

2011 Behavioral Risk Factor Surveillance System Report Annual Prevalence Report

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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, alcohol consumption and risky sexual behavior. The Behavioral Risk Factor Surveillance System (BRFSS) is a 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

In response to changing technology, the 2011 BRFSS survey contains two new significant features. One is the addition of cell phone interviews to the survey and the other is the introduction of a new method of weighting.

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 8,907 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 2011 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 2011 Mississippi BRFSS has approximately 80 percent land line and 20 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.

B. QUESTIONNAIRE

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

C. DATA ANALYSIS

The other significant change to the 2011 BRFSS is a new 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. Inclusion of these additional variables in the weighting process will allow the survey to 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 2010 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 percentage 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 data.

E. SAMPLE SIZE

In the 2011 BRFSS, 8,907 people were sampled: 7,226 landline surveys and 1,681 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 actually is. When the number of events is small and the probability of such an event is small, considerable caution should be observed in interpreting the estimates or differences 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.

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.

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 having their blood cholesterol checked and who have been told that their blood cholesterol is high by a doctor, nurse, or other health professional.

COPD Awareness

COPD – 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 that they needed to see a doctor within the past 12 months but who were unable because of the cost.

Health Status

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

Healthy Days

Physical Health - Respondents who report 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 that they received a flu shot or the flu spray vaccine within the last twelve months.

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

Kidney Disease

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

Mental Health

Depression Awareness – Respondents who 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 (or vigorous equivalent) aerobic recommendation.

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

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

Inactive – Respondents who report doing no physical activity.

Seat Belts Usage

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

Tobacco Use

Cigarette Smoker - Respondents who have ever smoked 100 cigarettes in their lifetime and report currently smoking every day or some days. This relates to *Healthy People 2020* Objective 27 - Target $\leq 12\%$.

Vision Impairment

Respondents who have been diagnosed by a health professional with vision impairment.

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 $18.5 \leq \text{BMI} \leq 24.9$. This measures *Healthy People 2020* Objective 19.1 - Target $\geq 60\%$.

Overweight - Respondents whose BMI is $25.0 \leq \text{BMI} \leq 29.9$.

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

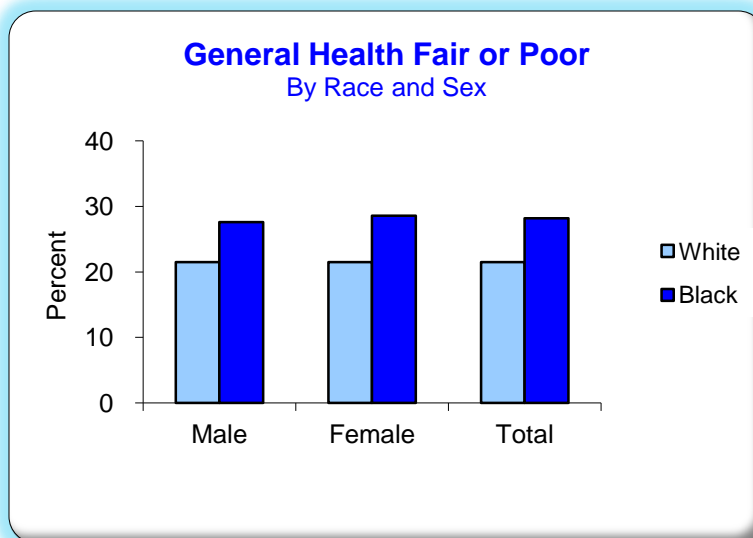
Survey Results

Health Status

Survey Question:

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

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



Black females reported the highest percentage of health that was fair or poor with a rate of 28.6 percent (Figure 1). Black respondents overall report their health as worse than whites. Black respondents reported fair or poor health at a rate of 28.2 percent compared to 21.5 percent for whites.

Figure 1

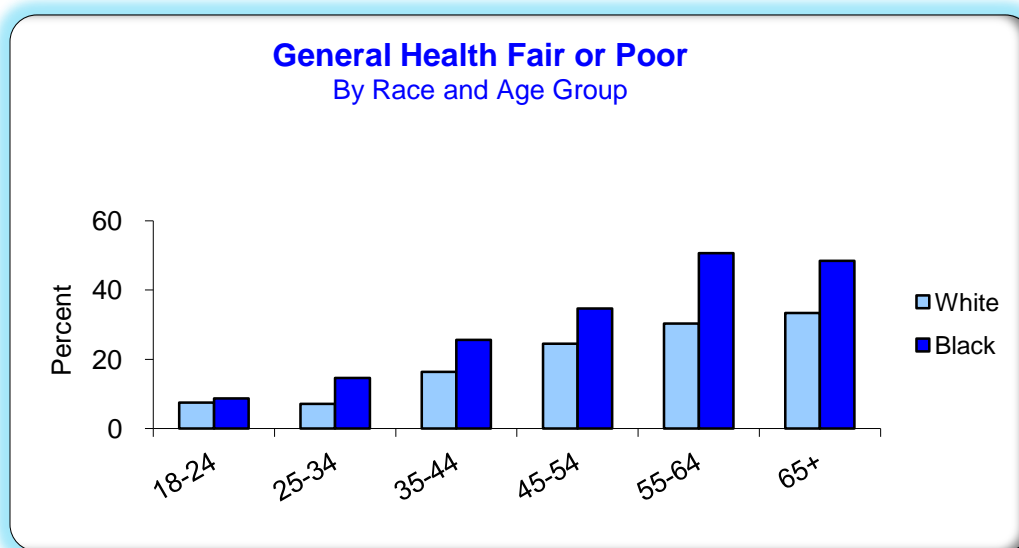


Figure 2

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 7.8 percent while those more than 65 years of age reported a rate of 37.8 percent (Figure 2 and Table 1).

Table 1: General Health Fair or Poor

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	530	21.5	345	27.6	875	23.8
Female	944	21.5	744	28.6	1,688	24.3
Age Group						
18-24	15	6.7	18	8.9	33	7.8
25-34	37	8.2	52	13.9	89	10.7
35-44	82	16.4	120	27.3	202	20.9
45-54	225	24.6	219	35.7	444	28.5
55-64	371	30.5	331	50.5	702	37.3
65+	740	34.1	342	50.0	1,082	37.8
Education						
< High School Graduate	335	39.3	421	43.1	756	41.2
High School Graduate or GED	609	26.2	366	25.4	975	25.9
Some College or Technical School	357	17.3	193	21.7	550	18.8
College Graduate	170	7.8	107	16.3	277	10.0
Income						
< \$15,000	431	51.7	474	40.3	905	44.9
\$15-\$24,999	363	31.6	270	28.6	633	30.1
\$25-\$34,999	144	21.3	90	23.3	234	22.1
\$35-\$49,999	149	17.3	35	15.0	184	16.7
\$50-\$74,999	87	9.9	30	12.3	117	10.3
\$75,000+	76	7.0	19	11.9	95	7.8
Employment Status						
Employed	252	10.0	226	17.0	478	12.5
Not Employed	74	23.7	106	21.6	180	22.5
Student/Homemaker	124	14.3	53	15.8	177	14.8
Retired/Unable to Work	1,023	45.6	704	58.8	1,727	50.2
Total	1,474	21.5	1,089	28.2	2,563	24.0

¹Unweighted

²Weighted

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 2011, 25.7 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 40.2 percent; black females were next at 30.7 percent (Figure 3).

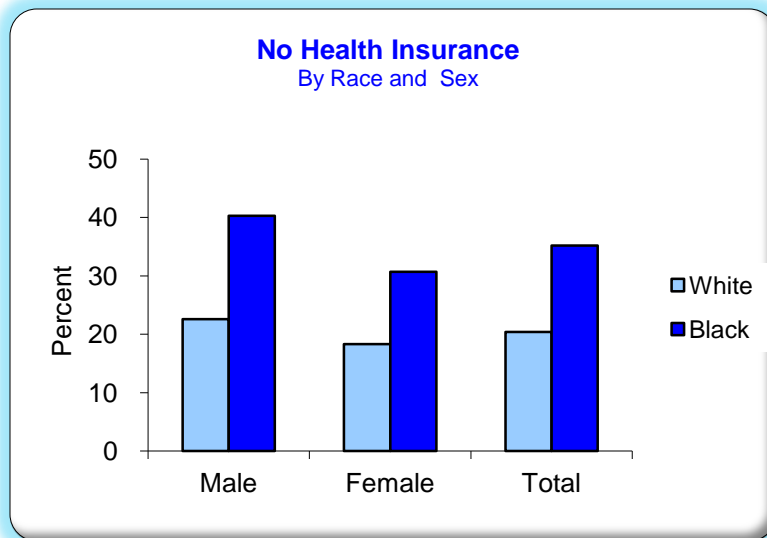


Figure 3

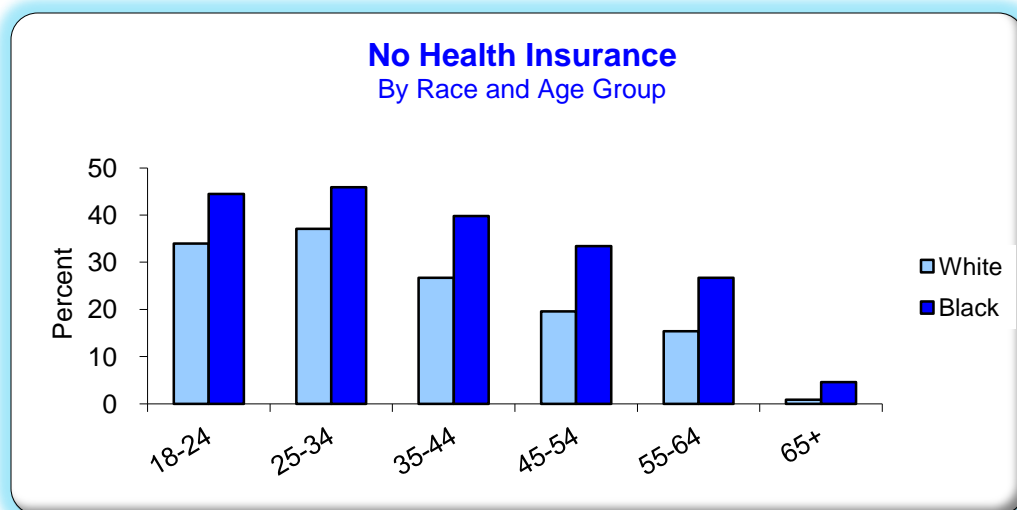


Figure 4

When viewed by age categories, blacks from the age of 25 to 34 reported the highest prevalence of no health care coverage at 45.1 percent (Figure 4).

Another factor that adversely affects the health status of people is access to medical care and in 2011, 23.4 percent of Mississippians said they were unable to see a doctor at some point in the prior twelve months because cost. Blacks (29.5 percent) were almost one and one-half times as

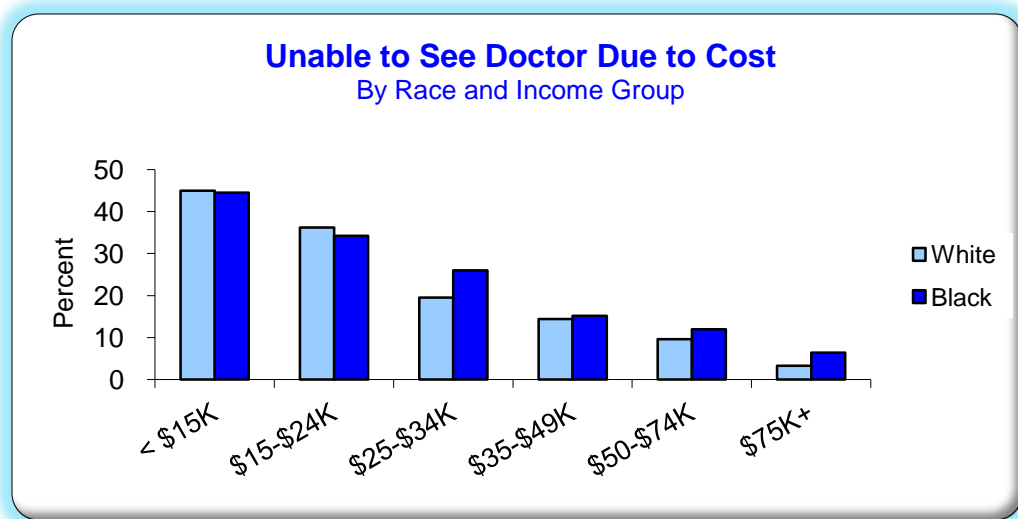


Figure 5

likely to have not seen a doctor due to cost as whites (19.7 percent). Also females of both races were much more likely to experience this phenomenon than males: 26.6 percent to 19.8 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).

Table 2: Have No Kind of Health Insurance

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	298	22.3	311	40.2	609	28.8
Female	403	18.0	497	30.7	900	22.8
Age Group						
18-24	72	33.6	100	43.2	172	38.0
25-34	133	35.5	144	45.1	277	39.8
35-44	126	26.3	165	39.6	291	31.8
45-54	162	19.3	200	34.8	362	24.7
55-64	181	15.3	156	26.4	337	19.1
65+	25	1.1	39	6.8	64	2.4
Education						
< High School Graduate	166	41.4	213	41.4	379	41.4
High School Graduate or GED	263	20.7	305	36.8	568	27.0
Some College or Technical School	184	17.1	210	33.8	394	22.7
College Graduate	86	7.1	78	19.1	164	10.2
Income						
< \$15,000	181	40.3	336	45.0	517	43.1
\$15-\$24,999	192	32.6	239	43.7	431	38.1
\$25-\$34,999	77	24.0	77	27.9	154	25.5
\$35-\$49,999	87	16.7	34	19.1	121	17.3
\$50-\$74,999	32	7.6	8	6.7	40	7.4
\$75,000+	25	4.0	8	8.6	33	4.7
Employment Status						
Employed	335	20.5	358	34.8	693	25.6
Not Employed	150	61.2	217	61.9	367	61.6
Student/Homemaker	94	23.9	81	42.4	175	29.9
Retired/Unable to Work	121	7.0	151	16.6	272	10.3
Total	701	20.0	808	35.1	1,509	25.7
¹ Unweighted						
² Weighted						

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

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	261	16.6	248	25.2	509	19.8
Female	590	22.5	646	33.3	1,236	26.6
Age Group						
18-24	48	21.1	73	26.9	121	23.8
25-34	112	28.2	122	28.2	234	28.2
35-44	138	25.6	174	36.4	312	30.0
45-54	214	24.4	230	38.8	444	29.4
55-64	212	17.7	207	30.1	419	22.0
65+	126	5.9	85	11.4	211	7.2
Education						
< High School Graduate	194	39.6	231	32.3	425	35.9
High School Graduate or GED	286	19.3	327	30.3	613	23.6
Some College or Technical School	230	16.6	225	30.0	455	21.2
College Graduate	140	9.5	109	19.9	249	12.2
Income						
< \$15,000	237	43.2	393	43.8	630	43.5
\$15-\$24,999	237	35.7	260	34.8	497	35.3
\$25-\$34,999	92	20.2	87	26.4	179	22.7
\$35-\$49,999	84	14.2	34	14.8	118	14.3
\$50-\$74,999	59	9.4	16	11.4	75	9.8
\$75,000+	33	3.4	10	6.2	43	3.9
Employment Status						
Employed	340	16.9	351	27.1	691	20.6
Not Employed	137	53.4	173	41.7	310	46.7
Student/Homemaker	83	17.9	63	24.7	146	20.1
Retired/Unable to Work	291	16.9	304	28.4	595	20.9
Total	851	19.7	894	29.5	1,745	23.4

¹Unweighted

²Weighted

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.

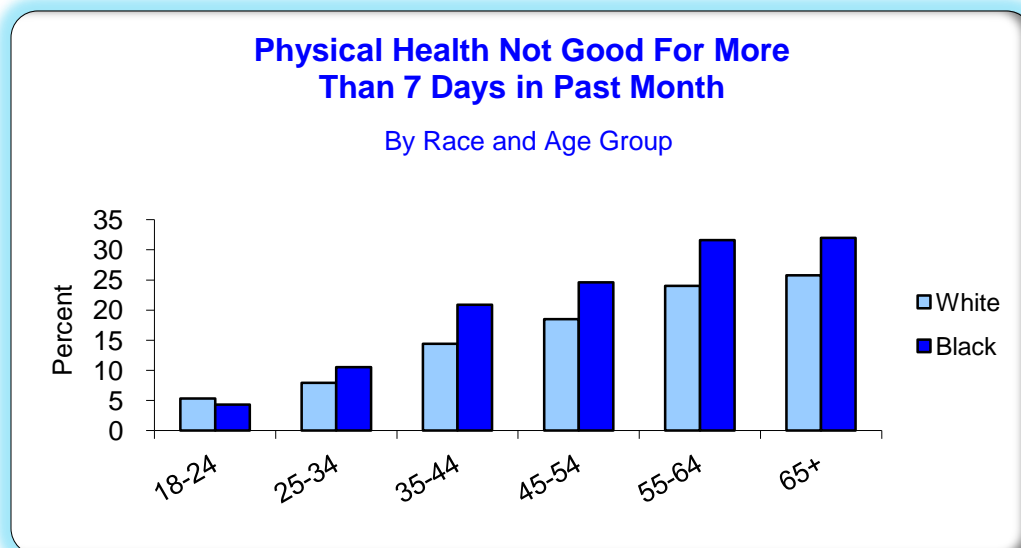


Figure 6

In Mississippi, the 2011 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 65 and older reported the highest percentage (27.2) of more than seven days when their physical health was not good. Respondents 55 to 65 age category reported a slightly lower rate of 26.6 percent. In the 65 and older group, white respondents had a rate of 25.8 percent compared to 32.0 percent for blacks. For those in age 55 to 64, whites reported a rate of 24.0 percent compared to 31.6 percent for blacks.

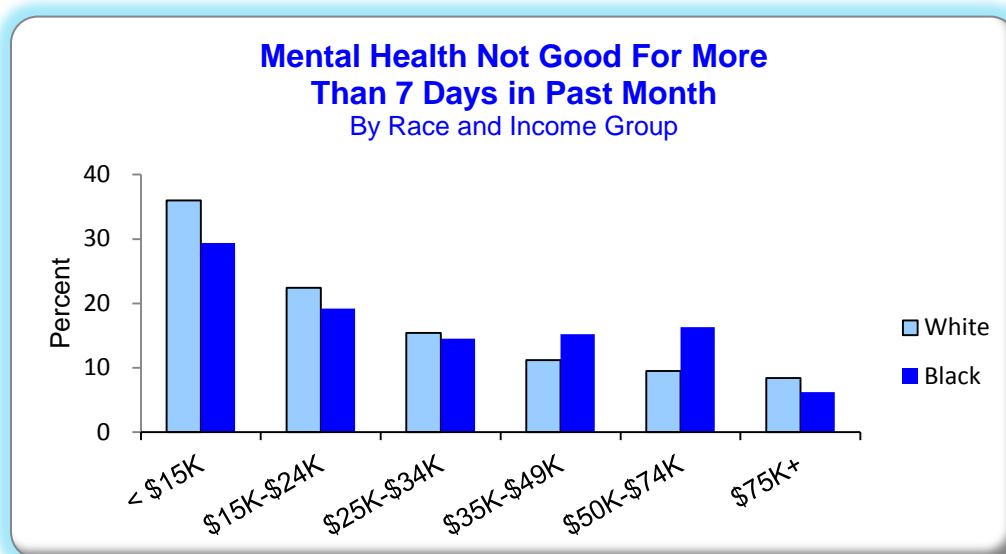


Figure 7

Those in the 45 to 54 year old age groups had the highest percentage of seven or more days when their mental health was not good with a rate of 21.7 percent – 19.8 for whites and 25.1 for blacks.

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 32.1 percent: 36.0 percent for whites and 29.4 percent for blacks (Figure 7). The second highest category is the unemployed who report a rate of 23.5 percent. White respondents in this category had a rate of 26.7 percent; blacks a rate of 23.5 percent.

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

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	385	15.9	208	17.2	593	16.3
Female	771	18.1	476	20.3	1,247	19.0
Age Group						
18-24	14	5.3	11	4.3	25	4.8
25-34	38	7.9	38	10.5	76	9.1
35-44	75	14.4	93	20.9	168	17.0
45-54	167	18.5	154	24.6	321	20.6
55-64	298	24.0	197	31.6	495	26.6
65+	561	25.8	187	32.0	748	27.2
Education						
< High School Graduate	224	25.6	251	28.3	475	27.0
High School Graduate or GED	478	22.0	224	17.7	702	20.3
Some College or Technical School	285	14.5	139	14.6	424	14.5
College Graduate	168	7.6	69	10.7	237	8.4
Income						
< \$15,000	314	38.4	320	30.1	634	33.5
\$15-\$24,999	279	25.5	159	16.7	438	21.2
\$25-\$34,999	129	17.2	58	16.5	187	16.9
\$35-\$49,999	109	12.1	28	11.8	137	12.0
\$50-\$74,999	84	9.9	20	9.1	104	9.8
\$75,000+	70	6.7	9	7.5	79	6.8
Employment Status						
Employed	181	7.4	116	8.7	297	7.8
Not Employed	50	14.4	64	13.9	114	14.1
Student/Homemaker	95	12.9	35	10.2	130	12.0
Retired/Unable to Work	830	37.7	469	45.6	1,299	40.4
Total	1,156	17.0	684	18.8	1,840	17.7
¹ Unweighted						
² Weighted						

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

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	258	13.8	195	18.6	453	15.5
Female	596	18.0	408	21.7	1,004	19.4
Age Group						
18-24	36	16.5	32	12.2	68	14.5
25-34	67	15.0	79	22.1	146	18.2
35-44	106	18.6	122	24.8	228	21.2
45-54	195	19.8	155	25.1	350	21.7
55-64	226	17.8	126	20.9	352	18.8
65+	221	10.0	86	13.8	307	10.9
Education						
< High School Graduate	159	26.6	176	25.4	335	26.0
High School Graduate or GED	315	17.9	192	17.2	507	17.6
Some College or Technical School	228	13.1	149	20.6	377	15.7
College Graduate	151	9.7	84	15.4	235	11.2
Income						
< \$15,000	230	36.0	264	29.4	494	32.1
\$15-\$24,999	206	22.4	149	19.2	355	20.8
\$25-\$34,999	87	15.4	51	14.5	138	15.1
\$35-\$49,999	78	11.2	32	15.2	110	12.3
\$50-\$74,999	72	9.5	18	16.3	90	10.8
\$75,000+	77	8.4	9	6.2	86	8.1
Employment Status						
Employed	265	11.7	177	15.7	442	13.1
Not Employed	80	26.7	90	21.0	170	23.5
Student/Homemaker	70	13.4	39	15.9	109	14.2
Retired/Unable to Work	439	22.4	295	30.4	734	25.2
Total	854	16.0	603	20.2	1,457	17.6
¹ Unweighted						
² Weighted						

Table 6: Activity Limited for More Than 7 Days Due to Poor Physical or Mental Health						
Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	268	27.2	188	30.1	456	28.5
Female	500	21.0	342	26.8	842	23.3
Age Group						
18-24	10	10.6	14	10.5	24	10.5
25-34	20	8.3	40	19.6	60	13.5
35-44	69	24.2	91	34.5	160	29.0
45-54	137	26.5	128	35.5	265	29.8
55-64	220	33.9	139	37.1	359	35.1
65+	309	30.6	116	39.7	425	32.9
Education						
< High School Graduate	144	32.4	190	40.4	334	36.6
High School Graduate or GED	324	29.9	185	28.5	509	29.4
Some College or Technical School	194	20.3	95	20.0	289	20.2
College Graduate	105	10.5	60	18.4	165	12.8
Income						
< \$15,000	221	40.5	270	41.7	491	41.2
\$15-\$24,999	194	31.7	103	21.7	297	26.8
\$25-\$34,999	78	21.3	44	24.6	122	22.7
\$35-\$49,999	72	18.3	18	17.9	90	18.2
\$50-\$74,999	60	18.2	13	16.0	73	17.7
\$75,000+	41	8.3	9	12.1	50	9.1
Employment Status						
Employed	122	10.9	71	12.7	193	11.6
Not Employed	46	24.4	73	33.4	119	29.3
Student/Homemaker	60	11.5	26	17.4	86	13.6
Retired/Unable to Work	540	45.3	360	53.0	900	48.2
Total	768	23.5	530	28.3	1,298	25.5
¹ Unweighted						
² Weighted						

Tobacco Use

Survey Question:

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

Tobacco use is the single leading preventable cause of death in Mississippi and the United States. Each year, about one-fifth of the deaths in Mississippi are from tobacco-related causes. Health problems related to tobacco use include cancers, lung disease, and heart disease. Over the past decade the percentage of current adult smokers has not changed significantly. During the same period smokeless tobacco and cigar use among adults has increased. Mississippi was the first state to reach a settlement with the tobacco industry. The Mississippi State Department of Health has drafted a state tobacco plan that

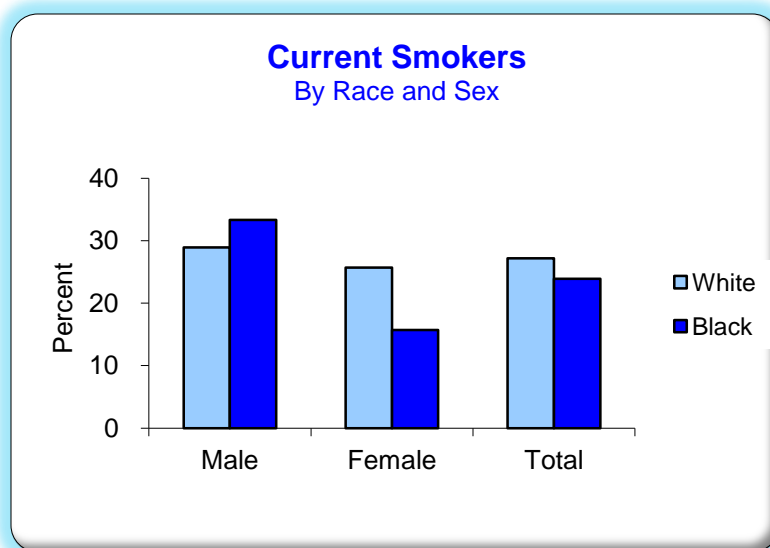


Figure 8

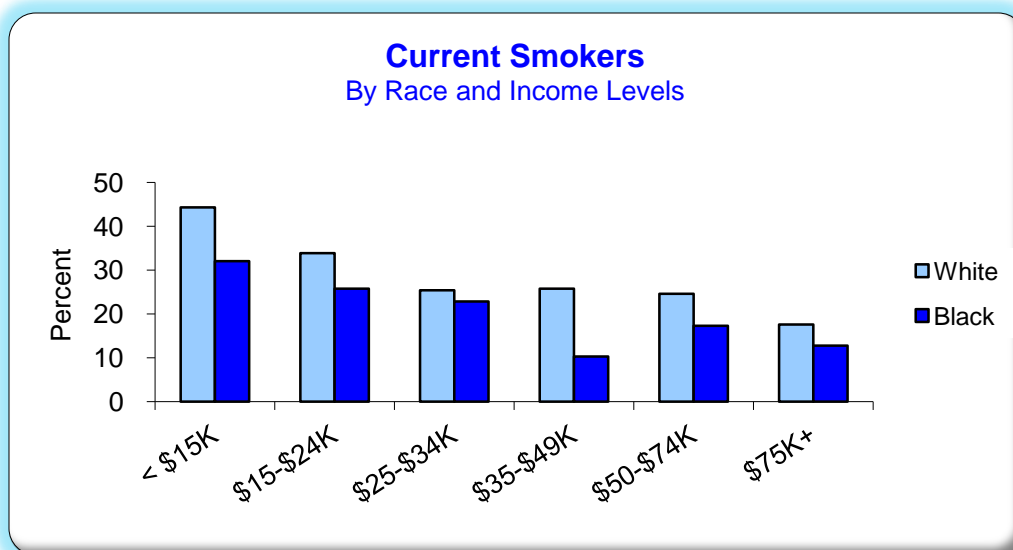


Figure 9

includes strategies to prevent initiation of tobacco use among youth, promote cessation among youth and adults, and eliminate exposure to environmental tobacco smoke.

According to the 2011 BRFSS report, the group with the highest percentage of current smokers is black males at 33.3 percent followed by white males at 28.9 percent and white females at 25.7 percent. The group with the lowest percentage of current smokers is black females at 15.7 percent (Figure 8).

Overall, the rate of current smoking in Mississippi is 26.0 percent. The *Healthy People 2020* objective is 12 percent.

Table 7: Current Smokers						
Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	459	28.9	309	33.3	768	30.5
Female	675	25.7	303	15.7	978	21.8
Age Group						
18-24	80	38.8	35	18.4	115	29.1
25-34	147	36.7	100	32.8	247	35.0
35-44	154	33.0	86	22.1	240	28.5
45-54	286	31.7	170	27.1	456	30.1
55-64	259	22.4	137	26.7	396	23.9
65+	204	9.4	84	11.7	288	10.0
Education						
< High School Graduate	212	45.3	190	30.6	402	37.8
High School Graduate or GED	419	28.5	234	28.1	653	28.3
Some College or Technical School	347	27.6	131	18.2	478	24.4
College Graduate	155	10.8	57	11.1	212	10.9
Income						
< \$15,000	248	44.3	244	32.1	492	37.0
\$15-\$24,999	234	33.9	161	25.8	395	29.9
\$25-\$34,999	123	25.4	62	22.9	185	24.4
\$35-\$49,999	142	25.8	28	10.3	170	21.8
\$50-\$74,999	123	24.6	19	17.3	142	23.2
\$75,000+	122	17.6	14	12.8	136	16.8
Employment Status						
Employed	513	27.6	232	22.4	745	25.7
Not Employed	123	54.4	110	35.1	233	43.4
Student/Homemaker	109	25.7	23	11.1	132	20.8
Retired/Unable to Work	389	20.4	246	24.8	635	21.9
Total	1,134	27.2	612	23.9	1,746	26.0
¹ Unweighted						
² Weighted						

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 seventh leading cause of death in Mississippi for the year 2010 with a death rate of 31.2 per 100,000 population. According to the 2011 BRFSS survey, 12.3 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 16.0 percent followed by black males with a rate of 12.8 percent. White females reported a rate of 11.5 percent and white males were the lowest at 10.5 percent (Figure 10).

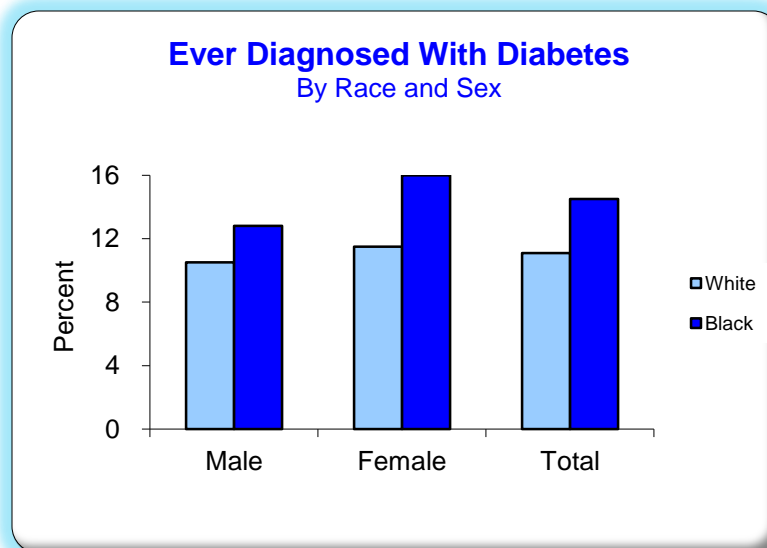


Figure 10

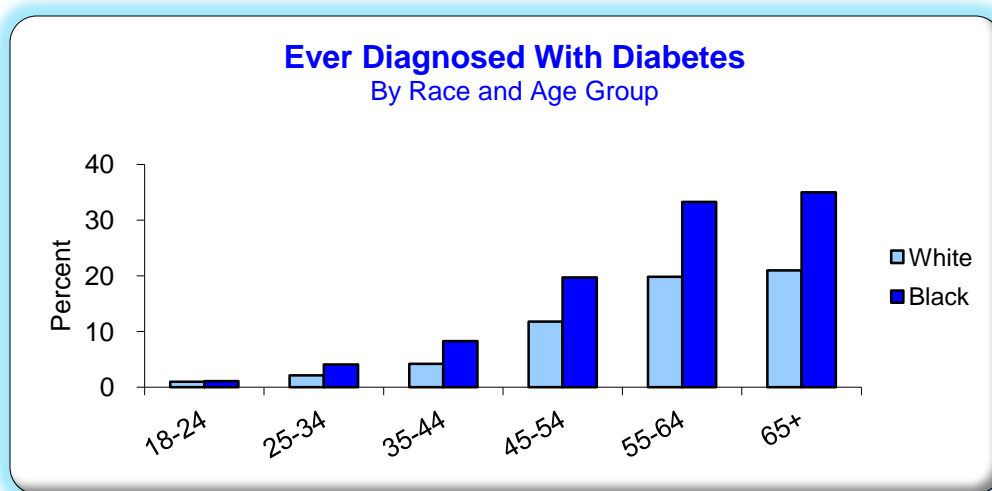


Figure 11

The rate of diabetes continues to show a marked difference by categories of education. Respondents who did not complete high school reported rates of 16.9 percent which is more than 29 percent higher than the next highest education category. Those with a high school education reported a rate of 13.4 percent; those with some college work, a rate of 9.8 percent; and college graduates a rate of 9.7 percent (Table 8).

There are also obvious differences seen by age of the respondent in the rate of diabetes. Only 1.1 percent of respondents under age 24 reported having diabetes while those age 65 and above reported a rate of 24.3 percent: 21.0 percent for whites and 35.0 percent for blacks (Figure 11).

Table 8: Diagnosed With Diabetes

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	328	10.5	191	12.8	519	11.4
Female	572	11.5	468	16.0	1,040	13.2
Age Group						
18-24	2	1.0	3	1.1	5	1.1
25-34	11	2.1	13	4.1	24	3.0
35-44	28	4.2	40	8.3	68	5.9
45-54	112	11.8	126	19.7	238	14.5
55-64	263	19.8	212	33.3	475	24.4
65+	481	21.0	258	35.0	739	24.3
Education						
< High School Graduate	140	13.8	232	19.9	372	16.9
High School Graduate or GED	328	12.9	234	14.1	562	13.4
Some College or Technical School	233	9.5	105	10.5	338	9.8
College Graduate	197	8.8	87	12.2	284	9.7
Income						
< \$15,000	178	16.6	267	18.7	445	17.8
\$15-\$24,999	194	14.3	144	12.3	338	13.3
\$25-\$34,999	95	12.1	60	12.7	155	12.3
\$35-\$49,999	108	11.0	30	14.2	138	11.8
\$50-\$74,999	81	7.1	28	12.3	109	8.1
\$75,000+	101	6.9	22	11.6	123	7.7
Employment Status						
Employed	222	6.4	147	9.2	369	7.4
Not Employed	33	6.9	33	5.1	66	5.9
Student/Homemaker	74	7.7	35	7.3	109	7.6
Retired/Unable to Work	570	22.1	442	33.6	1,012	26.1
Total	900	11.1	659	14.5	1,559	12.3
¹ Unweighted						
² Weighted						

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 taking medication to control high blood pressure.

Figure 12

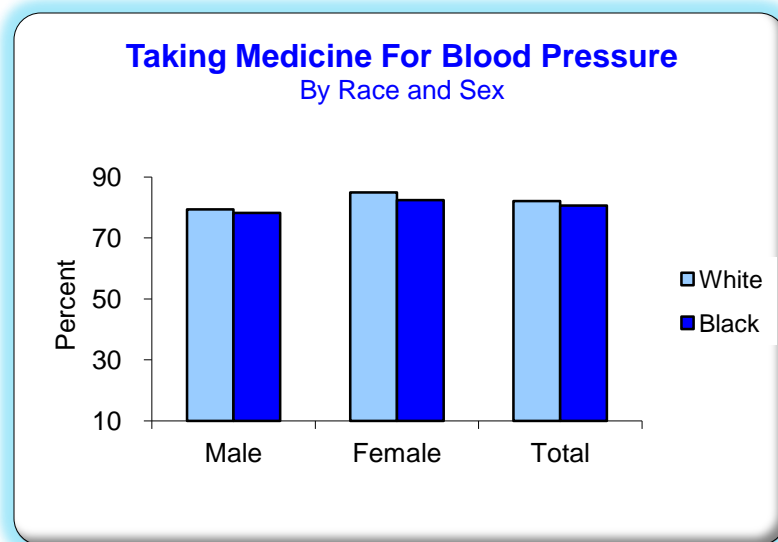
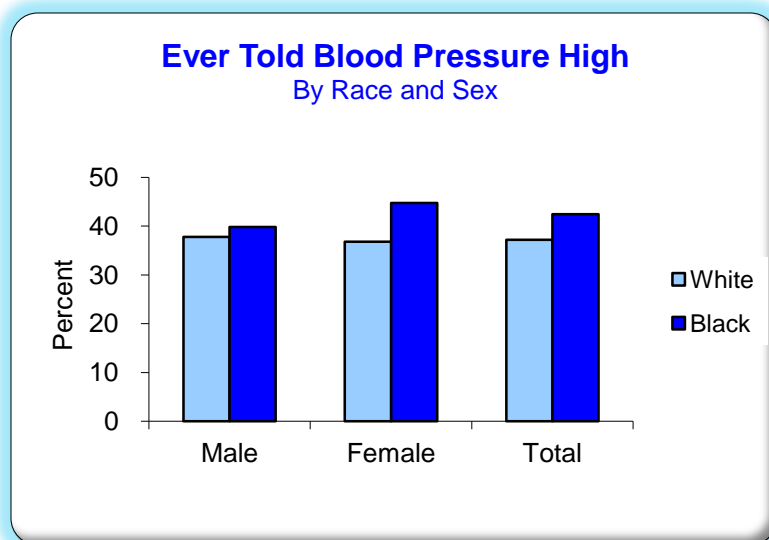


Figure 13

The 2011 BRFSS survey indicates that approximately 39.2 percent of the people surveyed in Mississippi have been told they have high blood pressure by a health care professional.

Blacks were more likely to be hypertensive than whites. The overall rate of hypertension among blacks in Mississippi was 42.4 percent compared to 37.2

for whites. Black females in the survey reported a rate of 44.7 percent rate for hypertension compared to 36.8 percent of the white females (Figure 12). Black male respondents reported a rate of 39.8 percent for being told they were hypertensive. The white male rate was 37.8 percent.

Table 9: Ever Told Blood Pressure High

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	991	37.8	521	39.8	1,512	38.5
Female	1,730	36.8	1,195	44.7	2,925	39.8
Age Group						
18-24	13	5.0	26	10.0	39	7.3
25-34	67	15.5	88	23.1	155	19.0
35-44	129	24.6	180	42.2	309	31.9
45-54	367	40.1	356	55.8	723	45.6
55-64	677	53.6	478	68.8	1,155	58.8
65+	1,455	65.5	575	80.0	2,030	68.9
Education						
< High School Graduate	367	41.2	516	48.8	883	45.0
High School Graduate or GED	1,011	42.9	591	43.7	1,602	43.2
Some College or Technical School	759	35.9	352	36.4	1,111	36.1
College Graduate	578	27.9	253	37.7	831	30.5
Income						
< \$15,000	470	48.7	613	49.3	1,083	49.1
\$15-\$24,999	537	45.0	441	41.8	978	43.4
\$25-\$34,999	317	41.2	172	48.9	489	44.3
\$35-\$49,999	348	36.4	100	34.9	448	36.0
\$50-\$74,999	278	29.1	81	39.8	359	31.1
\$75,000+	339	30.4	58	30.2	397	30.4
Employment Status						
Employed	820	28.5	521	34.6	1,341	30.7
Not Employed	102	27.2	145	27.0	247	27.1
Student/Homemaker	221	22.2	83	21.0	304	21.8
Retired/Unable to Work	1,577	62.6	964	75.6	2,541	67.1
Total	2,721	37.2	1,716	42.4	4,437	39.2
¹ Unweighted						
² Weighted						

Table 10: Taking Blood Pressure Medication³

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	854	79.3	434	78.2	1,288	78.9
Female	1,560	84.9	1,062	82.4	2,622	83.8
Age Group						
18-24	2	17.6	7	20.2	9	19.3
25-34	25	33.4	49	56.1	74	45.9
35-44	84	64.3	128	74.9	212	70.1
45-54	296	80.6	307	83.3	603	81.7
55-64	619	89.1	443	92.0	1,062	90.3
65+	1,377	94.9	550	95.6	1,927	95.1
Education						
< High School Graduate	314	77.5	470	86.9	784	82.6
High School Graduate or GED	910	82.9	513	80.0	1,423	81.7
Some College or Technical School	675	83.3	284	71.8	959	79.4
College Graduate	509	83.1	225	82.7	734	82.9
Income						
< \$15,000	408	77.3	538	83.6	946	81.0
\$15-\$24,999	476	77.9	374	76.4	850	77.2
\$25-\$34,999	280	84.7	148	79.2	428	82.2
\$35-\$49,999	302	80.1	87	77.1	389	79.3
\$50-\$74,999	255	86.4	73	86.5	328	86.4
\$75,000+	298	85.2	52	86.5	350	85.4
Employment Status						
Employed	669	73.1	419	72.7	1,088	72.9
Not Employed	77	68.5	103	66.9	180	67.6
Student/Homemaker	205	85.3	71	71.9	276	81.0
Retired/Unable to Work	1,462	90.9	900	91.5	2,362	91.1
Total	2,414	82.1	1,496	80.6	3,910	81.5
¹ Unweighted						
² Weighted						
³ Denominator is those who have been told that their blood pressure is high						

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 diets along with increasing physical activity will reduce the level approximately 75 percent of the time. The National Cholesterol

Education Program recommends that healthy adults more than twenty years old have their blood cholesterol levels checked at least once every five years.

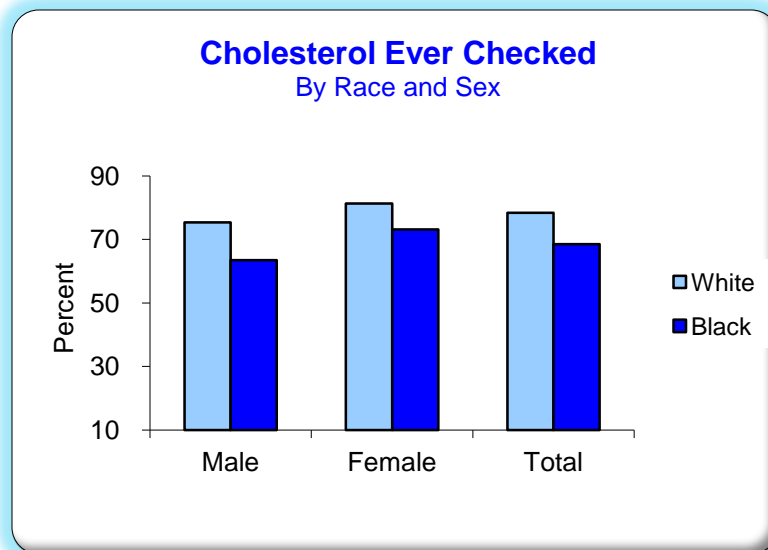


Figure 14

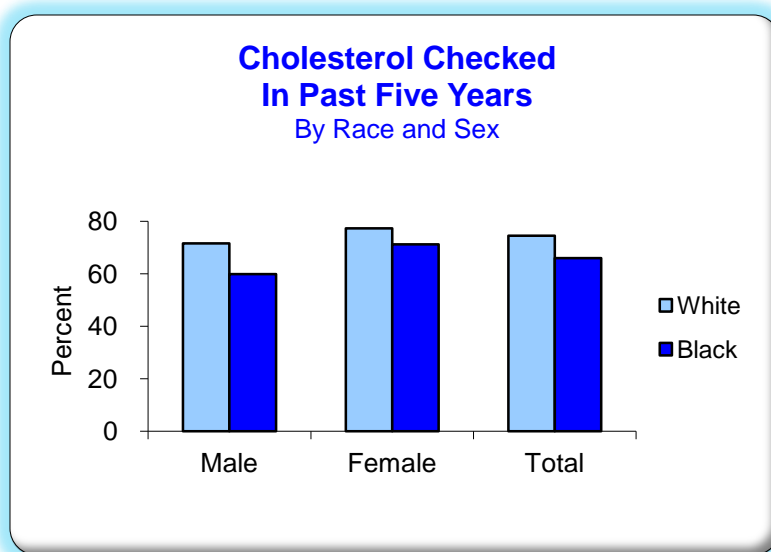


Figure 15

The 2011 survey revealed that 74.7 percent of the respondents reported that they have ever had their blood cholesterol checked (Figure 14) and 71.2 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 74.5 percent than blacks who reported a rate of 65.9 percent (Table 12).

Black male respondents reported the lowest rate for examinations within the past five years with a rate of 59.9 percent. Of those who have ever had their cholesterol checked, 42.2 percent said they have been told their blood cholesterol is high but for the age group 65 and above, the rate was 60.1 percent.

Table 11: Ever Had Cholesterol Checked

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	1,764	75.4	722	63.5	2,486	70.9
Female	3,210	81.3	1,660	73.1	4,870	78.1
Age Group						
18-24	76	35.1	86	36.3	162	35.7
25-34	245	54.9	211	56.2	456	55.5
35-44	474	78.0	320	71.7	794	75.4
45-54	821	87.0	510	81.5	1,331	85.1
55-64	1,209	94.0	590	89.1	1,799	92.3
65+	2,127	97.0	647	92.7	2,774	96.0
Education						
< High School Graduate	524	65.2	598	65.7	1,122	65.4
High School Graduate or GED	1,615	80.1	765	64.2	2,380	73.8
Some College or Technical School	1,362	78.6	561	71.1	1,923	76.0
College Graduate	1,463	86.1	454	80.4	1,917	84.6
Income						
< \$15,000	651	73.8	724	62.6	1,375	67.2
\$15-\$24,999	817	70.8	618	71.1	1,435	71.0
\$25-\$34,999	520	76.5	265	75.4	785	76.1
\$35-\$49,999	668	80.3	205	81.8	873	80.7
\$50-\$74,999	666	82.0	132	84.3	798	82.4
\$75,000+	911	88.1	131	77.1	1,042	86.3
Employment Status						
Employed	2,009	75.9	937	68.4	2,946	73.2
Not Employed	188	56.1	208	49.1	396	52.1
Student/Homemaker	448	64.7	137	49.3	585	59.3
Retired/Unable to Work	2,326	93.9	1,095	88.1	3,421	91.9
Total	4,974	78.4	2,382	68.5	7,356	74.7
¹ Unweighted						
² Weighted						

Table 12: Cholesterol Checked in Past 5 Years

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	1,677	71.6	681	59.9	2,358	67.2
Female	3,039	77.3	1,605	71.2	4,644	74.9
Age Group						
18-24	71	33.5	82	34.7	153	34.1
25-34	224	50.2	201	53.0	425	51.5
35-44	434	70.9	307	68.4	741	69.8
45-54	769	82.1	496	79.7	1,265	81.3
55-64	1,153	90.6	564	84.7	1,717	88.6
65+	2,044	95.2	620	91.5	2,664	94.3
Education						
< High School Graduate	481	59.1	564	61.9	1,045	60.6
High School Graduate or GED	1,536	76.0	734	61.8	2,270	70.4
Some College or Technical School	1,294	75.3	541	68.7	1,835	73.0
College Graduate	1,398	82.7	444	78.7	1,842	81.7
Income						
< \$15,000	600	68.7	688	58.8	1,288	62.8
\$15-\$24,999	771	66.5	599	68.8	1,370	67.7
\$25-\$34,999	498	72.8	257	72.7	755	72.7
\$35-\$49,999	634	75.8	198	79.4	832	76.7
\$50-\$74,999	636	77.8	130	84.0	766	78.9
\$75,000+	881	85.6	127	74.0	1,008	83.7
Employment Status						
Employed	1,898	71.9	896	64.8	2,794	69.3
Not Employed	164	47.7	195	47.0	359	47.3
Student/Homemaker	425	60.6	131	47.0	556	55.9
Retired/Unable to Work	2,226	91.5	1,060	86.9	3,286	89.9
Total	4,716	74.5	2,286	65.9	7,002	71.2
¹ Unweighted						
² Weighted						

Immunization

Survey Question:

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

Influenza and pneumonia was the ninth leading cause of death in Mississippi for 2010 producing a death rate of 19.0 per 100,000 population.

The *Healthy People 2020* goal for influenza vaccinations is that 90 percent of the non-institutionalized people age 65 and older have been vaccinated in the preceding twelve months. The target for those in the 18 to 64 age group who are not institutionalized is 80 percent. Influenza vaccine can prevent the disease and its complications. In the elderly, the vaccine is less effective in disease prevention, but reduces severity of disease and the incidence of complications and death. 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.

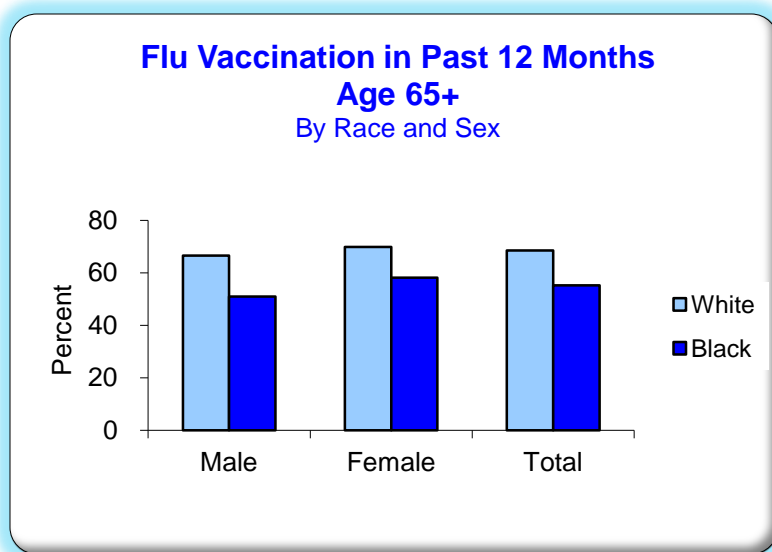


Figure 16

In the 2011 BRFSS survey, 65.4 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: 68.5 percent of whites reported having been vaccinated compared to only 55.2 percent for blacks (Figure 17). For the total population, females reported higher vaccination in the past twelve months with a rate of 37.9 percent compared to 33.0 percent for males (Figure 16).

Only 28.2 percent of the respondents said that they had ever received a pneumonia vaccination. Respondents over the age of 65 reported a vaccination rate of 69.0 percent. As with influenza vaccinations, there was a marked difference with respect to race for pneumonia vaccinations: 73.3 percent for whites but only 54.8 percent for blacks (Table 15).

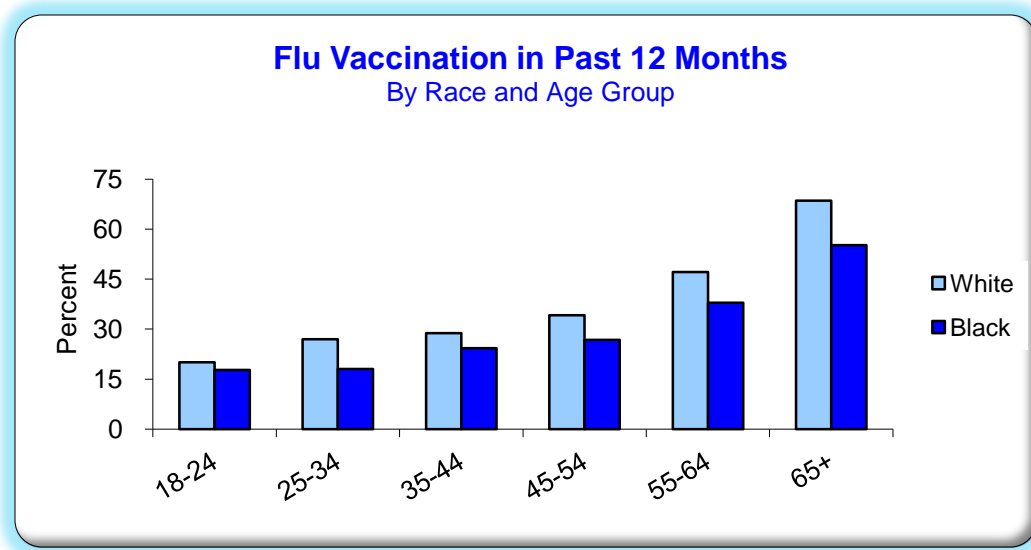


Figure 17

Table 13: Flu Vaccination in Past 12 Months

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	919	36.9	291	26.0	1,210	33.0
Female	1,868	43.3	675	29.1	2,543	37.9
Age Group						
18-24	46	20.0	35	17.7	81	19.0
25-34	124	27.0	67	18.0	191	23.0
35-44	183	28.8	96	24.3	279	27.0
45-54	329	34.2	161	26.8	490	31.7
55-64	618	47.1	241	37.9	859	44.0
65+	1,474	68.5	359	55.2	1,833	65.4
Education						
< High School Graduate	305	33.5	281	31.5	586	32.5
High School Graduate or GED	905	38.9	292	24.9	1,197	33.5
Some College or Technical School	730	39.5	202	24.9	932	34.7
College Graduate	841	48.0	189	32.1	1,030	44.0
Income						
< \$15,000	373	37.5	297	26.5	670	31.1
\$15-\$24,999	485	37.3	245	25.7	730	31.7
\$25-\$34,999	282	40.1	102	26.6	384	34.7
\$35-\$49,999	357	38.6	80	31.9	437	36.9
\$50-\$74,999	356	42.0	55	31.0	411	40.0
\$75,000+	486	44.6	46	29.4	532	42.2
Employment Status						
Employed	939	33.9	320	23.1	1,259	30.1
Not Employed	78	22.1	64	18.8	142	20.3
Student/Homemaker	264	34.1	46	17.8	310	28.9
Retired/Unable to Work	1,503	58.9	536	45.6	2,039	54.3
Total	2,787	40.2	966	27.6	3,753	35.6
¹ Unweighted						
² Weighted						

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

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	439	66.6	96	50.9	535	63.0
Female	1,035	69.8	263	58.1	1,298	67.1
Education						
< High School Graduate	214	67.7	152	54.2	366	61.8
High School Graduate or GED	580	70.4	101	59.7	681	68.6
Some College or Technical School	348	64.4	46	52.6	394	62.6
College Graduate	330	72.4	59	55.2	389	69.8
Income						
< \$15,000	252	64.7	131	52.3	383	59.6
\$15-\$24,999	322	66.3	87	56.4	409	63.6
\$25-\$34,999	174	66.4	37	70.7	211	67.2
\$35-\$49,999	170	69.6	25	57.4	195	68.0
\$50-\$74,999	119	71.7	5	40.7	124	69.6
\$75,000+	121	70.3	10	55.2	131	68.4
Employment Status						
Employed	151	59.7	32	67.6	183	60.9
Not Employed	17	59.0	5	54.6	22	57.4
Student/Homemaker	171	75.7	19	50.5	190	72.5
Retired/Unable to Work	1,135	69.2	303	54.4	1,438	65.5
Total	1,474	68.5	359	55.2	1,833	65.4
¹ Unweighted						
² Weighted						
*Sample size <50						

Table 15: Ever Had Pneumonia Vaccination

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	738	31.4	235	21.5	973	27.8
Female	1,556	33.5	506	20.2	2,062	28.6
Age Group						
18-24	32	18.4	19	10.6	51	14.7
25-34	49	12.9	37	11.0	86	12.0
35-44	79	14.5	55	13.5	134	14.1
45-54	177	20.3	99	17.3	276	19.3
55-64	399	32.8	178	32.1	577	32.5
65+	1,547	73.3	347	54.8	1,894	69.0
Education						
< High School Graduate	295	32.2	222	24.6	517	28.4
High School Graduate or GED	852	37.9	234	20.7	1,086	31.2
Some College or Technical School	605	30.9	140	16.6	745	26.2
College Graduate	539	27.6	143	22.1	682	26.2
Income						
< \$15,000	404	43.1	267	24.7	671	32.3
\$15-\$24,999	481	36.4	188	18.7	669	27.8
\$25-\$34,999	254	39.1	78	22.9	332	32.3
\$35-\$49,999	271	29.3	46	17.5	317	26.3
\$50-\$74,999	237	28.2	34	21.0	271	26.8
\$75,000+	246	21.2	28	20.8	274	21.1
Employment Status						
Employed	448	16.6	166	14.1	614	15.7
Not Employed	58	19.2	41	11.4	99	14.8
Student/Homemaker	247	34.1	31	10.5	278	26.5
Retired/Unable to Work	1,538	62.6	502	42.5	2,040	55.7
Total	2,294	32.5	741	20.8	3,035	28.2
¹ Unweighted						
² Weighted						

Table 16: Flu Vaccination in Past 12 Months: Age 65+

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	455	70.7	89	50.7	544	66.1
Female	1,092	75.0	258	57.6	1,350	71.0
Education						
< High School Graduate	231	74.2	143	54.1	374	65.5
High School Graduate or GED	614	74.2	89	50.4	703	70.1
Some College or Technical School	377	71.7	51	64.3	428	70.6
College Graduate	323	72.9	63	56.3	386	70.4
Income						
< \$15,000	283	73.5	124	51.0	407	64.5
\$15-\$24,999	353	75.1	89	59.2	442	70.7
\$25-\$34,999	180	69.0	36	65.1	216	68.2
\$35-\$49,999	174	75.3	25	73.0	199	75.0
\$50-\$74,999	116	69.0	5	42.4	121	67.1
\$75,000+	119	72.1	10	50.6	129	69.6
Employment Status						
Employed	132	53.2	21	43.8	153	51.7
Not Employed	14	48.6	7	61.2	21	53.2
Student/Homemaker	177	81.9	17	49.8	194	77.9
Retired/Unable to Work	1,223	76.0	301	55.9	1,524	71.0
Total	1,547	73.3	347	54.8	1,894	69.0
¹ Unweighted						
² 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 self-reported height and weight. (See the “Definitions” section for the formula)

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

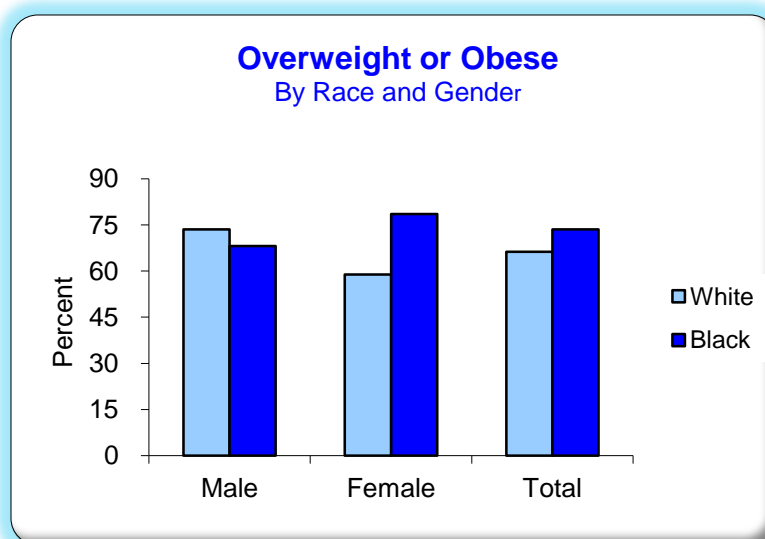


Figure 18

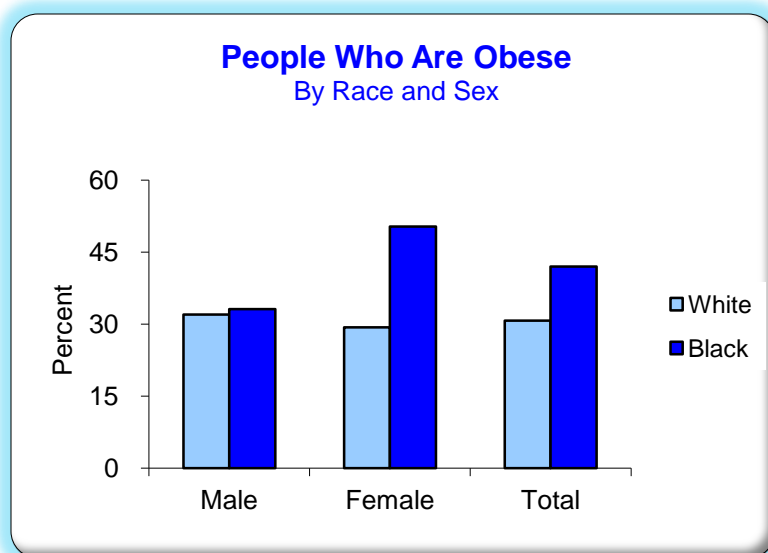


Figure 19

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 2011 BRFSS study, 68.9 percent of those surveyed in Mississippi reported themselves as being either overweight (BMI \geq 25) or obese (BMI \geq 30). The rate for whites was 66.2 percent compared to 73.5 percent for blacks (Table 17).

The total obesity rate for 2011 was 34.9 percent: 30.7 for whites and 42.0 for blacks (Table 18). Black females reported the highest rate of obesity at 50.3 percent and black males reported the second highest rate at 33.1 percent. Black respondents in the 45 to 54 age group have the highest rate of obesity at 50.9 percent compared to a rate of 35.9 for whites in the same age category.

Table 17: People Who Are Overweight or Obese

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	1,580	73.5	700	68.1	2,280	71.6
Female	2,072	58.9	1,564	78.5	3,636	66.3
Age Group						
18-24	97	48.9	123	57.5	220	52.8
25-34	267	64.8	265	70.3	532	67.3
35-44	398	70.1	352	80.5	750	74.4
45-54	632	70.9	484	80.5	1,116	74.2
55-64	887	73.7	514	76.2	1,401	74.6
65+	1,360	64.0	515	77.4	1,875	67.1
Education						
< High School Graduate	418	62.4	541	68.6	959	65.5
High School Graduate or GED	1,223	68.0	770	71.5	1,993	69.4
Some College or Technical School	1,013	66.9	554	78.3	1,567	70.7
College Graduate	992	64.9	399	79.6	1,391	68.7
Income						
< \$15,000	484	64.6	714	68.1	1,198	66.7
\$15-\$24,999	617	64.8	598	75.5	1,215	70.0
\$25-\$34,999	388	67.2	249	79.4	637	72.1
\$35-\$49,999	527	69.8	180	76.8	707	71.6
\$50-\$74,999	516	72.9	121	83.9	637	75.0
\$75,000+	658	67.2	112	75.1	770	68.4
Employment Status						
Employed	1,607	68.8	944	75.4	2,551	71.1
Not Employed	169	58.3	246	66.1	415	62.7
Student/Homemaker	307	55.1	141	65.2	448	58.4
Retired/Unable to Work	1,567	67.8	930	77.3	2,497	71.1
Total	3,652	66.2	2,264	73.5	5,916	68.9
¹ Unweighted						
² Weighted						

Table 18: People Who Are Obese

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	671	32.0	337	33.1	1,008	32.4
Female	962	29.3	976	50.3	1,938	37.3
Age Group						
18-24	49	24.3	60	27.4	109	25.7
25-34	124	30.5	159	41.9	283	35.7
35-44	193	35.7	211	46.1	404	40.0
45-54	324	35.9	305	50.9	629	41.0
55-64	428	34.2	311	44.6	739	37.8
65+	513	23.6	266	41.9	779	27.9
Education						
< High School Graduate	196	30.3	325	40.4	521	35.4
High School Graduate or GED	540	30.6	458	41.0	998	34.6
Some College or Technical School	472	32.4	326	45.9	798	36.9
College Graduate	421	28.2	204	40.0	625	31.2
Income						
< \$15,000	240	30.7	440	42.4	680	37.5
\$15-\$24,999	305	34.4	361	45.8	666	39.9
\$25-\$34,999	175	34.9	145	45.6	320	39.2
\$35-\$49,999	228	30.3	92	41.0	320	33.0
\$50-\$74,999	231	33.6	63	38.9	294	34.6
\$75,000+	266	26.9	58	39.9	324	29.0
Employment Status						
Employed	731	31.5	533	43.2	1,264	35.6
Not Employed	89	30.2	151	35.7	240	33.3
Student/Homemaker	141	28.6	86	38.1	227	31.6
Retired/Unable to Work	671	30.2	540	45.0	1,211	35.4
Total	1,633	30.7	1,313	42.0	2,946	34.9
¹ Unweighted						
² Weighted						

Asthma

Survey Question:

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

According to the U. S. Department of Health and Human Services, *Healthy People 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.

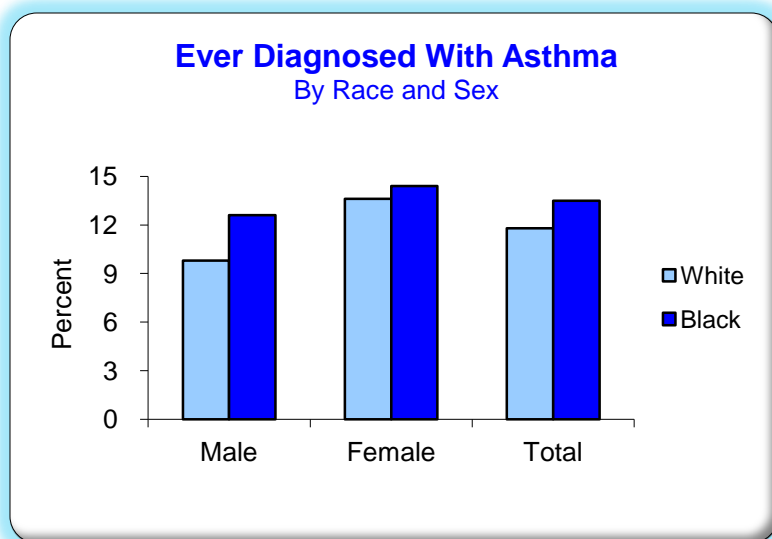


Figure 20

In Mississippi, the 2011 BRFSS survey revealed that 12.4 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, 13.5 percent, than whites who had a rate of 11.8 percent. Women reported a higher rate (13.9 percent) than men (10.8 percent).

Table 19 contains the figures related to the various rates.

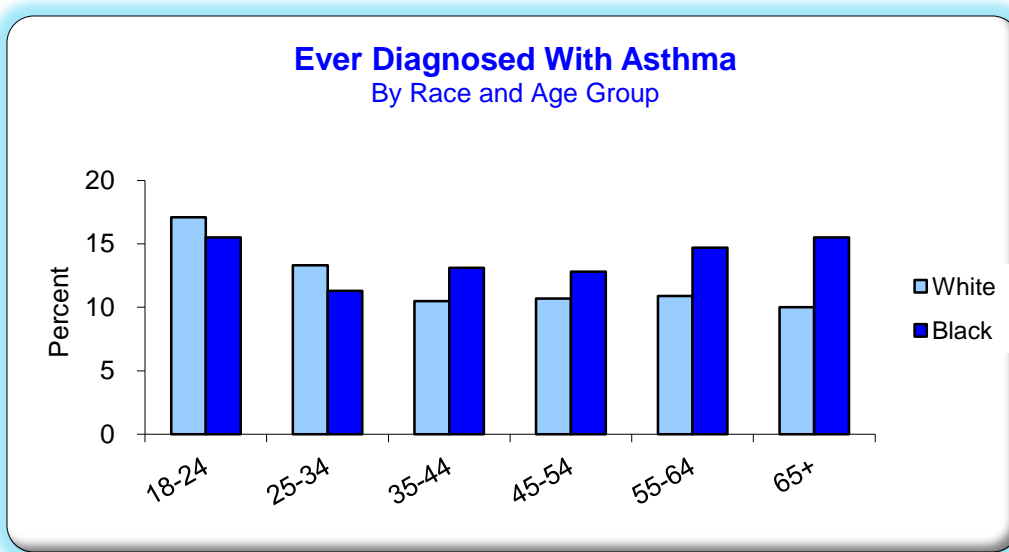


Figure 21

Table 19: Ever Diagnosed With Asthma

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	183	9.8	118	12.6	301	10.8
Female	441	13.6	301	14.4	742	13.9
Age Group						
18-24	38	17.1	31	15.5	69	16.3
25-34	50	13.3	41	11.3	91	12.4
35-44	58	10.5	56	13.1	114	11.6
45-54	105	10.7	83	12.8	188	11.5
55-64	144	10.9	101	14.7	245	12.2
65+	226	10.0	107	15.5	333	11.3
Education						
< High School Graduate	107	17.5	152	19.5	259	18.5
High School Graduate or GED	196	9.3	122	10.4	318	9.7
Some College or Technical School	181	12.6	84	11.8	265	12.3
College Graduate	139	9.6	61	12.4	200	10.3
Income						
< \$15,000	131	18.2	166	15.6	297	16.7
\$15-\$24,999	135	17.6	105	13.7	240	15.7
\$25-\$34,999	68	9.8	29	9.0	97	9.5
\$35-\$49,999	66	10.4	24	10.8	90	10.5
\$50-\$74,999	57	8.8	16	10.0	73	9.1
\$75,000+	74	7.9	11	8.7	85	8.0
Employment Status						
Employed	199	9.3	117	10.8	316	9.9
Not Employed	47	17.8	43	13.1	90	15.1
Student/Homemaker	74	15.2	26	10.8	100	13.7
Retired/Unable to Work	304	13.4	232	20.1	536	15.7
Total	624	11.8	419	13.5	1,043	12.4
¹ Unweighted						
² Weighted						

Table 20: Presently Have Asthma

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	95	4.4	69	7.5	164	5.6
Female	310	9.5	217	10.1	527	9.8
Age Group						
18-24	18	7.9	19	10.4	37	9.1
25-34	24	7.2	22	6.2	46	6.7
35-44	38	6.9	38	8.6	76	7.6
45-54	72	6.8	62	9.1	134	7.6
55-64	91	6.6	73	10.7	164	8.0
65+	160	7.2	72	9.9	232	7.8
Education						
< High School Graduate	77	11.5	109	13.0	186	12.3
High School Graduate or GED	138	6.4	89	7.2	227	6.7
Some College or Technical School	109	7.1	53	7.5	162	7.2
College Graduate	81	4.7	35	7.4	116	5.4
Income						
< \$15,000	102	13.8	124	10.4	226	11.8
\$15-\$24,999	89	10.7	71	9.9	160	10.3
\$25-\$34,999	38	5.8	15	4.3	53	5.2
\$35-\$49,999	41	6.0	16	6.5	57	6.1
\$50-\$74,999	32	5.2	10	5.8	42	5.3
\$75,000+	42	3.5	4	3.5	46	3.5
Employment Status						
Employed	104	4.7	69	6.6	173	5.4
Not Employed	30	11.4	28	8.5	58	9.7
Student/Homemaker	46	8.3	16	6.1	62	7.6
Retired/Unable to Work	225	9.9	172	14.7	397	11.6
Total	405	7.1	286	8.9	691	7.8
¹ Unweighted						
² Weighted						

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

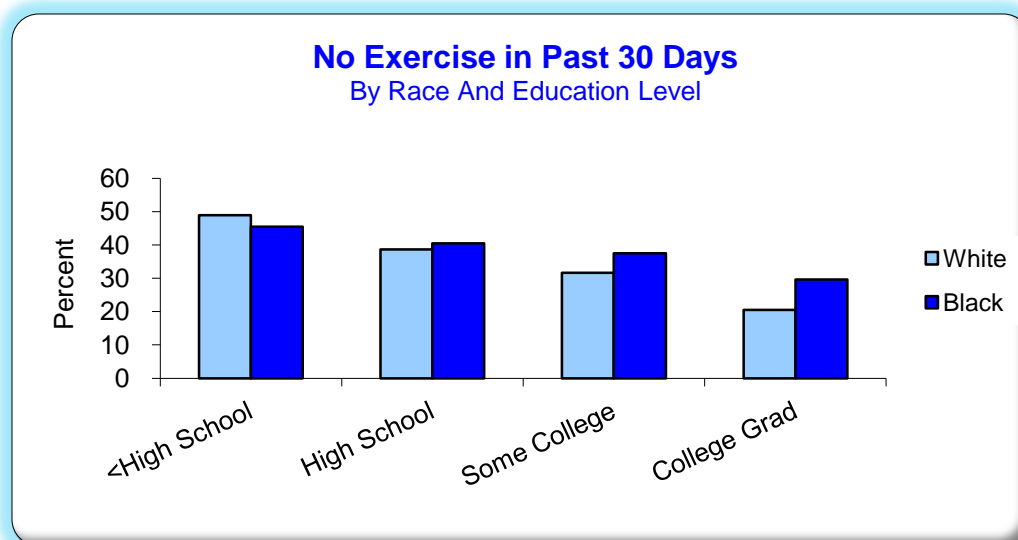


Figure 22

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 weight-bearing activities such as walking and especially when combined with appropriate drug therapy and calcium intake.

In Mississippi, 36.0 percent of the population is reported as not participating in any physical activity outside of work in the past 30 days. People with less education (Figure 22) and in lower income levels (Table 21) reported the highest percentage of physical inactivity.

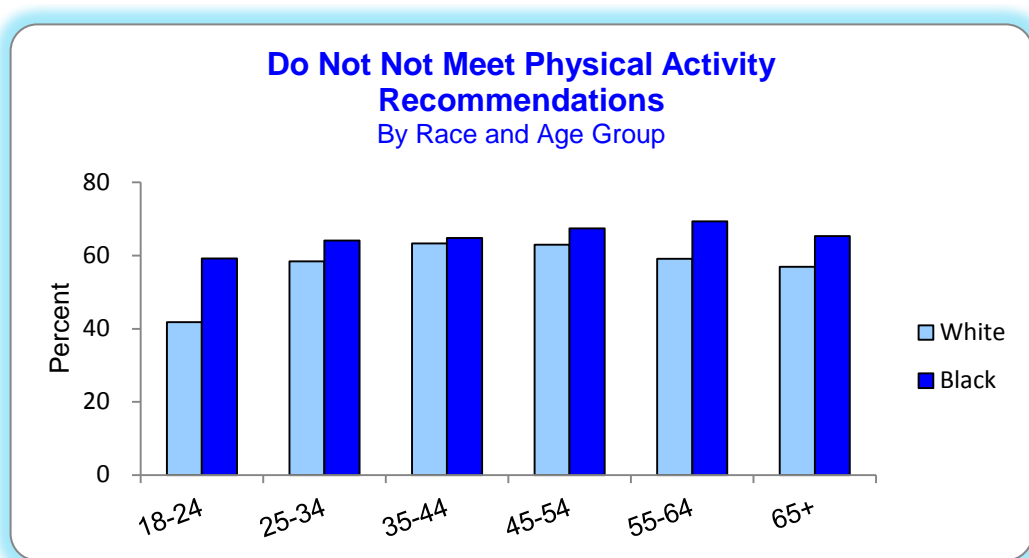


Figure 23

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

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	653	31.8	340	35.7	993	33.2
Female	1,302	35.9	830	43.1	2,132	38.6
Age Group						
18-24	41	18.6	76	32.2	117	24.9
25-34	111	29.6	129	39.7	240	34.1
35-44	181	36.3	173	41.2	354	38.3
45-54	309	35.4	235	41.3	544	37.4
55-64	445	36.8	262	41.9	707	38.5
65+	863	40.3	289	43.1	1,152	40.9
Education						
< High School Graduate	335	49.4	351	46.0	686	47.7
High School Graduate or GED	746	38.0	396	39.3	1,142	38.5
Some College or Technical School	530	31.3	266	38.1	796	33.6
College Graduate	339	20.2	154	29.9	493	22.7
Income						
< \$15,000	352	40.2	433	47.2	785	44.3
\$15-\$24,999	381	39.2	307	40.9	688	40.0
\$25-\$34,999	211	38.5	114	38.7	325	38.6
\$35-\$49,999	250	36.7	65	31.0	315	35.3
\$50-\$74,999	192	27.5	52	30.7	244	28.1
\$75,000+	225	23.2	39	29.0	264	24.2
Employment Status						
Employed	696	31.8	459	38.9	1,155	34.3
Not Employed	93	34.3	129	38.6	222	36.7
Student/Homemaker	178	25.5	72	33.3	250	28.1
Retired/Unable to Work	987	41.2	508	44.0	1,495	42.1
Total	1,955	33.9	1,170	39.6	3,125	36.0
¹ Unweighted						
² Weighted						

Table 22: Do Not Meet Physical Activity Recommendations

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	1,052	55.0	535	62.0	1,587	57.4
Female	2,025	60.4	1,294	66.9	3,319	62.8
Age Group						
18-24	94	42.5	122	57.3	216	49.4
25-34	230	57.7	203	63.9	433	60.4
35-44	323	62.9	279	65.5	602	63.9
45-54	540	62.2	371	66.8	911	63.7
55-64	718	59.1	428	69.9	1,146	62.7
65+	1,167	57.5	420	65.8	1,587	59.4
Education						
< High School Graduate	436	68.2	494	70.2	930	69.2
High School Graduate or GED	1,065	60.2	621	66.2	1,686	62.5
Some College or Technical School	849	56.8	430	60.9	1,279	58.2
College Graduate	721	47.9	281	56.8	1,002	50.1
Income						
< \$15,000	487	64.9	622	68.3	1,109	66.9
\$15-\$24,999	575	65.8	478	63.9	1,053	64.9
\$25-\$34,999	316	58.0	197	65.8	513	61.2
\$35-\$49,999	402	60.6	124	65.1	526	61.7
\$50-\$74,999	362	52.2	86	48.7	448	51.5
\$75,000+	460	47.3	77	60.5	537	49.4
Employment Status						
Employed	1,289	58.1	738	63.7	2,027	60.0
Not Employed	148	58.1	211	64.2	359	61.5
Student/Homemaker	288	48.5	118	56.0	406	50.9
Retired/Unable to Work	1,351	61.2	759	70.0	2,110	64.2
Total	3,077	57.8	1,829	64.6	4,906	60.3
¹ Unweighted						
² Weighted						

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.

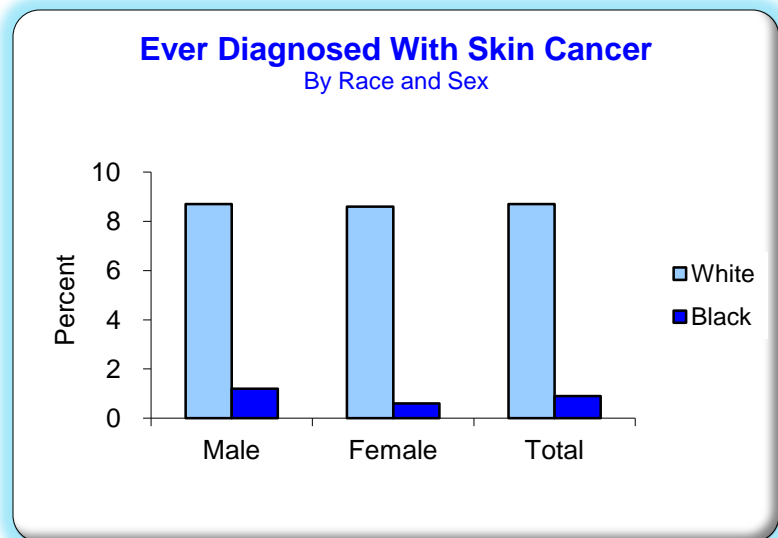


Figure 24

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 CDC estimates that in 2012 there will be two million new cases of skin cancer in the United States.

The 2011 Mississippi BRFSS revealed that 5.7 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 8.7 percent compared to only 0.9 percent for blacks. Whites age 65 and older had a rate of 24.2 percent compared to 2.5 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.

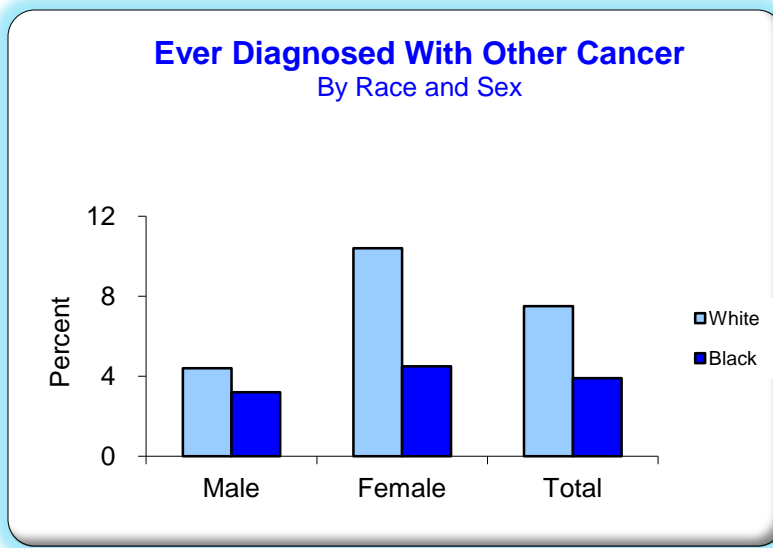


Figure 25

The 2011 BRFSS survey revealed that 6.1 percent of the people in Mississippi have been diagnosed with some form of cancer other than skin cancer which translates into almost 135,000 persons. The rate for white respondents was 7.5 percent while the rate for blacks was 3.9 percent (Figure 25).

Table 23: Ever Diagnosed With Skin Cancer

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	305	8.7	18	1.2	323	5.9
Female	465	8.6	12	0.6	477	5.5
Age Group						
18-24	1	0.4	0	0.0	1	0.2
25-34	3	0.6	0	0.0	3	0.3
35-44	10	1.5	4	1.5	14	1.5
45-54	55	5.4	3	0.2	58	3.6
55-64	158	12.5	9	2.1	167	8.9
65+	537	24.2	14	2.5	551	19.1
Education						
< High School Graduate	107	8.9	9	1.7	116	5.3
High School Graduate or GED	281	10.3	6	0.3	287	6.4
Some College or Technical School	186	7.5	10	0.7	196	5.2
College Graduate	196	8.1	5	0.7	201	6.2
Income						
< \$15,000	133	10.3	11	1.3	144	5.0
\$15-\$24,999	143	9.5	5	0.3	148	5.0
\$25-\$34,999	85	9.2	3	0.9	88	5.9
\$35-\$49,999	93	9.0	2	0.4	95	6.8
\$50-\$74,999	68	6.3	4	2.2	72	5.5
\$75,000+	102	7.1	2	0.8	104	6.1
Employment Status						
Employed	170	4.8	3	0.1	173	3.1
Not Employed	13	2.3	1	0.5	14	1.3
Student/Homemaker	76	6.4	0	0.0	76	4.2
Retired/Unable to Work	511	18.5	26	2.9	537	13.0
Total	770	8.7	30	0.9	800	5.7
¹ Unweighted						
² Weighted						

Table 24: Ever Diagnosed With Other Cancer

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	165	4.4	65	3.2	230	4.0
Female	457	10.4	133	4.5	590	8.1
Age Group						
18-24	5	2.4	1	0.4	6	1.5
25-34	15	2.7	5	0.8	20	1.8
35-44	28	4.2	6	1.2	34	2.9
45-54	59	5.9	30	4.1	89	5.2
55-64	129	9.1	64	8.9	193	9.0
65+	383	16.4	91	13.8	474	15.7
Education						
< High School Graduate	90	8.5	68	6.1	158	7.2
High School Graduate or GED	203	7.6	62	3.4	265	6.0
Some College or Technical School	181	7.8	37	2.9	218	6.1
College Graduate	146	6.1	31	2.7	177	5.2
Income						
< \$15,000	111	10.4	71	4.5	182	6.9
\$15-\$24,999	110	8.0	48	4.3	158	6.2
\$25-\$34,999	55	6.5	17	2.7	72	5.0
\$35-\$49,999	84	7.2	9	2.2	93	5.9
\$50-\$74,999	68	6.2	9	2.4	77	5.5
\$75,000+	74	5.4	9	2.5	83	4.9
Employment Status						
Employed	139	4.0	36	1.5	175	3.1
Not Employed	16	3.9	13	2.1	29	2.9
Student/Homemaker	61	8.0	7	1.7	68	5.9
Retired/Unable to Work	406	14.7	141	10.4	547	13.2
Total	622	7.5	198	3.9	820	6.1
¹ Unweighted						
² Weighted						

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.

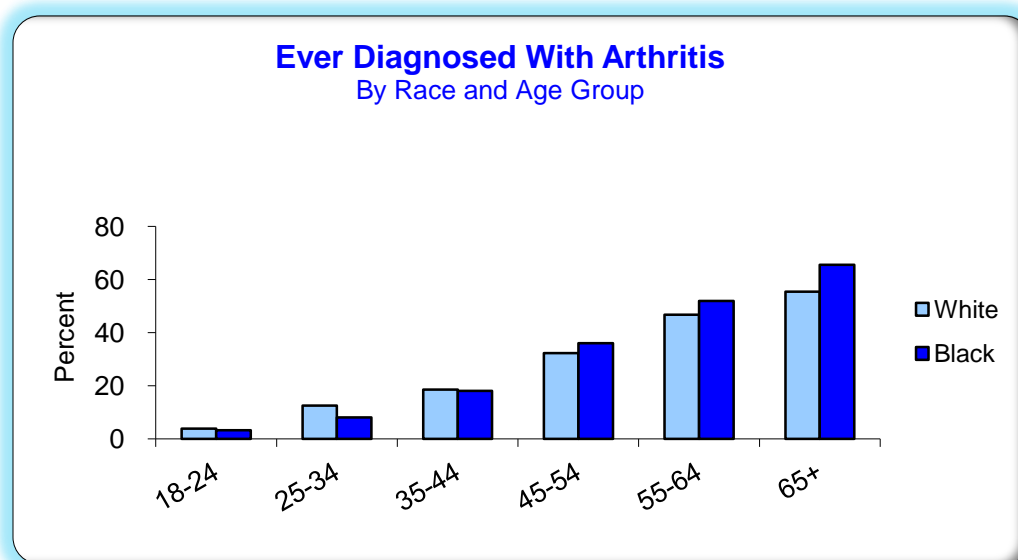


Figure 26

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.

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.

In Mississippi, the 2011 BRFSS survey showed that 29.1 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 57.8 percent. The rate for blacks within this age group was almost 16 percent higher than whites. Blacks reported a rate of 65.6 percent while whites were only 55.4 percent. Only 3.5 percent of those 18-24 years old reported this condition.

Of the people who were diagnosed with arthritis, 56.5 percent said that their usual, normal activities were limited by joint pain. Blacks with a rate of 61.8 percent reported a higher rate than whites who had a rate of 53.9 percent (Table 26).

Almost 47 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 56.3 percent had a much higher rate than whites with 42.1 percent. Little difference was noted between genders: males had a rate of 47.4 percent compared to 46.4 percent for females (Table 27).

Table 25: Ever Diagnosed With Arthritis

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	693	25.4	293	20.0	986	23.4
Female	1,636	36.0	893	31.4	2,529	34.2
Age Group						
18-24	9	3.8	9	3.2	18	3.5
25-34	46	12.5	32	8.0	78	10.5
35-44	111	18.5	96	18.0	207	18.3
45-54	303	32.3	242	36.0	545	33.6
55-64	593	46.8	356	51.9	949	48.5
65+	1,258	55.4	446	65.6	1,704	57.8
Education						
< High School Graduate	357	37.2	418	35.5	775	36.3
High School Graduate or GED	863	36.4	395	24.5	1,258	31.7
Some College or Technical School	628	28.1	239	22.2	867	26.1
College Graduate	477	22.2	132	17.5	609	21.0
Income						
< \$15,000	461	48.7	477	34.6	938	40.4
\$15-\$24,999	487	38.6	300	27.0	787	32.9
\$25-\$34,999	257	34.6	113	27.4	370	31.7
\$35-\$49,999	283	29.1	47	15.0	330	25.5
\$50-\$74,999	231	23.8	36	12.4	267	21.7
\$75,000+	230	19.4	35	16.4	265	18.9
Employment Status						
Employed	566	18.5	257	15.2	823	17.3
Not Employed	95	26.2	97	15.5	192	20.1
Student/Homemaker	211	21.8	59	11.5	270	18.4
Retired/Unable to Work	1,457	59.0	772	59.3	2,229	59.1
Total	2,329	30.9	1,186	26.0	3,515	29.1
¹ Unweighted						
² Weighted						

Table 26: Do Arthritis Symptoms Prevent Normal Activities³

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	348	52.6	158	60.4	506	55.0
Female	879	54.7	528	62.6	1,407	57.5
Age Group						
18-24	4	59.3	3	42.2	7	53.5
25-34	17	40.3	16	43.2	33	41.3
35-44	60	55.5	59	63.7	119	58.7
45-54	171	58.5	140	64.6	311	60.8
55-64	327	55.1	216	70.6	543	60.7
65+	644	52.3	251	56.4	895	53.4
Education						
< High School Graduate	216	63.7	272	68.2	488	65.9
High School Graduate or GED	475	53.9	223	63.5	698	56.8
Some College or Technical School	320	51.5	134	59.7	454	53.8
College Graduate	214	46.0	55	32.4	269	43.1
Income						
< \$15,000	313	73.0	314	69.3	627	71.1
\$15-\$24,999	283	58.5	163	54.6	446	57.0
\$25-\$34,999	127	50.8	59	69.5	186	57.3
\$35-\$49,999	115	42.4	20	59.4	135	45.1
\$50-\$74,999	93	41.1	18	52.2	111	42.4
\$75,000+	99	44.7	13	29.0	112	42.5
Employment Status						
Employed	205	37.3	90	43.8	295	39.3
Not Employed	50	57.9	56	61.5	106	59.5
Student/Homemaker	109	54.6	29	63.4	138	56.2
Retired/Unable to Work	863	62.9	510	70.5	1,373	65.5
Total	1,227	53.9	686	61.8	1,913	56.5
¹ Unweighted						
² Weighted						
³ Denominator is those diagnosed with arthritis						
*Sample size <50						

Table 27: Do Arthritis Symptoms Affect Work³

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	267	44.3	146	54.6	413	47.4
Female	629	40.6	456	57.2	1,085	46.4
Age Group						
18-24	2	27.6	3	42.2	5	32.6
25-34	18	45.7	14	42.8	32	44.6
35-44	50	50.4	57	58.6	107	53.6
45-54	136	47.0	146	66.1	282	54.1
55-64	271	45.9	188	62.2	459	51.8
65+	416	35.2	193	46.1	609	38.1
Education						
< High School Graduate	173	53.2	229	61.9	402	57.4
High School Graduate or GED	371	44.8	199	55.0	570	47.8
Some College or Technical School	216	39.2	130	58.6	346	44.7
College Graduate	134	27.3	44	30.8	178	28.1
Income						
< \$15,000	240	59.6	284	64.4	524	62.0
\$15-\$24,999	241	54.0	146	53.9	387	53.9
\$25-\$34,999	87	35.2	46	50.0	133	40.4
\$35-\$49,999	84	35.3	20	60.4	104	39.1
\$50-\$74,999	61	33.3	14	44.8	75	34.6
\$75,000+	52	22.5	9	23.2	61	22.6
Employment Status						
Employed	155	30.0	98	46.1	253	35.0
Not Employed	46	57.0	53	54.8	99	56.0
Student/Homemaker	69	33.6	21	49.7	90	36.7
Retired/Unable to Work	626	48.8	429	62.0	1,055	53.3
Total	896	42.1	602	56.3	1,498	46.8
¹ Unweighted						
² Weighted						
³ 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 2011 BRFSS survey over ten percent of Mississippi adults (more than 230,000 people) report having some kind of CVD, such as coronary heart disease, angina, previous heart attack, or stroke.

In 2010 Mississippi reported 7,551 deaths from heart disease

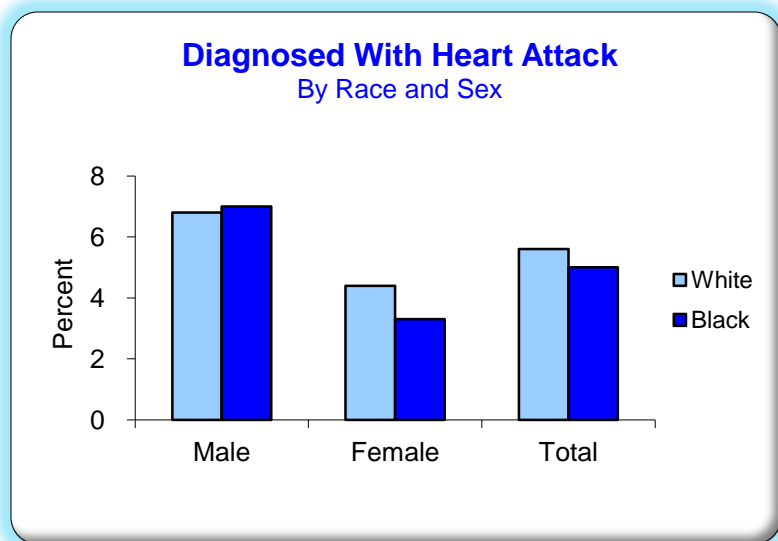


Figure 27

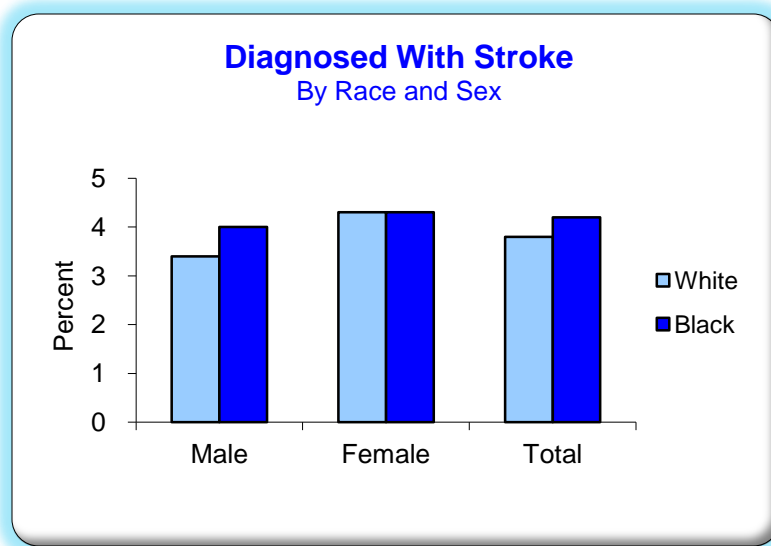


Figure 28

and 1,523 from cerebrovascular disease (stroke). The two combined accounted for a little more than thirty-one percent of all the deaths reported that year and more than forty percent of the total from the ten leading causes of death.

The 2011 BRFSS survey revealed that 14.9 percent of the population 65 years of age or older reported that they have been diagnosed as having had a heart attack: 14.7 for white respondents and 15.5 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 9.1 percent while blacks reported a rate of 8.6 for a total rate of 8.9 percent (Table 28).

Table 29 shows the rate for those age 65 and greater who had been diagnosed with a stroke was 8.3 for whites compared to a rate of 13.2 for blacks. In the 55 to 64 group the rates were 6.0 and 7.5 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 12.5

percent with white respondents having a rate of 13.4 percent compared to 9.8 for blacks. The 55 to 64 age category had an overall rate of 8.8 percent: 8.9 for whites and 8.7 for blacks (Table 30).

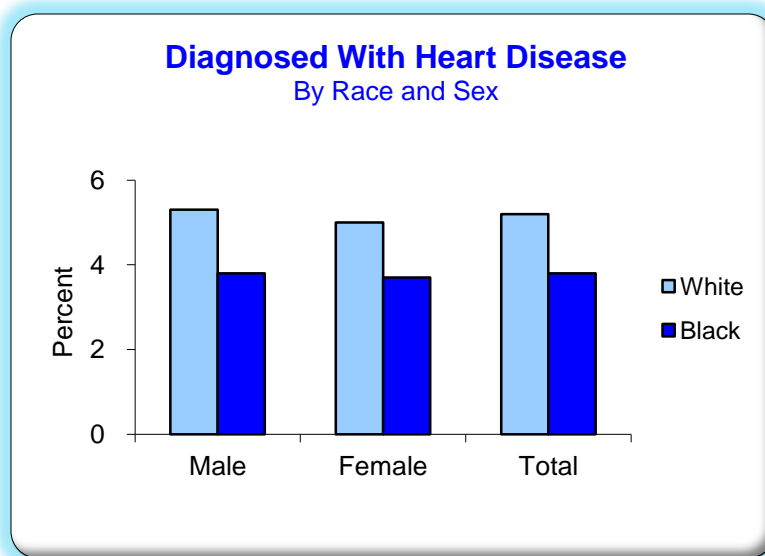


Figure 29

Table 28: Ever Diagnosed With Heart Attack

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	218	6.8	81	7.0	299	6.9
Female	222	4.4	115	3.3	337	4.0
Age Group						
18-24	1	0.8	1	0.7	2	0.7
25-34	0	0.0	4	1.5	4	0.7
35-44	9	1.8	11	3.8	20	2.6
45-54	24	3.2	31	5.6	55	4.0
55-64	102	9.1	54	8.6	156	8.9
65+	304	14.7	94	15.5	398	14.9
Education						
< High School Graduate	86	8.8	81	8.4	167	8.6
High School Graduate or GED	172	6.9	58	4.3	230	5.9
Some College or Technical School	106	4.3	36	3.2	142	3.9
College Graduate	76	3.2	21	3.5	97	3.3
Income						
< \$15,000	97	10.5	88	6.5	185	8.1
\$15-\$24,999	113	8.3	42	5.1	155	6.7
\$25-\$34,999	57	7.0	13	4.6	70	6.0
\$35-\$49,999	48	5.2	11	4.7	59	5.1
\$50-\$74,999	30	2.7	2	0.8	32	2.4
\$75,000+	31	2.1	9	6.0	40	2.7
Employment Status						
Employed	69	2.1	26	2.3	95	2.2
Not Employed	13	2.9	12	3.0	25	3.0
Student/Homemaker	33	3.2	3	0.3	36	2.2
Retired/Unable to Work	325	13.8	154	13.4	479	13.7
Total	440	5.6	196	5.0	636	5.4

¹Unweighted

²Weighted

Table 29: Ever Diagnosed With a Stroke

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	94	3.4	67	4.0	161	3.6
Female	216	4.3	129	4.3	345	4.3
Age Group						
18-24	0	0.0	0	0.0	0	0.0
25-34	4	1.0	7	2.2	11	1.6
35-44	12	2.9	7	1.3	19	2.3
45-54	26	2.5	32	5.2	58	3.5
55-64	69	6.0	57	7.5	126	6.5
65+	199	8.3	91	13.2	290	9.5
Education						
< High School Graduate	68	5.8	83	7.7	151	6.8
High School Graduate or GED	115	4.6	58	2.9	173	4.0
Some College or Technical School	75	3.4	37	3.0	112	3.3
College Graduate	51	1.7	18	2.2	69	1.9
Income						
< \$15,000	96	9.4	94	7.3	190	8.1
\$15-\$24,999	78	5.8	35	2.1	113	4.0
\$25-\$34,999	29	3.7	16	4.7	45	4.1
\$35-\$49,999	31	3.6	8	1.3	39	3.0
\$50-\$74,999	13	1.2	2	0.8	15	1.1
\$75,000+	22	1.8	4	1.4	26	1.8
Employment Status						
Employed	42	1.7	19	1.1	61	1.5
Not Employed	11	3.9	15	3.1	26	3.4
Student/Homemaker	26	2.6	9	2.7	35	2.6
Retired/Unable to Work	231	8.4	152	11.3	383	9.4
Total	310	3.8	196	4.2	506	4.0
¹ Unweighted						
² Weighted						

Table 30: Ever Diagnosed With Coronary Heart Disease

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	174	5.3	59	3.8	233	4.8
Female	260	5.0	96	3.7	356	4.5
Age Group						
18-24	0	0.0	1	0.3	1	0.1
25-34	0	0.0	2	0.9	2	0.4
35-44	10	1.8	7	1.5	17	1.7
45-54	31	3.2	35	5.5	66	4.0
55-64	111	8.9	56	8.7	167	8.8
65+	280	13.4	52	9.8	332	12.5
Education						
< High School Graduate	62	4.9	51	4.3	113	4.6
High School Graduate or GED	173	6.6	40	2.8	213	5.1
Some College or Technical School	118	5.1	37	3.8	155	4.7
College Graduate	81	3.4	27	4.8	108	3.8
Income						
< \$15,000	86	7.9	59	4.4	145	5.8
\$15-\$24,999	117	8.8	35	2.8	152	5.9
\$25-\$34,999	54	5.9	11	3.0	65	4.8
\$35-\$49,999	48	4.9	9	4.3	57	4.7
\$50-\$74,999	37	3.4	5	1.4	42	3.0
\$75,000+	37	2.7	12	9.0	49	3.7
Employment Status						
Employed	62	1.7	23	1.8	85	1.7
Not Employed	7	1.6	8	0.8	15	1.1
Student/Homemaker	39	3.3	4	0.8	43	2.5
Retired/Unable to Work	326	13.5	119	10.8	445	12.6
Total	434	5.2	155	3.8	589	4.6
¹ Unweighted						
² 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.

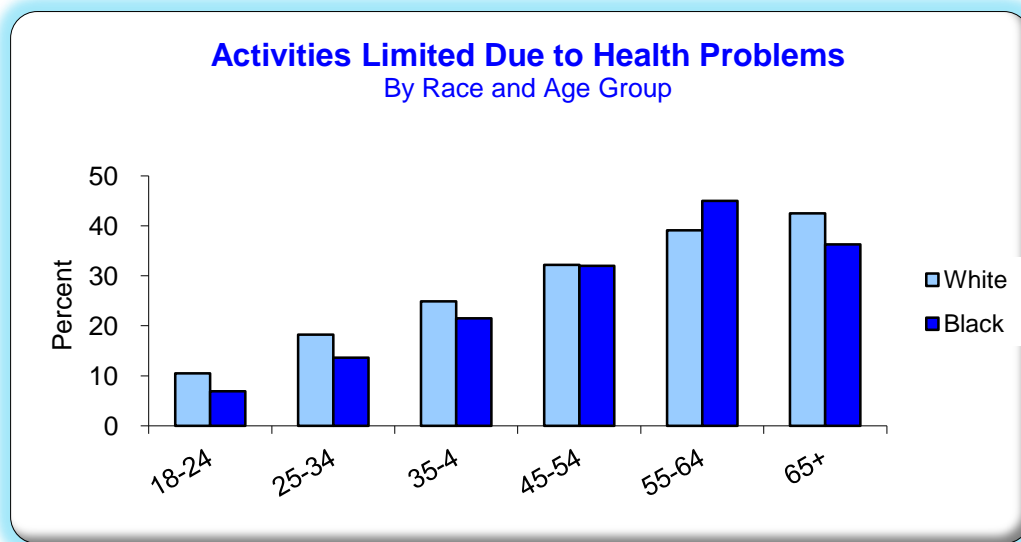


Figure 30

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

There are few data systems that identify those with disabilities as a sub-population. Despite the paucity of data, some disparities between people with and without disabilities have been

noted. These disparities include excess weight, reduced physical activity, increased stress, and less frequent mammograms for women over age 55 years with disabilities.

In the 2011 BRFSS survey, 27.5 percent of Mississippians reported that their activities were limited because of health. White respondents reported a rate of 29.6 percent while blacks reported a rate of 24.0 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 41.0 percent (42.5 for whites and 36.3 for blacks) but the 18-24 age group had a rate of only 8.8 percent (10.5 for whites and 6.9 for blacks).

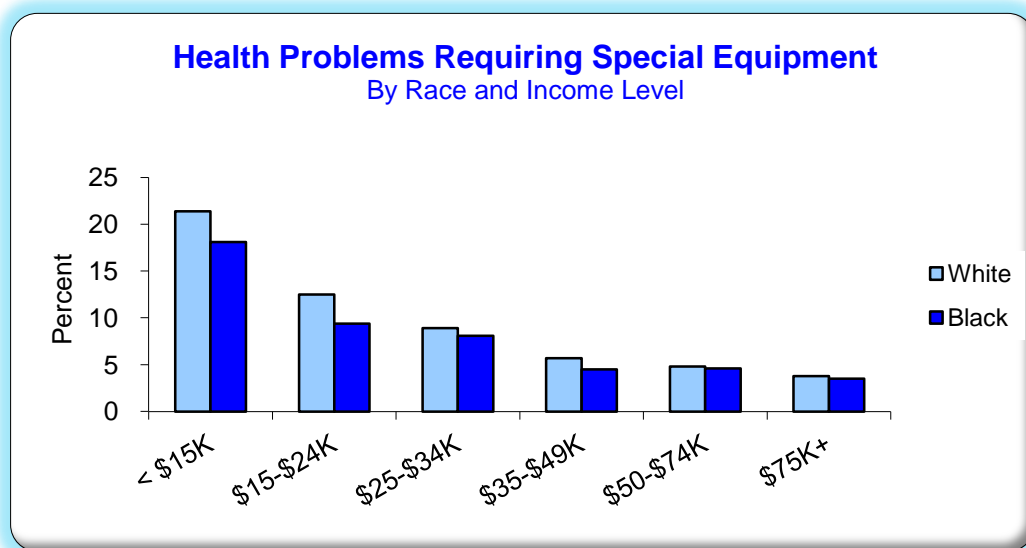


Figure 31

Only 9.8 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.

Table 31: Activities Limited Due to Health Problems

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	642	27.2	276	23.4	918	25.8
Female	1,296	31.9	607	24.5	1,903	29.1
Age Group						
18-24	24	10.5	14	6.9	38	8.8
25-34	64	18.2	48	13.6	112	16.2
35-44	135	24.9	104	21.5	239	23.5
45-54	288	32.2	196	32.0	484	32.1
55-64	488	39.1	267	45.0	755	41.1
65+	934	42.5	251	36.3	1,185	41.0
Education						
< High School Graduate	305	37.9	295	32.8	600	35.4
High School Graduate or GED	741	35.2	297	22.8	1,038	30.4
Some College or Technical School	504	26.9	182	20.4	686	24.8
College Graduate	386	19.7	107	15.7	493	18.7
Income						
< \$15,000	426	52.2	385	36.7	811	43.3
\$15-\$24,999	432	40.5	224	23.7	656	32.4
\$25-\$34,999	197	29.9	64	18.1	261	25.1
\$35-\$49,999	211	23.9	43	18.7	254	22.6
\$50-\$74,999	177	21.8	24	10.4	201	19.7
\$75,000+	188	17.2	20	11.3	208	16.3
Employment Status						
Employed	413	16.3	132	10.3	545	14.2
Not Employed	89	33.1	80	15.4	169	23.1
Student/Homemaker	179	23.5	36	11.8	215	19.7
Retired/Unable to Work	1,257	56.0	634	59.7	1,891	57.3
Total	1,938	29.6	883	24.0	2,821	27.5
¹ Unweighted						
² Weighted						

Table32: Health Problems Requiring Special Equipment

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	247	8.8	151	10.7	398	9.5
Female	480	9.3	328	11.6	808	10.2
Age Group						
18-24	.	.	3	1.9	3	0.9
25-34	10	1.9	4	0.9	14	1.5
35-44	27	4.5	30	5.6	57	5.0
45-54	83	9.3	91	15.3	174	11.4
55-64	143	12.0	141	23.6	284	15.9
65+	460	19.8	208	31.6	668	22.5
Education						
< High School Graduate	153	13.4	213	20.0	366	16.7
High School Graduate or GED	281	10.6	140	9.4	421	10.1
Some College or Technical School	183	8.4	82	7.4	265	8.1
College Graduate	109	4.8	44	5.2	153	4.9
Income						
< \$15,000	222	21.4	227	18.1	449	19.5
\$15-\$24,999	174	12.5	100	9.4	274	11.0
\$25-\$34,999	61	8.9	29	8.1	90	8.6
\$35-\$49,999	58	5.7	10	4.5	68	5.4
\$50-\$74,999	42	4.8	11	4.6	53	4.7
\$75,000+	40	3.8	9	3.5	49	3.7
Employment Status						
Employed	61	2.0	27	1.7	88	1.9
Not Employed	15	4.8	23	3.8	38	4.3
Student/Homemaker	62	5.7	19	5.9	81	5.8
Retired/Unable to Work	589	24.7	410	35.7	999	28.5
Total	727	9.1	479	11.2	1,206	9.8
¹ Unweighted						
² Weighted						

Alcohol Consumption

Survey Question:

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

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

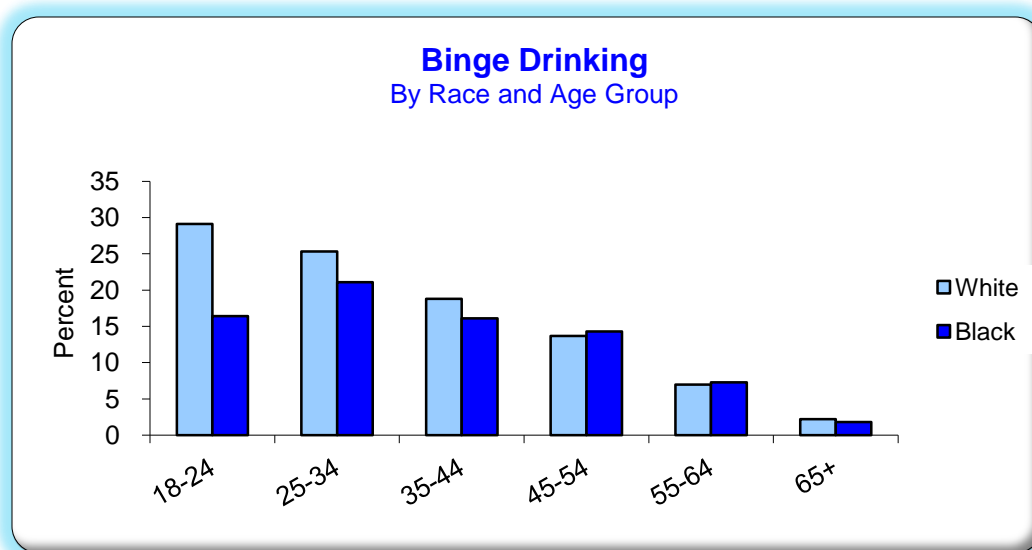


Figure 32

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 2008 alcohol use was associated with almost 38 percent of all motor vehicle crash fatalities, according to the Mississippi Office of Highway Safety.

Historically the BRFSS Survey has revealed that the group with the highest rate of binge drinking has been white males in the age category 18-24. In the 2011 survey the rate for this group was 23.3 percent (Figure 32). Males were almost three times as likely to indulge in binge drinking as females. Only 7.8 percent of female respondents said they had five or more drinks on one occasion during the last thirty days compared to 21.6 percent for males.

Table 33: At Risk From Binge Drinking

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	319	22.0	146	20.8	465	21.6
Female	148	7.5	98	8.2	246	7.8
Age Group						
18-24	56	29.1	28	16.4	84	23.3
25-34	91	25.3	53	21.1	144	23.5
35-44	86	18.8	53	16.1	139	17.7
45-54	118	13.7	61	14.3	179	13.9
55-64	75	7.0	36	7.3	111	7.1
65+	41	2.2	12	1.8	53	2.1
Education						
< High School Graduate	51	14.5	68	17.3	119	15.9
High School Graduate or GED	128	12.0	80	13.9	208	12.7
Some College or Technical School	142	16.6	60	12.2	202	15.2
College Graduate	146	14.6	36	10.9	182	13.7
Income						
< \$15,000	53	13.1	60	11.0	113	11.9
\$15-\$24,999	65	13.2	80	17.7	145	15.4
\$25-\$34,999	38	9.8	36	15.8	74	12.2
\$35-\$49,999	67	14.5	18	12.3	85	14.0
\$50-\$74,999	73	15.8	16	14.3	89	15.6
\$75,000+	117	18.2	8	13.1	125	17.4
Employment Status						
Employed	295	18.2	144	17.9	439	18.1
Not Employed	41	20.6	50	20.6	91	20.6
Student/Homemaker	49	18.3	12	9.7	61	15.5
Retired/Unable to Work	82	4.6	38	4.2	120	4.4
Total	467	14.4	244	13.9	711	14.3
¹ Unweighted						
² Weighted						

Table 34: At Risk From Chronic Drinking

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	119	6.7	51	7.1	170	6.9
Female	81	3.2	30	2.1	111	2.8
Age Group						
18-24	11	5.1	6	2.5	17	3.9
25-34	20	5.8	20	8.2	40	6.9
35-44	24	5.6	10	2.9	34	4.6
45-54	56	6.8	26	6.9	82	6.9
55-64	47	4.5	13	3.0	60	4.0
65+	42	2.2	6	1.0	48	1.9
Education						
< High School Graduate	24	7.0	25	6.0	49	6.5
High School Graduate or GED	51	3.7	32	4.4	83	4.0
Some College or Technical School	63	5.1	17	3.5	80	4.6
College Graduate	62	4.6	7	3.1	69	4.2
Income						
< \$15,000	27	6.0	24	4.3	51	5.1
\$15-\$24,999	34	6.0	28	5.4	62	5.7
\$25-\$34,999	19	3.6	11	5.0	30	4.2
\$35-\$49,999	27	4.3	5	4.5	32	4.4
\$50-\$74,999	26	4.2	6	5.2	32	4.4
\$75,000+	44	5.6	1	2.9	45	5.2
Employment Status						
Employed	111	5.7	54	6.6	165	6.0
Not Employed	15	5.6	11	4.3	26	4.9
Student/Homemaker	16	5.1	4	1.9	20	4.1
Retired/Unable to Work	58	3.1	12	1.4	70	2.5
Total	200	4.9	81	4.4	281	4.7
¹ Unweighted						
² Weighted						

HIV/AIDS

Survey Question:

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

CDC estimates that 1.2 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.

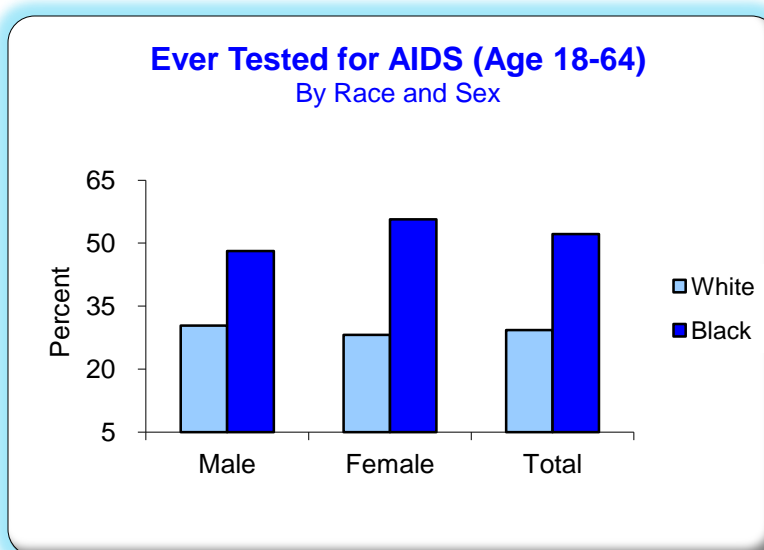
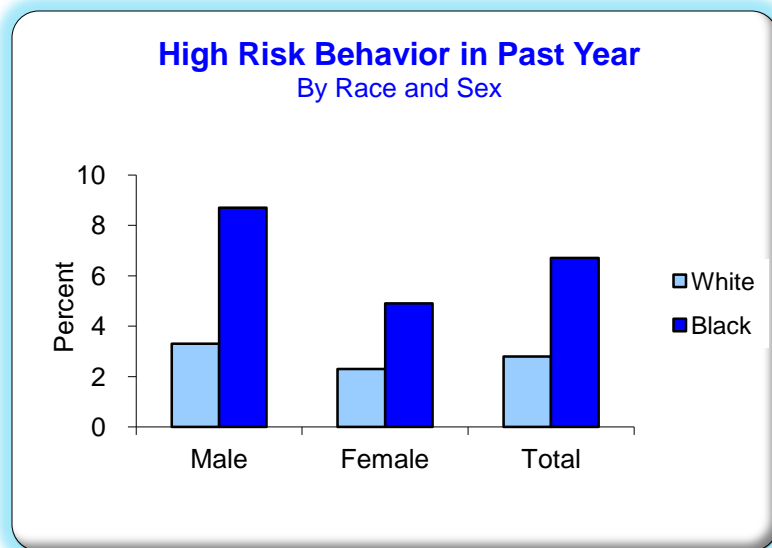


Figure 33

In 2010, an estimated 47,129 people were diagnosed with HIV infection in the 46 states with confidential name-based HIV infection reporting. In that same year, an estimated 33,015 people throughout the U.S. were diagnosed with AIDS. Since the epidemic began, an estimated 1,129,127 people in the U.S. have been diagnosed with AIDS. An estimated 17,774 people with AIDS died in 2009, and nearly 619,400 people with AIDS in the U.S. have died since the epidemic began.

In 2011, Mississippi reported 573 new cases of HIV Disease (includes AIDS) and there were 9,907 people with HIV Disease living in the state. In 2010, 550 new cases were diagnosed and making a total of 9,546 people with the disease living in Mississippi as of December 31, 2010.

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 2011, 37.8 percent of the respondents reported that they had ever been tested. Black respondents were more likely to have ever been tested than whites: 52.2 percent to 29.3 percent. The rate for white respondents who have ever been tested was 30.4 percent for males and 28.2 percent for females. For blacks, the rates were 48.1 percent for males and 55.7 for females. (Figure 33 and Table 35).

Figure 34

On the question of whether the respondents had participated in high risk behavior, blacks with a rate of 6.7 percent were almost two and a half times as likely to have participated as whites who had a rate of 2.8 percent. Blacks in the 18-24 age category had, by a wide margin, the highest rate of risky behavior at 14.0 percent which more than three times the rate for the state at large (4.2 percent).

There was little difference by gender for white respondents: males reported a rate of 3.3 percent; females a rate of 2.3 percent. For blacks, the male rate was nearly 44 percent higher than the rate for females—8.7 percent to 4.9 percent.

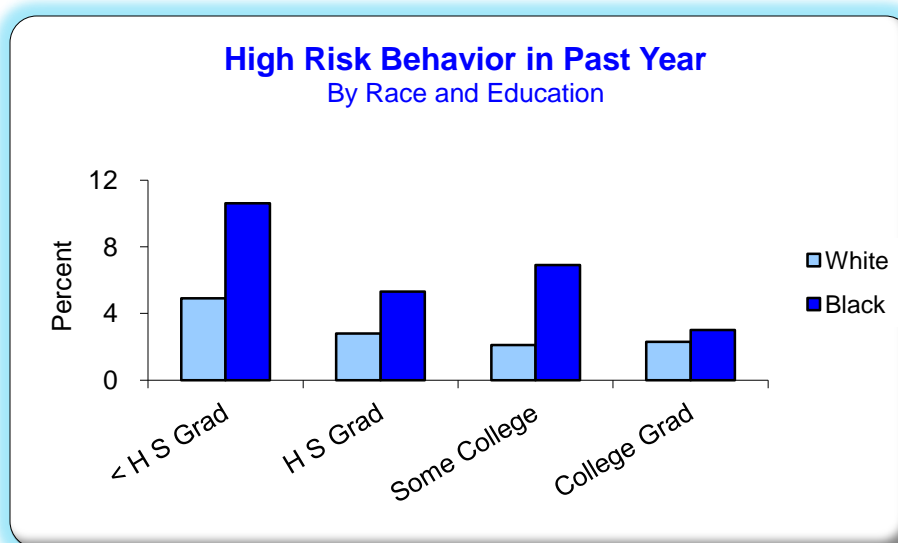


Figure 35

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

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	485	30.4	406	48.1	891	36.9
Female	672	28.2	836	55.7	1,508	38.7
Age Group						
18-24	61	27.6	117	53.1	178	39.6
25-34	180	45.4	257	75.2	437	58.9
35-44	255	47.7	274	60.4	529	53.0
45-54	269	32.8	279	52.9	548	39.7
55-64	232	21.1	194	31.4	426	24.6
Education						
< High School Graduate	136	34.4	236	43.3	372	38.9
High School Graduate or GED	287	23.3	389	47.0	676	32.7
Some College or Technical School	365	32.2	357	62.3	722	42.3
College Graduate	367	29.0	260	62.7	627	37.8
Income						
< \$15,000	184	35.9	376	51.9	560	45.3
\$15-\$24,999	189	32.2	344	56.6	533	44.2
\$25-\$34,999	106	29.2	147	52.3	253	38.8
\$35-\$49,999	143	26.1	97	49.6	240	32.0
\$50-\$74,999	172	28.8	74	59.8	246	34.9
\$75,000+	249	32.3	76	58.3	325	36.6
Employment Status						
Employed	605	32.0	606	58.2	1,211	41.3
Not Employed	100	48.7	197	62.8	297	56.9
Student/Homemaker	112	27.4	94	45.1	206	33.1
Retired/Unable to Work	339	20.1	344	36.7	683	25.9
Total	1,157	29.3	1,242	52.2	2,399	37.8
¹ Unweighted						
² Weighted						

Table 36: High Risk Behavior in Past Year (Age 18-64)

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	42	3.3	54	8.7	96	5.3
Female	44	2.3	55	4.9	99	3.2
Age Group						
18-24	17	6.4	30	14.0	47	9.9
25-34	31	7.8	23	8.5	54	8.1
35-44	8	1.8	17	5.0	25	3.1
45-54	9	0.8	17	5.2	26	2.3
55-64	13	1.4	11	2.4	24	1.8
Education						
< High School Graduate	17	5.4	41	10.4	58	7.9
High School Graduate or GED	23	2.6	32	4.7	55	3.4
Some College or Technical School	25	2.1	27	6.9	52	3.7
College Graduate	21	2.2	8	3.0	29	2.4
Income						
< \$15,000	18	3.9	36	8.0	54	6.3
\$15-\$24,999	15	3.6	34	7.5	49	5.5
\$25-\$34,999	8	2.9	7	3.6	15	3.2
\$35-\$49,999	12	2.6	6	3.7	18	2.9
\$50-\$74,999	15	2.9	3	4.7	18	3.3
\$75,000+	6	0.8	4	2.7	10	1.1
Employment Status						
Employed	44	3.0	46	6.6	90	4.3
Not Employed	12	7.4	25	9.7	37	8.7
Student/Homemaker	12	2.7	8	6.4	20	3.9
Retired/Unable to Work	18	1.2	30	4.9	48	2.5
Total	86	2.8	109	6.7	195	4.2
¹ Unweighted						
² 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 injury is the cause of more children and young adults fatalities than any other single cause in the United States. According to the National Highway Traffic Safety Administration (NHTSA) in the United States during 2009, safety belts saved the lives of an estimated 12,713 people over five years of age. If all passenger vehicle occupants over age 4 had worn seat belts, an additional 3,688 lives could have been saved.

The NHTSA further reports that seat belts reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light-truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent. Ejection from the vehicle is one of the most injurious events that can happen to a person in a crash. In fatal crashes in 2009, 77 percent of passenger vehicle occupants who were totally ejected from the vehicle were killed. Seat belts are effective in preventing total ejections: only one percent of the occupants reported to have been using restraints were totally ejected, compared with 31 percent of the unrestrained occupants.

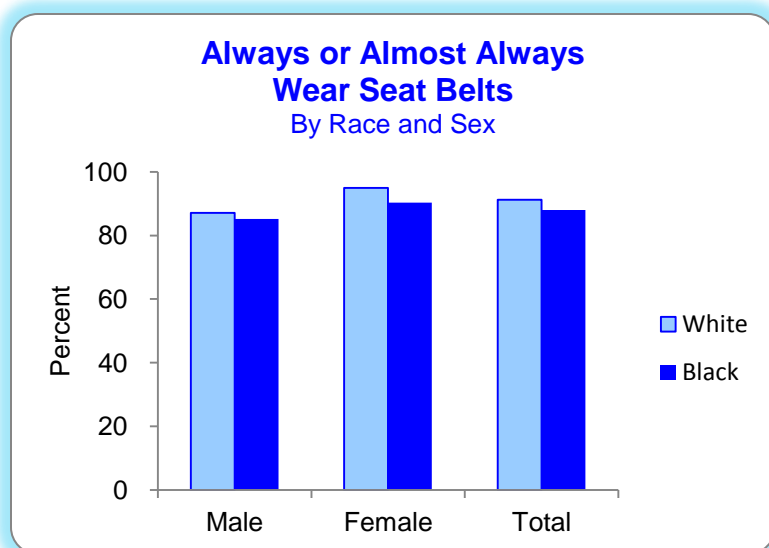


Figure 36

Among children under age five, an estimated 309 lives were saved in 2009 by child restraint use. Of these, 284 were associated with the use of child safety seats and 26 with the use of adult seat belts. Had child safety seat use been used for all children under age five, an estimated 63 more lives could have been saved.

The Agency also reports that 23,382 occupants of passenger cars and light trucks died in motor vehicle crashes during 2009. Among these victims were 1,051 children age 15 years and under plus 3,349 people ages 16 to 20 years. Approximately half the people killed in motor

vehicle crashes in 2009 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.

During 2010 there were 7,092 serious traffic injuries in Mississippi and less than one out of every four, were not using safety belts. Fatalities among passengers ages 16 to 20 were unbelted at an alarming rate of 81.3 percent. There were 440 drivers who sustained life-threatening injuries. Also, there were 4,395 drivers with moderate injuries and almost 20 percent percent of those were unbelted. Moreover, 13,349 drivers (92.9 percent) sustained minor injuries. The Mississippi Department of Highway Safety concludes that seat belts save lives and reduce injury.

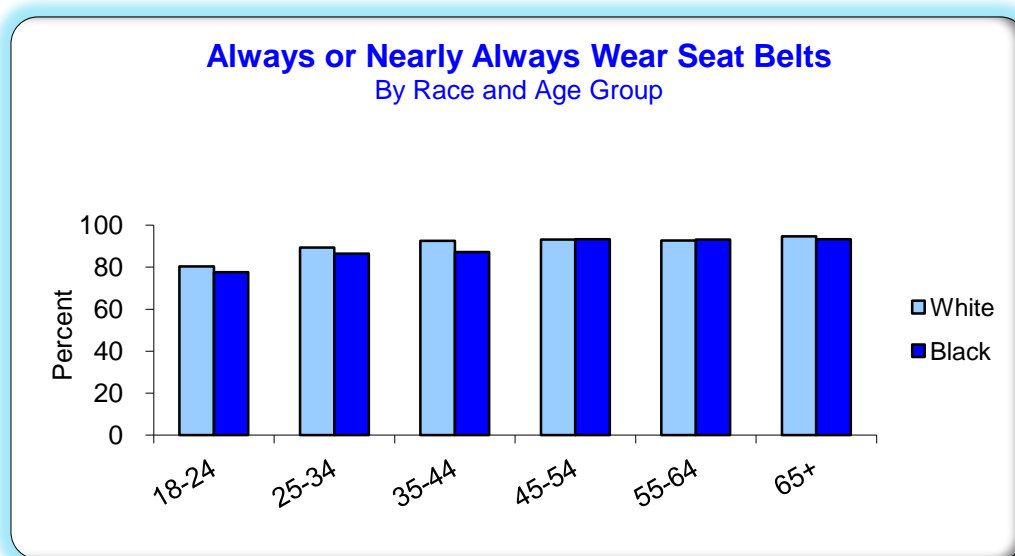


Figure 37

The 2011 BRFSS survey in Mississippi revealed that 90.0 of the respondents say that they always or nearly always wear a seat belt when they either drive or ride in a car. Females report that they use seat belts more often than men. Women had a usage rate of 93.3 percent compared to 86.4 percent for men (Figure 36). Younger respondents reported a higher rate of non-usage than older respondents. In the 18 to 24 age group, 79.1 percent said that they always or nearly always use seat belts while those age 65 and older reported a rate of 94.3 percent (Figure 37).

Table 37: Always or Nearly Always Wear Seat Belts

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	1,819	87.0	821	85.2	2,640	86.4
Female	3,394	95.0	1,809	90.3	5,203	93.3
Age Group						
18-24	178	80.4	170	77.6	348	79.1
25-34	381	89.3	300	86.4	681	88.0
35-44	534	92.5	374	87.2	908	90.3
45-54	847	93.2	535	93.3	1,382	93.2
55-64	1,180	92.7	590	93.1	1,770	92.8
65+	2,072	94.6	643	93.3	2,715	94.3
Education						
< High School Graduate	21	100.0	18	100.0	39	100.0
High School Graduate or GED	592	88.0	646	85.9	1,238	86.9
Some College or Technical School	1,674	89.9	867	85.9	2,541	88.3
College Graduate	1,434	91.1	636	90.3	2,070	90.8
	1,504	95.8	478	92.6	1,982	95.0
Income						
< \$15,000	708	92.2	828	87.2	1,536	89.3
\$15-\$24,999	872	89.0	668	87.8	1,540	88.4
\$25-\$34,999	547	92.3	285	86.5	832	89.9
\$35-\$49,999	694	89.0	212	94.0	906	90.2
\$50-\$74,999	690	92.4	145	89.6	835	91.9
\$75,000+	921	92.7	136	93.6	1,057	92.8
Employment Status						
Employed	2,159	91.1	1,056	86.9	3,215	89.6
Not Employed	236	85.9	302	84.2	538	84.9
Student/Homemaker	532	89.9	178	84.9	710	88.3
Retired/Unable to Work	2,283	93.4	1,092	93.5	3,375	93.5
Total	5,213	91.2	2,630	87.9	7,843	90.0
¹ Unweighted						
² Weighted						

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.

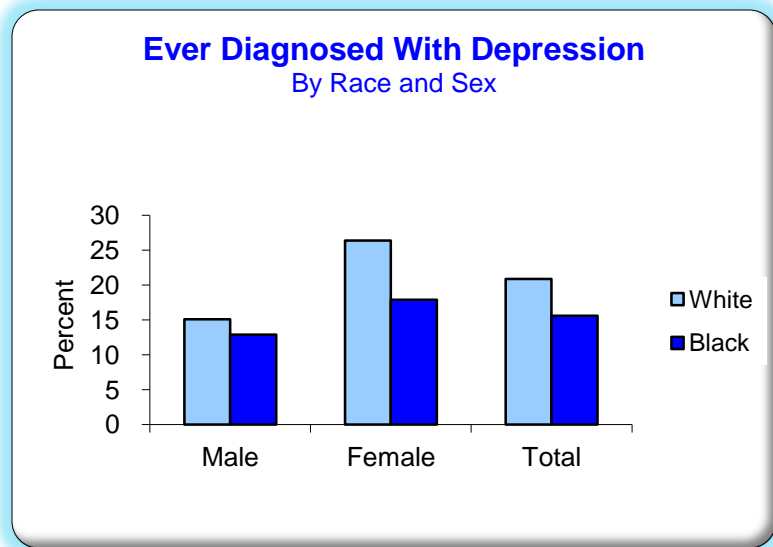


Figure 38

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, 18.9 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 23.2 percent compared to only 14.3 percent for males (Figure 38). Similarly, the respondents in lower income category 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 39.9 percent (Figure 39 and Table 38).

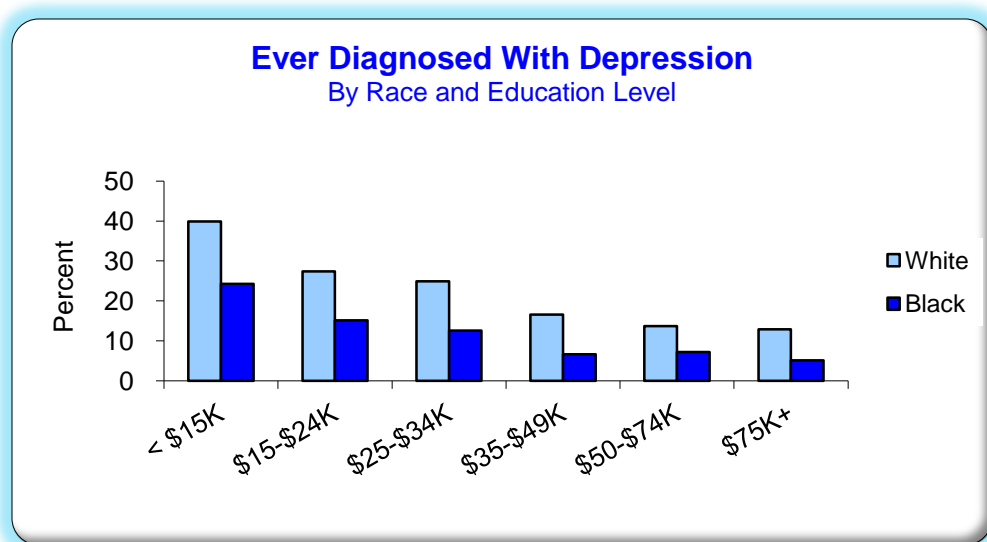


Figure 39

Table 38: Ever Diagnosed With Depression

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	317	15.1	143	12.9	460	14.3
Female	906	26.4	384	17.9	1,290	23.2
Age Group						
18-24	38	16.4	22	10.7	60	13.7
25-34	89	19.8	47	12.3	136	16.4
35-44	142	24.9	84	14.7	226	20.7
45-54	247	24.7	135	20.5	382	23.3
55-64	363	26.4	147	23.0	510	25.3
65+	339	14.1	91	15.5	430	14.4
Education						
< High School Graduate	163	26.2	161	19.3	324	22.7
High School Graduate or GED	450	23.5	185	15.7	635	20.5
Some College or Technical School	331	19.3	119	13.0	450	17.1
College Graduate	277	16.0	61	12.6	338	15.1
Income						
< \$15,000	285	39.9	249	24.3	534	30.7
\$15-\$24,999	267	27.4	127	15.1	394	21.3
\$25-\$34,999	144	24.9	47	12.6	191	20.0
\$35-\$49,999	135	16.6	15	6.6	150	14.0
\$50-\$74,999	113	13.7	12	7.2	125	12.5
\$75,000+	130	12.9	7	5.1	137	11.7
Employment Status						
Employed	377	15.1	98	7.1	475	12.3
Not Employed	102	33.0	61	15.8	163	23.1
Student/Homemaker	126	21.6	35	15.9	161	19.7
Retired/Unable to Work	618	28.4	331	31.7	949	29.6
Total	1,223	20.9	527	15.6	1,750	18.9
¹ Unweighted						
² 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.

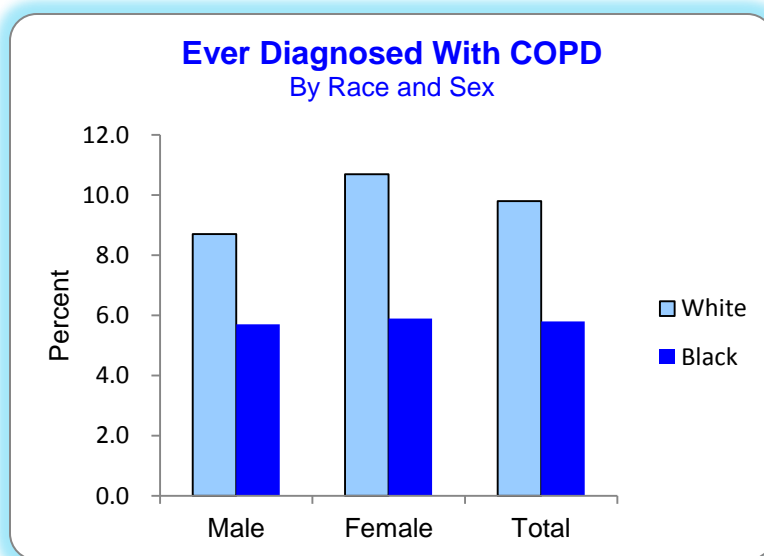


Figure 40

In the 2011 BRFSS survey, Mississippi reported a rate of diagnosed COPD at 8.3 percent which translates into more than 184,000 Mississippians with the disease. For whites the rate was 9.8 percent while blacks reported a rate of 5.8 percent. In the race by gender category, white females reported the highest rate of COPD with a rate of 10.7 percent; next were white males with a rate of 8.7 percent followed by black females at 5.9 percent. Black males were the lowest with a rate of 5.7 percent (Figure 40).

The survey revealed that the rate of COPD increased as annual income levels decreased. The category producing the highest rate of COPD was white respondents who have less than \$15,000 in annual income with a rate 18.8 percent followed by whites who earn between \$15,000 and \$25,000 annually with a rate of 15.5 percent. Additional details can be found in Table 39 and Figure 41.

As can also be seen from Table 39, trends are evident with respect to age groups. COPD rates are low in the younger respondents and higher in the older. The same is true for levels of

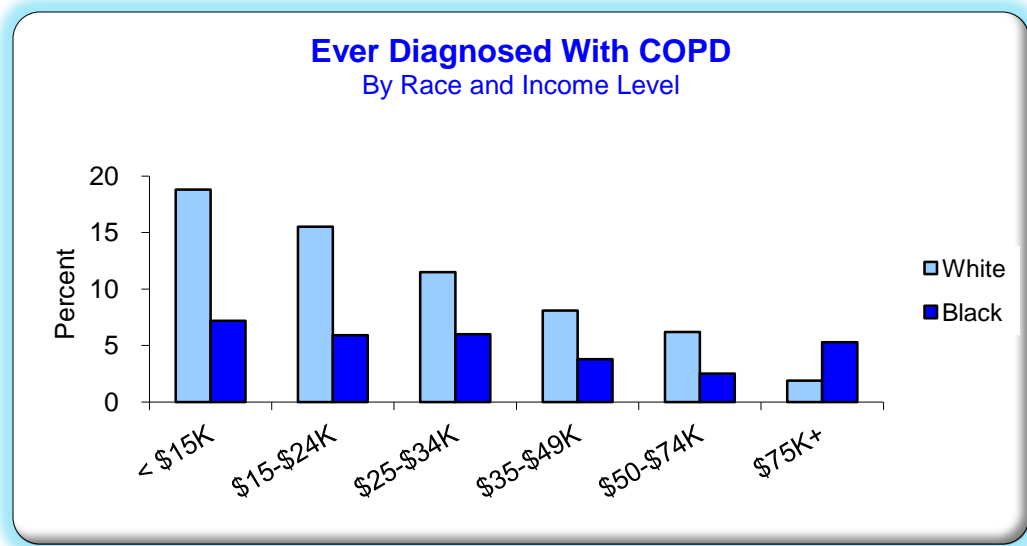


Figure 41

education. Those who have completed more years of education report lower rates of COPD than those with lower years of education.

Table 39: Ever Diagnosed With COPD

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	196	8.7	66	5.7	262	7.6
Female	448	10.7	149	5.9	597	8.9
Age Group						
18-24	8	4.1	6	2.8	14	3.5
25-34	19	4.0	9	2.3	28	3.2
35-44	37	8.2	17	3.8	54	6.4
45-54	104	11.1	50	7.4	154	9.8
55-64	161	12.4	65	11.3	226	12.0
65+	310	15.0	66	12.1	376	14.3
Education						
< High School Graduate	134	15.7	77	8.0	211	11.8
High School Graduate or GED	258	11.8	68	4.6	326	9.0
Some College or Technical School	171	8.8	47	5.5	218	7.7
College Graduate	80	3.7	23	5.0	103	4.0
Income						
< \$15,000	179	18.8	93	7.2	272	11.9
\$15-\$24,999	168	15.5	55	5.9	223	10.8
\$25-\$34,999	73	11.5	16	6.0	89	9.3
\$35-\$49,999	59	8.1	6	3.8	65	7.0
\$50-\$74,999	44	6.2	4	2.5	48	5.5
\$75,000+	27	1.9	7	5.3	34	2.4
Employment Status						
Employed	120	5.2	37	3.2	157	4.5
Not Employed	38	9.7	17	4.0	55	6.4
Student/Homemaker	55	8.1	7	1.6	62	5.9
Retired/Unable to Work	431	19.1	154	13.9	585	17.2
Total	644	9.8	215	5.8	859	8.3
¹ Unweighted						
² Weighted						

Vision Impairment

Survey Question:

Has a doctor, nurse, or other health professional ever told you that you have vision impairment in one or both eyes, even when wearing glasses?

According to the Centers for Disease Control and Prevention (CDC) refractive errors are the most frequent eye problems in the United States. Refractive errors include myopia (near-sightedness), hyperopia (farsightedness), astigmatism (distorted vision at all distances), and presbyopia that occurs between age 40-50 years which is characterized by the loss of the ability to focus up close, the inability to read letters of the phone book, and the need to hold newspapers

farther away to see clearly. All of these symptoms can be corrected by eyeglasses, contact lenses, or in some cases surgery. Recent studies conducted by the National Eye Institute showed that proper refractive correction could improve vision among 11 million Americans 12 years of age and older.

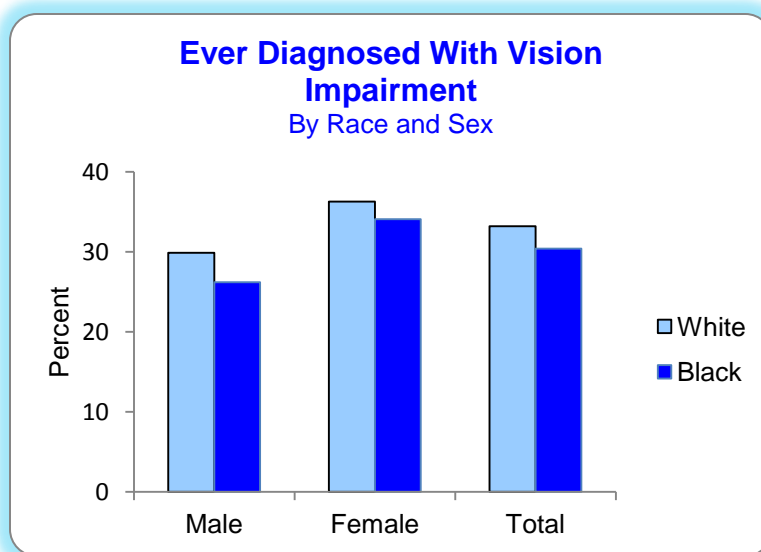


Figure 42

The CDC reports the following with regard to vision impairment.

- Approximately 14 million individuals aged twelve years and older have visual impairment, among which more than 80 percent could be corrected to good vision with refractive correction.
- As of 2004, blindness or low vision affects more than 3.3 million Americans aged 40 years and older; this number is predicted to double by 2030 due to the increasing epidemics of diabetes and other chronic diseases and the rapidly aging U.S. population.
- Approximately 6.8 percent of children younger than 18 years in the United States have a diagnosed eye and vision condition.

- In 2001, about 2 million Americans sustained eye injuries that required medical attention.
- An estimated 61 million adults in the United States are at high risk for serious vision loss, but only half visited an eye doctor in the past 12 months.
- The annual economic impact of major vision problems among the adult population 40 years and older is more than \$51 billion.
- Vision disability is one of the top 10 disabilities among adults 18 years and older and one of the most prevalent disabling conditions among children.
- Early detection and timely treatment of eye conditions such as diabetic retinopathy has been found to be efficacious and cost effective.
- The National Commission on Prevention Priorities has identified vision screening among adults aged 65 years and older as one of the top ten priorities among effective clinical preventive services.
- Vision loss causes a substantial social and economic toll for millions of people including significant suffering, disability, loss of productivity, and diminished quality of life.
- National and state data show that more than half of adult Americans did not seek eye care due to lack of awareness or costs; which is often exacerbated by lack of adequate health insurance.
- In 2005, more than 70 percent of survey respondents from National Eye Health Education Program survey. consider that the loss of their eyesight would have the greatest impact on their day-to-day life; however, less than eleven percent knew that there are no early warning signs of glaucoma and diabetic retinopathy.

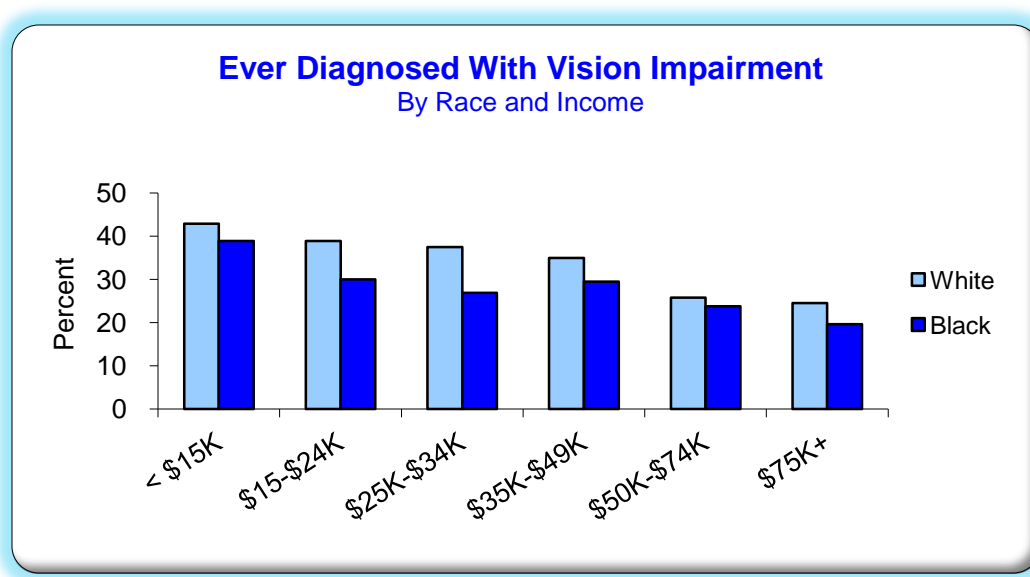


Figure 43

The 2011 BRFSS survey showed that 32.2 percent of Mississippians have been diagnosed with some type of vision impairment. The rate for white respondents was 33.2 percent while blacks reported a rate of 30.4 percent. People at lower income levels reported a much higher rate of vision impairment than those with higher levels. Those with an annual income less than \$15,000 showed a rate of 40.6 percent compared to a rate of 23.7 percent for those whose income is \$75,000 per year or greater (Figure 43).

Table 40: Ever Diagnosed With Impaired Vision

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	679	29.9	303	26.2	982	28.5
Female	1,343	36.3	722	34.1	2,065	35.5
Age Group						
18-24	62	25.4	57	22.1	119	23.8
25-34	115	26.9	86	23.1	201	25.2
35-44	154	27.2	100	24.2	254	26.0
45-54	311	34.4	191	34.0	502	34.2
55-64	432	35.9	256	43.8	688	38.6
65+	938	43.5	327	46.4	1,265	44.2
Education						
< High School Graduate	264	38.4	311	35.7	575	37.1
High School Graduate or GED	716	34.7	327	26.2	1,043	31.4
Some College or Technical School	551	32.8	231	30.5	782	32.0
College Graduate	487	28.1	153	28.8	640	28.2
Income						
< \$15,000	352	42.9	401	38.9	753	40.6
\$15-\$24,999	394	38.9	256	30.0	650	34.5
\$25-\$34,999	237	37.5	88	26.9	325	33.3
\$35-\$49,999	273	35.0	59	29.5	332	33.5
\$50-\$74,999	211	25.8	42	23.8	253	25.4
\$75,000+	244	24.5	33	19.6	277	23.7
Employment Status						
Employed	688	27.7	281	23.0	969	26.0
Not Employed	98	35.4	104	24.7	202	29.3
Student/Homemaker	189	31.4	74	28.1	263	30.3
Retired/Unable to Work	1,046	44.0	564	49.3	1,610	45.8
Total	2,022	33.2	1,025	30.4	3,047	32.2
¹ Unweighted						
² Weighted						

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 as well as possible. 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 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.

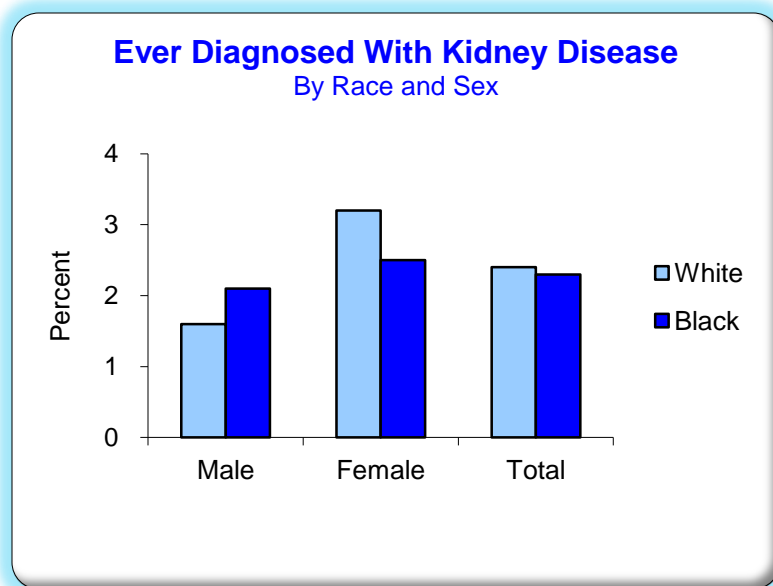


Figure 44

In Mississippi the 2011 BRFSS survey revealed that 2.4 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 2.4 percent while blacks had a rate of 2.3 percent.

As is true on the national level, the rate for Mississippi females showed a pronounced difference from males. White females reported a rate twice as high as males: 3.2 percent to 1.6 percent. For blacks, females were 16 percent higher than males: 2.5 percent to 2.1 percent.

Table 41: Ever Diagnosed With Kidney Disease

Groups	White		Black		Total	
	Number ¹	Percent ²	Number ¹	Percent ²	Number ¹	Percent ²
Sex						
Male	56	1.6	26	2.1	82	1.8
Female	135	3.2	61	2.5	196	2.9
Age Group						
18-24	1	0.4	1	0.5	2	0.5
25-34	8	1.7	0	0.0	8	1.0
35-44	6	0.9	7	2.0	13	1.3
45-54	18	2.0	12	1.9	30	2.0
55-64	37	3.0	36	6.5	73	4.2
65+	120	5.2	30	5.5	150	5.3
Education						
< High School Graduate	36	3.6	32	3.4	68	3.5
High School Graduate or GED	66	2.4	24	1.6	90	2.1
Some College or Technical School	52	2.4	22	2.3	74	2.4
College Graduate	37	1.6	9	1.7	46	1.6
Income						
< \$15,000	43	3.8	33	3.5	76	3.6
\$15-\$24,999	47	3.5	19	1.8	66	2.6
\$25-\$34,999	21	2.4	12	2.4	33	2.4
\$35-\$49,999	22	2.3	2	0.9	24	1.9
\$50-\$74,999	20	2.6	4	1.6	24	2.4
\$75,000+	17	1.3	4	2.8	21	1.5
Employment Status						
Employed	33	1.2	10	0.7	43	1.0
Not Employed	8	2.3	6	0.7	14	1.4
Student/Homemaker	12	1.2	1	0.5	13	1.0
Retired/Unable to Work	138	5.4	70	7.0	208	6.0
Total	191	2.4	87	2.3	278	2.4
¹ Unweighted						
² Weighted						