

MISSISSIPPI

BEHAVIORAL RISK FACTORS SURVEY



1999

ANNUAL REPORT

MISSISSIPPI STATE DEPARTMENT OF HEALTH

**1999**  
**Behavioral Risk Factor Surveillance System Report**  
**(BRFSS)**

**Mississippi State Department of Health**  
**570 East Woodrow Wilson Drive**  
**P. O. Box 1700**  
**Jackson, MS 39215-1700**

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## **Introduction**

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

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

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

## **Methodology**

### **A. SAMPLING DESIGN**

The Mississippi BRFSS is a random sample telephone survey. Utilizing the disproportionate stratified sample (DSS) design with random digit dialing and the Computer Assisted Telephone Interviewing (CATI) system, the survey has the potential to represent 93% of all households in Mississippi that have telephones according to BellSouth data. A sample size of 2,180 interviews over a 12-month period was selected to obtain a 95% confidence interval of  $\pm 3\%$  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.

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

### **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.

### **C. DATA ANALYSIS**

The data collected by the MSDH Office of Public Health Statistics was compiled and weighted by the CDC. Weighted counts were based on the 1999 Mississippi population to accurately reflect the population demographics. The weighting factor considered the number of adults and telephone lines in the household, and age/race/sex distribution of the general population. Therefore, the estimated prevalence of any risk factor from the survey represents the total population of Mississippi residents very well.

This report presents the percentage of high-risk behavior within each demographic group for each of the thirteen risk factors plus one chronic disease (diabetes). The demographic information for persons reporting a high-risk behavior or chronic disease are also presented. The demographic information collected and presented in this survey covers sex, age, race, education, and household income.

### **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 make his or her own evaluation of the data.

## **E. Sample Size**

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

## Definition of Terms and Risk Factors

### Mammography and Clinical Breast Exam (CBE)

**Mammogram and CBE** - Female respondents, age 40 and older, who report that they have ever had a mammogram and a CBE.

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

### Cervical Cancer

**Pap Smear** - Female respondents, age 18 and older, who report that they have ever had a pap smear.

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

### Diabetes

**Diabetes Awareness** - Respondents, age 18 and older, who report they were told by a doctor that they have diabetes.

### Health Insurance

**Health Insurance** - Respondents age 18 and older who report they have no health care plan.

### Health Status

**Self-Reported Health Status** - Respondents who report having a general health status of fair or poor.

### Overweight

**Overweight: Based on Body Mass Index** - Females with body mass index (BMI)  $\geq 27.3$  and males with BMI  $\geq 27.8$ . BMI is defined as weight in kilograms divided by height in meters squared ( $w/h^2$ ). This measures Healthy People 2000 Objective 2.3 - Target #20%. This should be used with caution. Since people tend to under-report their weight, BRFSS may underestimate the prevalence of overweight.

### Immunization

**Flu Shots** - Respondents who report that they have taken a flu shot within the last twelve months.

## **Smoking Status**

**Cigarette Smoker** - Respondents, age 18 and older, who have ever smoked 100 cigarettes in their lifetime and report smoking every day or some days. This relates to Healthy People 2000 Objective 3.4 - Target #15%.

## **Oral Health**

**Last dental visit** - Respondents who report that they have visited a dentist or a dental clinic within the past twelve months.

## **Skin Cancer**

**Sunburn** - Respondents who report that they experienced sunburns in the prior twelve months, including any time that even a small part the skin was red for more than twelve hours.

## **Alcohol Consumption**

**Drinking and driving** - Respondents who report having driven a vehicle during the past month after having had too much to drink.

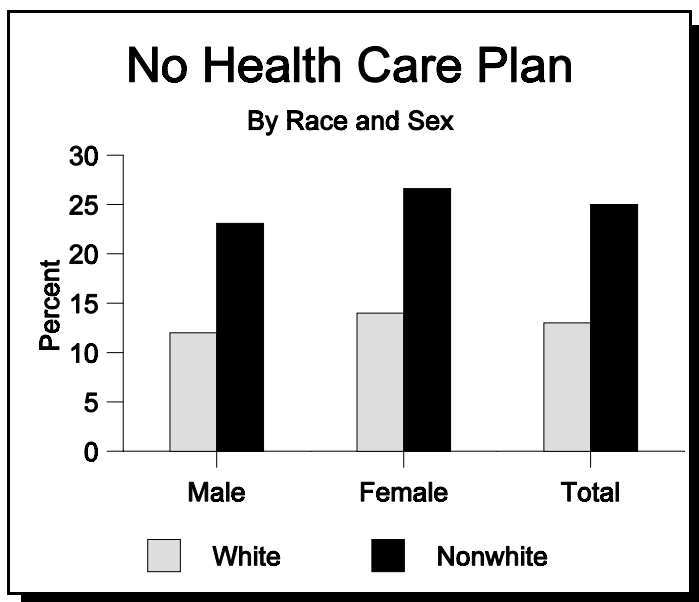
**Chronic drinking** - Respondents who report having consumed sixty or more alcoholic drinks in a month.

**Acute (binge) drinking** - Respondents who report having consumed five or more drinks per occasion, one or more times during the past month.



# **Survey Results**

## Health Care Coverage

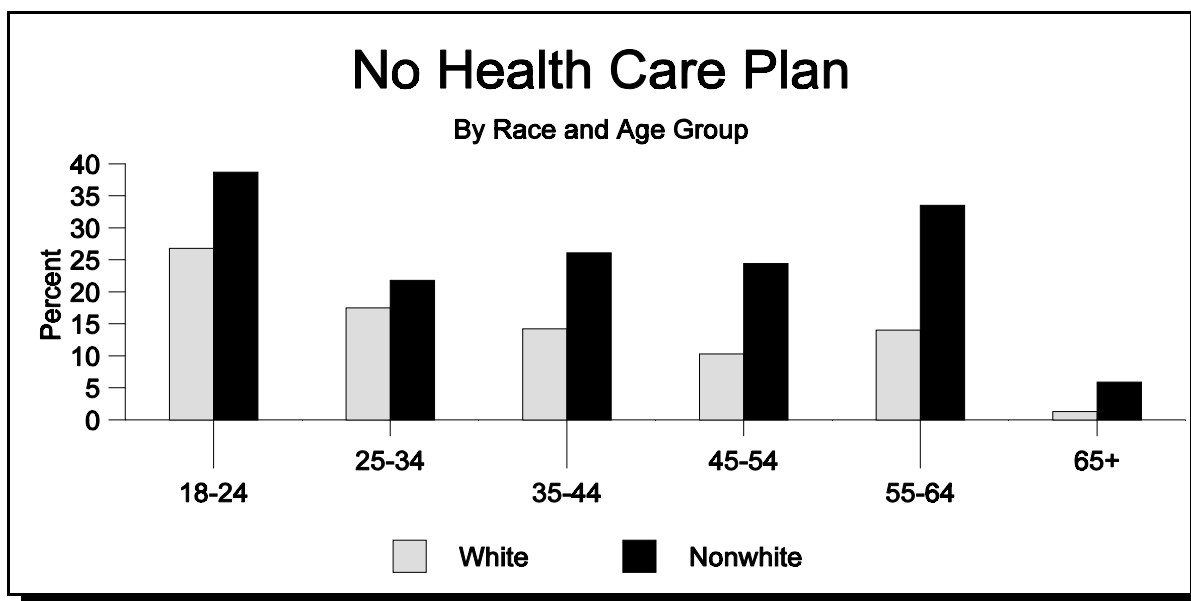


**Figure 1**

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 cannot afford to pay for insurance coverage. People at risk are those who have no health insurance, prepaid plans, Medicare, or other government assisted programs such as the military, the VA or Medicaid.

In 1999, 17.0% of the respondents indicated they had no health care plan compared to 18.6 in 1998. According to the survey, nonwhite females have the highest rate of non-coverage at a rate of 26.6%; nonwhite males were next at 23.1% (Figure 1).

Nonwhites from the age of eighteen to twenty-four reported the highest prevalence of no health care coverage at 38.7% (Figure 2).



**Figure 2**

## Persons Who Have No Kind of Health Care Plan

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	76	12.0	46	23.1	122	15.4
Female	112	14.0	131	26.6	244	18.4
<b>Age Group</b>						
18-24	41	26.8	35	38.7	76	31.8
25-34	39	17.5	37	21.8	77	19.4
35-44	43	14.2	46	26.1	89	18.1
45-54	32	10.3	28	24.4	60	14.4
55-64	30	14.0	25	33.5	55	18.8
65+	3	1.3	6	5.9	9	2.5
<b>Education</b>						
< High School Graduate	45	19.1	48	24.8	93	21.7
High School Graduate or GED	72	16.4	67	30.3	140	21.0
Some College or Technical School	54	13.9	51	27.6	105	18.5
College Graduate	17	3.8	10	8.1	27	4.7
<b>Income</b>						
< \$15,000	38	21.4	68	39.7	106	29.7
\$15 - \$24,999	49	23.7	53	29.7	103	26.8
\$25 - \$34,999	38	18.1	17	16.7	55	17.6
\$35 - \$49,999	26	9.7	6	11.9	32	10.0
\$50 - \$74,999	7	3.8	3*	11.6	10	5.2
\$75,000+	2	1.8	1*	7.2	3	2.4
<b>Employment Status</b>						
Employed	109	12.0	105	24.1	214	16.0
Not Employed	14*	39.7	24*	50.9	39	46.3
Student/Homemaker	42	27.0	22*	43.5	64	31.1
Retired/Unable to Work	23	5.6	25	13.2	48	7.9
<b>Total</b>	188	13.0	177	25.0	366	17.0

\* Sample size less than 50

## Health Status

Questions related to health status attempt 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 in that they can indicate dysfunction and disability not measured in standard morbidity and mortality data.

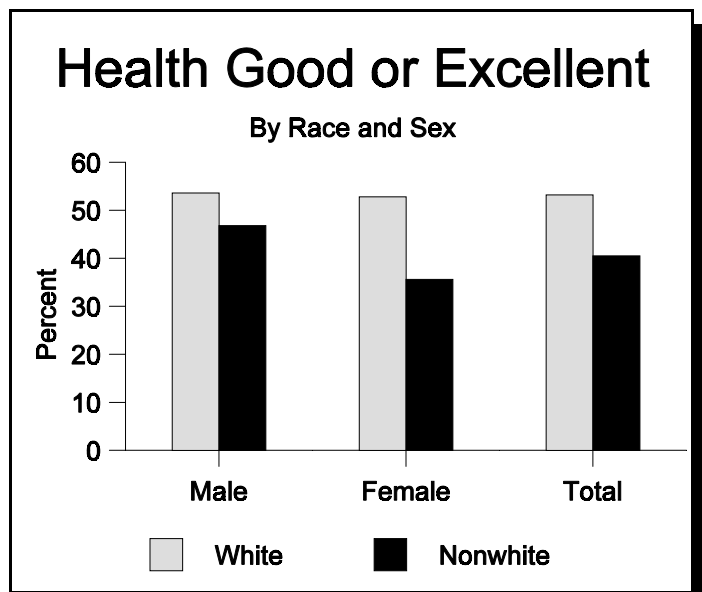


Figure 3

Males reported their health as being better than females (Figure 3). White respondents also report better health than nonwhites. Not surprisingly, persons with higher incomes report their health as being better.

The 1999 BRFSS Report indicated that a person who has less than a high school education (21.9%) is least likely to report his health as being very good or excellent and for people older than 65, only 29.9% said their health was very good or excellent (Figure 4).

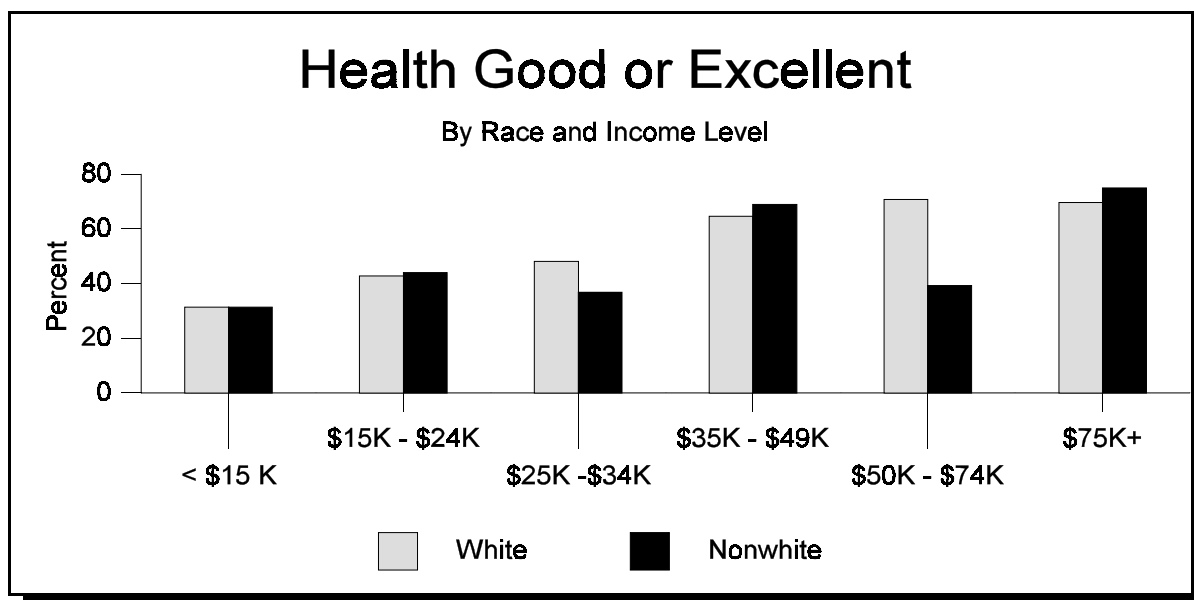


Figure 4

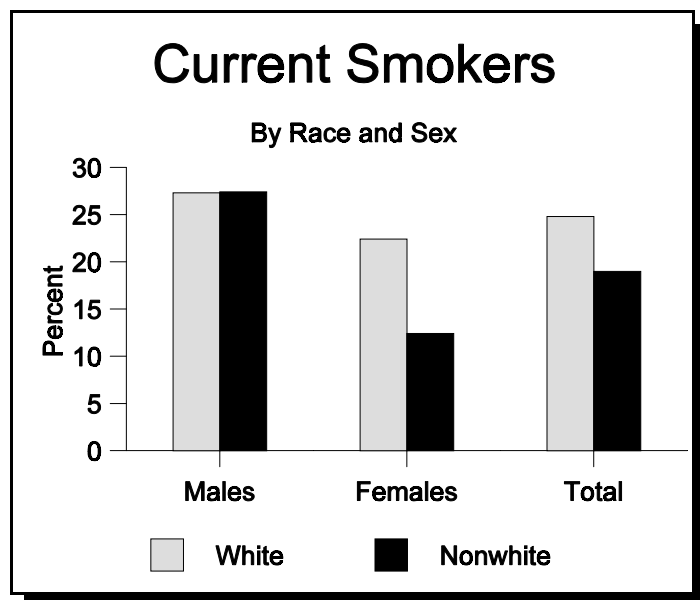
## Person Who Report Their Health as Being Very Good or Excellent

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	348	53.6	93	46.8	442	51.6
Female	432	52.8	174	35.6	607	46.8
<b>Age Group</b>						
18-24	85	59.9	47	57.0	132	58.7
25-34	165	72.3	77	49.0	243	62.8
35-44	192	62.6	77	50.6	270	58.7
45-54	166	57.8	28	19.7	194	46.5
55-64	76	33.8	16	23.7	92	31.3
65+	95	32.6	21	21.8	116	29.9
<b>Education</b>						
< High School Graduate	58	22.2	39	21.5	97	21.9
High School Graduate or GED	213	46.0	86	42.6	299	44.8
Some College or Technical School	232	62.1	85	52.5	318	58.7
College Graduate	277	73.9	56	49.2	334	68.7
<b>Income</b>						
< \$15,000	52	31.3	45	31.4	97	31.4
\$15 - \$24,999	100	42.8	78	44.0	178	43.2
\$25 - \$34,999	112	48.1	44	36.8	156	44.2
\$35 - \$49,999	173	64.6	40	68.9	213	65.3
\$50 - \$74,999	144	70.8	15*	39.3	159	65.2
\$75,000+	104	69.7	11*	74.9	115	70.2
<b>Employment Status</b>						
Employed	577	62.4	204	47.9	783	57.6
Not Employed	14*	36.2	13*	37.8	27	36.6
Student/Homemaker	98	63.4	21*	51.7	119	60.2
Retired/Unable to Work	91	25.6	28	15.6	119	22.5
<b>Total</b>	780	53.2	267	40.5	1,049	49.0

\* Sample size less than 50

## Tobacco Use

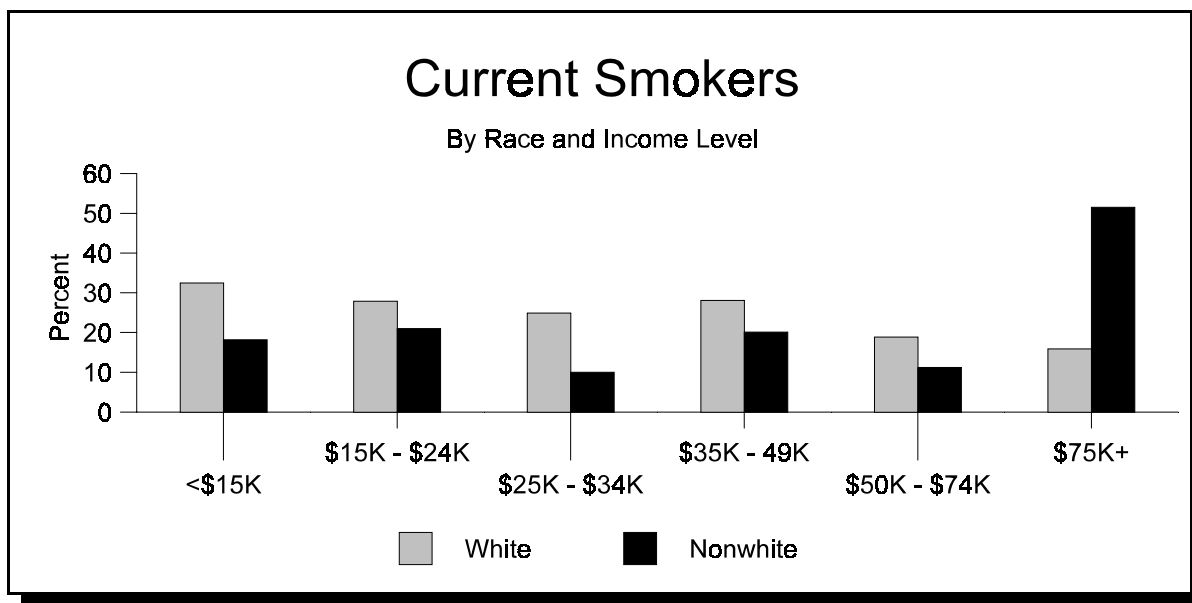
Tobacco use is the single leading preventable cause of death in Mississippi and the United States. Each year, about one-fifth of Mississippians die from tobacco-related causes. Health problems related to tobacco use include cancers, lung disease, and heart disease. Over the past



**Figure 5**

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

The group with the largest percentage of current smokers is nonwhite males at 27.4% followed by white males at 27.3% and white females at 22.4% .



**Figure 6**

The group with the lowest percentage of current smokers is nonwhite females at 12.4% (Figure 5). Overall, the rate of current smoking in Mississippi is 22.9%. The Healthy People 2000 objective is 15%.

## Person Who Have Smoked at Least 100 Cigarettes and Who Now Smoke

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	183	27.3	63	27.4	246	27.3
Female	195	22.4	66	12.4	262	19.0
<b>Age Group</b>						
18-24	44	29.2	5	9.0	49	20.7
25-34	64	27.4	19	13.2	83	21.7
35-44	90	26.9	52	36.5	142	30.0
45-54	90	29.5	24	23.2	114	27.6
55-64	52	24.0	20	26.1	72	24.5
65+	38	14.3	9	8.3	47	12.8
<b>Education</b>						
< High School	79	32.5	49	23.2	128	28.3
High School Graduate or GED	135	28.5	44	24.2	179	27.0
Some College or Technical School	96	22.9	25	13.6	122	19.8
College Graduate	66	16.6	11	10.7	77	15.3
<b>Income</b>						
< \$15,000	62	32.5	32	18.2	94	26.0
\$15 - \$24,999	63	27.9	37	21.0	100	24.4
\$25 - \$34,999	60	24.9	13	10.0	73	19.8
\$35 - \$49,999	81	28.1	13	20.1	94	26.8
\$50 - \$74,999	39	18.9	6*	11.2	45	17.6
\$75,000+	27	15.9	6*	51.5	33	20.0
<b>Employment Status</b>						
Employed	259	26.8	85	20.1	345	24.6
Not Employed	10*	35.6	10*	24.8	20	29.6
Student/Homemaker	32	19.3	3*	7.9	35	16.3
Retired/Unable to Work	77	20.7	31	18.5	108	20.0
<b>Total</b>	378	24.8	129	19.0	508	22.9

\* Sample size less than 50

## People Who Currently Use Smokeless Tobacco

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	85	14.2	12	3.6	97	10.9
Female	7	0.8	17	3.1	24	1.6
<b>Age Group</b>						
18-24	10	8.0	1	0.8	11	4.9
25-34	28	12.7	3	1.6	31	8.3
35-44	22	9.8	4	1.5	26	7.0
45-54	15	5.2	4	2.5	19	4.4
55-64	10	6.0	9	12.5	19	7.6
65+	7	2.5	8	7.4	15	3.7
<b>Education</b>						
< High School	18	10.5	17	6.9	35	8.9
High School Graduate or GED	33	7.7	9	3.7	42	6.4
Some College or Technical School	24	6.8	3	1.1	27	4.9
College Graduate	17	5.2	-	-	17	4.1
<b>Income</b>						
< \$15,000	5	2.7	9	4.2	14	3.4
\$15 - \$24,999	9	3.8	10	4.4	19	4.1
\$25 - \$34,999	16	8.4	3	2.0	19	6.2
\$35 - \$49,999	25	10.2	-	-	25	8.5
\$50 - \$74,999	16	9.1	1*	1.7	17	7.8
\$75,000+	7	5.3	2*	11.1	9	5.9
<b>Employment Status</b>						
Employed	76	9.3	15	2.7	91	7.1
Not Employed	2*	13.4	1*	1.1	3	6.9
Student/Homemaker	4	3.6	1*	1.1	5	3.0
Retired/Unable to Work	10	2.8	12	6.6	22	4.0
<b>Total</b>	92	7.3	29	3.3	121	6.0

\* Sample size less than 50



## Diabetes

### The MSDH Insulin Program

The Mississippi State Department of Health maintains a program which provides insulin, syringes, and diabetes testing supplies at no charge to type 1 diabetics 21 years of age and younger and gestational diabetics of any age. In FY 1999, the Insulin Program served 443 patients.

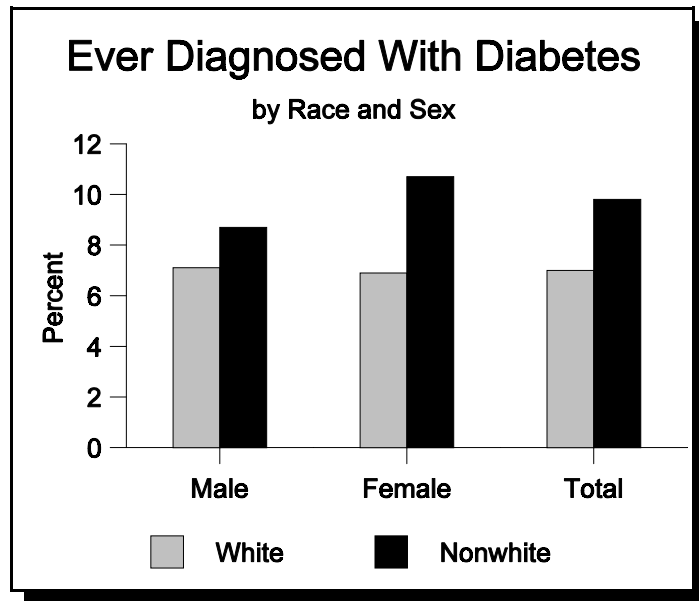


Figure 7

Supportive services for both type 1 and type 2 diabetics are available through the county health departments, including screening and referral for definitive diagnosis; problem assessment and appropriate referral; joint medical management (with the patient's own physician); and health education, provision of informational materials, and diet counseling. In FY 1999, county health departments reported 1,642 diabetic monitoring visits.

There are no specific MSDH treatment programs or services for older, non-insulin-dependent diabetics (who constitute more than 90% of all diabetics in the state).

### The Diabetes Control and Prevention Program

In 1994, the MSDH entered into a cooperative agreement with the CDC to establish a statewide Diabetes Control and Prevention Program. Funds have been used to develop a chronic disease coalition (the Mississippi Chronic Illness Coalition), which has a major focus on diabetes, and to build epidemiologic capacity in the area of diabetes, so that diabetes prevalence, morbidity, and mortality can be better estimated. In addition, planning is underway for the development of a diabetes resource center. Funds cannot be used for direct patient services, and currently no expansion of clinical diabetes services is planned.

According to the 1999 BRFSS survey, approximately 7.9 percent of the people in Mississippi have been told they have diabetes. Nonwhite females comprised the largest group having a rate of 10.7% followed by nonwhite males with a rate of 8.7%. White males responded with a rate of 7.1% and white females were the lowest at 6.9% (Figure 7).

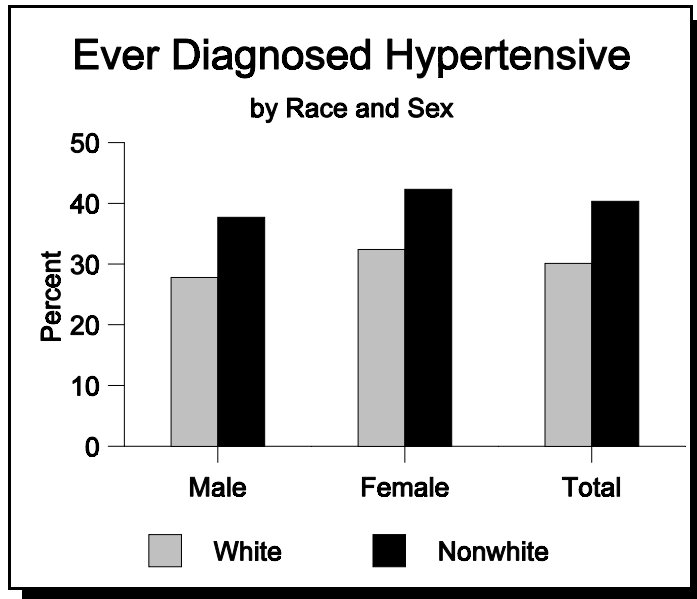
### Ever Told By Doctor You Have Diabetes

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	40	7.1	27	8.7	67	7.6
Female	58	6.9	55	10.7	113	8.2
<b>Age Group</b>						
18-24	2	1.0	-	-	2	0.6
25-34	11	5.8	5	1.6	16	4.1
35-44	12	4.4	16	7.9	28	5.6
45-54	21	7.9	13	10.4	34	8.6
55-64	11	5.2	20	27.0	31	10.6
65+	41	14.5	28	28.5	69	18.0
<b>Education</b>						
< High School	26	10.7	42	18.6	68	14.3
High School Graduate or GED	32	7.0	15	5.4	47	6.5
Some College or Technical School	23	6.6	11	4.4	34	5.8
College Graduate	17	5.0	13	13.2	30	6.7
<b>Income</b>						
< \$15,000	18	8.0	25	12.6	43	10.1
\$15 - \$24,999	21	11.1	18	7.8	39	9.4
\$25 - \$34,999	12	6.2	9	7.1	21	6.5
\$35 - \$49,999	15	6.1	4	5.4	19	6.0
\$50 - \$74,999	5	2.5	3	7.2	8	3.3
\$75,000+	10	8.1	1	12.3	11	8.6
<b>Employment Status</b>						
Employed	44	5.1	31	5.2	75	5.1
Not Employed	1*	3.2	3*	3.9	4	3.6
Student/Homemaker	8	4.6	4*	8.9	12	5.7
Retired/Unable to Work	45	13.6	43	25.1	88	17.2
<b>Total</b>	98	7.0	82	9.8	180	7.9

\* Sample size less than 50

## Hypertension Awareness

High blood pressure is found in people of all age groups including children. According to the National Health and Nutrition Examination Survey III, Phase 2 more than 32% of people in the United States between the ages of 18 and 74 with high blood pressure are unaware that they have it.



**Figure 8**

Early detection allows treatment that can prevent many of the 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.

The MSDH Hypertension Control Program provides blood pressure screening, detection, diagnosis, treatment or referral for treatment, and follow-up on compliance in cooperation with the patient's physician as a joint management effort. In FY 1999, the program admitted 13,622 patients to

treatment. The program also educates persons with hypertension in proper dietary habits and exercise and provides drugs through a comprehensive drug formulary at a lower cost than could be obtained elsewhere. Priority individuals are in high risk groups: black males and females 18 to 55 years of age, white males 25 to 55 years of age, and those in rural, medically under served areas who are at or near poverty level.

The 1999 BRFSS indicates that approximately 33% of the people surveyed in Mississippi have been told they have high blood pressure. Nonwhites were more likely to be hypertensive than whites. Slightly more than 42% of the nonwhite females in the survey said they had been told they were hypertensive compared to 32.4% of the white females. Approximately 38% of the nonwhite male respondents had been told they were hypertensive. The white male rate was 27.8%.

## Ever Told That You Have High Blood Pressure

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	186	27.8	79	37.7	265	30.8
Female	287	32.4	206	42.3	494	35.8
<b>Age Group</b>						
18-24	14	9.2	13	16.8	27	12.5
25-34	28	12.6	36	31.8	64	20.1
35-44	67	21.5	57	32.9	124	25.3
45-54	93	30.8	58	48.0	151	35.9
55-64	102	47.0	49	62.0	151	50.6
65+	169	55.5	72	76.9	241	60.9
<b>Education</b>						
< High School	106	41.9	111	54.7	217	47.6
High School Graduate or GED	149	28.9	76	35.8	225	31.1
Some College or Technical School	114	27.9	62	36.5	177	30.8
College Graduate	103	26.7	34	29.6	137	27.2
<b>Income</b>						
< \$15,000	87	39.1	86	51.0	173	44.5
\$15 - \$24,999	73	33.3	81	43.2	154	38.1
\$25 - \$34,999	66	29.4	29	30.3	95	29.7
\$35 - \$49,999	73	25.1	16	29.8	89	25.9
\$50 - \$74,999	53	25.6	11*	20.7	64	24.8
\$75,000+	41	27.1	4*	21.5	45	26.5
<b>Employment Status</b>						
Employed	213	21.4	150	35.7	364	26.1
Not Employed	12*	37.3	13*	28.2	25	32.1
Student/Homemaker	42	24.4	13*	24.1	55	24.3
Retired/Unable to Work	206	55.8	107	63.5	313	58.1
<b>Total</b>	473	30.1	285	40.3	759	33.4

\* Sample size less than 50

## Blood Pressure Checked in Past Two Years

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	590	92.0	194	90.2	786	91.5
Female	804	96.1	474	96.7	1,282	96.3
<b>Age Group</b>						
18-24	132	92.4	81	90.6	213	91.6
25-34	216	94.4	145	94.3	364	94.4
35-44	287	93.7	163	93.5	451	93.6
45-54	269	92.4	108	96.3	378	93.6
55-64	204	95.0	78	94.4	282	94.8
65+	281	96.5	91	95.0	372	96.1
<b>Education</b>						
< High School	218	91.2	180	93.8	398	92.4
High School Graduate or GED	442	92.3	206	94.2	649	92.9
Some College or Technical School	370	97.0	168	94.9	541	96.3
College Graduate	361	95.5	110	90.6	473	94.5
<b>Income</b>						
< \$15,000	176	93.2	160	92.6	336	93.0
\$15 - \$24,999	204	93.5	186	96.4	392	95.0
\$25 - \$34,999	210	92.3	97	95.2	307	93.3
\$35 - \$49,999	259	94.7	58	98.0	317	95.3
\$50 - \$74,999	191	93.6	39*	94.6	230	93.8
\$75,000+	146	99.4	16*	87.7	163	98.0
<b>Employment Status</b>						
Employed	868	93.2	420	93.1	1,292	93.2
Not Employed	32*	94.4	42*	100.0	75	97.4
Student/Homemaker	147	93.1	42	90.2	190	92.4
Retired/Unable to Work	347	97.1	160	95.4	507	96.6
<b>Total</b>	1,394	94.2	668	93.8	2,068	94.1

\* Sample size less than 50

## Cholesterol Awareness

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 over twenty years old have their blood cholesterol levels checked at least once every five years.

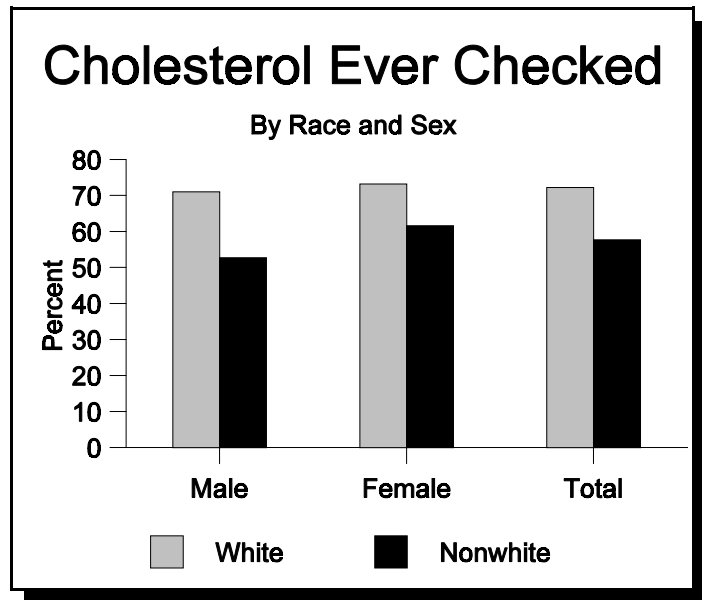


Figure 9

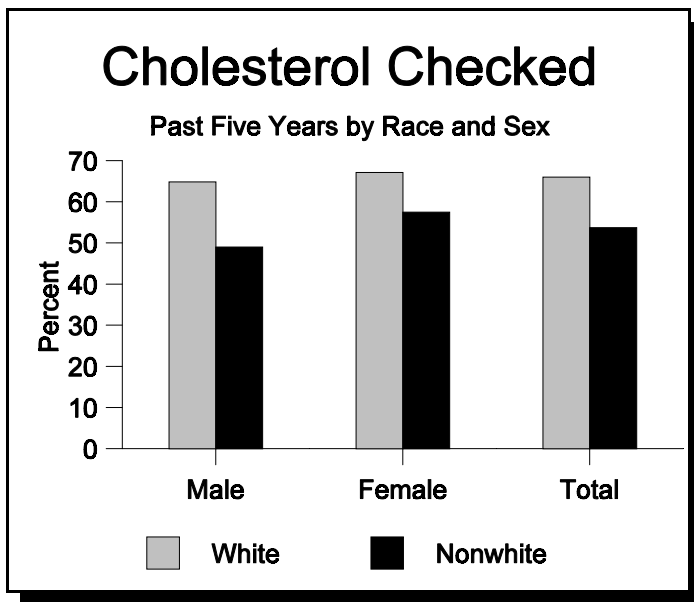


Figure 10

Sixty-two percent of the Mississippians surveyed said their cholesterol had been checked in the past five years. This is an increase from 60.0% reported in 1997. Females were more likely to have ever had a cholesterol check (69.2%) than were males (65.5%).

Nonwhite male respondents reported the lowest rate for examinations with a rate of 52.7% an increase from 49.0% reported in 1997.

## Ever Had Blood Cholesterol Checked

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	454	71.0	121	52.7	577	65.5
Female	620	73.2	309	61.6	932	69.2
<b>Age Group</b>						
18-24	50	39.1	34	41.4	84	40.0
25-34	135	58.3	95	54.8	232	56.9
35-44	212	69.3	98	56.0	311	64.9
45-54	238	83.0	75	64.5	314	77.6
55-64	183	86.7	64	79.4	247	84.9
65+	254	89.1	63	67.0	317	83.5
<b>Education</b>						
< High School	156	66.4	107	50.7	263	59.3
High School Graduate or GED	327	67.8	129	53.6	456	63.1
Some College or Technical School	289	74.2	111	62.1	403	70.2
College Graduate	301	80.1	79	69.9	382	78.0
<b>Income</b>						
< \$15,000	130	66.0	93	55.5	223	61.3
\$15 - \$24,999	142	65.0	123	57.1	266	61.0
\$25 - \$34,999	160	70.0	58	50.7	218	63.4
\$35 - \$49,999	194	70.2	39	64.7	233	69.3
\$50 - \$74,999	165	80.9	32*	82.6	197	81.2
\$75,000+	135	91.5	14*	81.7	150	90.4
<b>Employment Status</b>						
Employed	663	70.6	281	60.9	948	67.4
Not Employed	17*	55.1	20*	31.2	37	42.0
Student/Homemaker	89	54.7	20*	46.3	110	52.7
Retired/Unable to Work	305	87.2	105	59.4	410	78.6
<b>Total</b>	1,074	72.2	430	57.7	1,509	67.4

\* Sample size less than 50

### Cholesterol Checked in Past 5 Years

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	416	64.8	114	49.0	532	60.0
Female	566	67.1	288	57.5	857	63.8
<b>Age Group</b>						
18-24	46	35.4	33	39.7	79	37.2
25-34	120	51.9	89	51.4	211	51.7
35-44	196	63.2	93	53.1	290	59.9
45-54	213	74.6	69	57.1	283	69.4
55-64	171	81.4	57	69.7	228	78.5
65+	234	82.8	60	65.1	294	78.4
<b>Education</b>						
< High School	134	57.4	98	46.9	232	52.7
High School Graduate or GED	307	63.0	124	49.9	431	58.7
Some College or Technical School	262	67.7	100	57.2	365	64.2
College Graduate	279	74.5	76	67.2	357	73.0
<b>Income</b>						
< \$15,000	114	57.5	88	53.0	202	55.5
\$15 - \$24,999	131	59.4	113	50.9	245	55.1
\$25 - \$34,999	145	63.5	57	50.0	202	58.8
\$35 - \$49,999	176	64.1	34	56.6	210	62.8
\$50 - \$74,999	154	74.9	30*	79.6	184	75.7
\$75,000+	127	85.3	12*	72.5	140	83.8
<b>Employment Status</b>						
Employed	605	64.1	263	56.3	872	61.6
Not Employed	17*	55.1	19*	30.1	36	41.4
Student/Homemaker	83	50.5	20*	46.3	104	49.5
Retired/Unable to Work	277	80.0	96	55.0	373	72.3
<b>Total</b>	982	66.0	402	53.7	1,389	62.0

\* Sample size less than 50



## Breast Cancer Screening

The MSDH breast and cervical cancer program has three major emphases: establishing greater access to screening and follow-up services, increasing education and outreach programs for women and health care providers, and improving quality assurance measures for screening.

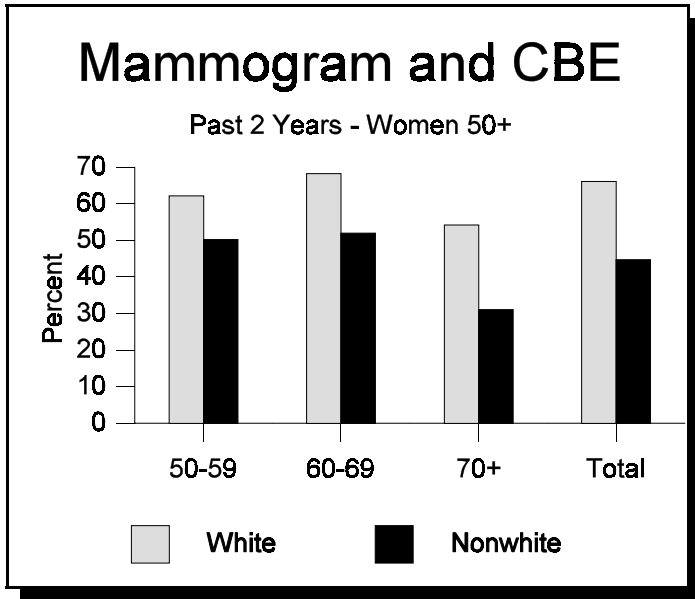


Figure 11

The program objective for FY1999 is to reduce breast cancer deaths to no more than 19.5 per 100,000 by September 30, 1999. In 1998, there were 27.6 breast cancer deaths per 100,000 females, a decrease from 30.3 in 1997.

A mammogram and a breast examination by a medical professional (clinical breast exam or CBE) is recommended yearly by the American Cancer Society and the National Cancer Advisory Board for women over the age of 40. The American Cancer Society states that women between the ages of 20 and 39 should have a clinical breast examination every 3 years, and all women over age 20 should do breast self examination (BSE) every month.

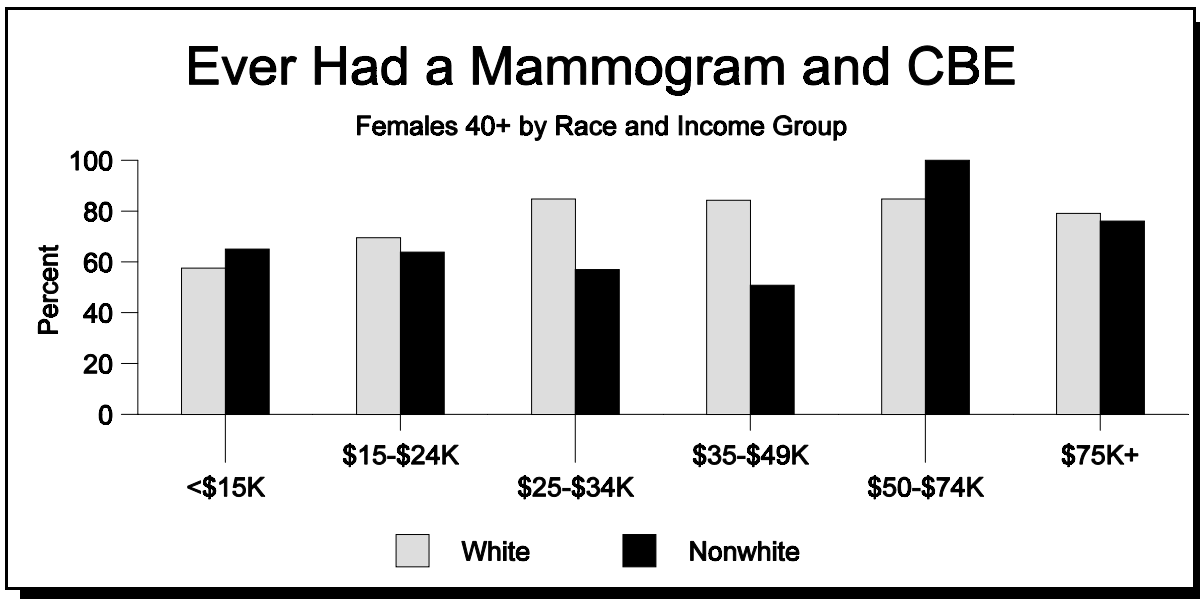


Figure 12

## Year 2000 National Health Objective

1. Increase to at least 80.0% the proportion of women aged 40 and older who have ever received a clinical breast examination and mammogram.

1999 BRFSS data revealed that 71.9% of Mississippi women aged 40 and older have ever received a clinical breast examination and mammogram.

2. Increase to at least 60.0% the proportion of women aged 50 and older who have received a clinical breast examination and mammogram within the preceding 1 to 2 years.

1999 BRFSS data revealed that 57.2% of Mississippi women aged 50 and older have received a clinical breast examination and mammogram within the preceding 1 to 2 years.

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

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

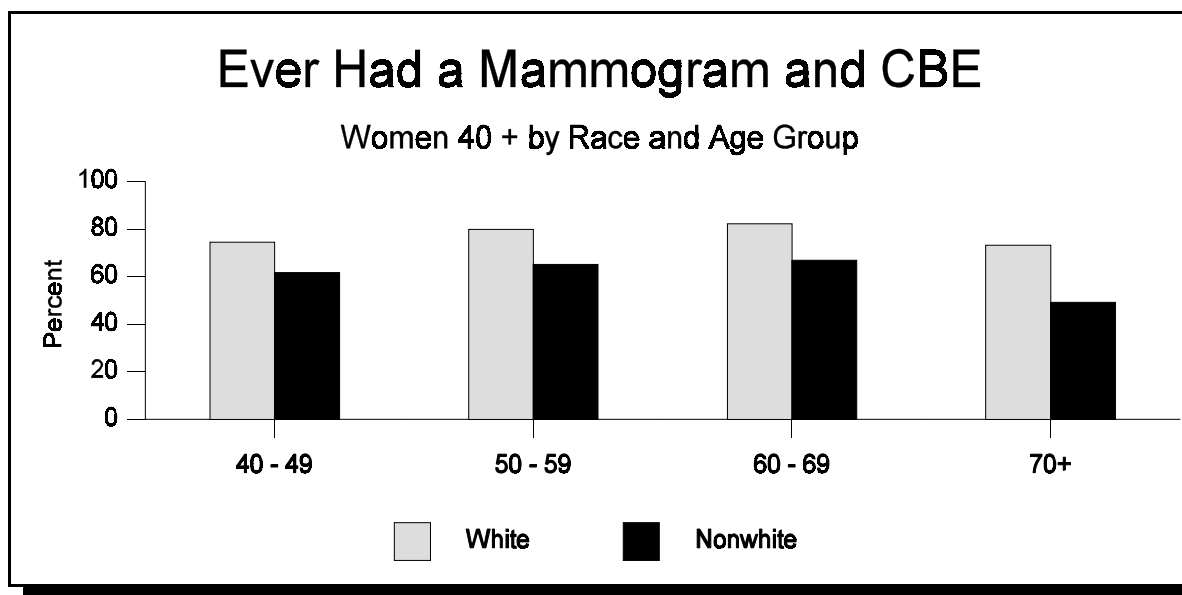


Figure 13

## Females 40+ Who Have Ever Had a Mammogram and CBE

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Age Group</b>						
40-49	121	74.4	65	61.6	186	69.7
50-59	109	79.8	29*	65.1	138	76.3
60-69	94	82.2	36	66.9	130	77.5
70+	106	73.2	25*	49.2	131	67.4
<b>Education</b>						
< High School Graduate	69	59.8	54	57.9	123	59.0
High School Graduate or GED	144	75.8	45	56.1	189	70.2
Some College or Technical School	118	82.3	29*	67.7	147	79.2
College Graduate	99	89.7	27*	79.0	126	87.2
<b>Income</b>						
< \$15,000	66	57.6	44	65.0	110	60.5
\$15 - \$24,999	58	69.5	39	63.8	97	67.1
\$25 - \$34,999	55	84.8	18*	57.0	73	76.0
\$35 - \$49,999	74	84.3	7*	50.8	81	80.9
\$50 - \$74,999	52	84.8	12*	100.0	64	87.5
\$75,000+	37*	79.1	5*	76.1	42	78.6
<b>Employment Status</b>						
Employed	204	81.0	84	67.6	288	76.5
Not Employed	7*	70.3	8*	72.1	15*	71.1
Student/Homemaker	53	73.8	5*	46.2	58	70.6
Retired/Unable to Work	166	74.2	58	54.9	224	68.6
<b>Total</b>	430	77.0	155	61.0	585	72.3

\* Sample size less than 50

### Had a Mammogram and a CBE in the Past Two Years (Women 50+)

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Age Group</b>						
50-59	87	62.2	21*	50.2	108	59.3
60-69	75	68.3	27	52.0	102	63.2
70+	77	54.2	17*	31.1	94	48.7
<b>Education</b>						
High School Graduate	32	36.3	31	41.1	63	38.4
High School Graduate or GED	87	58.7	16*	39.7	103	54.7
Some College or Technical School	68	75.9	7*	60.0	75	74.0
College Graduate	52	79.8	11*	66.2	63	76.9
<b>Income</b>						
< \$15,000	40	38.8	21*	49.9	61	42.7
\$15 - \$24,999	40	60.0	16*	48.0	56	56.3
\$25 - \$34,999	30*	77.0	6*	54.7	36	72.2
\$35 - \$49,999	33*	71.9	1*	33.7	34	69.5
\$50 - \$74,999	27*	75.2	4*	100.0	31*	78.4
\$75,000+	18*	90.5	-	-	18*	86.7
<b>Employment Status</b>						
Employed	90	66.1	23*	50.1	113	61.4
Not Employed	6*	73.2	2*	59.1	8*	69.3
Student/Homemaker	29*	65.5	2*	32.9	31	61.7
Retired/Unable to Work	114	56.6	38	43.2	152	53.0
<b>Total</b>	239	61.1	65	44.7	304	56.8

\* Sample size less than 50

## Cervical Cancer Screening

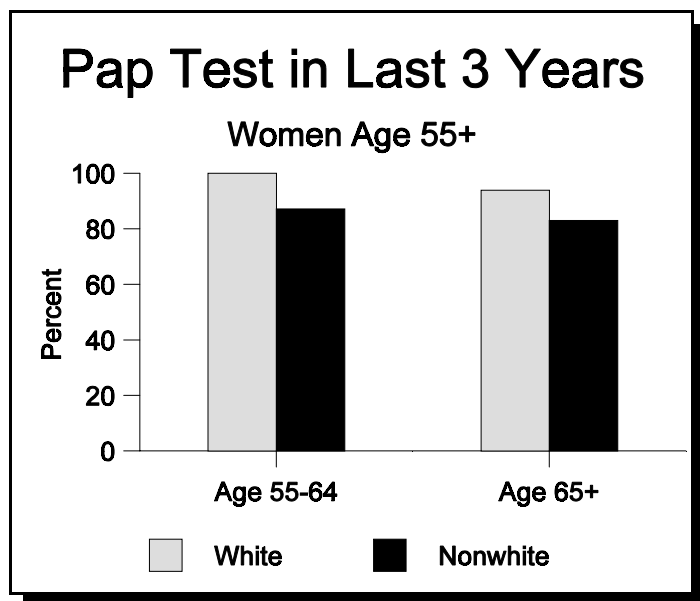
This year, the American Cancer Society estimates that in the United States there will be about 12,800 new cases of invasive cervical cancer and about 4,800 will die from the disease. When detected and treated early, cervical cancer can often be cured. At one time cervical cancer was one of the most common causes of cancer death for American women. Between 1955 and 1992, the number of deaths from cervical cancer declined by 74%. The American Cancer Society attributes the decline to the use of the Pap smear as a screening test for cervical cancer. All women should have yearly Pap smears as recommended by the American Cancer Society starting at age 18 or when they become sexually active. The Breast and Cervical Cancer Early Detection Program currently follows the American Cancer Society recommendations.

### Year 2000 National Health Objective

1. Increase to at least 95.0% the proportion of women aged 18 and older who have ever received a Pap test.

1999 BRFSS data indicate that 92.7% of Mississippi women aged 18 and older have received a Pap test. This figure represents a decrease from 95.8% reported in the 1997 BRFSS Report.

2. Increase to at least 85.0% the proportion of women aged 18 and older who have received a Pap test within the preceding 1 to 3 years.



1999 BRFSS data indicate that 82.7% of Mississippi women aged 18 and older have received a Pap test within the preceding 1 to 3 years.

Centers for Disease Control surveys show that in the United States for 1993, almost 83% of women aged 18 years or older reported having had a Pap smear within the past two years. Rates of recent Pap screening among women ages 60 and older were substantially lower.

Figure 14

## Females 18+ Who Have Had a Pap Test in Past Three Years

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Age Group</b>						
18-24	66	90.7	50	83.8	116	87.6
25-34	96	90.8	100	93.9	198	92.2
35-44	105	90.4	78	85.1	183	88.5
45-54	65	87.8	35*	70.4	101	81.4
55-64	46	86.7	11*	51.5	57	77.7
65+	48	56.2	18*	53.2	66	55.3
<b>Education</b>						
< High School Graduate	49	67.1	52	65.8	101	66.4
High School Graduate or GED	134	86.8	89	78.1	224	83.7
Some College or Technical School	136	91.2	91	90.5	229	91.0
College Graduate	109	83.8	61	86.0	171	84.5
<b>Income</b>						
< \$15,000	35	62.2	86	84.4	121	75.9
\$15 - \$24,999	70	86.0	79	84.8	150	85.5
\$25 - \$34,999	74	93.6	49*	79.3	123	88.0
\$35 - \$49,999	90	90.2	27*	89.4	117	90.0
\$50 - \$74,999	58	89.8	17*	76.8	75	86.5
\$75,000+	34*	89.6	5*	100.0	40*	90.5
<b>Employment Status</b>						
Employed	272	92.2	196	85.3	471	89.6
Not Employed	10*	85.3	25*	89.3	36*	88.1
Student/Homemaker	74	75.8	30*	83.7	104	78.1
Retired/Unable to Work	72	70.1	42	59.0	114	65.9
<b>Total</b>	428	84.6	293	80.4	725	83.1

\* Sample size less than 50

### Females 18+ Who Have Ever Had a Pap Test

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Age Group</b>						
18-24	66	90.7	50	83.8	116	87.6
25-34	102	96.7	105	98.1	209	97.3
35-44	118	100.0	86	97.0	204	98.9
45-54	74	100.0	44*	98.8	119	99.5
55-64	54	100.0	21*	93.9	75	98.4
65+	78	87.2	28*	83.0	106	86.0
<b>Education</b>						
< High School Graduate	67	89.3	70	86.3	137	87.8
High School Graduate or GED	154	97.3	104	95.8	259	96.8
Some College or Technical School	150	98.7	95	94.2	247	97.0
College Graduate	123	93.7	66	93.4	190	93.6
<b>Income</b>						
< \$15,000	54	88.9	101	97.1	155	94.0
\$15 - \$24,999	80	95.2	89	95.9	170	95.6
\$25 - \$34,999	79	99.2	53	98.9	132	99.1
\$35 - \$49,999	101	100.0	29*	95.8	130	99.3
\$50 - \$74,999	62	98.2	17*	76.8	79	92.7
\$75,000+	39*	100.0	5*	100.0	45*	100.0
<b>Employment Status</b>						
Employed	294	98.8	218	94.5	515	97.2
Not Employed	13*	100.0	27*	95.7	41*	97.5
Student/Homemaker	86	87.2	31*	86.4	117	87.0
Retired/Unable to Work	101	93.4	59	90.6	160	92.3
<b>Total</b>	494	95.5	335	92.8	833	94.5

\* Sample size less than 50

## Immunization

Influenza is a respiratory illness caused by a virus which has many subtypes. One or more of these subtypes circulates every influenza season, starting as early as October, and ending as late as March. The illness is usually characterized by fever, malaise, headache, coryza, sore throat and cough. The cough may be severe, and may last for weeks. Influenza is easily spread through airborne exposure or direct contact. Influenza vaccine can prevent the disease and its complications. In the elderly, the vaccine is less effective in disease prevention, but reduces severity of disease and the incidence of complications and death. It is an important intervention to reduce hospitalizations due to complications of influenza. Influenza vaccine is recommended for all persons 65 years of age and older, and for those with chronic health problems which put them at risk for complications.

The *Healthy People 2000* objective for influenza vaccine includes as a goal that 60% of persons aged 65 or older be vaccinated. In the 1999 BRFSS, respondents were asked if they had received

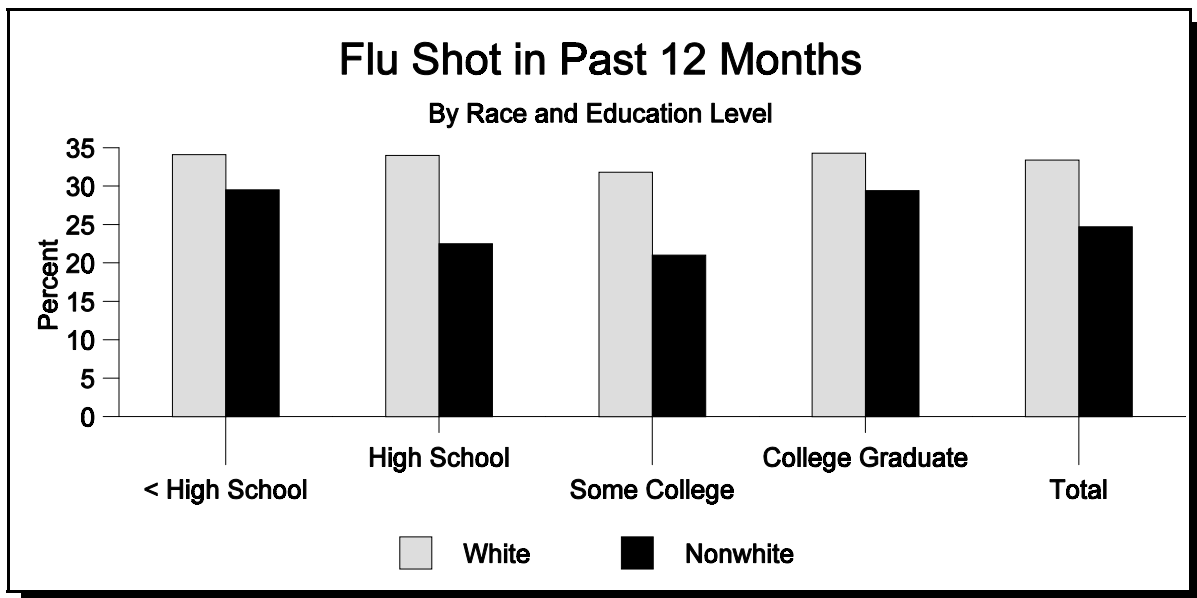


Figure 15

the influenza vaccine in the last 12 months. Sixty-two percent of respondents aged 65 or older reported having received the vaccine in the past 12 months. The proportion vaccinated in this age group differed by race: sixty-eight percent of whites reported having been vaccinated compared to only 42% for nonwhites. Vaccination rates did not differ significantly by sex; 31.4% of males and 29.8% of females reported receiving vaccine.

The Mississippi State Department of Health offers the influenza vaccine at each of its clinics to anyone who wants it.



## Flu Shot in Past 12 Months

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	202	32.1	64	29.7	267	31.4
Female	302	34.7	105	20.8	407	29.8
<b>Age Group</b>						
18-24	28	20.4	8	14.5	36	17.9
25-34	47	20.2	41	26.4	88	22.5
35-44	64	21.9	34	20.6	99	21.6
45-54	80	27.2	22	19.6	102	25.0
55-64	80	34.7	27	34.8	107	34.8
65+	202	68.4	37	42.0	239	61.7
<b>Education</b>						
< High School	86	34.1	50	29.5	136	32.0
High School Graduate or GED	167	34.0	52	22.5	219	30.3
Some College or Technical School	120	31.8	36	21.0	156	28.0
College Graduate	130	34.3	31	29.4	162	33.4
<b>Income</b>						
< \$15,000	89	43.3	37	26.3	126	35.6
\$15 - \$24,999	82	40.8	54	26.7	136	33.6
\$25 - \$34,999	69	29.4	17	16.9	86	25.1
\$35 - \$49,999	78	29.1	10	14.5	88	26.6
\$50 - \$74,999	49	22.9	14*	37.5	63	25.5
\$75,000+	52	37.0	3*	22.0	55	35.2
<b>Employment Status</b>						
Employed	243	25.6	100	22.6	344	24.7
Not Employed	8*	21.9	5*	16.0	13	18.6
Student/Homemaker	37	23.7	5*	15.6	42	21.5
Retired/Unable to Work	216	60.8	59	37.7	275	53.7
<b>Total</b>	504	33.4	169	24.7	674	30.6

\*Sample size less than 50

## Overweight and Obesity

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

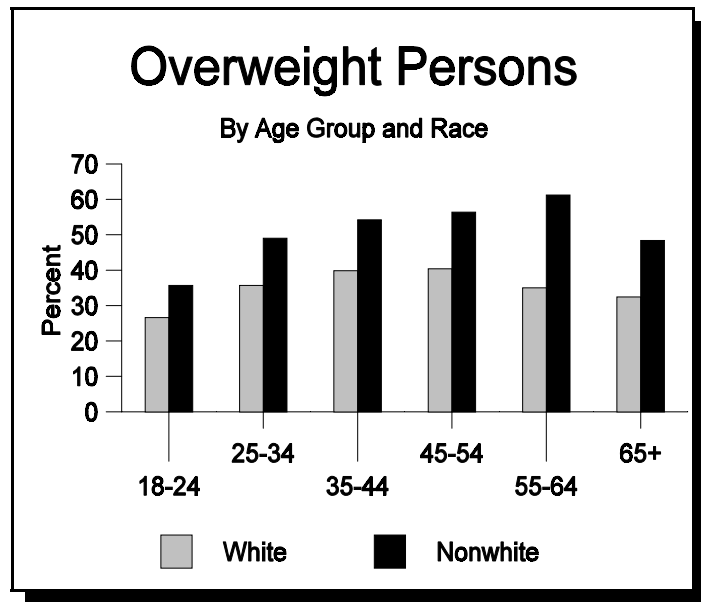


Figure 16

Weight may be controlled by dietary changes such as decreasing caloric intake and by increasing physical activity. According to the 1999 BRFSS study forty percent of those surveyed in Mississippi reported themselves as being overweight defined as body mass index  $\geq 27.8$  for males and  $\geq 27.3$  for females. Figure 17 shows how being overweight increases with age.

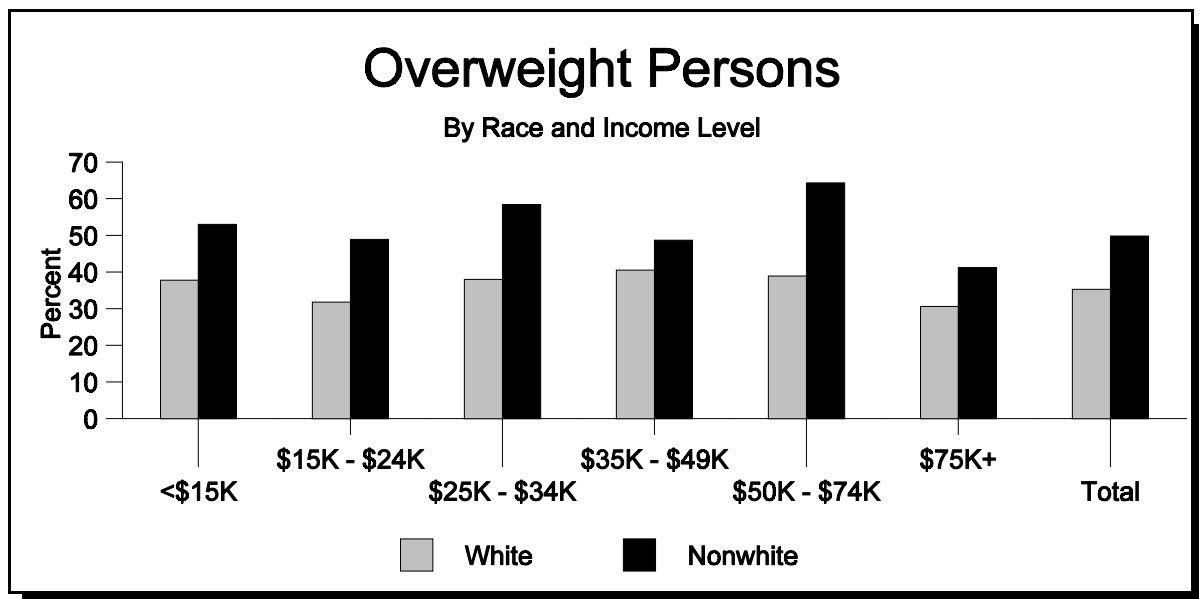


Figure 17

## People at Risk From Being Overweight (Based on BMI)

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	237	36.5	94	45.9	332	39.4
Female	286	34.3	258	52.9	544	40.6
<b>Age Group</b>						
18-24	39	26.6	32	37.7	71	31.3
25-34	79	35.7	72	49.0	152	40.9
35-44	115	39.8	95	54.2	210	44.5
45-54	112	40.4	62	56.4	174	45.1
55-64	77	35.0	48	61.2	125	41.4
65+	101	32.4	43	48.4	144	36.5
<b>Education</b>						
< High School	95	42.1	93	51.7	188	46.4
High School Graduate or GED	175	35.8	113	46.8	288	39.2
Some College or Technical School	144	37.0	85	49.4	230	41.1
College Graduate	109	29.1	61	56.4	170	34.8
<b>Income</b>						
< \$15,000	74	37.8	90	53.0	164	44.7
\$15 - \$24,999	74	31.8	100	48.9	175	40.3
\$25 - \$34,999	84	38.0	50	58.4	134	45.0
\$35 - \$49,999	107	40.5	30	48.7	137	41.9
\$50 - \$74,999	77	38.9	25*	64.3	102	43.4
\$75,000+	45	30.6	7*	41.2	52	31.7
<b>Employment Status</b>						
Employed	336	36.7	224	51.1	560	41.4
Not Employed	18*	52.3	21*	55.6	39	53.4
Student/Homemaker	45	27.0	18*	31.0	64	28.2
Retired/Unable to Work	124	33.7	89	52.7	213	39.5
<b>Total</b>	523	35.3	352	49.8	876	40.0

\* Sample size less than 50

## Oral Health

Oral health diseases such as tooth decay and periodontal diseases are common health problems in Mississippi, yet only 57.7% of respondents from the 1999 BRFSS Survey reported that they have seen a dentist within the last 12 months. The lowest frequency of dental visits within the past twelve months was observed in persons with less than a high school education (32.7%), nonwhite males (39.3%) and those whose annual income is below \$15,000 (40.9%).

People with incomes above \$75,000 per year reported the highest percentage of visits during the last year (84.9%) and as annual income decreased there was a commensurate decrease in the rate of dental visits. With respect to age-groups, whites 18-24 reported the highest number of visits with a rate of 75.4%. Nonwhite males had the lowest prevalence of the prior year dental visit at 39.3% and nonwhite females had a prevalence of 51.8%.

Nonwhites aged 65 and older had the lowest frequency of dental visits for the previous year at 18.3%; whites in the same age category were at 56.7%. Nonwhites aged 18-24 had a higher rate of a prior year dental visit at 55.7% than any other age grouping of nonwhites.

The BRFSS Survey indicated that 57.7% of Mississippians have seen a dentist within the past twelve months.

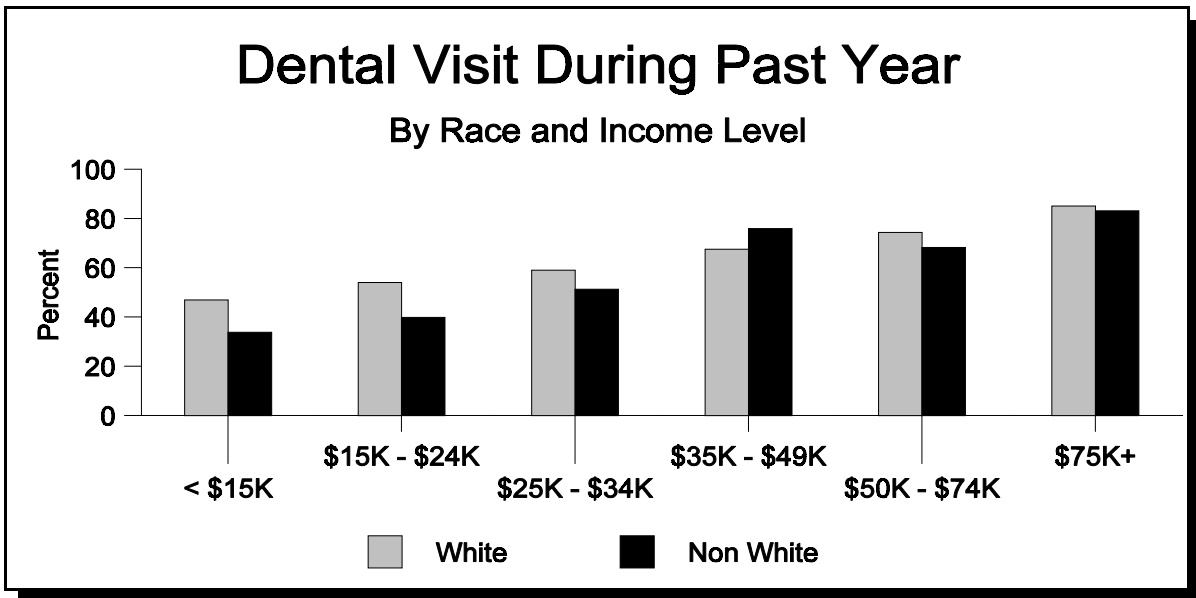


Figure 18

## Persons Who Visited a Dentist or Dental Clinic in Last 12 Months

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	395	62.5	91	39.3	487	55.4
Female	522	63.9	263	51.8	787	59.7
<b>Age Group</b>						
18-24	106	75.4	55	55.7	161	67.1
25-34	145	62.8	90	49.6	236	57.5
35-44	195	64.8	96	53.7	292	61.2
45-54	184	62.7	54	44.2	239	57.3
55-64	126	60.2	36	45.5	162	56.6
65+	158	56.7	21	18.3	179	47.0
<b>Education</b>						
< High School	89	38.9	54	25.0	143	32.7
High School Graduate or GED	281	60.5	116	52.2	398	57.9
Some College or Technical School	263	68.7	108	52.0	371	62.8
College Graduate	284	77.2	75	63.6	361	74.4
<b>Income</b>						
< \$15,000	81	46.9	60	33.8	141	40.9
\$15 - \$24,999	121	54.0	94	39.8	216	47.0
\$25 - \$34,999	132	59.0	65	51.3	197	56.3
\$35 - \$49,999	179	67.5	45	75.9	224	69.0
\$50 - \$74,999	151	74.3	29*	68.2	180	73.2
\$75,000+	125	85.1	13*	83.1	139	84.9
<b>Employment Status</b>						
Employed	608	65.9	260	53.4	870	61.7
Not Employed	19*	54.7	21*	47.1	41	51.3
Student/Homemaker	103	67.5	25*	53.0	128	63.6
Retired/Unable to Work	187	54.8	47	22.7	234	44.9
<b>Total</b>	<b>917</b>	<b>63.2</b>	<b>354</b>	<b>46.3</b>	<b>1,274</b>	<b>57.7</b>

\* Sample size less than 50

## Skin Cancer

Skin cancer is the most common form of cancer in the United States. There are three major types, the most serious being malignant melanoma which causes more than 75% of all deaths from skin cancer in the United States. The other two are basal and squamous cell carcinomas. Although death rates from these carcinomas are low, they can cause considerable damage and disfigurement if left untreated, but when detected and treated early, more than 95% of them can be treated successfully.

The American Cancer Society estimates that 47,700 new cases of malignant melanoma will be diagnosed in the year 2000 and will claim the lives of approximately 9,600 people. A combined total of about one million new cases of basal cell and squamous cell carcinomas will be diagnosed.

Malignant melanoma diagnosed at an early stage can usually be cured, but melanoma diagnosed at a late stage is more likely to spread and cause death. In 1999, Mississippi had 69 deaths from skin cancer for a mortality rate of 2.5 per 100,000 population.

Although anyone can develop skin cancer, one of the main risk factors is chronic exposure to the ultraviolet rays of the sun. Skin cancer is largely preventable when sun protection measures are consistently used. The 1999 BRFSS report revealed that 27.5% of respondents in Mississippi reported having been sunburned in the past twelve months. As seen in Figure 20 the frequency of sunburns decreased with increasing age.

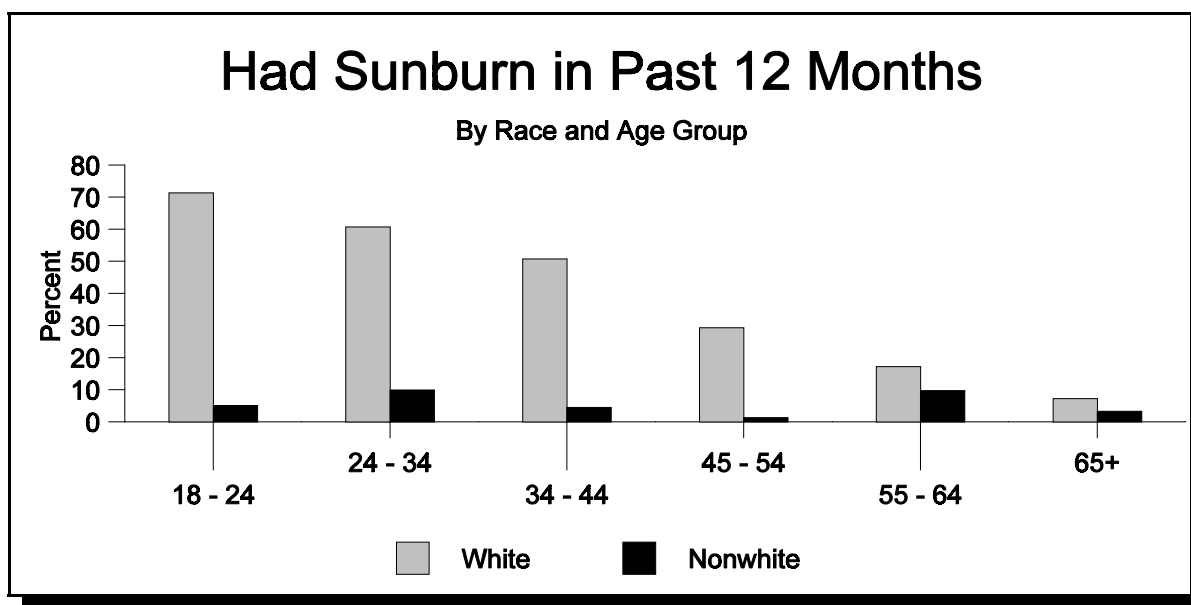


Figure 19

## Had Sunburn in Last 12 Months

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	283	43.4	13	7.0	297	32.3
Female	265	33.1	23	4.5	289	23.2
<b>Age Group</b>						
18-24	100	71.3	6	5.1	106	43.2
25-34	142	60.7	9	9.9	151	40.4
35-44	158	50.7	8	4.5	167	35.4
45-54	85	29.3	3	1.3	89	21.1
55-64	41	17.2	6	9.7	47	15.4
65+	22	7.2	4	3.3	26	6.2
<b>Education</b>						
< High School	52	22.9	11	8.3	63	16.3
High School Graduate or GED	163	35.5	7	3.5	170	25.2
Some College or Technical School	159	42.8	7	3.8	166	29.5
College Graduate	174	46.7	11	9.5	187	39.0
<b>Income</b>						
< \$15,000	41	27.2	8	4.2	49	16.8
\$15 - \$24,999	67	30.5	6	3.5	73	17.0
\$25 - \$34,999	83	35.1	3	7.2	86	25.5
\$35 - \$49,999	136	50.2	5	7.3	141	42.9
\$50 - \$74,999	95	47.5	5*	9.1	100	40.7
\$75,000+	71	49.0	3*	20.2	75	45.8
<b>Employment Status</b>						
Employed	428	47.2	22	5.1	452	33.3
Not Employed	13*	38.8	3*	7.8	16	22.3
Student/Homemaker	66	43.8	4*	11.9	70	35.6
Retired/Unable to Work	41	10.5	7	4.4	48	8.6
<b>Total</b>	548	38.1	36*	5.6	586	27.5

\* Sample size less than 50

## Alcohol Consumption

According to a 1986 report by the Secretary of Health and Human Services approximately 10.6 million adults in the United States can be classified as alcoholics, and an additional 7.3 million either are alcohol abusers or have experienced negative consequences of alcohol use such as arrest or involvement in an accident. In addition, an estimated 4.6 million young people aged 14 to 17 are problem drinkers. The public health consequences of problem drinking include injuries and deaths from fires, falls, drowning, homicide, suicide, family abuse and other violence as well as industrial and motor vehicle accidents. An estimated one-third to one-half of all unintentionally and intentionally injured adult Americans involved in accidents, crimes, and suicides had been drinking alcohol. Problem drinking also causes medical damage including pancreatitis, nutritional deficiencies, malignancies, fetal alcohol syndrome, and cirrhosis (the ninth leading cause of death among adults in the United States).

1. According to the 1999 BRFSS survey, over one-third (33.5%) of white respondents in the 18-24 year age group said they had indulged in binge drinking in the past 30 days compared to only 9.9% of the nonwhite respondents (Figure 24). Males were five times more likely to indulge in binge drinking than females. Only four percent of female respondents said they had five or more drinks on one occasion during the last thirty days compared to 20.7% for males.

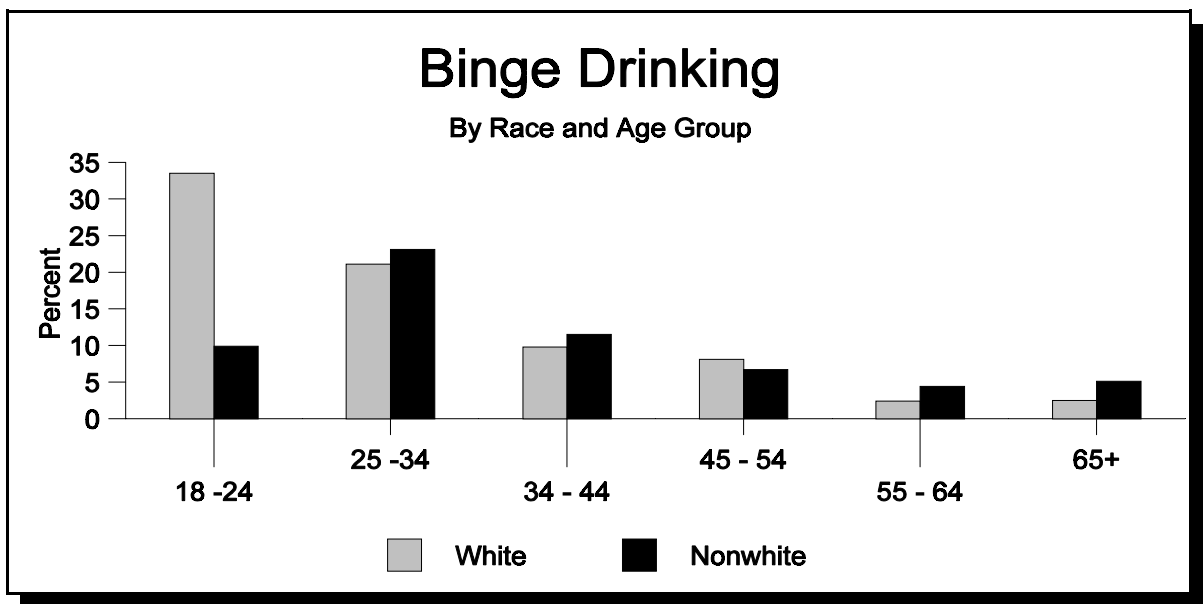


Figure 20



## Acute Drinking

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	142	21.1	32	20.1	174	20.7
Female	32	3.5	25	4.8	57	4.0
<b>Age Group</b>						
18-24	49	33.5	9	9.9	58	23.5
25-34	50	21.1	18	23.1	68	21.8
35-44	33	9.8	15	11.5	48	10.3
45-54	30	8.1	10	6.7	40	7.7
55-64	5	2.4	2	4.4	7	2.9
65+	7	2.5	3	5.1	10	3.2
<b>Education</b>						
< High School	15	7.6	11	9.1	26	8.3
High School Graduate or GED	65	13.4	19	11.4	83	12.7
Some College or Technical School	47	13.5	19	14.3	66	13.7
College Graduate	47	11.4	8	11.4	55	11.4
<b>Income</b>						
< \$15,000	18	11.2	16	13.4	34	12.2
\$15 - \$24,999	25	10.6	18	10.9	43	10.7
\$25 - \$34,999	36	16.9	8	20.0	44	17.9
\$35 - \$49,999	37	12.9	5	7.6	42	12.0
\$50 - \$74,999	28	14.4	1*	4.8	29	12.7
\$75,000+	16	10.2	5*	28.7	21	12.3
<b>Employment Status</b>						
Employed	145	15.6	38	13.4	183	14.9
Not Employed	2*	5.4	8*	17.7	10	11.7
Student/Homemaker	18	12.9	4*	10.1	22	12.1
Retired/Unable to Work	9	2.5	7	5.1	16	3.3
<b>Total</b>	174	12.0	57	11.6	231	11.8

\* Sample size less than 50

## Chronic Drinking

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	51	8.2	7	3.6	59	6.8
Female	6	0.6	5	0.8	11	0.7
<b>Age Group</b>						
18-24	16	12.3	-	-	16	7.1
25-34	14	6.2	5	4.1	20	5.5
35-44	9	3.1	3	2.3	12	2.8
45-54	9	2.6	3	2.0	12	2.4
55-64	6	2.7	1	3.8	7	3.0
65+	3	1.2	-	-	3	0.9
<b>Education</b>						
< High School	8	4.1	4	2.1	12	3.2
High School Graduate or GED	17	4.1	3	2.4	20	3.5
Some College or Technical School	16	4.9	4	1.4	21	3.8
College Graduate	15	3.8	1	2.4	16	3.5
<b>Income</b>						
< \$15,000	8	6.3	5	2.9	13	4.7
\$15 - \$24,999	7	3.5	1	1.2	9	2.5
\$25 - \$34,999	14	7.6	1	1.4	15	5.5
\$35 - \$49,999	13	3.9	2	3.5	15	3.9
\$50 - \$74,999	6	3.3	-	-	6	2.7
\$75,000+	6	4.7	3*	23.4	9	6.8
<b>Employment Status</b>						
Employed	43	5.0	10	2.4	53	4.1
Not Employed	3*	7.3	-	-	3	3.4
Student/Homemaker	6	5.5	1*	4.0	8	5.4
Retired/Unable to Work	5	1.4	1	0.9	6	1.2
<b>Total</b>	<b>57</b>	<b>4.3</b>	<b>12</b>	<b>2.0</b>	<b>70</b>	<b>3.6</b>

\* Sample size less than 50

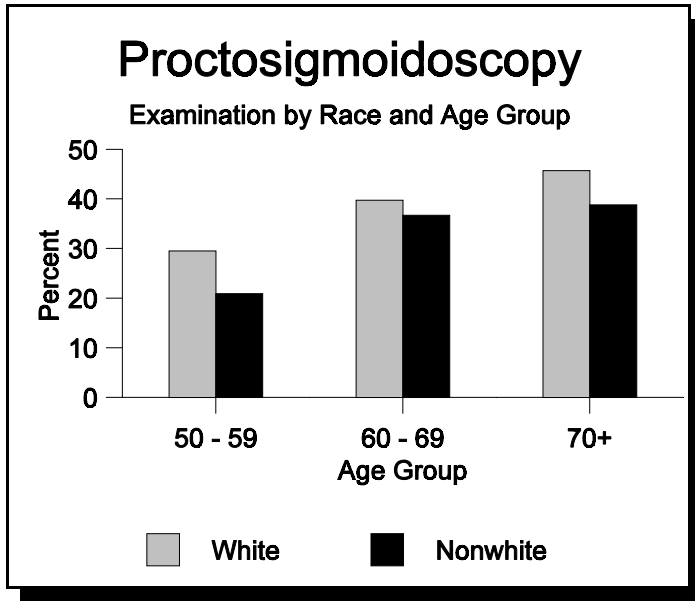
## Drinking and Driving

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	27	4.2	8	6.1	35	4.8
Female	7	0.9	4	0.7	11	0.8
<b>Age Group</b>						
18-24	10	7.6	-	-	10	4.4
25-34	9	3.9	6	8.5	15	5.7
35-44	3	0.9	4	3.7	7	1.9
45-54	9	2.7	1	0.4	10	2.0
55-64	1	0.6	1	3.8	2	1.3
65+	2	0.7	-	-	2	0.5
<b>Education</b>						
< High School	3	1.5	5	6.4	8	3.7
High School Graduate or GED	15	3.0	2	2.1	17	2.7
Some College or Technical School	7	2.8	1	0.6	8	2.1
College Graduate	9	2.1	4	3.9	13	2.5
<b>Income</b>						
< \$15,000	4	4.5	-	-	4	2.5
\$15 - \$24,999	7	3.3	5	4.0	12	3.7
\$25 - \$34,999	6	2.8	4	7.6	10	4.4
\$35 - \$49,999	8	2.4	1	1.2	9	2.2
\$50 - \$74,999	2	0.8	-	-	2	0.6
\$75,000+	4	2.3	1*	12.3	5	3.5
<b>Employment Status</b>						
Employed	28	2.9	9	3.8	37	3.2
Not Employed	-	-	-	-	-	-
Student/Homemaker	4	4.4	1*	4.0	5	4.3
Retired/Unable to Work	2	0.7	2	1.6	4	1.0
<b>Total</b>	34	2.5	12	3.1	46	2.7

\* Sample size less than 50

## Colorectal Cancer Screening

In 1999, the death rate for colorectal cancer in Mississippi was 74.3 per 100,000 among people age fifty and over. Digital rectal examinations (DRE) and proctosigmoidoscopic examinations are designed to detect colorectal cancer and other problems at an early stage to enhance the success of medical intervention. The American Cancer Society recommends a DRE annually after age forty and a proctoscopy every three to five years after age fifty.



The Year 2000 National Health Objective is for at least 40% of persons age fifty and older to have a proctosigmoidoscopy examination. The 1999 BRFSS data for Mississippi indicates that 36.4% of those surveyed had this kind of examination. For persons aged 50-59 the rate was 27.5%; for those 60-69 it was 38.5% and for those over 70 the rate was 44.0% (Figure 22).

Figure 21

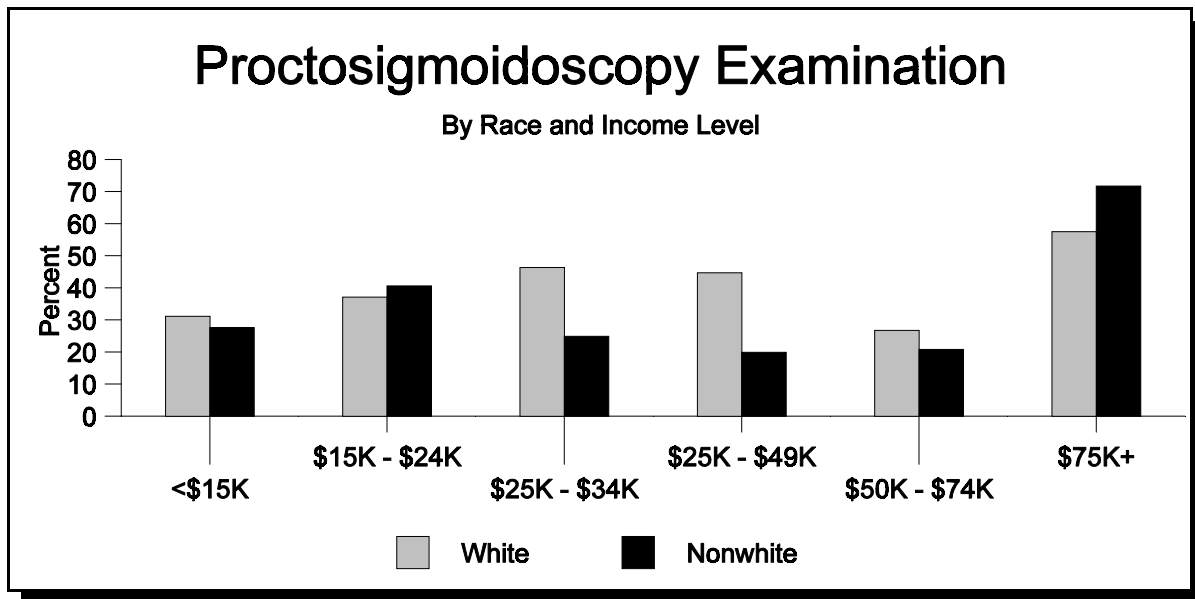


Figure 22

### Ever Had Proctosigmoidoscopy (Persons 50+)

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	82	36.9	29	36.9	111	36.9
Female	152	38.6	39	28.6	191	35.9
<b>Age Group</b>						
50-59	73	29.5	17	20.9	90	27.5
60-69	71	39.7	29	36.7	100	38.8
70+	90	45.7	22	38.8	112	44.0
<b>Education</b>						
< High School	41	30.9	36	32.6	77	31.7
High School Graduate or GED	73	34.1	18	33.0	91	33.9
Some College or Technical School	61	41.5	4*	33.6	65	40.7
College Graduate	59	47.7	10*	29.6	69	44.4
<b>Income</b>						
< \$15,000	42	31.1	17	27.6	59	29.9
\$15 - \$24,999	35	37.1	20	40.6	55	38.3
\$25 - \$34,999	36	46.3	7*	24.9	43	42.1
\$35 - \$49,999	35	44.7	2*	19.9	37	42.2
\$50 - \$74,999	17	26.7	2*	20.8	19	25.9
\$75,000+	26	57.5	1*	71.7	27	58.3
<b>Employment Status</b>						
Employed	75	29.0	19	22.9	94	27.5
Not Employed	3*	29.6	2*	36.6	5*	31.4
Student/Homemaker	21*	40.6	3*	54.8	24	42.8
Retired/Unable to Work	135	44.5	44	37.0	179	42.5
<b>Total</b>	234	37.9	68	32.0	302	36.4

\* Sample size less than 50

### Ever Had Home Blood Stool Test (Persons 50+)

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Sex</b>						
Male	60	27.2	9	11.7	69	23.5
Female	124	31.4	35	24.0	159	29.5
<b>Age Group</b>						
50-59	51	20.4	7	7.8	58	17.4
60-69	62	32.4	19	24.0	81	30.0
70+	71	37.3	18	25.9	89	34.6
<b>Education</b>						
< High School	30	22.5	23	19.0	53	21.0
High School Graduate or GED	63	28.9	12	21.1	75	27.4
Some College or Technical School	47	33.3	3*	22.2	50	32.2
College Graduate	44	34.3	6*	15.4	50	30.9
<b>Income</b>						
< \$15,000	29	20.2	14	18.6	43	19.6
\$15 - \$24,999	25	25.3	12	24.5	37	25.0
\$25 - \$34,999	25	34.6	2*	10.4	27	29.8
\$35 - \$49,999	23	28.9	1*	9.4	24	26.9
\$50 - \$74,999	19	29.0	2*	23.6	21	28.3
\$75,000+	20	42.3	-	-	20	39.8
<b>Employment Status</b>						
Employed	67	26.1	11	12.7	78	22.8
Not Employed	1*	4.9	-	-	1*	3.6
Student/Homemaker	15*	29.9	2*	23.6	17	28.9
Retired/Unable to Work	101	33.1	31	24.0	132	30.6
<b>Total</b>	184	29.6	44	19.1	228	26.9

\* Sample size less than 50



**MISSISSIPPI STATE DEPARTMENT OF HEALTH**

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May 2002

*Equal Opportunity In Employment/Services*