7
Income						
< \$15,000	110	23.3	134	18.3	248	20.0
\$15-\$24,999	105	13.9	80	12.2	188	13.2
\$25-\$34,999	65	12.3	35	14.1	102	13.3
\$35-\$49,999	61	10.9	10	5.8	71	9.0
\$50-\$74,999	44	5.8	18	9.5	65	6.8
\$75,000+	68	8.4	12	7.9	81	8.2
Employment Status						
Employed	155	8.3	105	12.0	266	9.7
Not Employed	22	14.4	40	16.7	62	15.2
Student/Homemaker	48	12.7	22	12.0	73	12.9
Retired/Unable to Work	320	17.1	177	16.5	506	
Total	546	11.8	346	13.8	911	12.5

#### Table 19: Ever Diagnosed With Asthma

<sup>1</sup>Unw eighted

	White		Bla	ack	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	81	5.0	55	6.4	142	5.6
Female	302	10.2	187	10.8	498	10.6
Age Group						
18-24	17	8.3	14	8.8	32	8.9
25-34	19	4.7	25	6.3	45	5.3
35-44	28	6.9	22	10.1	54	8.5
45-54	58	9.5	50	9.8	110	9.5
55-64	85	7.6	63	9.4	152	8.6
65+	174	8.5	65	8.9	242	8.5
Education						
< High School Graduate	81	16.1	81	11.5	166	13.9
High School Graduate or GED	115	6.4	80	9.9	199	7.9
Some College or Technical School	103	6.6	40	6.0	146	6.6
College Graduate	83	5.0	40	6.9	126	5.4
Income						
< \$15,000	93	19.4	104	13.0	201	15.4
\$15-\$24,999	77	9.7	53	6.6	132	8.3
\$25-\$34,999	43	7.4	19	6.7	64	7.7
\$35-\$49,999	36	5.8	7	4.6	43	5.2
\$50-\$74,999	30	4.3	14	8.4	45	5.3
\$75,000+	41	4.0	8	5.9	49	4.2
Employment Status						
Employed	80	3.9	59	6.0	144	4.8
Not Employed	12	8.5	25	9.2	37	8.6
Student/Homemaker	35	9.5	16	8.7	53	9.8
Retired/Unable to Work	255	13.7	140	13.7	402	13.7
Total	383	7.7	242	8.8	640	8.2

#### Table 20: Presently Have Asthma

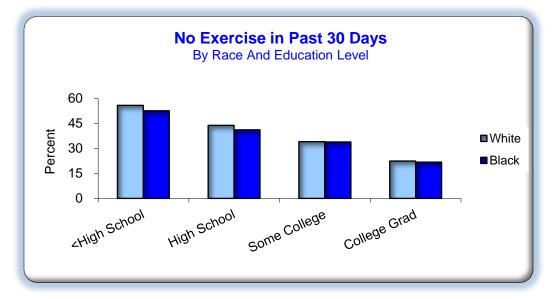
<sup>1</sup>Unw eighted

# **Exercise and Physical Activity**

#### 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 of these other risk factors.

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

In Mississippi, 38.2 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 22) and in lower income levels (Table 21) reported the highest percentage of physical inactivity.

Mississippi Behavioral Risk Factor Surveillance Survey 2013

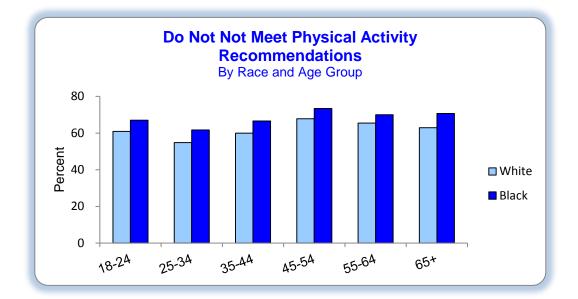


Figure 23

	White		Bla	ick	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	585	34.5	223	32.4	828	33.6
Female	1,182	40.9	780	44.6	1,993	42.3
Age Group						
18-24	41	25.8	44	33.7	86	29.0
25-34	85	29.5	75	30.9	162	29.5
35-44	138	35.7	102	36.2	254	36.9
45-54	258	40.7	196	47.1	459	42.2
55-64	394	42.2	263	41.5	671	42.3
65+	845	44.2	318	48.2	1,177	45.4
Education						
< High School Graduate	286	55.8	321	52.6	615	53.3
High School Graduate or GED	638	43.7	350	41.1	1,006	42.8
Some College or Technical School	454	34.1	179	33.8	645	34.1
College Graduate	384	22.3	151	21.7	548	22.2
Income						
< \$15,000	279	51.5	366	50.7	652	50.5
\$15-\$24,999	355	47.0	230	36.4	595	41.8
\$25-\$34,999	188	38.6	103	41.4	298	39.4
\$35-\$49,999	205	35.9	68	29.6	275	33.4
\$50-\$74,999	185	31.4	42	17.1	235	28.7
\$75,000+	239	26.2	38	20.7	283	25.7
Employment Status						
Employed	597	33.0	354	35.3	971	33.8
Not Employed	67	36.7	73	35.0	141	35.0
Student/Homemaker	131	29.7	31	19.1	169	26.3
Retired/Unable to Work	970	48.7	541	52.6	1,533	50.3
Total	1,767	37.7	1,003	39.1	2,821	38.2

#### Table 21: No Leisure Time Physical Activity in Past 30 Days

<sup>1</sup>Unw eighted

	White		Bla	ack	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	919	58.2	385	60.0	1,339	58.9
Female	1,702	63.8	1,149	71.4	2,899	66.4
Age Group						
18-24	99	61.8	80	64.7	181	61.8
25-34	171	53.3	151	61.0	326	55.8
35-44	237	58.4	181	63.6	437	61.2
45-54	422	66.2	295	72.0	731	67.9
55-64	594	64.5	391	68.6	1,008	66.1
65+	1,092	60.7	431	69.0	1,543	63.1
Education						
< High School Graduate	354	74.7	433	78.4	801	75.8
High School Graduate or GED	869	64.7	511	66.1	1,405	65.4
Some College or Technical School	692	59.0	305	61.5	1,014	59.4
College Graduate	701	49.8	283	54.9	1,011	51.3
Income						
< \$15,000	351	67.8	517	74.1	880	71.8
\$15-\$24,999	467	67.1	356	62.2	841	64.3
\$25-\$34,999	268	59.6	155	68.7	434	62.7
\$35-\$49,999	328	60.8	117	60.1	450	59.8
\$50-\$74,999	325	58.9	81	46.6	416	56.3
\$75,000+	455	53.1	80	57.0	544	53.6
Employment Status						
Employed	1,050	58.9	599	64.7	1,685	60.9
Not Employed	100	55.8	131	68.5	236	61.9
Student/Homemaker	210	57.6	68	47.6	286	52.5
Retired/Unable to Work	1,258	67.3	730	73.4	2,021	69.9
Total	2,621	61.1	1,534	66.3	4,238	62.8

#### Table 22: Do Not Meet Physical Activity Recommendations

<sup>1</sup>Unw eighted

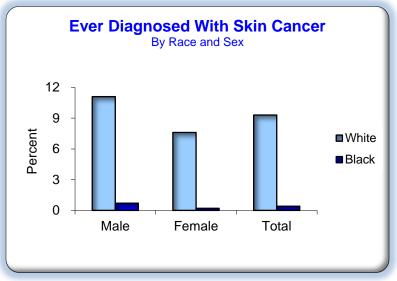
# Cancer

#### Survey Question:

Has a doctor, nurse, or other health professional ever told you that you had skin cancer?

Has a doctor, nurse, or other health professional EVER told you that you had any other types of cancer?

According to the Centers for Disease Control and Prevention (CDC), skin cancer is the most common form of cancer in the United States. The two most common types of skin cancer are basal cell and squamous cell carcinomas both of which are highly curable. However, melanoma, the third most common skin cancer, is more dangerous. About 65 to 90 percent of all melanomas are caused by exposure to ultraviolet light.



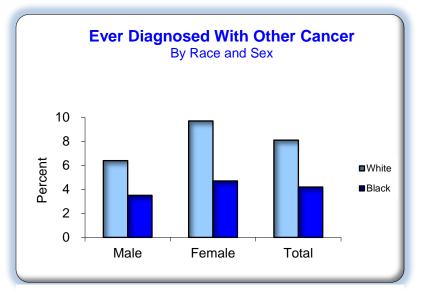
Most skin cancers form in older people on parts of the body



exposed to the sun or in people who have weakened immune systems. The American Cancer Society estimates that in 2014 there will be 81,220 new cases of skin cancer in the United States.

The 2013 Mississippi BRFSS revealed that 5.9 percent of the population had been diagnosed with some form of skin cancer. There was a conspicuous difference between the rates based on race. Whites reported a rate of 9.3 percent compared to only 0.4 percent for blacks. Whites age 65 and older had a rate of 24.9 percent compared to 1.8 percent for blacks (Table 23).

The second BRFSS question concerning cancer was whether the respondent had ever been diagnosed with any other type of cancer. Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the spread is not controlled, it most likely results in death. Cancer is caused by both external and internal factors. These factors may act together or in sequence to initiate or promote carcinogenesis. Ten or more years often pass between exposure to external factors and detectable cancer.



The 2013 BRFSS survey revealed that 6.7 percent of the people in Mississippi have been diagnosed with some form of cancer other than skin cancer which translates into more than 150,000 persons. The rate for white respondents was 8.2 percent while the rate for blacks was 4.2 percent (Figure 25).

Figure 25

	White		Bla	ack	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	306	11.1	3	0.7	312	7.2
Female	349	7.7	7	0.2	359	4.7
Age Group						
18-24	2	0.6	1	0.6	3	0.6
25-34	8	2.4	0	0.0	8	1.3
35-44	15	2.6	0	0.0	16	1.7
45-54	36	4.2	0	0.0	36	2.6
55-64	125	12.0	3	0.6	129	8.0
65+	469	25.0	6	1.8	479	19.0
Education						
< High School Graduate	94	10.4	3	0.9	97	5.6
High School Graduate or GED	226	10.9	2	0.0	231	6.4
Some College or Technical School	149	7.5	5	0.7	154	5.2
College Graduate	185	9.6	0	0.0	188	6.8
Income	1	2.0	0	0.0	1	1.4
< \$15,000	78	8.4	4	0.6	83	3.7
\$15-\$24,999	112	10.5	3	0.4	116	5.4
\$25-\$34,999	73	9.5	0	0.0	74	5.6
\$35-\$49,999	86	9.1	1	0.5	87	6.2
\$50-\$74,999	85	9.9	0	0.0	86	7.8
\$75,000+	110	8.1	0	0.0	111	7.1
Employment Status						
Employed	138	4.6	1	0.2	141	3.0
Not Employed	9	4.5	0	0.0	9	2.0
Student/Homemaker	35	4.0	0	0.0	35	2.4
Retired/Unable to Work	472	20.2	8	1.1	484	13.3
Total	655	9.3	10	0.4	671	5.9

#### Table 23: Ever Diagnosed With Skin Cancer

<sup>1</sup>Unw eighted

	White		Bla	ick	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	166	6.4	41	3.5	213	5.3	
Female	346	9.9	126	4.7	481	7.9	
Age Group							
18-24	5	1.9	1	1.1	6	1.5	
25-34	10	4.0	5	1.1	15	2.6	
35-44	16	4.5	16	5.2	34	4.8	
45-54	37	4.6	17	3.1	58	4.3	
55-64	95	9.3	51	6.7	148	8.3	
65+	348	18.7	76	10.7	430	16.6	
Education							
< High School Graduate	55	7.7	56	6.4	112	6.7	
High School Graduate or GED	169	8.8	46	3.9	219	6.8	
Some College or Technical School	145	8.7	25	2.4	174	6.8	
College Graduate	139	6.7	40	4.5	185	6.1	
Income							
< \$15,000	70	11.3	53	5.4	126	7.6	
\$15-\$24,999	114	11.9	41	3.4	157	7.8	
\$25-\$34,999	46	6.4	16	4.4	64	5.4	
\$35-\$49,999	66	7.8	8	1.2	76	6.1	
\$50-\$74,999	45	5.8	13	3.7	60	5.5	
\$75,000+	69	5.4	11	5.0	81	5.4	
Employment Status							
Employed	97	3.6	38	2.0	139	3.0	
Not Employed	11	6.6	10	2.7	23	5.0	
Student/Homemaker	37	5.8	3	0.8	41	3.8	
Retired/Unable to Work	365	17.4	114	9.7	487	14.7	
Total	512	8.2	167	4.2	694	6.7	

#### Table 24: Ever Diagnosed With Other Cancer

<sup>1</sup>Unw eighted

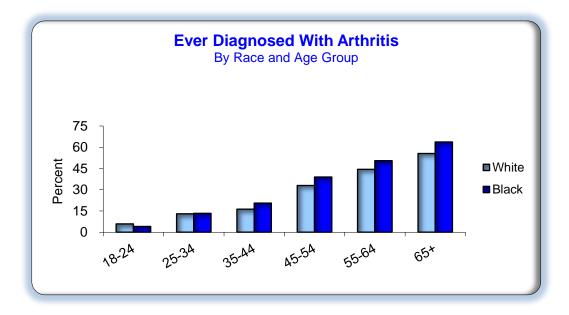
# Arthritis

#### Survey Question:

Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?

According to the *Healthy People 2020* publication, arthritis affects one in five adults in the United States and continues to be the most common cause of disability and generates more than \$128 billion per year to the cost of health care. All of the human and economic costs are projected to increase over time as the population ages.

There are more than 100 types of arthritis which commonly occurs with other chronic conditions, such as diabetes, heart disease, and obesity. Interventions to treat the pain and reduce the functional limitations from arthritis are important, and may also enable people with these other chronic conditions to be more physically active.



#### Figure 26

The significant public health impact of arthritis is reflected in a variety of measures. First, arthritis is the leading cause of disability. Arthritis limits major activities such as regular work, housekeeping and school for nearly three percent of the U. S. population and almost twenty percent of those who are afflicted with the condition. Arthritis trails only heart disease as a cause of work disability. As a consequence, arthritis limits the independence of affected persons and disrupts the lives of family members and other care givers.

Health-related quality of life measures are consistently worse for persons with arthritis, whether the measure is healthy days in the past 30 days, days without severe pain, "ability days" (that is, days without activity limitations), or difficulty in performing personal care activities.

For Mississippi, the 2013 BRFSS survey showed that 30.1 percent of the population had been diagnosed with arthritis by a health care professional. As noted in the "Definitions of Terms and Risk Factors," the question in the current report has been amended so that only those who have actually been diagnosed with arthritis by a health care professional are being reported. Until 2003, the report included those who had reported pain or stiffness in the joints for at least 30 days during the previous year.

As seen in Figure 26, the proportion increases with age. Respondents over the age of 65 reported being diagnosed with arthritis at a rate of 57.3 percent. The rate for blacks within this age group was than 13 percent higher than whites. Blacks reported a rate of 63.7 percent while whites were only 55.5 percent. Only 4.8 percent of those 18-24 years old reported this condition.

Of the people who were diagnosed with arthritis, 56.4 percent said that their usual, normal activities were limited by joint pain. Blacks reported a rate of 57.7 while white respondents had a rate of 55.9 percent (Table 26).

A little more than 44 percent of diagnosed arthritics reported that the amount of work, the type of work or even if they are able to work at all is affected by their joint symptoms. Blacks at 51.6 percent had a much higher rate than whites with 40.2 percent. Little difference was noted between genders: males had a rate of 44.4 percent compared to 43.9 percent for females (Table 27).

	White Black		ack	То	tal	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	603	27.2	227	26.4	855	26.5
Female	1,318	35.3	768	31.2	2,107	33.3
Age Group						
18-24	9	5.9	6	4.0	15	4.8
25-34	44	12.9	30	13.3	74	12.6
35-44	66	16.3	55	20.5	126	17.9
45-54	233	33.0	161	39.0	402	34.6
55-64	471	44.4	319	50.5	804	46.5
65+	1,091	55.5	417	63.7	1,524	57.3
Education						
< High School Graduate	319	45.6	359	50.1	686	46.3
High School Graduate or GED	655	34.5	307	26.1	973	30.8
Some College or Technical School	497	27.5	172	19.9	676	24.7
College Graduate	444	22.8	154	17.4	616	21.1
Income						
< \$15,000	321	46.9	398	42.3	731	43.9
\$15-\$24,999	387	39.8	224	26.4	618	32.6
\$25-\$34,999	211	35.0	83	25.9	297	30.7
\$35-\$49,999	224	27.1	49	18.6	276	23.9
\$50-\$74,999	203	27.2	42	18.3	253	25.5
\$75,000+	242	19.1	31	14.7	276	18.3
Employment Status						
Employed	439	17.4	211	15.5	664	16.5
Not Employed	72	32.2	56	19.4	131	24.6
Student/Homemaker	126	20.6	33	10.5	162	16.5
Retired/Unable to Work	1,278	59.3	689	63.1	1,990	60.5
Total	1,921	31.3	995	29.0	2,962	30.1

#### Table 25: Ever Diagnosed With Arthritis

<sup>1</sup>Unw eighted

	White		Bla	ack	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	291	52.6	115	54.2	415	52.8
Female	717	58.3	435	60.1	1,164	59.0
Age Group						
18-24	2	24.3*	2	27.7*	4	25.6
25-34	24	66.3*	15	66.5*	39	66.4
35-44	34	56.3	30	55.6	67	57.2
45-54	135	62.7	94	59.2	234	61.0
55-64	260	55.8	182	62.7	447	57.6
65+	552	52.7	225	52.9	783	52.6
Education						
< High School Graduate	186	65.5	220	62.4	409	63.5
High School Graduate or GED	357	55.3	178	57.2	539	56.1
Some College or Technical School	260	53.9	95	54.3	358	53.8
College Graduate	203	46.5	55	42.2	269	45.8
Income						
< \$15,000	228	76.5	269	71.0	504	73.1
\$15-\$24,999	225	64.1	120	56.4	350	61.5
\$25-\$34,999	106	49.5	30	31.6*	138	44.4
\$35-\$49,999	109	47.1	17	29.9*	126	42.4
\$50-\$74,999	89	45.1	12	15.1*	104	40.2
\$75,000+	86	39.3	11	48.1*	99	40.4
Employment Status						
Employed	157	36.7	61	33.6	224	35.5
Not Employed	47	73.4	35	61.2	85	68.8
Student/Homemaker	56	45.0	14	45.6*	73	47.4
Retired/Unable to Work	746	65.2	438	67.8	1,193	65.9
Total	1,008	55.9	550	57.7	1,579	56.4

#### Table 26: Activity Limited by Arthritis Symptoms

<sup>1</sup>Unw eighted

<sup>2</sup>Weighted

<sup>3</sup>Denominator is those diagnosed with arthritis

\*Sample size <50

	White		Bla	ack	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	203	41.1	97	51.8	309	44.4	
Female	429	39.5	341	51.5	781	43.9	
Age Group							
18-24	0	0.0*	3	36.3*	3	13.9*	
25-34	18	48.3*	13	58.1*	31	52.4	
35-44	25	50.9	32	59.6	59	54.2	
45-54	101	52.4	82	60.8	187	55.2	
55-64	186	44.8	164	58.8	357	49.8	
65+	301	30.2	142	34.1	449	31.3	
Education							
< High School Graduate	132	52.2	175	56.9	309	54.2	
High School Graduate or GED	222	38.5	137	54.9	363	43.9	
Some College or Technical School	163	37.3	71	36.0	238	37.0	
College Graduate	114	31.3	52	46.8	176	35.6	
Income							
< \$15,000	156	57.0	214	58.9	377	57.5	
\$15-\$24,999	139	46.8	100	57.2	244	51.0	
\$25-\$34,999	73	45.9	30	46.6	105	46.3	
\$35-\$49,999	66	30.9	19	39.4*	85	32.6	
\$50-\$74,999	53	31.4	9	13.3*	66	29.8	
\$75,000+	46	23.5	10	35.7*	57	25.0	
Employment Status							
Employed	100	26.4	74	40.2	181	31.1	
Not Employed	40	58.8	29	66.4	72	62.0	
Student/Homemaker	37	43.8	10	35.6*	49	43.9	
Retired/Unable to Work	455	45.0	324	55.3	787	48.6	
Total	632	40.2	438	51.6	1,090	44.1	

#### Table 27: Do Arthritis Symptoms Affect Work<sup>3</sup>

<sup>1</sup>Unw eighted

<sup>2</sup>Weighted

 $^{3}\mbox{Denominator}$  is those diagnosed with arthritis

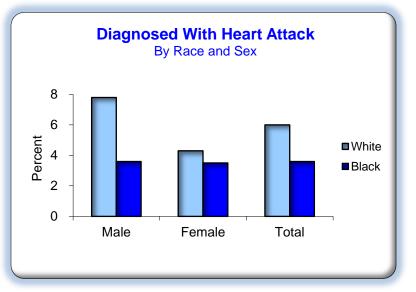
\*Sample size <50

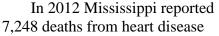
# **Cardiovascular** Disease

#### 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?

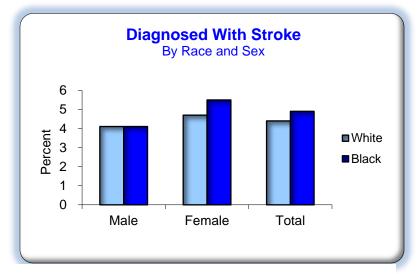
Cardiovascular disease (CVD) includes coronary heart disease, stroke, complications of hypertension, and diseases of the arterial blood vessels. In addition to causing almost half of all deaths in Mississippi, CVD is the major cause of premature, permanent disability among working adults.. In the 2013 BRFSS survey over ten percent of Mississippi adults (more than 235,000 people) report having some kind of CVD, such as coronary heart disease, angina, previous heart attack, or stroke.







and 1,509 from cerebrovascular disease (stroke). The two combined accounted for a nearly



thirty percent of all the deaths reported that year and more than forty percent of the total from the ten leading causes of death.

#### Figure 28

The 2013 BRFSS survey revealed that 14.0 percent of the population 65 years of age or older reported that they have been diagnosed as having had a heart attack: 15.1 for white respondents and 11.3 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 7.8 percent while blacks reported a rate of 6.4 for a total rate of 7.4 percent (Table 28).

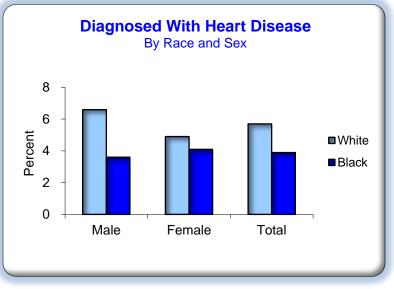


Table 29 shows the rate for those age 65 and greater who



had been diagnosed with a stroke was 9.5 for whites compared to a rate of 16.5 for blacks. In the 55 to 64 group the rates were 6.5 and 8.4 for whites and blacks respectively.

Those in the older age groups also reported a higher rate of coronary heart disease. Those in the age group 65 and older reported a rate of 12.3 percent with white respondents having a rate of 13.3 percent compared to 9.3 for blacks. The 55 to 64 age category had an overall rate of 9.0 percent: 8.8 for whites and 9.0 for blacks (Table 30).

	White		Bla	ack	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	177	7.8	45	3.6	230	6.3	
Female	189	4.3	84	3.5	275	3.9	
Age Group							
18-24	0	0.0	0	0.0	0	0.0	
25-34	1	0.5	2	0.5	4	0.6	
35-44	8	2.6	5	1.6	15	2.5	
45-54	24	4.4	15	5.0	39	4.5	
55-64	78	7.8	37	6.4	118	7.4	
65+	254	15.1	70	11.3	328	14.0	
Education							
< High School Graduate	70	11.0	52	6.6	122	8.5	
High School Graduate or GED	131	6.7	46	2.9	182	5.4	
Some College or Technical School	91	4.6	23	3.1	116	4.1	
College Graduate	71	3.5	7	0.5	80	2.6	
Income							
< \$15,000	73	10.9	51	6.0	127	8.2	
\$15-\$24,999	82	9.5	32	4.0	115	6.7	
\$25-\$34,999	34	4.9	10	2.8	45	4.0	
\$35-\$49,999	37	5.0	4	1.4	41	3.7	
\$50-\$74,999	31	3.7	2	0.3	36	3.4	
\$75,000+	33	2.1	1	0.5	34	1.8	
Employment Status							
Employed	42	1.8	16	1.2	62	1.7	
Not Employed	7	2.7	4	1.0	11	1.7	
Student/Homemaker	15	1.9	5	1.0	20	1.5	
Retired/Unable to Work	301	15.2	104	9.8	410	13.3	
Total	366	6.0	129	3.6	505	5.1	

#### Table 28: Ever Diagnosed With Heart Attack

<sup>1</sup>Unw eighted <sup>2</sup>Weighted

	White		Bla	ick	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	160	6.6	36	3.6	199	5.4	
Female	213	4.9	94	4.1	313	4.5	
Age Group							
18-24	1	0.7	2	1.7	3	1.2	
25-34	2	0.8	0	0.0	2	0.4	
35-44	5	1.2	2	0.1	7	0.7	
45-54	30	4.5	23	6.2	53	5.0	
55-64	87	8.8	41	9.0	131	9.0	
65+	247	13.3	62	9.3	315	12.3	
Education							
< High School Graduate	61	8.9	46	7.0	108	7.8	
High School Graduate or GED	126	6.1	48	4.3	177	5.2	
Some College or Technical School	96	5.0	21	2.2	118	4.0	
College Graduate	89	4.0	14	0.9	107	3.1	
Income							
< \$15,000	71	9.0	52	6.1	125	7.2	
\$15-\$24,999	80	7.9	31	3.3	113	5.5	
\$25-\$34,999	36	5.3	12	4.7	51	5.2	
\$35-\$49,999	36	4.5	6	2.3	42	3.6	
\$50-\$74,999	35	4.6	5	0.8	40	3.8	
\$75,000+	45	3.0	3	1.0	48	2.7	
Employment Status							
Employed	45	1.8	15	1.4	62	1.7	
Not Employed	10	3.1	5	2.1	15	2.5	
Student/Homemaker	17	1.9	5	2.4	23	2.4	
Retired/Unable to Work	300	14.4	105	9.5	411	12.5	
Total	373	5.7	130	3.9	512	4.9	

#### Table 29: Ever Diagnosed With Coronary Heart Disease

<sup>1</sup>Unw eighted <sup>2</sup>Weighted

	White		Bla	ack	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	87	4.1	56	4.1	148	4.1	
Female	182	4.6	145	5.5	331	4.9	
Age Group							
18-24	1	1.3	0	0.0	1	0.6	
25-34	3	0.6	4	1.0	7	0.7	
35-44	6	1.7	3	1.7	12	2.1	
45-54	23	3.3	22	6.2	46	4.3	
55-64	56	6.5	63	8.4	120	7.0	
65+	180	9.5	109	16.5	293	11.2	
Education							
< High School Graduate	62	8.7	92	10.2	155	9.0	
High School Graduate or GED	87	4.4	65	4.6	154	4.5	
Some College or Technical School	71	3.6	22	1.9	94	3.1	
College Graduate	48	2.3	20	1.9	72	2.2	
Income							
< \$15,000	61	8.3	91	8.6	156	8.8	
\$15-\$24,999	68	7.9	35	4.7	104	6.2	
\$25-\$34,999	21	4.0	13	3.0	34	3.4	
\$35-\$49,999	19	1.8	9	1.7	28	1.7	
\$50-\$74,999	17	1.5	1	0.3	18	1.3	
\$75,000+	22	1.7	2	0.8	25	1.5	
Employment Status							
Employed	28	1.0	15	1.1	43	1.0	
Not Employed	4	3.0	5	1.5	9	2.1	
Student/Homemaker	20	2.9	4	0.2	24	1.8	
Retired/Unable to Work	216	10.9	175	14.5	399	12.4	
Total	269	4.4	201	4.9	479	4.5	

#### Table 30: Ever Diagnosed With a Stroke

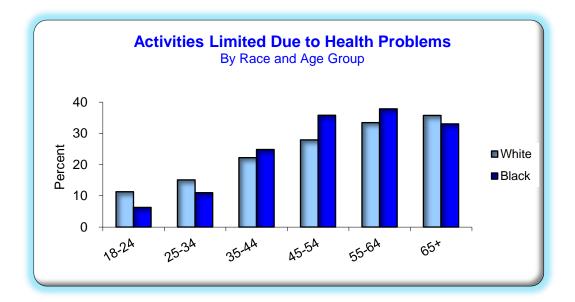
<sup>1</sup>Unw eighted <sup>2</sup>Weighted

# 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 2020*. 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 have led to an increase in secondary conditions such as social, emotional, family and community problems.



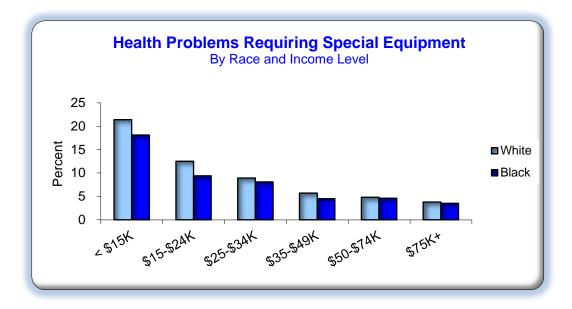


According to the Centers for Disease control and Prevention (CDC), people who have activity limitations report having had more days of pain, depression, anxiety, and sleeplessness and fewer days of vitality during the previous month than people not reporting activity limitations. In view of the increased 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.

Mississippi Behavioral Risk Factor Surveillance Survey 2013

In the 2013 BRFSS survey, 24.9 percent of Mississippians reported that their activities were limited because of health. White respondents reported a rate of 25.9 percent while blacks reported a rate of 23.5 percent. Figure 30 reflects the fact that these limitations increase with age for both races. People over the age of 65 report a rate of 34.9 percent (35.7 for whites and 33.0 for blacks) but the 18-24 age group had a rate of only 8.6 percent (11.3 for whites and 6.3 for blacks).



#### Figure 31

Only 10.4 percent of the population has health problems that require special equipment such as a wheelchair, special bed, cane or special telephone. Figure 31 shows that those with lower incomes tend to require special equipment for health problems.

	White		Bla	ick	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	469	23.9	202	25.4	689	24.2	
Female	919	27.8	480	21.9	1,423	25.5	
Age Group							
18-24	20	11.3	10	6.3	30	8.6	
25-34	44	15.1	27	11.0	72	13.1	
35-44	81	22.2	66	24.8	158	24.0	
45-54	192	27.9	137	35.8	337	30.2	
55-64	344	33.4	219	37.8	575	34.8	
65+	703	35.7	221	33.0	934	34.9	
Education							
< High School Graduate	235	40.0	232	36.9	475	37.6	
High School Graduate or GED	489	28.5	231	21.8	730	25.8	
Some College or Technical School	365	23.0	136	20.7	510	22.0	
College Graduate	298	16.5	81	8.6	394	14.6	
Income							
< \$15,000	300	52.9	317	40.9	626	45.6	
\$15-\$24,999	303	37.3	154	20.1	470	29.3	
\$25-\$34,999	158	27.8	46	15.4	208	22.5	
\$35-\$49,999	134	17.9	23	7.2	157	14.0	
\$50-\$74,999	126	17.7	23	11.3	155	16.5	
\$75,000+	133	11.6	16	8.6	154	11.4	
Employment Status							
Employed	229	10.8	95	10.0	337	10.6	
Not Employed	65	37.2	49	23.3	116	29.1	
Student/Homemaker	97	19.0	24	9.2	123	14.9	
Retired/Unable to Work	995	52.5	512	52.2	1,532	52.6	
Total	1,388	25.9	682	23.5	2,112	24.9	

#### Table 31: Activities Limited Due to Health Problems

<sup>1</sup>Unw eighted

	White		Bla	ack	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	201	9.4	120	11.7	329	10.2
Female	446	10.0	307	11.8	763	10.6
Age Group						
18-24	2	0.7	1	0.4	3	0.5
25-34	14	5.6	5	1.7	19	3.8
35-44	20	5.1	21	8.5	45	6.8
45-54	66	9.3	70	16.7	140	12.0
55-64	126	11.5	118	20.8	246	14.3
65+	419	19.2	211	31.1	638	22.1
Education						
< High School Graduate	144	18.8	176	21.4	325	19.4
High School Graduate or GED	208	8.7	132	10.4	344	9.5
Some College or Technical School	168	9.0	74	8.7	245	8.8
College Graduate	127	5.6	43	3.8	176	5.2
Income						
< \$15,000	165	22.6	200	21.0	369	21.7
\$15-\$24,999	152	15.2	81	9.1	238	12.1
\$25-\$34,999	66	11.2	29	6.1	96	8.9
\$35-\$49,999	50	5.1	10	4.5	60	4.7
\$50-\$74,999	37	4.7	14	4.6	53	4.7
\$75,000+	43	3.4	4	2.0	47	3.2
Employment Status						
Employed	60	2.4	30	2.8	94	2.6
Not Employed	18	11.8	16	6.0	34	8.4
Student/Homemaker	34	3.8	6	0.4	42	2.5
Retired/Unable to Work	534	24.0	375	33.9	921	27.6
Total	647	9.7	427	11.8	1,092	10.4

## Table32: Health Problems Requiring Special Equipment

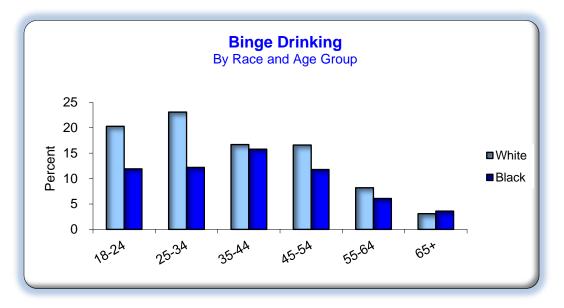
<sup>1</sup>Unw eighted

# **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.



### Figure 32

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 2011 alcohol use was associated 25.9 percent of all motor vehicle crash fatalities, according to the Mississippi Office of Highway Safety.

Although, historically the BRFSS survey has shown that the group with the highest rate of binge drinking has been white males in the age category 18-24, in 2013 the highest reported age group was white males in the 25 to 34 group who had a binge drinking rate of 23.2 percent. This rate exceeded that of white males in the 18 to 24 group who reported a rate of 20.3 percent (Table 33).

Males were almost twice as likely to indulge in binge drinking as females. Only 8.7 percent of female respondents said they had five or more drinks on one occasion during the last thirty days compared to 16.6 percent for males.

	White		Bla	ick	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	232	17.5	86	14.1	328	16.6	
Female	162	9.5	74	7.8	238	8.7	
Age Group							
18-24	39	20.3	15	11.9	55	16.5	
25-34	69	23.2	30	12.2	105	18.9	
35-44	63	16.7	35	15.8	99	15.9	
45-54	96	16.6	38	11.8	137	14.7	
55-64	79	8.2	27	6.1	107	7.5	
65+	48	3.0	15	3.6	63	3.1	
Education							
< High School Graduate	41	17.5	32	10.7	76	14.3	
High School Graduate or GED	95	11.1	63	10.4	163	11.0	
Some College or Technical School	104	12.6	44	12.7	150	12.7	
College Graduate	154	14.8	21	7.1	177	12.4	
Income							
< \$15,000	42	14.6	50	11.6	93	12.7	
\$15-\$24,999	46	10.9	49	13.5	98	12.5	
\$25-\$34,999	31	9.4	18	9.1	50	9.2	
\$35-\$49,999	47	10.8	13	12.0	60	10.8	
\$50-\$74,999	60	15.7	11	9.0	75	14.6	
\$75,000+	130	18.2	5	7.3	136	17.0	
Employment Status							
Employed	265	17.7	88	12.7	362	16.0	
Not Employed	33	27.0	26	16.1	60	20.9	
Student/Homemaker	22	10.4	8	9.8	32	10.9	
Retired/Unable to Work	74	4.4	38	5.2	112	4.6	
Total	394	13.4	160	10.6	566	12.4	

## Table 33: At Risk From Binge Drinking

<sup>1</sup>Unw eighted

	White		Bla	ick	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	82	5.6	33	4.8	118	5.3	
Female	88	3.5	27	2.8	116	3.2	
Age Group							
18-24	9	4.0	3	2.5	12	3.2	
25-34	18	5.6	11	4.5	30	5.0	
35-44	15	3.9	15	6.8	30	4.8	
45-54	43	6.9	13	4.2	56	5.7	
55-64	42	4.8	10	1.8	54	4.2	
65+	43	2.7	8	1.8	52	2.4	
Education							
< High School Graduate	14	5.3	12	5.2	27	5.2	
High School Graduate or GED	42	4.2	23	2.9	65	3.6	
Some College or Technical School	44	4.5	13	3.5	60	4.3	
College Graduate	70	4.5	12	3.3	82	4.0	
Income							
< \$15,000	15	4.5	22	4.3	37	4.3	
\$15-\$24,999	25	5.5	13	5.3	38	5.2	
\$25-\$34,999	9	1.8	10	4.0	21	2.8	
\$35-\$49,999	23	4.1	4	3.0	27	3.6	
\$50-\$74,999	29	5.6	6	4.8	36	5.5	
\$75,000+	50	5.4			51	4.8	
Employment Status							
Employed	96	5.5	29	4.3	127	5.0	
Not Employed	13	9.9	14	6.1	27	7.6	
Student/Homemaker	15	3.5			16	2.5	
Retired/Unable to Work	45	2.4	17	3.0	63	2.6	
Total	170	4.6	60	3.7	234	4.2	

## Table 34: At Risk From Chronic Drinking

<sup>1</sup>Unw eighted

# HIV/AIDS

### Survey Question:

## Have you ever been tested for HIV?

CDC estimates that nearly 1.15 million people in the United States are living with HIV infection. One in five of those people are unaware of their infection. Despite increases in the total number of people in the U.S. living with HIV infection in recent years (due to better testing and treatment options), the annual number of new HIV infections has remained relatively stable. However, new infections continue at far too high of a level, with approximately 50,000

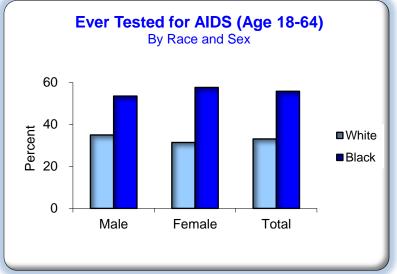
Americans becoming infected with HIV each year.

In 2011, an estimated 49,273 people were diagnosed with HIV infection in the United States. In that same year, an estimated 32,052 people throughout the U.S. were diagnosed with AIDS. An estimated 15,529 people with AIDS died in 2010, and nearly 636,100 people with AIDS in the U.S. have died since the epidemic began.

In 2013, Mississippi reported 370 new cases of HIV Disease and 177 new cases of **Figure 33** AIDS. As of December 31, 2013

there 5,330 people in Mississippians living with the HIV infection and 5,146 living with AIDS for a total of total 10,473 with HIV,

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 2013, 41.4 percent of the respondents reported that they had ever been tested. Black respondents were more likely to have ever been tested than whites: 55.8 percent to 33.1 percent. The rate for white respondents who have ever been tested was 35.0 percent for males and 31.3 percent for females. For blacks, the rates were 53.5 percent for males and 57.6 for females. (Figure 33 and Table 35).



	White		Bla	ick	Total	
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	452	35.0	299	53.5	769	41.0
Female	586	31.3	707	57.6	1,320	41.9
Age Group						
18-24	55	28.3	75	57.8	134	41.7
25-34	171	59.8	199	80.0	377	68.2
35-44	197	51.3	214	76.7	423	61.0
45-54	239	38.4	217	49.7	464	42.2
55-64	201	21.9	180	36.0	388	26.4
Education						
< High School Graduate	105	30.3	180	44.2	293	37.2
High School Graduate or GED	250	28.3	317	55.0	578	39.2
Some College or Technical School	312	36.5	251	60.6	572	43.9
College Graduate	371	36.1	258	69.2	646	45.5
Income						
< \$15,000	159	43.5	302	56.1	472	50.8
\$15-\$24,999	163	35.4	247	56.8	422	46.3
\$25-\$34,999	104	32.4	107	48.7	216	38.4
\$35-\$49,999	127	33.8	92	50.9	221	38.6
\$50-\$74,999	134	29.4	76	73.5	213	37.7
\$75,000+	244	34.5	82	70.6	330	39.4
Employment Status						
Employed	563	39.2	496	62.2	1,080	47.0
Not Employed	70	53.2	124	71.5	200	62.8
Student/Homemaker	79	26.2	65	54.9	153	37.5
Retired/Unable to Work	326	21.2	319	39.9	654	28.0
Total	1,038	33.1	1,006	55.8	2,089	41.4

## Table 35: Ever Tested for AIDS: Age 18-64

<sup>1</sup>Unw eighted

<sup>2</sup>Weighted

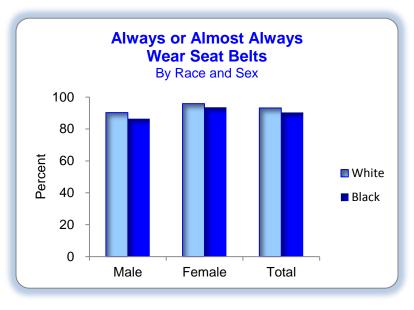
# Seat Belt Usage

### 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 cause more fatalities among 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 2012, safety belts saved the lives of an estimated 12,174 people over five years of age. If all passenger vehicle occupants over age 4 had worn seat belts, an additional 3,031 lives could have been saved.

The NHTSA further reports that seat belts reduce the risk of fatal injury to frontseat 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-tocritical 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 2012, 79 percent of passenger vehicle occupants who were totally ejected from the vehicle were killed. Seat belts

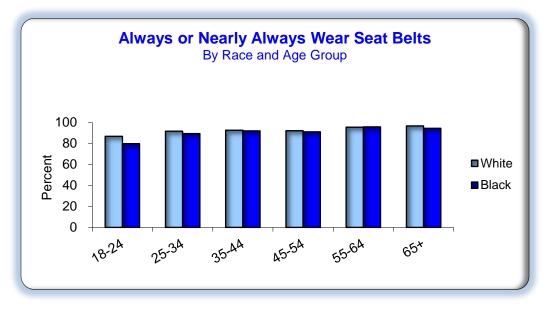




are effective in preventing total ejections: only one percent of the occupants reported to have been using restraints were totally ejected, compared with 30 percent of the unrestrained occupants.

Among children under age five, an estimated 284 lives were saved in 2012 by child restraint use. Of these, 284 were associated with the use of child safety seats and 18 with the use of adult seat belts. Had child safety seats been used for all children under age five, an estimated 59 more lives could have been saved.

The Agency also reports that 21,667 occupants of passenger cars and light trucks died in motor vehicle crashes during 2012. Among these victims were 900 children age 15 years and under plus 2,586 people ages 16 to 20 years. Approximately 55 percent of the people killed in motor vehicle crashes in 2012 were not wearing safety belts. NHTSA reports 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 passenger cars. For infants and toddlers in light trucks, the corresponding reductions are 58 percent and 59 percent, respectively.



#### Figure 35

During 2011 there were 6,670 serious traffic injuries in Mississippi and 22 percent of these, were not using safety belts. Fatalities among passengers ages 16 to 20 were unbelted at an astounding rate of 77 percent. There were 442 drivers who sustained life-threatening injuries. Also, there were 4,064 drivers with moderate injuries and almost 20 percent of those were unbelted. Moreover, 13,562 drivers sustained minor injuries; 94 percent of those were belted. The Mississippi Department of Highway Safety concludes that seat belts save lives and reduce injury.

The 2013 BRFSS survey in Mississippi revealed that 92.0 of the respondents say that they always or nearly always wear a seat belt when they either drive of ride in a car. Females report that they use seat belts more often than men. Women had a usage rate of 94.9 percent compared to 88.8 percent for men (Figure 34). Younger respondents reported a higher rate of non-usage than older respondents. In the 18 to 24 age group, 84.0 percent said that they always or nearly always use seat belts while those age 65 and older reported a rate of 96.0 percent (Figure 35).

	White		Bla	ack	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	1,521	90.1	595	86.3	2,168	88.8	
Female	2,686	95.8	1,586	93.4	4,338	94.9	
Age Group							
18-24	149	86.7	112	79.7	268	84.0	
25-34	301	91.6	227	89.4	541	90.9	
35-44	369	92.5	258	91.9	648	92.3	
45-54	644	92.1	399	91.0	1,062	91.6	
55-64	930	95.5	553	95.7	1,511	95.2	
65+	1,801	96.4	618	94.4	2,446	96.0	
Education							
< High School Graduate	458	89.4	523	86.8	1,002	88.0	
High School Graduate or GED	1,267	92.9	713	90.9	2,010	92.2	
Some College or Technical School	1,130	92.6	466	91.1	1,621	92.2	
College Graduate	1,344	96.9	475	93.0	1,861	95.7	
Income							
< \$15,000	496	91.5	667	91.6	1,180	91.7	
\$15-\$24,999	668	93.3	525	89.4	1,219	91.5	
\$25-\$34,999	438	91.5	223	86.5	675	89.5	
\$35-\$49,999	537	92.4	179	91.6	730	92.4	
\$50-\$74,999	545	93.9	147	92.6	706	93.5	
\$75,000+	855	93.6	139	94.8	1,006	93.8	
Employment Status							
Employed	1,694	92.5	856	90.0	2,600	91.5	
Not Employed	152	87.9	188	87.1	348	87.7	
Student/Homemaker	377	94.5	131	87.9	527	92.3	
Retired/Unable to Work	1,978	94.5	999	92.4	3,017	93.8	
Total	4,207	93.1	2,181	90.2	6,506	92.0	

## Table 36: Always or Nearly Always Wear Seat Belts

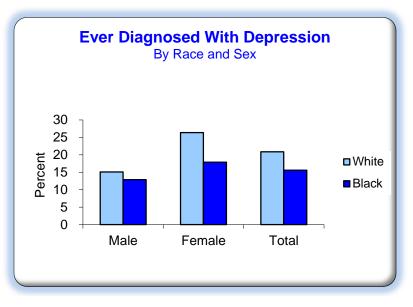
<sup>1</sup>Unw eighted

## Depression

### Survey Question:

# Has a doctor, nurse, or other health professional ever told you that you a depressive disorder?

The CDC states that depression is characterized by depressed or sad mood, diminished interest in activities which used to be pleasurable, weight gain or loss, psychomotor agitation or retardation, fatigue, inappropriate guilt, difficulties concentrating, as well as recurrent thoughts of death. Diagnostic criteria established by the American Psychiatric Association dictate that five or more of the above symptoms must be present for a continuous period of at least two weeks. As an illness, depression falls within the spectrum of affective disorders.





Depression poses a substantial burden globally and also to the individual suffering from the disorder. Research has found that interpersonal relationships are particularly likely to suffer when someone is depressed, and data suggest that few families or networks of friends are likely to remain unaffected by depression.

The urgency of the rate of depression to public health is likely compounded by the recognition that, if not effectively treated, depression is likely to lapse into a chronic disease. Experiencing just one episode of depression places the individual at a 50 percent risk for experiencing another, with subsequent episodes raising the likelihood of experiencing more episodes in the future.

Major depression frequently goes unrecognized and untreated and may foster tragic consequences, such as suicide and impaired interpersonal relationships at work and at home. The use of medications and/or specific psychotherapeutic techniques has proven very effective in the treatment of major depression, but the condition is still misconstrued as a sign of weakness, rather than recognized as an illness.

With respect to depressive disorders, 19.3 percent of those surveyed said they had been diagnosed with this condition. Women reported a much higher rate than men. Females reported a rate of 24.5 percent compared to only 13.3 percent for males (Figure 36). Similarly, the

Mississippi Behavioral Risk Factor Surveillance Survey 2013

respondents in lower income categories reported higher rates of diagnosed depression than those in the upper income groups. The group with the highest rate of depression was white respondents whose income was less than \$15 thousand annually with a rate of 41.4 percent (Figure 37 and Table 37).

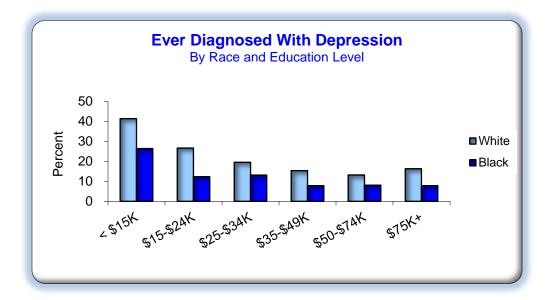


Figure 37

	White		Bla	ack	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	244	15.1	88	11.0	342	13.6	
Female	738	27.4	337	19.4	1,097	24.5	
Age Group							
18-24	32	17.0	16	8.4	49	12.8	
25-34	79	21.7	35	12.0	120	18.0	
35-44	99	24.9	52	18.6	164	23.3	
45-54	172	24.4	93	21.3	266	22.5	
55-64	258	23.6	131	19.8	396	22.5	
65+	340	17.0	97	15.3	440	16.4	
Education							
< High School Graduate	130	27.1	136	23.9	270	25.0	
High School Graduate or GED	317	20.8	144	14.9	470	18.9	
Some College or Technical School	296	22.2	92	13.2	396	19.3	
College Graduate	234	16.5	53	7.1	296	14.0	
Income							
< \$15,000	204	41.4	200	26.4	413	32.6	
\$15-\$24,999	200	26.5	91	12.3	299	20.0	
\$25-\$34,999	97	19.5	31	13.1	133	17.8	
\$35-\$49,999	105	15.6	18	7.8	124	12.8	
\$50-\$74,999	83	13.1	16	8.1	102	12.2	
\$75,000+	144	16.3	12	7.8	157	15.1	
Employment Status							
Employed	293	15.1	84	7.4	388	12.4	
Not Employed	61	37.3	49	19.9	112	27.5	
Student/Homemaker	81	18.1	20	8.8	108	15.8	
Retired/Unable to Work	545	30.7	270	30.7	825	30.8	
Total	982	21.4	425	15.6	1,439	19.3	

## Table 37: Ever Dianosed With Depression

<sup>1</sup>Unw eighted <sup>2</sup>Weighted

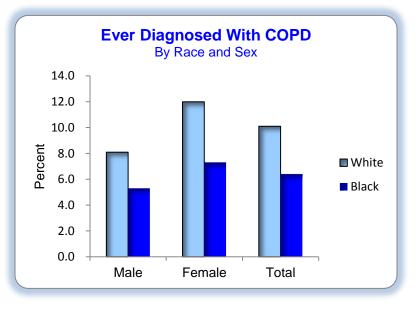
# Chronic Obstructive Pulmonary Disease (COPD)

### Survey Question:

# Has a doctor, nurse, or other health professional ever told you that you had COPD, emphysema or chronic bronchitis?

Chronic Obstructive Pulmonary Disease, or COPD, refers to a group of diseases that cause airflow blockage and breathing-related problems. It includes emphysema, chronic bronchitis, and in some cases asthma.

COPD is the fourth leading cause of death in the United States. The disease kills more than 120,000 Americans each year, which is one death every four minutes, and causes serious, long-term disability. The number of people with COPD is increasing. The CDC reports that more than 12 million

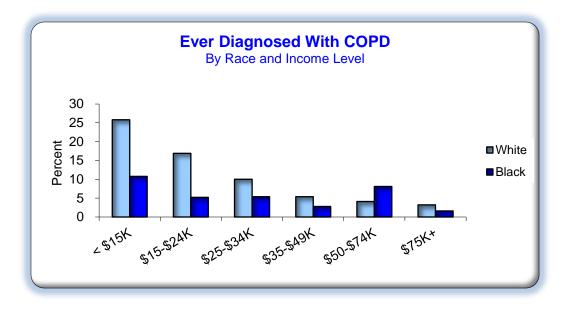




people are diagnosed with COPD and that an additional 12 million are affected without knowing it.

In the 2013 BRFSS survey, Mississippians reported a rate of diagnosed COPD at 8.7 percent which translates into almost 196,000 Mississippians with the disease. For whites the rate was 10.1 percent while blacks reported a rate of 6.4 percent. By gender category, white females reported the highest rate of COPD with a rate of 12.0 percent; next were white males with a rate of 8.1 percent followed by black females at 7.3 percent. Black males were the lowest with a rate of 5.3 percent (Figure 38).

The survey revealed that the rate of COPD increased as annual income levels decreased. The category reporting the highest rate of COPD was white respondents who have less than \$15,000 in annual income with a rate 25.8 percent followed by whites who earn between \$15,000 and \$25,000 annually with a rate of 16.9 percent. Additional details can be found in Table 38 and Figure 39.



## Figure 39

As can also be seen from Table 38, trends are evident with respect to age groups. COPD rates are low in the younger respondents and higher in the older respondents. The same is true for levels of education. Those who have completed more years of education report lower rates of COPD than those with fewer years of education.

	White		Bla	ick	То	tal
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>
Sex						
Male	151	8.1	43	5.3	203	7.3
Female	387	12.0	159	7.3	553	10.1
Age Group						
18-24	4	2.8	5	3.1	10	3.4
25-34	10	3.8	11	4.3	21	3.9
35-44	25	8.6	13	4.1	40	6.9
45-54	70	11.9	44	10.6	116	11.2
55-64	130	13.0	62	8.4	199	11.9
65+	298	15.4	66	9.6	368	13.9
Education						
< High School Graduate	115	20.6	62	9.7	182	15.1
High School Graduate or GED	194	10.4	64	6.2	262	8.8
Some College or Technical School	142	8.5	38	4.2	183	7.2
College Graduate	85	4.2	38	5.3	126	4.6
Income						
< \$15,000	141	25.8	88	10.8	232	16.8
\$15-\$24,999	130	16.9	47	5.2	180	11.0
\$25-\$34,999	62	10.0	16	5.4	81	8.8
\$35-\$49,999	37	5.4	8	2.8	46	4.7
\$50-\$74,999	36	4.1	12	8.1	49	5.0
\$75,000+	31	3.2	4	1.6	36	3.0
Employment Status						
Employed	78	4.0	32	2.4	113	3.5
Not Employed	22	15.6	23	10.7	46	12.6
Student/Homemaker	32	5.2	5	4.0	38	5.2
Retired/Unable to Work	405	21.5	142	12.7	556	18.4
Total	538	10.1	202	6.4	756	8.7

## Table 38: Ever Diagnosed With COPD

<sup>1</sup>Unw eighted

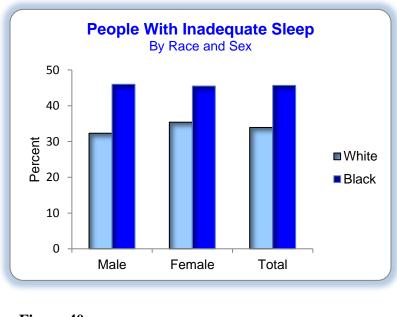
## Sleep

### Survey Question:

## On average how many hours of sleep to you get in a 24-hour period?

While sleep is often considered a passive activity, sufficient sleep is increasingly being recognized as an essential aspect of health promotion and chronic disease prevention in the public health community.

Insufficient sleep is associated with a number of chronic diseases and conditions—such as diabetes. cardiovascular disease, obesity, and depression—which threaten our nation's health. Notably, while insufficient sleep is associated with the onset of these diseases, it also poses important implications for their management and outcome. Moreover, insufficient sleep is responsible for motor vehicle and machinery-related crashes, causing substantial injury and disability each year. Drowsy driving can be as dangerous as driving while intoxicated.





More than one-quarter of the U.S. population report occasionally not getting enough sleep, while nearly 10 percent experience chronic insomnia. However, new methods for assessing and treating sleep disorders are bringing hope to the millions suffering from insufficient sleep. Fundamental to the success of all of these efforts is the recognition that sufficient sleep is not a luxury but rather a necessity and should be thought of as a vital sign of good health.

According to the CDC there are four major sleep disorders: 1) Insomnia which is an inability to initiate or maintain sleep, 2) Narcolepsy, the hallmarks of which are daytime sleepiness combined with sudden muscle weakness, 3) Restless Leg Syndrome or RLS characterized by an unpleasant sensation which feels like it is originating in the lower legs, but often associated with aches and pains throughout the legs and which may cause difficulty initiating sleep, and 4) Sleep Apnea a potentially serious sleep disorder in which breathing repeatedly stops and starts and often results in loud snoring or gasping sounds during sleep and cause a person to be tired even after a full night of sleep.

In Mississippi the group with the highest rate of inadequate sleep was black males between the ages of 18 and 24 who reported a rate of 53.5 percent. The next highest group was black males in the 25 to 34 age group with a rate of 48.4 percent. Table 39 contains the details.

Overall, blacks reported an inadequate sleep rate of 45.7 percent compared to 33.9 percent for whites, a difference of almost 26 percent (Figure 40).

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	White		Bla	ack	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	532	32.5	297	46.0	859	37.4	
Female	897	35.3	683	45.5	1,617	39.3	
Age Group							
18-24	78	42.3	86	53.5	167	47.6	
25-34	113	33.7	125	48.4	244	39.8	
35-44	152	36.7	122	44.5	289	40.1	
45-54	263	37.0	191	47.3	467	40.8	
55-64	323	34.2	225	36.0	563	35.1	
65+	482	24.2	212	38.2	704	27.5	
Education							
< High School Graduate	187	39.0	231	44.5	431	41.4	
High School Graduate or GED	472	34.1	305	42.7	798	38.1	
Some College or Technical School	405	34.5	226	51.9	641	40.0	
College Graduate	360	28.2	211	41.8	592	32.1	
Income							
< \$15,000	219	45.0	314	49.1	542	47.0	
\$15-\$24,999	261	37.7	236	43.5	512	40.7	
\$25-\$34,999	147	33.8	100	43.9	253	37.9	
\$35-\$49,999	158	30.5	74	47.8	235	35.4	
\$50-\$74,999	166	31.7	56	44.5	230	34.8	
\$75,000+	222	27.1	54	36.8	283	28.3	
Employment Status							
Employed	580	32.3	410	45.8	1,026	37.4	
Not Employed	66	35.1	93	47.7	164	41.3	
Student/Homemaker	126	40.3	65	49.6	198	43.0	
Retired/Unable to Work	654	34.2	403	43.2	1,074	37.4	
Total	1,429	33.9	980	45.7	2,476	38.4	

## Table 39: People With Inadequate Sleep

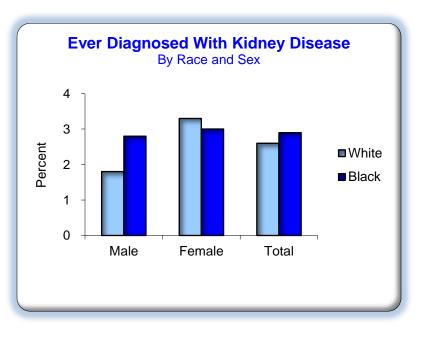
<sup>1</sup>Unw eighted

# **Kidney Disease**

### Survey Question:

# Has a doctor, nurse, or other health professional ever told you that you have kidney disease?

Chronic kidney disease (CKD) is a condition in which the kidneys are damaged and cannot filter blood adequately. This damage can cause wastes to build up in the body and lead to other health problems, including cardiovascular disease (CVD), anemia, and bone disease. People with early CKD tend not to feel any symptoms. The only ways to detect CKD are through a blood test to estimate kidney function, and a urine test to assess kidney damage. CKD is usually an irreversible and progressive



#### Figure 41

disease and can lead to kidney failure, also called End Stage Renal Disease, over time if it is not treated. Once detected, CKD can be treated through medication and lifestyle changes to reduce the disease progression, and to prevent or delay the onset of kidney failure. However, the only treatment options for kidney failure are dialysis or a kidney transplant.

The CDC reports the following facts about CKD: 1) is common among adults in the United States; 2) More than 10 percent of people, or more than 20 million, aged 20 years or older in the United States have CKD; 3) CKD is more common among women than men; 4) more than 35 percent of people aged 20 years or older with diabetes have CKD; and 5) more than 20 percent of people aged 20 years or older with hypertension have CKD.

Adults with diabetes or hypertension are at an increased risk of developing CKD. Other risk factors for developing CKD include CVD, obesity, elevated cholesterol, and a family history of CKD. The risk of developing CKD increases with age largely because risk factors for kidney disease become more common as one ages.

In Mississippi the 2013 BRFSS survey revealed that 2.8 percent of the respondents said they have been diagnosed with kidney disease. There was very little difference with respect to race. Whites reported a rate of 2.6 percent while blacks had a rate of 2.9 percent.

As is true on the national level, the rate for Mississippi females is higher than the rate for males. White females reported a 45 percent higher rate than white males: 3.3 percent to 1.8 percent. For blacks, females reported a rate of 3.0 percent while black males had a rate of 2.8 percent.

	White		Bla	ack	Total		
Groups	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	Number <sup>1</sup>	Percent <sup>2</sup>	
Sex							
Male	47	1.8	28	2.8	77	2.2	
Female	119	3.3	63	3.0	186	3.2	
Age Group							
18-24	3	1.4	3	1.9	6	1.6	
25-34	5	1.4	5	1.1	10	1.2	
35-44	9	1.9	6	1.6	19	2.3	
45-54	11	1.1	18	5.5	29	2.6	
55-64	42	3.4	21	2.9	65	3.4	
65+	95	4.8	38	6.0	133	5.1	
Education							
< High School Graduate	26	2.1	37	5.3	65	3.9	
High School Graduate or GED	57	3.3	33	3.1	90	3.1	
Some College or Technical School	46	2.6	11	1.3	58	2.3	
College Graduate	36	1.8	10	1.5	49	1.8	
Income							
< \$15,000	27	2.7	44	4.8	72	3.9	
\$15-\$24,999	39	3.2	18	2.7	60	3.4	
\$25-\$34,999	15	1.9	6	1.8	22	2.1	
\$35-\$49,999	20	3.4	2	2.2	22	2.9	
\$50-\$74,999	13	2.4	1	0.2	15	2.0	
\$75,000+	15	1.1	4	2.1	19	1.2	
Employment Status							
Employed	31	1.3	14	1.7	48	1.6	
Not Employed	6	1.9	2	0.7	8	1.2	
Student/Homemaker	15	2.1	2	0.2	19	1.8	
Retired/Unable to Work	114	5.0	72	6.9	187	5.6	
Total	166	2.6	91	2.9	263	2.8	

## Table 40: Ever Diagnosed With Kidney Disease

<sup>1</sup>Unw eighted