# Mississippi

# Behavioral Risk Factors Survey

## 2002

## Annual Report

Mississippi State Department Of Health

# 2002

# Behavioral Risk Factor Surveillance System Report

# (BRFSS)

**Mississippi State Department of Health**

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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 program designed to estimate the prevalence of these and other health risk factors throughout 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.

*Healthy People 2010: Understanding and Improving Health* is a publication of the U. S. Department of health and human Services and is a component of a national health planning process that began in 1979. Several citations from the publication are included in this report and referenced as *Healthy People 2010*.

## Methodology

### A. SAMPLING DESIGN

The Mississippi BRFSS is a random sample telephone survey. Utilizing the disproportionate stratified random sample (DSS) using list assisted sampling methodology and the Computer Assisted Telephone Interviewing (CATI) system, the survey has the potential to represent 88 percent of all households in Mississippi that have telephones according to Bell South data. A sample size of 4,085 interviews over a 12-month period was selected to obtain a 95% confidence interval of less than ±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 2000 Mississippi population to accurately reflect the population demographics. The weighting comprised the following factors: the number of adults and telephone lines in the household, cluster size, and age/race/sex distribution of the general population; the ratio of the estimated sampling fraction of each stratum to the stratum with the largest estimated sampling fraction; the ratio of the sampling fraction of the low density stratum to the high density stratum; and the ratio of the expected cluster size to the actual cluster size. Therefore, the estimated prevalence of any risk factor from the survey represents the total population of Mississippi residents very well.

The reader should understand that the number of observations presented in the tables of this report reflect the actual, non-weighted observations for each cell while the percentages in each cell represent weighted percentages.

This report presents the percentage of high-risk behavior within each demographic group for each of the eighteen 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, education, household income, employment status, and race.

## 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. Not all households have telephones and the survey does not attempt to contact institutionalized persons 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 number of respondents can mislead the reader into believing that a given finding is much 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 CDC recommends not interpreting percentages when based on a denominator of fewer than 50 non-weighted respondents. In the tables of results, such situations are marked with an asterisk indicating: “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.

### Arthritis

*At Risk for Arthritis* - Respondents who have been told by a doctor, nurse or other health care professional that they have arthritis or who report pain, aching or stiffness in their joints (excluding back and neck) during the past thirty days**.**

*Arthritis Awareness* **-** Respondents who have been told by a doctor, nurse or other health care professional that they have arthritis**.**

### Asthma

*Asthma Awareness* - Respondents who have been told by a doctor, nurse or other health care professional they have asthma**.**

### Breast Cancer Screening

*Mammogram and Clinical Breast Examination (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 Screening

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

### Colorectal Cancer Screening

*Colorectal Cancer* - Respondents age 50 and older who report that they have ever had a sigmoidoscopy or colonoscopy test.

**Diabetes**

*Diabetes Awareness* - Respondents who have been told by a doctor that they have diabetes.

**Exercise**

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

**Folic Acid**

*Take Multivitamins* - Female respondents age 18-44 who report that they take multivitamins.

*Folic Acid Benefits* - Female respondents age 18-44 who report that they are aware that folic acid helps prevent birth defects.

**Fruits and Vegetables**

*Fruit and vegetable consumption* - Respondents who report that they eat at least five servings of fruits and vegetables per day.

**Health Care Access**

*Health Care Plan* - Respondents who report that they have no health care coverage, including health insurance, prepaid plans such as Health Maintenance Organizations (HMO's) or government plans such as Medicare.

**Health Status**

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

**HIV/AIDS**

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

*High Risk Behavior* - Respondents age 18-64 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.

**Immunization**

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

**Oral Health**

*Permanent Teeth Extracted* - Respondents who report that they have had no permanent teeth extracted.

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

**Prostate Cancer**

*Prostate Cancer Screening* - Male respondents, age 40 and older, who report that they have ever had a prostate specific antigen (PSA) test used to check for prostate cancer.

**Seat Belt Usage**

*Never Use Seat Belts* - Respondents who report that they never use seat belts when driving or riding in a car.

*Seldom or Never Use Seat Belts* - Respondents who report that they sometimes, seldom or never use seat belts when driving or riding in a car.

**Tobacco Use**

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

# Survey Results

## Health Care Coverage

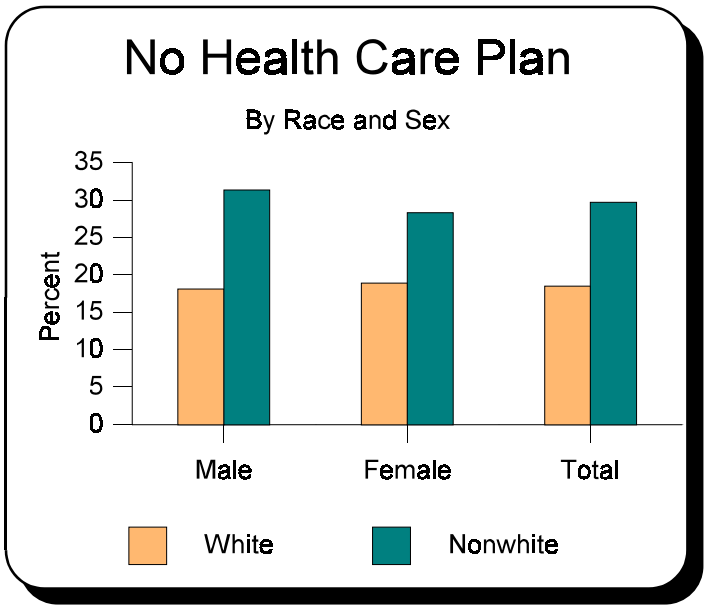


**Figure 1**

Access to health services– including preventive care, primary care and tertiary care– often depends on whether a person has health insurance. Uninsured people are less than half as likely as people with health insurance to have a primary care provider to have received appropriate preventive care, such as recent mammograms or Pap tests or to have had any recent medical visits. Lack of insurance also affects access to care for relatively serious medical conditions. Evidence suggests that lack of insurance over an extended period significantly increases the risk of premature death and that death rates among hospitalized patients without health insurance are significantly higher than among patients with insurance.

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,

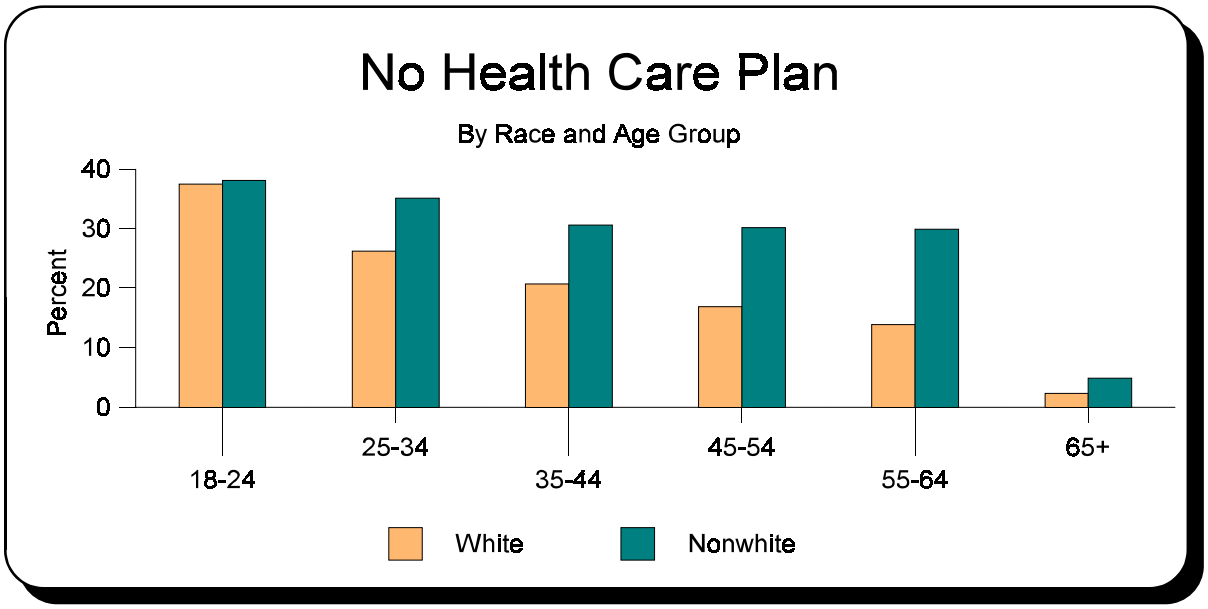


**Figure 2**

prepaid plans, Medicare or other government assisted programs such as the military, the VA or Medicaid.

In 2002, 22.5 percent of the respondents indicated they had no health care plan compared to 18.6 in 2001. According to the survey, nonwhite males had the highest rate of non-coverage at a rate of 31.3 percent; nonwhite females were next at 28.3 percent (Figure 1).

Respondents in the 18-24 year age category reported the highest proportion of non-coverage with a rate of 37.8 percent: 37.5 percent for whites and 38.1 percent for nonwhites (Figure 2).

## Persons Who Have No Kind of Health Care Plan

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 143 | 18.1 | 99 | 31.3 | 247 | 22.6 |
| Female | 276 | 18.9 | 241 | 28.3 | 522 | 22.4 |
| **Age Group** | | | | | | |
| 18-24 | 57 | 37.5 | 48 | 38.1 | 107 | 37.8 |
| 25-34 | 97 | 26.2 | 57 | 35.1 | 154 | 29.5 |
| 35-44 | 93 | 20.7 | 85 | 30.6 | 180 | 24.5 |
| 45-54 | 92 | 16.9 | 82 | 30.2 | 176 | 21.4 |
| 55-64 | 64 | 13.9 | 54 | 29.9 | 121 | 18.5 |
| 65+ | 16 | 2.3 | 12 | 4.9 | 28 | 3.0 |
| **Education** | | | | | | |
| < High School Graduate | 97 | 29.8 | 88 | 31.5 | 186 | 30.7 |
| High School Graduate or GED | 163 | 23.8 | 151 | 35.4 | 318 | 28.3 |
| Some College or Technical School | 109 | 18.0 | 69 | 28.4 | 182 | 21.3 |
| College Graduate | 50 | 6.8 | 28 | 14.8 | 79 | 8.9 |
| **Income** | | | | | | |
| < $15,000 | 85 | 31.1 | 140 | 40.0 | 229 | 36.0 |
| $15 - $24,999 | 123 | 33.4 | 108 | 39.5 | 234 | 36.5 |
| $25 - $34,999 | 72 | 21.2 | 28 | 23.9 | 100 | 21.9 |
| $35 - $49,999 | 54 | 15.2 | 11 | 10.9 | 66 | 14.1 |
| $50 - $74,999 | 17 | 5.1 | 5 | 5.6 | 22 | 5.1 |
| $75,000+ | 16 | 6.0 | 4* | 7.8 | 20 | 6.3 |
| **Employment Status** | | | | | | |
| Employed | 236 | 19.1 | 180 | 27.6 | 421 | 22.0 |
| Not Employed | 46 | 54.5 | 76 | 67.1 | 124 | 62.5 |
| Student/Homemaker | 78 | 27.5 | 34 | 36.0 | 114 | 30.3 |
| Retired/Unable to Work | 59 | 8.2 | 49 | 13.6 | 109 | 10.0 |
| **Total** | 419 | 18.5 | 340 | 29.7 | 769 | 22.5 |

* 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.

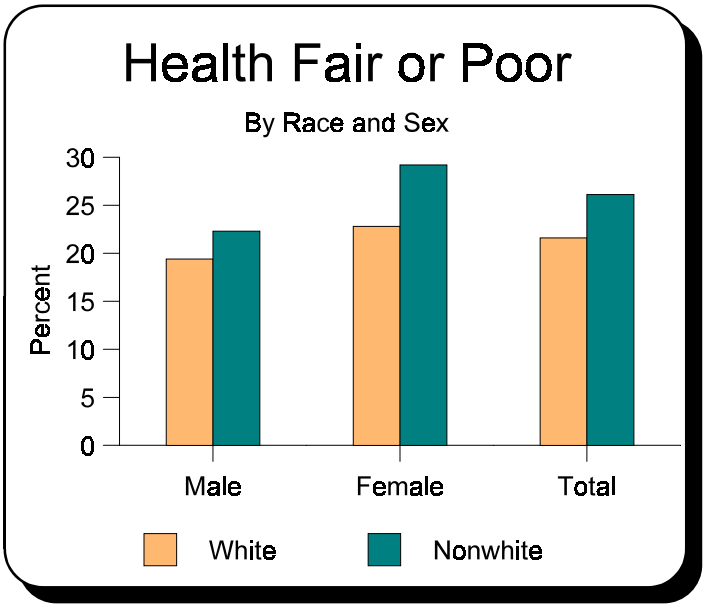


**Figure 3**

In Mississippi, females of both races reported their health as being worse than males (Figure 3). Nonwhite respondents reported fair or poor health more than whites.

Not surprisingly, persons with higher incomes report their health as being better (Figure 4). The 2002 BRFSS Survey indicated that a person whose annual income is below $15,000 annually is more likely to report his health as being fair or poor (Figure 4).

For those older than age 65, 43.2 percent said their health was fair or poor.

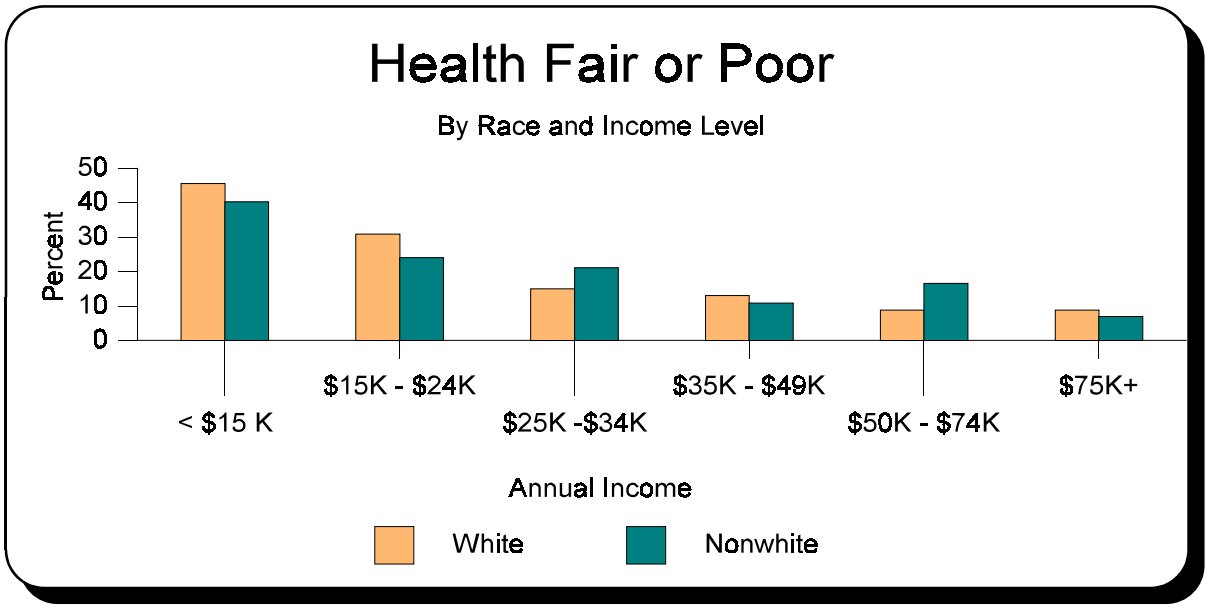


**Figure 4**

## People Who Report Their Health as Being Fair or Poor

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 214 | 19.4 | 99 | 22.3 | 315 | 20.3 |
| Female | 451 | 22.8 | 300 | 29.2 | 754 | 25.1 |
| **Age Group** | | | | | | |
| 18-24 | 14 | 9.1 | 15 | 8.3 | 29 | 8.7 |
| 25-34 | 32 | 7.8 | 35 | 17.2 | 67 | 11.5 |
| 35-44 | 75 | 14.9 | 56 | 21.4 | 131 | 17.3 |
| 45-54 | 118 | 21.2 | 87 | 31.5 | 206 | 24.7 |
| 55-64 | 149 | 32.2 | 88 | 44.7 | 238 | 35.6 |
| 65+ | 275 | 38.9 | 116 | 55.7 | 392 | 43.2 |
| **Education** | | | | | | |
| <High School | 185 | 42 | 182 | 48.4 | 368 | 45.1 |
| High School or GED | 225 | 23.9 | 110 | 20.2 | 336 | 22.3 |
| Some college or Technical School | 149 | 15.9 | 71 | 22.7 | 222 | 18 |
| College Graduate | 105 | 12.3 | 34 | 13.1 | 140 | 12.5 |
| **Income** | | | | | | |
| <$15,000 | 193 | 45.6 | 173 | 40.3 | 367 | 42.7 |
| $15-$24,999 | 135 | 30.8 | 90 | 24.0 | 225 | 27.5 |
| 25-$34,999 | 72 | 14.9 | 29 | 21.1 | 101 | 16.7 |
| $35-$49,999 | 64 | 13 | 17 | 10.8 | 81 | 12.4 |
| $50-$74,999 | 37 | 8.8 | 11 | 16.6 | 48 | 9.9 |
| $75,000+ | 31 | 8.8 | 3* | 6.9 | 34 | 8.5 |
| **Employment Status** | | | | | | |
| Employed | 162 | 10.5 | 117 | 14.5 | 280 | 11.8 |
| Not Employed | 29 | 29.4 | 37 | 23.9 | 67 | 26 |
| Student/Homemaker | 54 | 15.1 | 22 | 18.5 | 77 | 16.2 |
| Retired/Disabled | 420 | 49.4 | 223 | 60.7 | 645 | 53.2 |
| **Total** | 665 | 21.2 | 399 | 26.1 | 1,069 | 22.9 |

* Sample size less than 50

## Tobacco Use

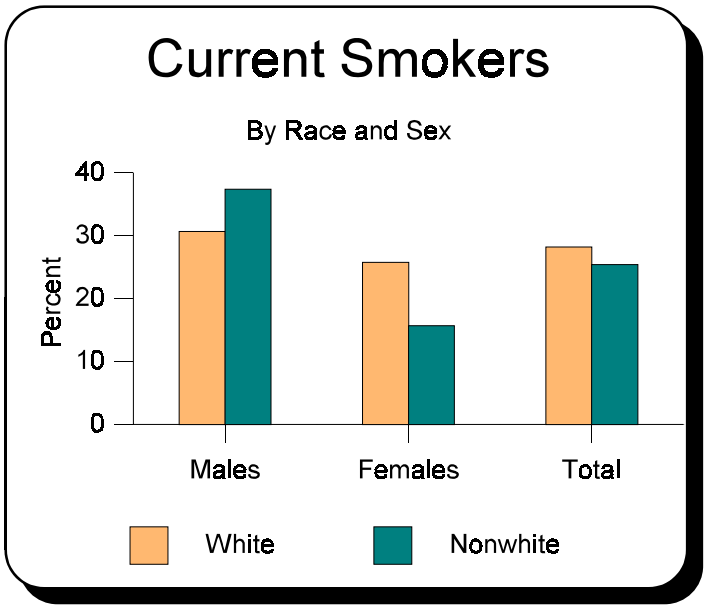


**Figure 5**

Tobacco use is the single leading preventable risk factor associated with death both 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 decade the percent of current adult smokers has not changed significantly. During the same period smokeless tobacco and cigar use among adults has increased. The MSDH has a tobacco plan which includes strategies to prevent tobacco use among youth, promote cessation among youth and adults and eliminate exposure to environmental tobacco smoke.

The 2002 BRFSS Survey revealed that the largest percentage of current smokers continue to be nonwhite males at 37.4 percent followed by white males at 30.7 percent and white females at 24.8 percent . The group with the lowest percentage of current smokers were nonwhite

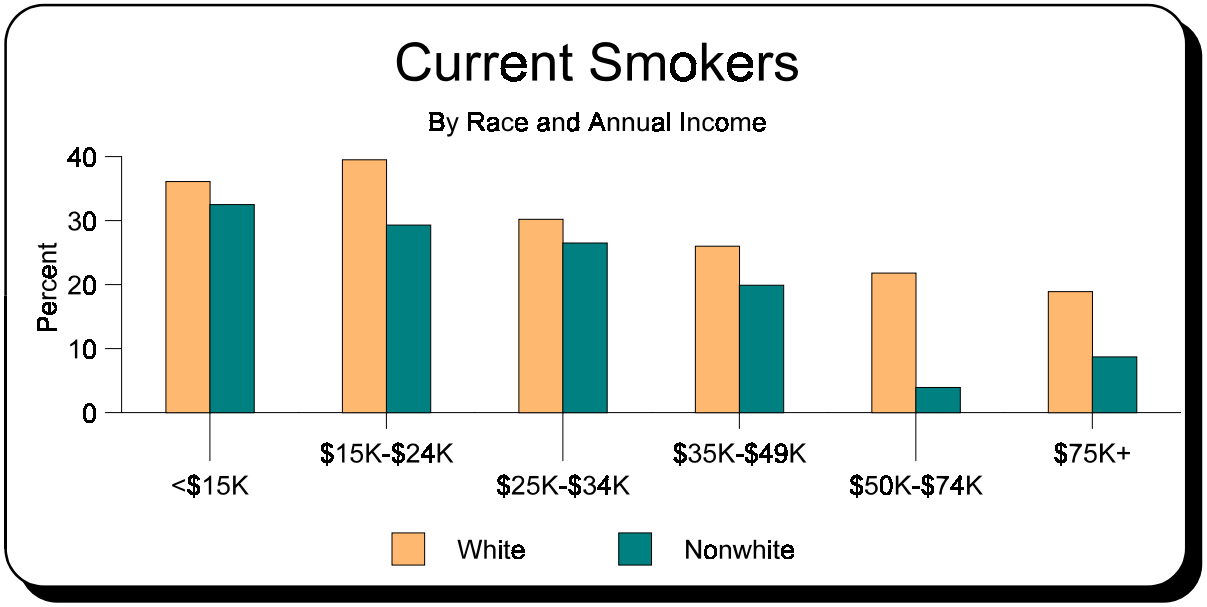


**Figure 6**

females at 15.7 percent (Figure 5).

Overall, the rate of current smoking in Mississippi is 27.2 percent which is an increase from 25.1 percent in 2001. The *Healthy People 2010* objective is 12 percent.

## Persons Who Smoke Everyday or Some Days

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 278 | 30.7 | 125 | 37.4 | 408 | 33.0 |
| Female | 420 | 25.8 | 152 | 15.7 | 574 | 22.0 |
| **Age Group** | | | | | | |
| 18-24 | 76 | 46.5 | 19 | 24.4 | 97 | 36.4 |
| 25-34 | 124 | 35.2 | 51 | 32.4 | 177 | 34.1 |
| 35-44 | 164 | 32.0 | 66 | 25.0 | 230 | 29.2 |
| 45-54 | 148 | 26.9 | 67 | 25.6 | 215 | 26.4 |
| 55-64 | 97 | 21.0 | 50 | 26.3 | 148 | 22.4 |
| 65+ | 88 | 13.0 | 23 | 15.7 | 113 | 13.9 |
| **Education** | | | | | | |
| < High School Graduate | 130 | 38.8 | 84 | 33.1 | 214 | 36.1 |
| High School Graduate or GED | 233 | 31.0 | 98 | 26.4 | 335 | 29.2 |
| Some College or Technical School | 219 | 33.0 | 68 | 24.2 | 289 | 30.3 |
| College Graduate | 115 | 14.3 | 24 | 12.9 | 140 | 14.0 |
| **Income** | | | | | | |
| < $15,000 | 125 | 36.1 | 101 | 32.5 | 229 | 34.3 |
| $15 - $24,999 | 149 | 39.5 | 78 | 29.3 | 227 | 34.5 |
| $25 - $34,999 | 102 | 30.2 | 33 | 26.5 | 136 | 29.1 |
| $35 - $49,999 | 110 | 26.0 | 25 | 19.9 | 136 | 24.5 |
| $50 - $74,999 | 77 | 21.8 | 3 | 3.9 | 80 | 18.8 |
| $75,000+ | 62 | 18.9 | 3* | 8.7 | 65 | 17.4 |
| **Employment Status** | | | | | | |
| Employed | 414 | 30.8 | 145 | 25.1 | 563 | 28.8 |
| Not Employed | 39 | 40.8 | 36 | 33.5 | 75 | 35.7 |
| Student/Homemaker | 58 | 22.0 | 21 | 23.2 | 80 | 22.4 |
| Retired/Unable to Work | 186 | 22.9 | 75 | 23.0 | 263 | 23.1 |
| **Total** | 698 | 28.2 | 277 | 25.4 | 982 | 27.2 |

* Sample size less than 50

## Diabetes

Diabetes was the seventh leading cause of death in Mississippi for the year 2001 with a death rate of 23.0 per 100,000 population. According to the 2002 BRFSS survey, 8.5 percent of all respondents reported being told by a doctor that they have diabetes which represents a decrease of 8.6 percent from the rate of 9.3 percent reported in 2001. In 1999 and 2000 the rate of self-reported diabetes increased.

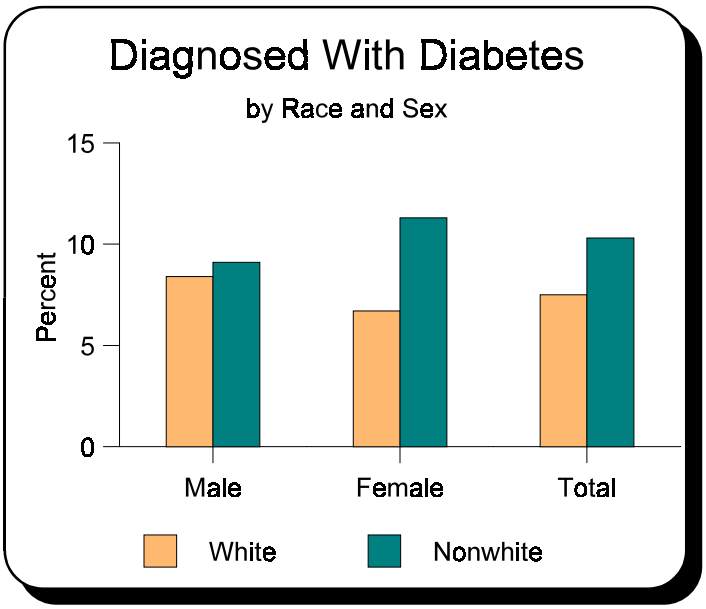


**Figure 7**

Nonwhite females continue to comprise the largest group having a self-reported rate of diabetes at 11.3 percent followed by nonwhite males with a rate of 9.1 percent. White males reported a rate of 8.4 percent and white females were the lowest at 6.7 percent (Figure 7).

There were some erratic results in the category of education. Respondents who did not complete high school reported a rate of 11.4 followed by college graduates who reported a rate of 9.2 percent. High school graduates and those attending some college or technical school both reported a rate of 7.5 percent.

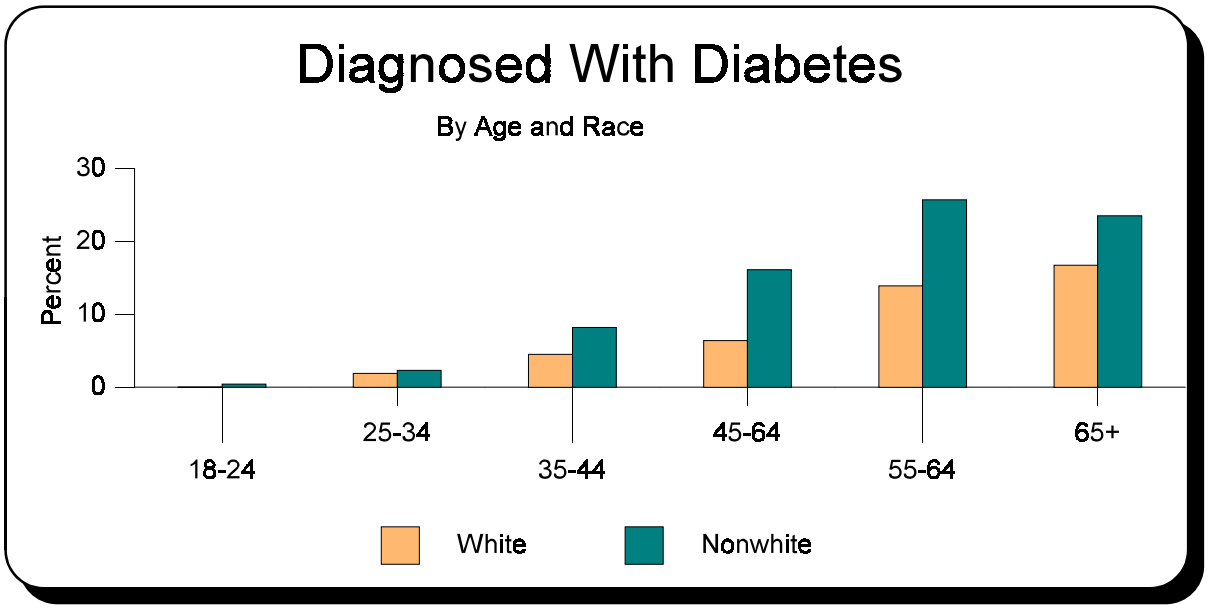


**Figure 8**

Clear differences appear in the age of respondents and the rate of diabetes. Only 3.7 percent of respondents under age 45 reported having diabetes while 14.7 percent of those above 45 reported they had diabetes. Respondents 65 years and older reported a rate of 18.5 percent

## Persons Who Have Been Told by a Doctor That They Have Diabetes

| | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 102 | 8.4 | 44 | 9.1 | 148 | 8.7 |
| Female | 132 | 6.7 | 128 | 11.3 | 262 | 8.4 |
| **Age Group** | | | | | | |
| 18-24 | 0 | 0.0 | 1 | 0.4 | 1 | 0.2 |
| 25-34 | 7 | 1.9 | 7 | 2.3 | 14 | 2.0 |
| 35-44 | 22 | 4.5 | 23 | 8.2 | 45 | 5.9 |
| 45-54 | 34 | 6.4 | 37 | 16.1 | 72 | 9.7 |
| 55-64 | 64 | 13.9 | 46 | 25.7 | 112 | 17.4 |
| 65+ | 106 | 16.7 | 55 | 23.5 | 162 | 18.5 |
| **Education** | | | | | | |
| < High School Graduate | 43 | 8.5 | 69 | 14.4 | 113 | 11.4 |
| High School Graduate or GED | 75 | 8.1 | 38 | 6.5 | 114 | 7.5 |
| Some College or Technical School | 54 | 6.5 | 31 | 9.2 | 87 | 7.5 |
| College Graduate | 62 | 7.2 | 32 | 15.3 | 94 | 9.2 |
| **Income** | | | | | | |
| < $15,000 | 45 | 10.3 | 63 | 12.7 | 109 | 11.6 |
| $15 - $24,999 | 46 | 9.8 | 28 | 6.8 | 74 | 8.4 |
| $25 - $34,999 | 25 | 4.9 | 14 | 6.6 | 40 | 5.5 |
| $35 - $49,999 | 22 | 4.7 | 9 | 7.1 | 31 | 5.3 |
| $50 - $74,999 | 34 | 10.1 | 6 | 10.4 | 40 | 10.0 |
| $75,000+ | 22 | 5.4 | 9* | 22.6 | 31 | 7.8 |
| **Employment Status** | | | | | | |
| Employed | 84 | 4.9 | 49 | 5.7 | 134 | 5.2 |
| Not Employed | 6 | 6.9 | 12 | 7.7 | 19 | 7.8 |
| Student/Homemaker | 15 | 3.9 | 5 | 2.3 | 20 | 3.4 |
| Retired/Unable to Work | 128 | 15.6 | 105 | 26.7 | 235 | 19.4 |
| **Total** | 234 | 7.5 | 172 | 10.3 | 410 | 8.5 |

* Sample size less than 50

## Folic Acid

Folic acid is a B vitamin that helps to prevent birth defects of the brain and spinal cord called neural tube defects (NTD) when taken before pregnancy and in the early weeks of pregnancy. About 2,500 babies are born with neural tube defects each year in the United States. They include spina bifida which can result in paralysis, and anencephaly, a fatal condition which impedes the development of the brain and skull. Studies suggest that folic acid may help prevent some other birth defects as well such as cleft lip and palate. It has also been found to reduce the risk of certain types of cancer and cardiovascular disease.

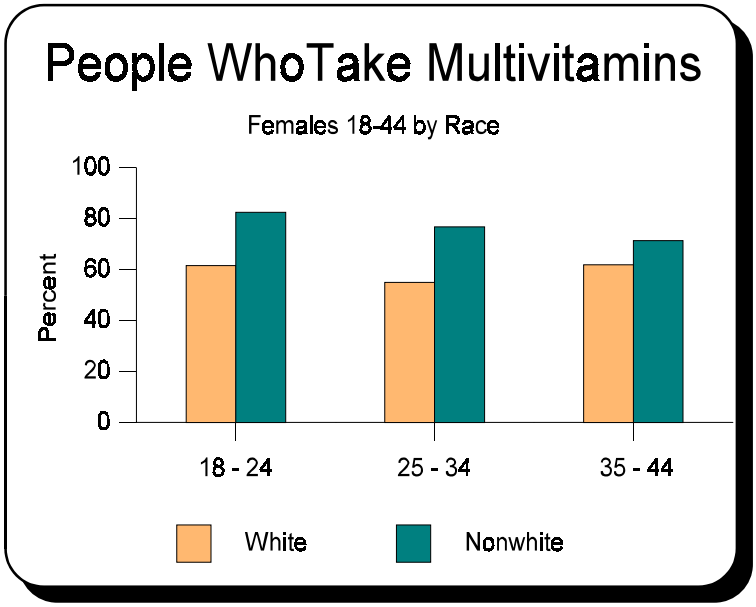


**Figure 9**

In 2002, 35.6 percent of the female respondents from the age of 18 to 44 were aware that folic acid may prevent birth defects. This is an increase from 22.8 percent reported in the 2000 BRFSS survey.

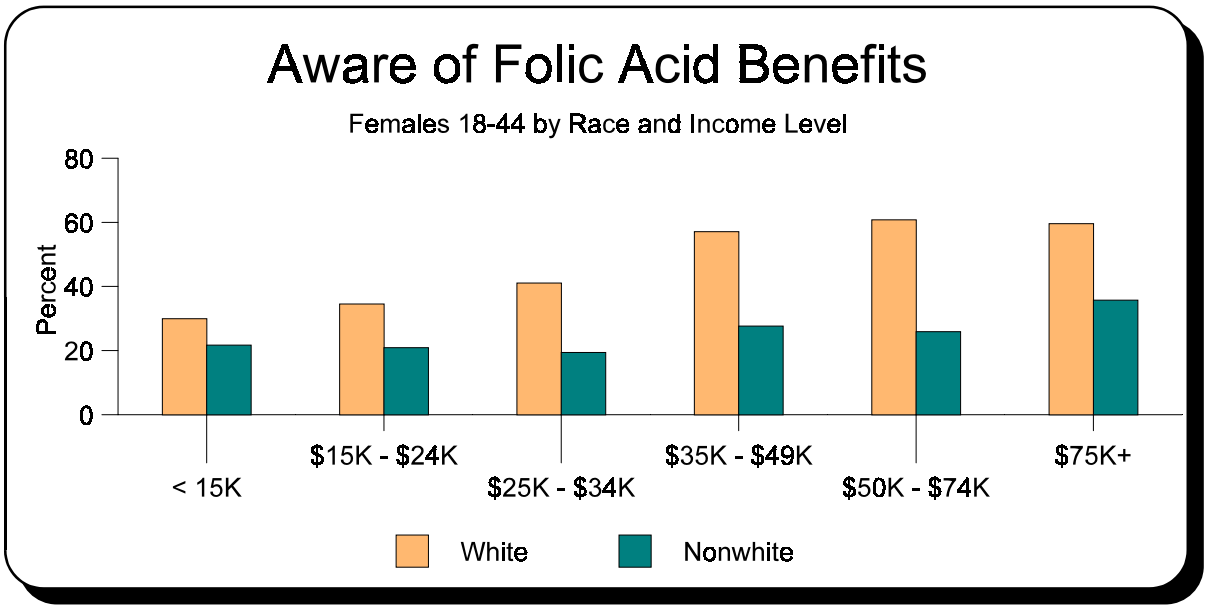


**Figure 10**

## Aware That Folic Acid Prevents Birth Defects (Females 18-44)

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Age Group** | | | | | | |
| 18-24 | 44 | 37.4 | 28 | 23.9 | 72 | 30.7 |
| 25-34 | 124 | 52.8 | 47 | 23.3 | 171 | 40.0 |
| 35-44 | 149 | 46.3 | 35 | 18.1 | 186 | 35.2 |
| **Education** | | | | | | |
| < High School | 14 | 21.3 | 5 | 6.8 | 19 | 13.6 |
| High School Graduate or GED | 64 | 32.9 | 33 | 16.8 | 98 | 24.6 |
| Some College or Technical School | 102 | 50.2 | 35 | 25.7 | 138 | 40.4 |
| College Graduate | 137 | 63.6 | 37 | 38.7 | 174 | 55.9 |
| **Income** | | | | | | |
| < $15,000 | 24 | 29.9 | 29 | 20.9 | 53 | 24.1 |
| $15 - $24,999 | 36 | 34.5 | 32 | 19.4 | 68 | 25.4 |
| $25 - $34,999 | 49 | 41.1 | 19 | 27.6 | 68 | 35.4 |
| $35 - $49,999 | 61 | 57.1 | 11* | 25.9 | 73 | 48.0 |
| $50 - $74,999 | 69 | 60.8 | 8* | 35.7 | 78 | 56.9 |
| $75,000+ | 51 | 59.6 | 5* | 45.2 | 56 | 57.7 |
| **Employment Status** | | | | | | |
| Employed | 215 | 46.9 | 75 | 22.9 | 292 | 36.3 |
| Not Employed | 16* | 33.8 | 14 | 22.5 | 30 | 26.5 |
| Student/Homemaker | 75 | 51.8 | 13 | 15.9 | 88 | 40.5 |
| Retired/Unable to Work | 11* | 27.9 | 8* | 21.3 | 19 | 24.9 |
| **Total** | 317 | 46.2 | 110 | 21.7 | 429 | 35.6 |

* Sample size less than 50

## Take Multivitamins (Females 18-44)

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Age Group** | | | | | | |
| 18-24 | 42 | 38.5 | 21 | 17.6 | 63 | 28.3 |
| 25-34 | 107 | 45.1 | 41 | 23.3 | 148 | 35.6 |
| 35-44 | 134 | 38.2 | 54 | 28.6 | 189 | 34.4 |
| **Education** | | | | | | |
| < High School | 15 | 22.9 | 10 | 15.5 | 25 | 19.0 |
| High School Graduate or GED | 52 | 28.4 | 33 | 17.3 | 85 | 22.5 |
| Some College or Technical School | 95 | 47.5 | 34 | 28.1 | 130 | 39.7 |
| College Graduate | 121 | 51.6 | 39 | 37.8 | 160 | 47.3 |
| **Income** | | | | | | |
| < $15,000 | 33 | 40.7 | 19 | 12.5 | 52 | 22.5 |
| $15 - $24,999 | 35 | 30.3 | 40 | 24.1 | 75 | 26.5 |
| $25 - $34,999 | 46 | 40.4 | 13 | 17.6 | 59 | 31.2 |
| $35 - $49,999 | 50 | 43.5 | 15* | 33.6 | 65 | 40.4 |
| $50 - $74,999 | 61 | 53.2 | 12* | 57.8 | 74 | 54.2 |
| $75,000+ | 42 | 44.5 | 7* | 66.0 | 49 | 47.4 |
| **Employment Status** | | | | | | |
| Employed | 186 | 41.3 | 87 | 27.4 | 274 | 35.1 |
| Not Employed | 11* | 25.6 | 12 | 17.3 | 23 | 20.3 |
| Student/Homemaker | 71 | 46.7 | 10 | 11.8 | 81 | 35.8 |
| Retired/Unable to Work | 15* | 23.2 | 7* | 24.2 | 22 | 23.6 |
| **Total** | 283 | 40.6 | 116 | 23.4 | 400 | 33.1 |

* Sample size less than 50

## Breast Cancer Screening

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

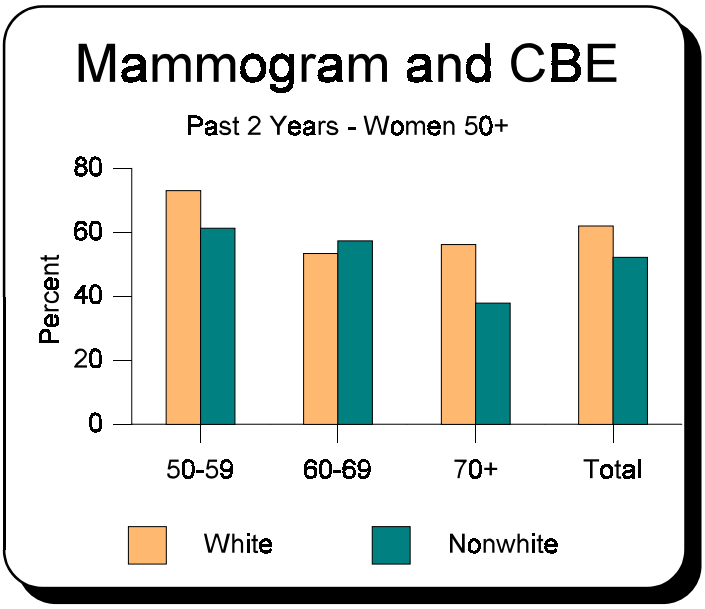


**Figure 11**

The MSDH breast and cervical cancer program has established a goal to reduce breast cancer deaths to no more than 17.0 per 100,000 female population by 2002. In 1999, there were 29.7 breast cancer deaths per 100,000 females, in 2000 there were 31.4 deaths per 100,000 and in 2001 29.9 deaths per 100,000.

The 2002 BRFSS survey indicated that 77.2 percent of the women in Mississippi age 40 and above had ever had a mammogram and a clinical breast examination (CBE). In women age 50 and older, white respondents had a mammogram and CBE within two years at a rate of 62.9 percent compared to a rate of 52.9 percent for nonwhites.

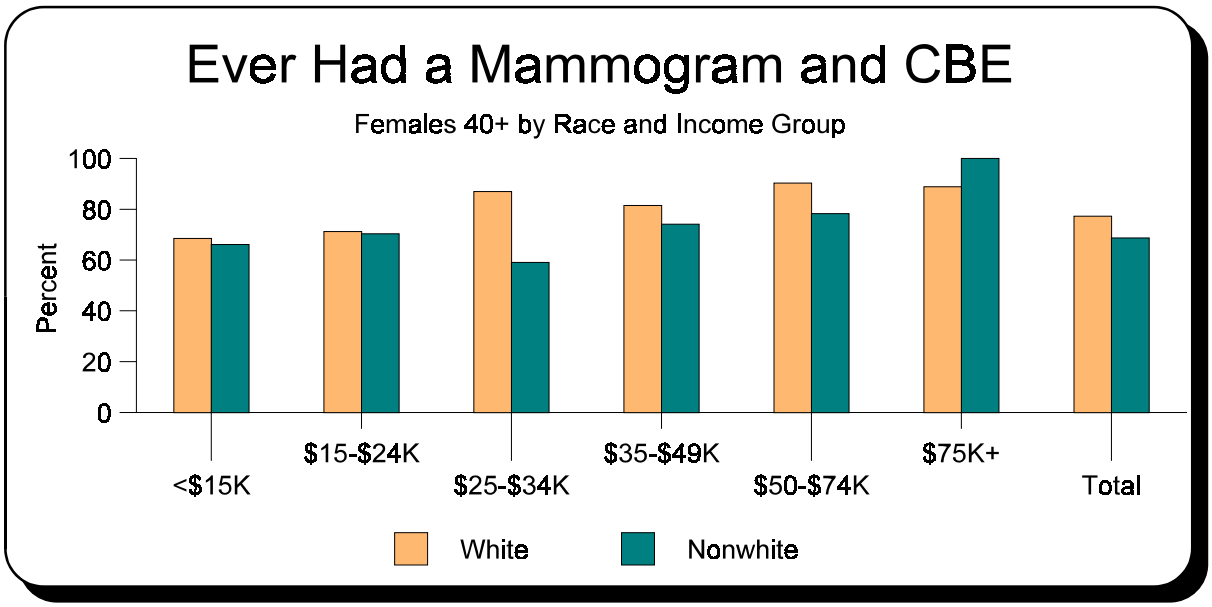


**Figure 12**

The Year 2010 National Health Objective is to increase to at least 70 percent the proportion of women aged 50 and older who have received a clinical breast examination and mammogram within the preceding one to two years. 2002 BRFSS data revealed that 59.9 percent of Mississippi women aged 50 and older have received a clinical breast examination and mammogram within the preceding one to two years.

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

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

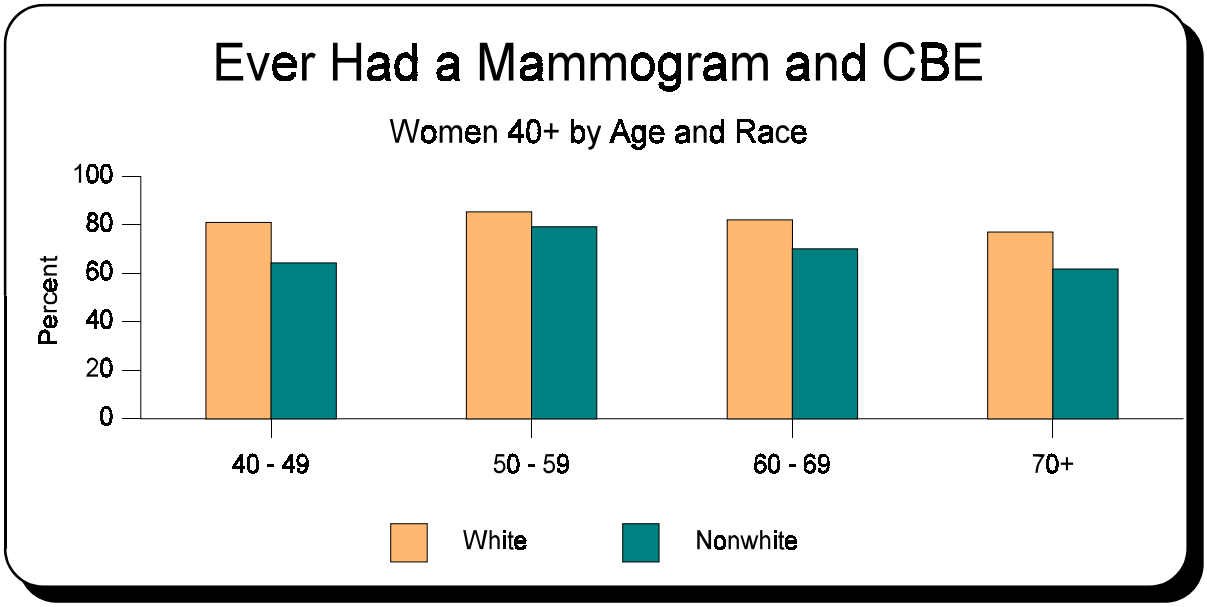


**Figure 13**

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

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Age Group** | | | | | | |
| 40-49 | 280 | 80.9 | 139 | 64.2 | 420 | 74.2 |
| 50-59 | 255 | 85.3 | 111 | 79.2 | 369 | 83.6 |
| 60-69 | 234 | 82.1 | 78 | 70.1 | 314 | 78.9 |
| 70+ | 249 | 77.0 | 69 | 61.7 | 318 | 72.7 |
| **Education** | | | | | | |
| < High School Graduate | 141 | 67.2 | 125 | 63.8 | 267 | 65.5 |
| High School Graduate or GED | 325 | 79.8 | 109 | 63.0 | 437 | 74.7 |
| Some College or Technical School | 276 | 85.6 | 83 | 79.3 | 361 | 84.1 |
| College Graduate | 274 | 89.6 | 80 | 76.4 | 354 | 86.2 |
| **Income** | | | | | | |
| < $15,000 | 155 | 68.8 | 115 | 59.2 | 271 | 64.0 |
| $15 - $24,999 | 162 | 76.5 | 86 | 67.7 | 249 | 73.2 |
| $25 - $34,999 | 125 | 82.1 | 45 | 69.8 | 171 | 78.2 |
| $35 - $49,999 | 139 | 85.3 | 36* | 83.0 | 177 | 85.0 |
| $50 - $74,999 | 122 | 92.2 | 23* | 84.7 | 145 | 90.9 |
| $75,000+ | 119 | 94.9 | 13* | 94.1 | 132 | 94.8 |
| **Employment Status** | | | | | | |
| Employed | 438 | 85.6 | 186 | 73.8 | 627 | 81.7 |
| Not Employed | 26* | 70.3 | 31* | 66.3 | 59 | 68.9 |
| Student/Homemaker | 117 | 74.7 | 15* | 58.1 | 133 | 71.2 |
| Retired/Unable to Work | 437 | 80.1 | 165 | 65.2 | 602 | 75.3 |
| **Total** | 1,018 | 81.4 | 397 | 68.2 | 1,421 | 77.2 |

* 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 |
| **Age Group** | | | | | | |
| 50-59 | 207 | 69.9 | 88 | 59.5 | 297 | 66.6 |
| 60-69 | 178 | 63.4 | 66 | 58.9 | 244 | 61.9 |
| 70+ | 175 | 54.7 | 40 | 37.7 | 215 | 50.0 |
| **Education** | | | | | | |
| High School Graduate | 89 | 50.6 | 70 | 46.1 | 159 | 48.1 |
| High School Graduate or GED | 178 | 55.8 | 48 | 46.6 | 228 | 54.0 |
| Some College or Technical School | 161 | 73.7 | 35 | 60.6 | 196 | 70.9 |
| College Graduate | 131 | 75.1 | 41 | 79.0 | 172 | 75.9 |
| **Income** | | | | | | |
| < $15,000 | 92 | 48.0 | 58 | 45.6 | 150 | 46.7 |
| $15 - $24,999 | 84 | 52.4 | 35 | 54.8 | 120 | 53.3 |
| $25 - $34,999 | 73 | 67.9 | 17* | 46.2 | 90 | 62.3 |
| $35 - $49,999 | 81 | 77.6 | 17* | 66.9 | 99 | 75.9 |
| $50 - $74,999 | 61 | 87.5 | 14* | 86.8 | 75 | 87.4 |
| $75,000+ | 47 | 84.8 | 4* | 79.9 | 51 | 84.4 |
| **Employment Status** | | | | | | |
| Employed | 185 | 73.0 | 75 | 75.8 | 260 | 73.2 |
| Not Employed | 16* | 61.8 | 9* | 42.4 | 26* | 53.1 |
| Student/Homemaker | 60 | 58.9 | 11* | 48.8 | 72 | 57.1 |
| Retired/Unable to Work | 299 | 58.4 | 99 | 45.0 | 398 | 54.2 |
| **Total** | 560 | 62.9 | 194 | 52.9 | 756 | 59.9 |

* Sample size less than 50

## Cervical Cancer Screening

The American Cancer Society estimates that there will be about 12,800 new cases of invasive cervical cancer and that about 4,800 will die in the United States in 2002. 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 percent. 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 2010 National Health Objective

1. Increase to at least 97 percent the proportion of women aged 18 and older who have ever received a Pap test.

> 2002 BRFSS data indicate that 95.2 percent of Mississippi women aged 18 and older have received a Pap test. This figure represents a slight decrease from 96.4 percent reported in the 2001 BRFSS Report and the 95.3 in the 2000 Report.

2. Increase to at least 90 percent the proportion of women aged 18 and older who have received a Pap test within the preceding one to three years.

> The 2002 BRFSS data indicate that 82.9 percent of Mississippi women aged 18 and

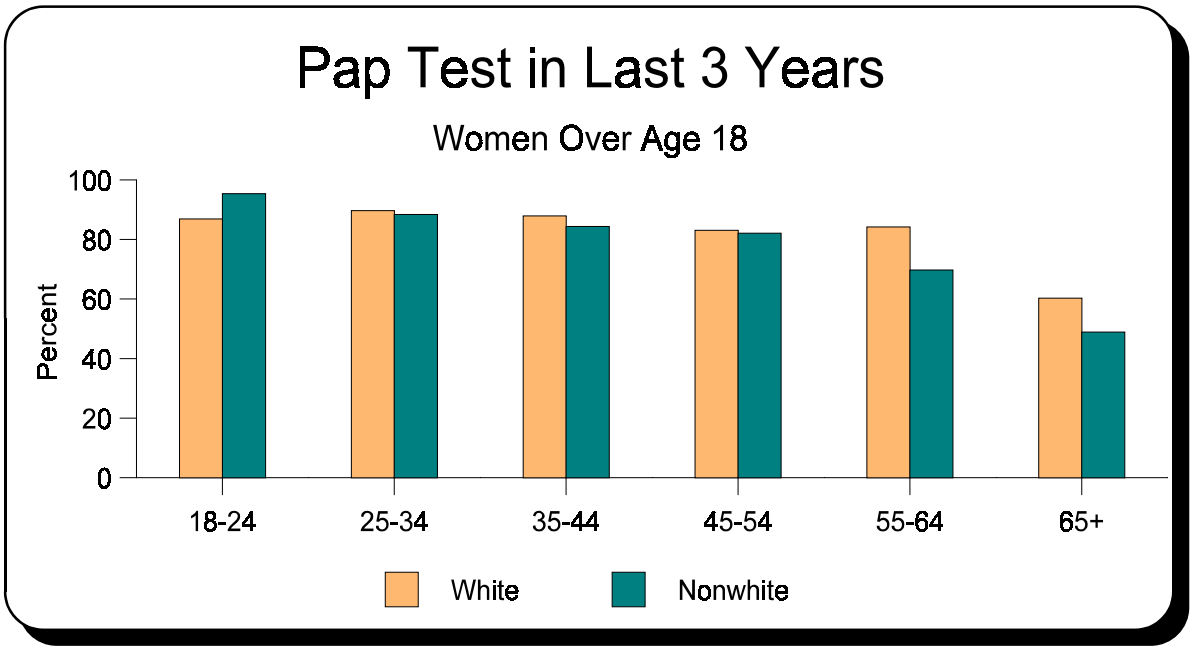


**Figure 14**

older have received a Pap test within the preceding one to three years which is a decrease from 86.3 percent reported in 2001 and from 86.8 percent in 2000.

Centers for Disease Control surveys show that in the United States for 1998, 92 percent of women aged 18 years or older reported ever having a Pap smear and 79 percent reported having one within the preceding three years. In Mississippi, the rate of recent Pap screening among women ages 65 and older was only 56.5 percent.

## Women 18 and Older Who Have Ever Had a Pap Test

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Age Group** | | | | | | |
| 18-24 | 88 | 87.2 | 87 | 93.1 | 176 | 89.7 |
| 25-34 | 206 | 99.1 | 153 | 97.7 | 395 | 98.5 |
| 35-44 | 248 | 100.0 | 145 | 96.5 | 395 | 98.6 |
| 45-54 | 165 | 98.0 | 103 | 98.6 | 268 | 98.2 |
| 55-64 | 110 | 97.7 | 43* | 95.2 | 154 | 97.0 |
| 65+ | 190 | 92.0 | 65 | 78.1 | 255 | 87.3 |
| **Education** | | | | | | |
| < High School Graduate | 111 | 94.5 | 119 | 87.6 | 231 | 90.5 |
| High School Graduate or GED | 305 | 95.6 | 214 | 92.8 | 521 | 94.4 |
| Some College or Technical School | 291 | 95.6 | 143 | 98.6 | 438 | 96.4 |
| College Graduate | 304 | 97.5 | 126 | 100.0 | 431 | 98.2 |
| **Income** | | | | | | |
| < $15,000 | 135 | 90.7 | 175 | 95.4 | 310 | 93.2 |
| $15 - $24,999 | 162 | 94.2 | 168 | 95.5 | 331 | 94.9 |
| $25 - $34,999 | 146 | 96.6 | 83 | 95.8 | 229 | 95.7 |
| $35 - $49,999 | 157 | 99.2 | 45* | 95.4 | 203 | 98.2 |
| $50 - $74,999 | 137 | 99.6 | 29* | 100.0 | 167 | 99.7 |
| $75,000+ | 118 | 95.8 | 17* | 100.0 | 135 | 96.4 |
| **Employment Status** | | | | | | |
| Employed | 567 | 97.4 | 345 | 98.1 | 918 | 97.6 |
| Not Employed | 43* | 92.8 | 67 | 94.0 | 111 | 92.6 |
| Student/Homemaker | 172 | 93.6 | 67 | 90.4 | 240 | 92.7 |
| Retired/Unable to Work | 229 | 95.0 | 122 | 85.3 | 351 | 91.2 |
| **Total** | 1,012 | 95.9 | 604 | 94.4 | 1,624 | 95.2 |

* Sample size less than 50

## Women 18 and Older Who Have Had a Pap Test in Past Three Years

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Age Group** | | | | | | |
| 18-24 | 87 | 86.9 | 85 | 92.4 | 172 | 88.8 |
| 25-34 | 185 | 89.7 | 143 | 88.4 | 328 | 89.1 |
| 35-44 | 221 | 87.9 | 128 | 84.4 | 351 | 86.5 |
| 45-54 | 140 | 83.1 | 90 | 82.1 | 230 | 82.8 |
| 55-64 | 96 | 84.2 | 33* | 69.7 | 130 | 80.3 |
| 65+ | 118 | 60.3 | 42 | 48.9 | 160 | 56.5 |
| **Education** | | | | | | |
| < High School Graduate | 76 | 69.1 | 92 | 69.8 | 169 | 69.4 |
| High School Graduate or GED | 240 | 79.1 | 190 | 83.7 | 432 | 81.2 |
| Some College or Technical School | 259 | 87.7 | 128 | 86.3 | 390 | 86.8 |
| College Graduate | 275 | 88.5 | 117 | 92.1 | 393 | 89.6 |
| **Income** | | | | | | |
| < $15,000 | 93 | 69.3 | 144 | 81.0 | 237 | 76.0 |
| $15 - $24,999 | 135 | 79.8 | 149 | 83.9 | 285 | 82.0 |
| $25 - $34,999 | 129 | 88.2 | 78 | 88.5 | 207 | 87.8 |
| $35 - $49,999 | 141 | 89.9 | 40* | 86.8 | 182 | 89.2 |
| $50 - $74,999 | 125 | 91.4 | 28* | 96.7 | 154 | 92.5 |
| $75,000+ | 111 | 88.1 | 17* | 100.0 | 128 | 89.6 |
| **Employment Status** | | | | | | |
| Employed | 506 | 88.1 | 318 | 89.5 | 829 | 88.5 |
| Not Employed | 34* | 76.4 | 59 | 82.0 | 94 | 79.2 |
| Student/Homemaker | 148 | 82.8 | 59 | 82.5 | 208 | 82.8 |
| Retired/Unable to Work | 162 | 69.9 | 90 | 61.7 | 252 | 66.7 |
| **Total** | 851 | 83.1 | 529 | 82.9 | 1,387 | 82.9 |

* Sample size less than 50

## Fruits and Vegetables

Nutrition plays a vital role in achieving and maintaining optimum health. Dietary factors have a significant impact in decreasing the risk of heart disease, stroke, diabetes mellitus, obesity and atherosclerosis. Some scientific studies have shown that greater fruit and vegetable consumption reduces the risk of cancer of the colon, breast, lung, oral cavity, larynx, esophagus, stomach, bladder, uterine cervix and pancreas.

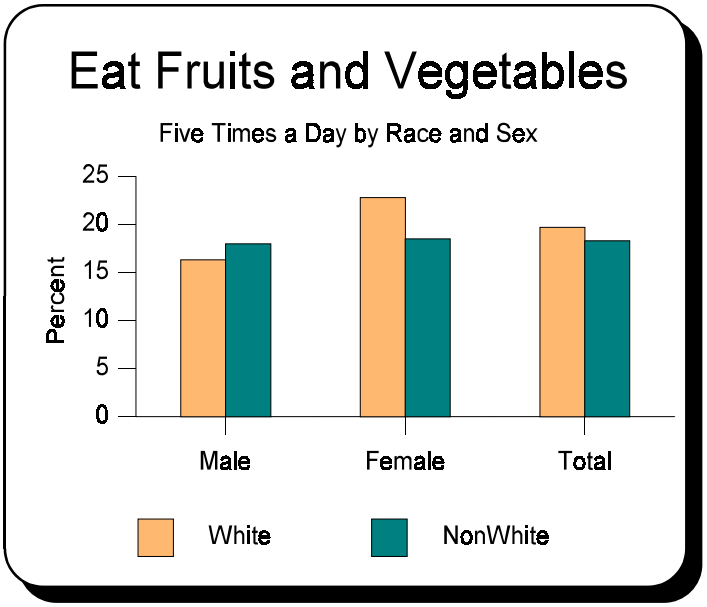


**Figure 15**

Fruits and vegetables are high in complex carbohydrates, fiber, minerals and vitamins and as a general rule are low in fat and calories. It is recommended that every person eat a variety of and a minimum of five servings of fruits and vegetables each day.

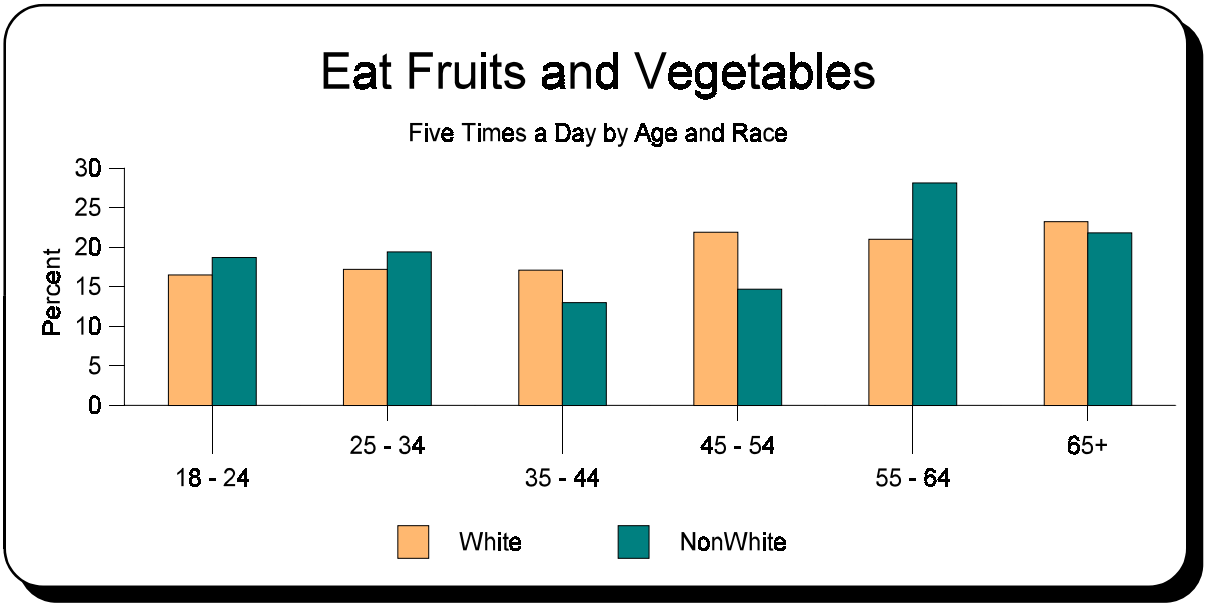


**Figure 16**

Based on the 2002 BRFSS Survey only 19.2 percent of the people in Mississippi report that they consume fruits and vegetables as much as five times per day. This represents an increase from 18.6 percent reported in the year 2000.

As noted in Figure 15 white females reported the highest rate of fruit and vegetables consumption at 22.8 percent. Next were nonwhite females at 18.5 percent which followed by nonwhite males at 18.0 percent. White males were the lowest at 16.3 percent.

## People Who Eat Fruits and Vegetables at Least Five Times Per Day

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 167 | 16.3 | 60 | 18.0 | 230 | 16.9 |
| Female | 402 | 22.8 | 172 | 18.5 | 577 | 21.2 |
| **Age Group** | | | | | | |
| 18-24 | 26 | 16.5 | 24 | 18.7 | 50 | 17.4 |
| 25-34 | 65 | 17.2 | 36 | 19.4 | 101 | 17.9 |
| 35-44 | 86 | 17.1 | 40 | 13.0 | 127 | 15.5 |
| 45-54 | 128 | 21.9 | 42 | 14.7 | 171 | 19.6 |
| 55-64 | 102 | 21.0 | 44 | 28.1 | 146 | 22.8 |
| 65+ | 159 | 23.2 | 43 | 21.8 | 203 | 22.9 |
| **Education** | | | | | | |
| < High School | 62 | 15.2 | 59 | 16.8 | 121 | 15.9 |
| High School Graduate or GED | 158 | 17.3 | 72 | 17.1 | 232 | 17.1 |
| Some College or Technical School | 148 | 19.6 | 48 | 19.2 | 199 | 19.6 |
| College Graduate | 200 | 24.9 | 49 | 21.0 | 249 | 23.8 |
| **Income** | | | | | | |
| < $15,000 | 64 | 17.7 | 63 | 17.1 | 128 | 17.4 |
| $15 - $24,999 | 78 | 17.9 | 62 | 21.0 | 141 | 19.3 |
| $25 - $34,999 | 83 | 19.8 | 26 | 15.1 | 109 | 18.2 |
| $35 - $49,999 | 92 | 20.1 | 25 | 18.4 | 117 | 19.5 |
| $50 - $74,999 | 71 | 18.5 | 11 | 18.6 | 83 | 18.5 |
| $75,000+ | 93 | 24.6 | 11* | 18.8 | 104 | 23.8 |
| **Employment Status** | | | | | | |
| Employed | 297 | 18.2 | 116 | 17.1 | 416 | 17.7 |
| Not Employed | 15 | 14.6 | 21 | 19.2 | 36 | 17.3 |
| Student/Homemaker | 66 | 22.2 | 22 | 21.5 | 88 | 21.9 |
| Retired/Unable to Work | 190 | 22.7 | 73 | 19.6 | 265 | 21.9 |
| **Total** | 569 | 19.7 | 232 | 18.3 | 807 | 19.2 |

* Sample size less than 50

## Arthritis

The various forms of arthritis affect more than 15 percent of the U.S. population– over 43 million persons– and more than 20 percent of the adult population, making arthritis one of the most common conditions in the United States according to *Healthy People 2010.*

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 working, housekeeping and school of nearly three percent of the entire U.S. population (seven million persons), including nearly one out of every five persons with arthritis. 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.

Second, 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.

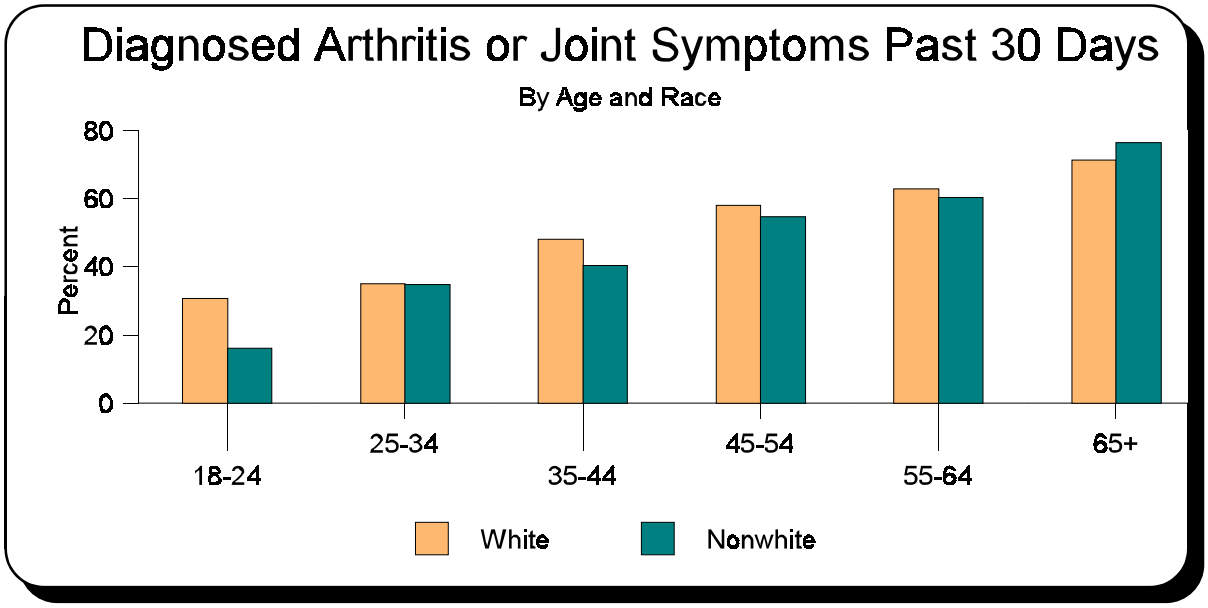


**Figure 17**

One of the national goals for *Healthy People 2010* is reduce to 21 percent the rate of adults with chronic joint symptoms that limit the activity of a person. In Mississippi, the 2002 BRFSS survey showed that 48.8 percent of the population either reported joint symptoms in the past thirty days or had been diagnosed with arthritis by a health care professional.

As seen in Figure 17 the proportion increases with age. Over 72 percent of respondents over the age of 65 either reported joint symptoms in the past thirty days or being diagnosed with arthritis. The rate for whites was 71.2 percent while nonwhites reported a rate of 76.3 percent. In the 18-24 age group, 24.1 percent of the respondents reported these conditions.

## At Risk for Arthritis

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 517 | 47.8 | 161 | 40.7 | 681 | 45.5 |
| Female | 1,036 | 55.9 | 480 | 44.8 | 1,524 | 51.8 |
| **Age Group** | | | | | | |
| 18-24 | 56 | 30.7 | 24 | 16.1 | 81 | 24.1 |
| 25-34 | 146 | 35.0 | 73 | 34.8 | 220 | 35.1 |
| 35-44 | 235 | 48.1 | 118 | 40.4 | 356 | 45.3 |
| 45-54 | 320 | 58.0 | 144 | 54.6 | 467 | 57.0 |
| 55-64 | 296 | 62.8 | 118 | 60.4 | 416 | 62.1 |
| 65+ | 495 | 71.2 | 159 | 76.3 | 654 | 72.2 |
| **Education** | | | | | | |
| < High School | 256 | 58.4 | 211 | 58.6 | 468 | 58.5 |
| High School Graduate or GED | 481 | 52.6 | 183 | 36.2 | 669 | 46.2 |
| Some College or Technical School | 425 | 53.7 | 144 | 41.1 | 574 | 50.0 |
| College Graduate | 387 | 46.1 | 99 | 40.1 | 486 | 44.5 |
| **Income** | | | | | | |
| < $15,000 | 254 | 60.4 | 216 | 49.1 | 472 | 54.2 |
| $15 - $24,999 | 253 | 56.5 | 160 | 44.6 | 414 | 50.7 |
| $25 - $34,999 | 225 | 50.1 | 60 | 34.5 | 285 | 45.1 |
| $35 - $49,999 | 221 | 45.1 | 48 | 35.0 | 271 | 42.5 |
| $50 - $74,999 | 194 | 51.6 | 32 | 45.7 | 228 | 51.1 |
| $75,000+ | 164 | 47.7 | 16* | 28.7 | 180 | 45.0 |
| **Employment Status** | | | | | | |
| Employed | 746 | 46.2 | 274 | 34.7 | 1,026 | 42.3 |
| Not Employed | 54 | 54.2 | 53 | 35.1 | 109 | 42.2 |
| Student/Homemaker | 130 | 40.0 | 42 | 35.7 | 174 | 38.6 |
| Retired/Unable to Work | 621 | 71.8 | 271 | 71.7 | 893 | 71.6 |
| **Total** | 1,553 | 52.0 | 641 | 43.0 | 2,205 | 48.8 |

* Sample size less than 50

## Diagnosed With Arthritis

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 270 | 23.6 | 80 | 17.8 | 351 | 21.5 |
| Female | 696 | 35.2 | 324 | 28.7 | 1,027 | 32.8 |
| **Age Group** | | | | | | |
| 18-24 | 13 | 5.8 | 6 | 6.0 | 20 | 6.0 |
| 25-34 | 49 | 11.2 | 25 | 9.6 | 74 | 10.4 |
| 35-44 | 113 | 21.5 | 58 | 17.2 | 173 | 19.9 |
| 45-54 | 183 | 32.8 | 88 | 31.2 | 274 | 32.5 |
| 55-64 | 209 | 44.7 | 92 | 47.2 | 302 | 45.4 |
| 65+ | 395 | 55.0 | 131 | 59.9 | 526 | 56.0 |
| **Education** | | | | | | |
| < High School | 189 | 38.7 | 159 | 37.7 | 349 | 38.3 |
| High School Graduate or GED | 325 | 32.5 | 104 | 19.0 | 432 | 27.0 |
| Some College or Technical School | 243 | 27.4 | 78 | 19.7 | 325 | 25.3 |
| College Graduate | 207 | 23.4 | 60 | 21.1 | 267 | 22.8 |
| **Income** | | | | | | |
| < $15,000 | 191 | 40.9 | 157 | 31.4 | 349 | 35.7 |
| $15 - $24,999 | 163 | 33.1 | 92 | 21.8 | 256 | 27.7 |
| $25 - $34,999 | 144 | 29.6 | 37 | 20.3 | 181 | 26.6 |
| $35 - $49,999 | 126 | 24.9 | 26 | 17.7 | 154 | 23.1 |
| $50 - $74,999 | 95 | 24.6 | 17 | 22.2 | 113 | 24.1 |
| $75,000+ | 86 | 23.4 | 7* | 10.9 | 93 | 21.7 |
| **Employment Status** | | | | | | |
| Employed | 359 | 20.5 | 137 | 14.7 | 499 | 18.5 |
| Not Employed | 29 | 26.3 | 32 | 19.6 | 63 | 22.5 |
| Student/Homemaker | 79 | 21.5 | 20 | 15.4 | 101 | 19.8 |
| Retired/Unable to Work | 499 | 56.3 | 215 | 53.4 | 715 | 55.3 |
| **Total** | 966 | 29.6 | 404 | 23.8 | 1,378 | 27.5 |

* Sample size less than 50

## Exercise

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

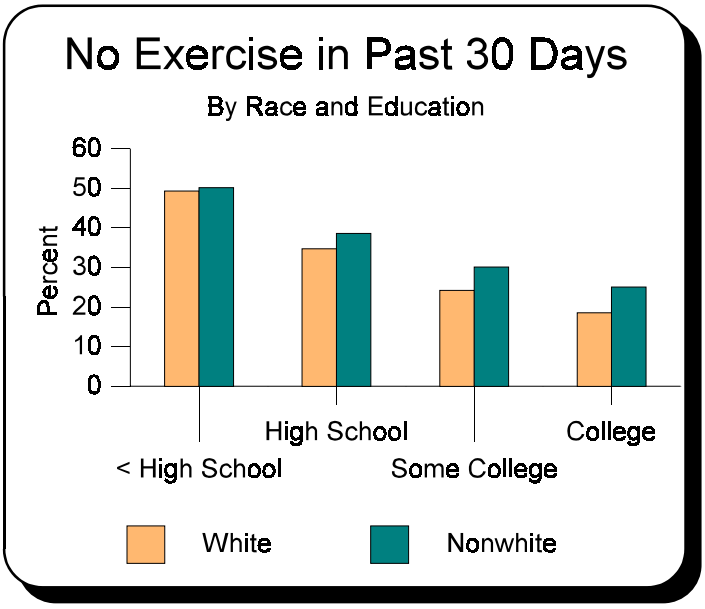


**Figure 18**

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

The 2002 BRFSS survey revealed that 32.5 percent of the population is at risk for not

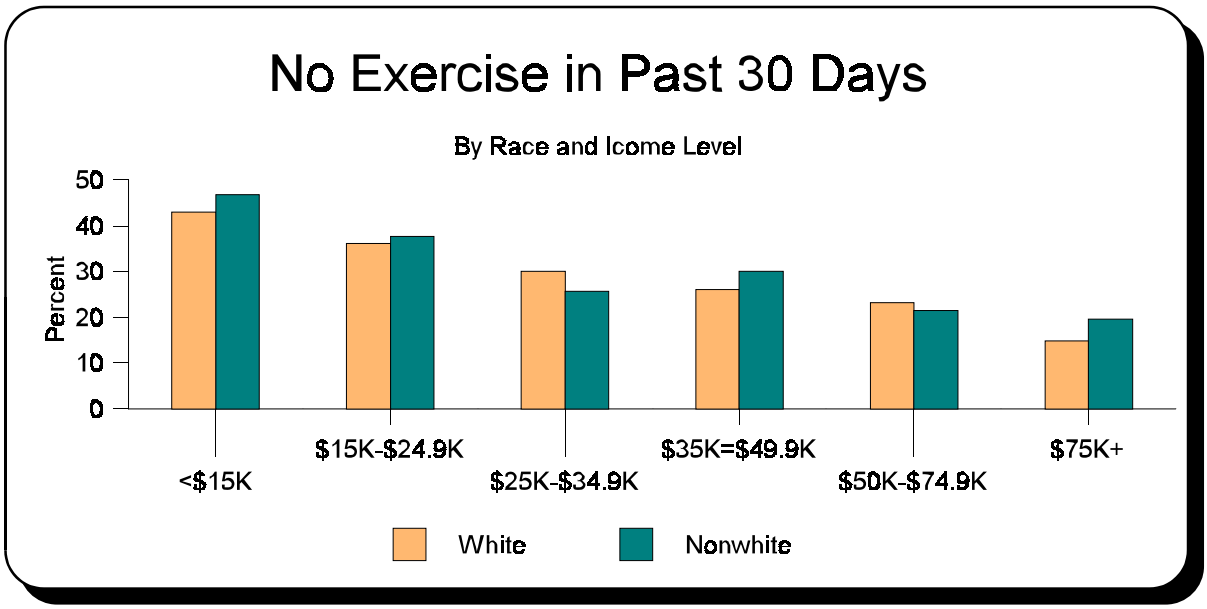


**Figure 19**

participating in any physical activity outside of work in the past 30 days. People with less education (Figure 18) and in lower income levels (Figure 19) and reported the highest percentage of being at risk.

## No Exercise in Past 30 Days

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 277 | 26.5 | 120 | 30.4 | 399 | 27.7 |
| Female | 589 | 32.7 | 399 | 43.0 | 1,000 | 36.7 |
| **Age Group** | | | | | | |
| 18-24 | 38 | 21.3 | 53 | 33.9 | 93 | 27.3 |
| 25-34 | 92 | 23.1 | 85 | 35.8 | 179 | 28.2 |
| 35-44 | 132 | 26.6 | 86 | 31.8 | 221 | 28.7 |
| 45-54 | 171 | 32.1 | 104 | 37.8 | 276 | 34.0 |
| 55-64 | 180 | 39.4 | 77 | 42.5 | 260 | 40.5 |
| 65+ | 248 | 34.1 | 109 | 51.2 | 359 | 38.6 |
| **Education** | | | | | | |
| < High School | 198 | 49.4 | 175 | 50.2 | 375 | 49.9 |
| High School Graduate or GED | 314 | 34.8 | 183 | 38.6 | 504 | 36.3 |
| Some College or Technical School | 200 | 24.2 | 97 | 30.1 | 301 | 26.2 |
| College Graduate | 151 | 18.6 | 59 | 25.1 | 211 | 20.3 |
| **Income** | | | | | | |
| < $15,000 | 163 | 42.9 | 175 | 46.7 | 340 | 44.8 |
| $15 - $24,999 | 165 | 36.1 | 138 | 37.7 | 305 | 36.9 |
| $25 - $34,999 | 127 | 30.1 | 47 | 25.7 | 177 | 29.1 |
| $35 - $49,999 | 120 | 26.1 | 40 | 30.0 | 162 | 27.2 |
| $50 - $74,999 | 82 | 23.2 | 16 | 21.5 | 99 | 22.8 |
| $75,000+ | 56 | 14.9 | 7* | 19.5 | 63 | 15.6 |
| **Employment Status** | | | | | | |
| Employed | 416 | 26.8 | 244 | 32.1 | 668 | 28.7 |
| Not Employed | 29 | 29.8 | 54 | 44.4 | 85 | 39.6 |
| Student/Homemaker | 72 | 23.8 | 39 | 36.7 | 114 | 28.0 |
| Retired/Unable to Work | 346 | 39.4 | 180 | 47.4 | 527 | 42.0 |
| **Total** | 866 | 29.7 | 519 | 37.4 | 1,399 | 32.5 |

* 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 the following: 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.

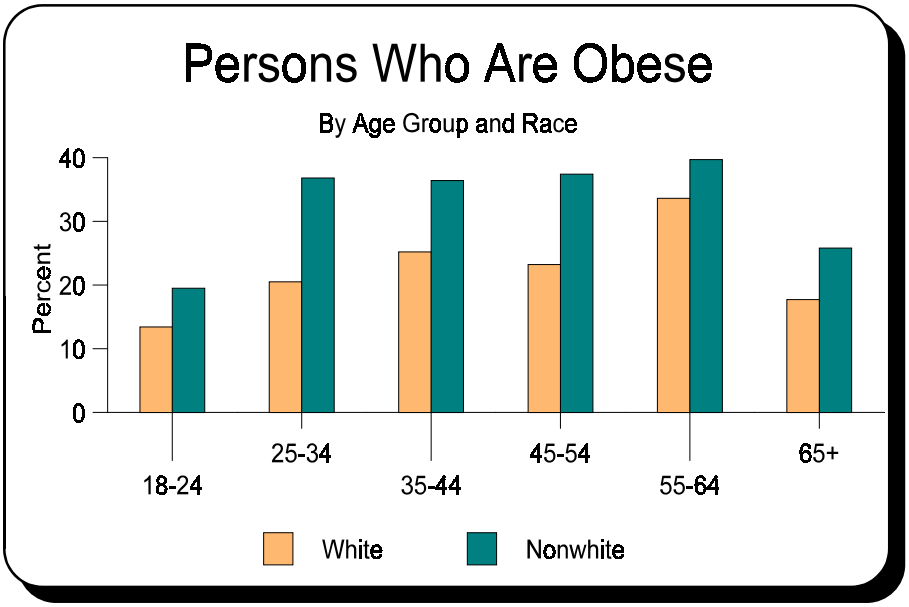


**Figure 20**

Weight may be controlled by dietary changes such as decreasing caloric intake and by increasing physical activity. According to the 2002 BRFSS study 60.8 percent of those surveyed in Mississippi reported themselves as being either overweight (BMI $25) or obese (BMI $30). Figure 20 shows how being overweight increases with age.

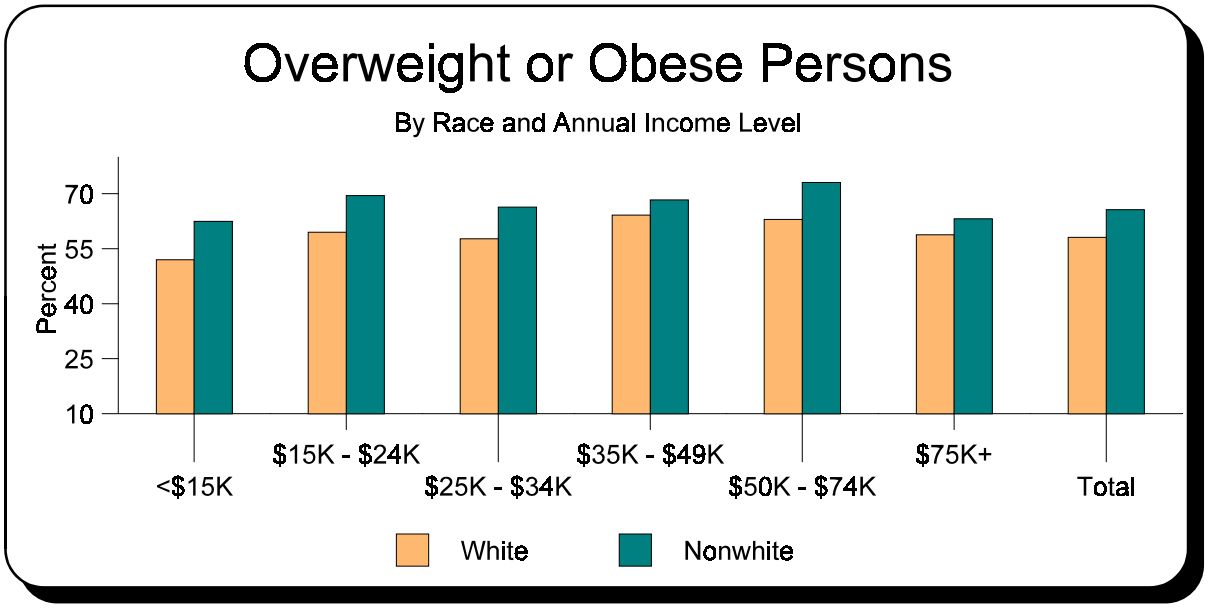


**Figure 21**

## People Who Are Overweight or Obese

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 708 | 67.8 | 234 | 68.0 | 949 | 67.9 |
| Female | 866 | 49.0 | 627 | 63.9 | 1,501 | 54.4 |
| **Age Group** | | | | | | |
| 18-24 | 71 | 40.9 | 60 | 46.1 | 131 | 43.0 |
| 25-34 | 209 | 55.7 | 133 | 67.3 | 344 | 60.4 |
| 35-44 | 273 | 58.4 | 193 | 71.2 | 471 | 63.5 |
| 45-54 | 338 | 64.1 | 201 | 77.4 | 541 | 68.5 |
| 55-64 | 317 | 71.4 | 137 | 75.6 | 457 | 72.6 |
| 65+ | 363 | 55.9 | 132 | 62.5 | 496 | 57.5 |
| **Education** | | | | | | |
| < High School | 229 | 59.7 | 212 | 65.1 | 442 | 62.2 |
| High School Graduate or GED | 516 | 61.1 | 303 | 66.2 | 829 | 63.3 |
| Some College or Technical School | 400 | 55.7 | 189 | 63.8 | 593 | 58.0 |
| College Graduate | 427 | 56.3 | 154 | 68.6 | 581 | 59.2 |
| **Income** | | | | | | |
| < $15,000 | 202 | 52.0 | 251 | 62.5 | 455 | 57.5 |
| $15-$24,999 | 249 | 59.5 | 228 | 69.5 | 480 | 64.4 |
| 25-$34,999 | 234 | 57.7 | 105 | 66.4 | 340 | 60.1 |
| $35-$49,999 | 278 | 64.2 | 83 | 68.3 | 364 | 65.4 |
| $50-$74,999 | 227 | 63.0 | 45 | 73.1 | 274 | 64.9 |
| $75,000+ | 190 | 58.8 | 26* | 63.2 | 216 | 59.4 |
| **Employment Status** | | | | | | |
| Employed | 899 | 59.8 | 465 | 67.8 | 1,374 | 62.5 |
| Not employed | 61 | 66.1 | 86 | 68.1 | 149 | 67.3 |
| Student/Homemaker | 128 | 42.4 | 52 | 46.6 | 181 | 43.5 |
| Retired/Disabled | 485 | 60.3 | 257 | 67.7 | 744 | 62.8 |
| **Total** | 1,574 | 58.1 | 861 | 65.7 | 2,450 | 60.8 |

* Sample size less than 50

## People Who Are Obese

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 247 | 23.3 | 98 | 29.1 | 347 | 25.2 |
| Female | 374 | 21.4 | 343 | 34.7 | 723 | 26.4 |
| **Age Group** | | | | | | |
| 18-24 | 23 | 13.4 | 26 | 19.5 | 49 | 16.1 |
| 25-34 | 86 | 20.5 | 78 | 36.8 | 164 | 26.8 |
| 35-44 | 128 | 25.2 | 99 | 36.4 | 230 | 29.7 |
| 45-54 | 122 | 23.2 | 98 | 37.4 | 222 | 28.0 |
| 55-64 | 141 | 33.6 | 77 | 39.7 | 220 | 35.4 |
| 65+ | 120 | 17.7 | 62 | 25.8 | 182 | 19.7 |
| **Education** | | | | | | |
| < High School | 90 | 22.3 | 120 | 32.8 | 211 | 27.3 |
| High School Graduate or GED | 209 | 24.5 | 154 | 31.6 | 366 | 27.3 |
| Some College or Technical School | 159 | 22.0 | 92 | 30.8 | 255 | 24.8 |
| College Graduate | 163 | 20.0 | 75 | 35.9 | 238 | 23.9 |
| **Income** | | | | | | |
| < $15,000 | 83 | 21.8 | 140 | 32.3 | 224 | 27.4 |
| $15-$24,999 | 98 | 22.6 | 128 | 35.3 | 228 | 28.8 |
| 25-$34,999 | 98 | 23.5 | 55 | 36.9 | 154 | 27.6 |
| $35-$49,999 | 109 | 24.1 | 41 | 35.7 | 151 | 27.1 |
| $50-$74,999 | 87 | 24.3 | 15 | 30.0 | 103 | 25.1 |
| $75,000+ | 75 | 21.3 | 13* | 34.2 | 88 | 23.1 |
| **Employment Status** | | | | | | |
| Employed | 365 | 22.4 | 231 | 32.2 | 601 | 25.8 |
| Not employed | 22 | 26.1 | 47 | 37.1 | 71 | 33.5 |
| Student/Homemaker | 49 | 17.4 | 26 | 21.8 | 75 | 18.6 |
| Retired/Disabled | 184 | 23.7 | 136 | 34.2 | 321 | 27.2 |
| **Total** | 621 | 22.3 | 441 | 32.2 | 1,070 | 25.8 |

* Sample Size less than 50

## Asthma

According to the *Healthy People 2010*, asthma is a serious and growing health problem. An estimated 14.9 million persons in the United States have asthma. The number of people with asthma increased by 102 percent between 1979-80 and 1993-94.

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.

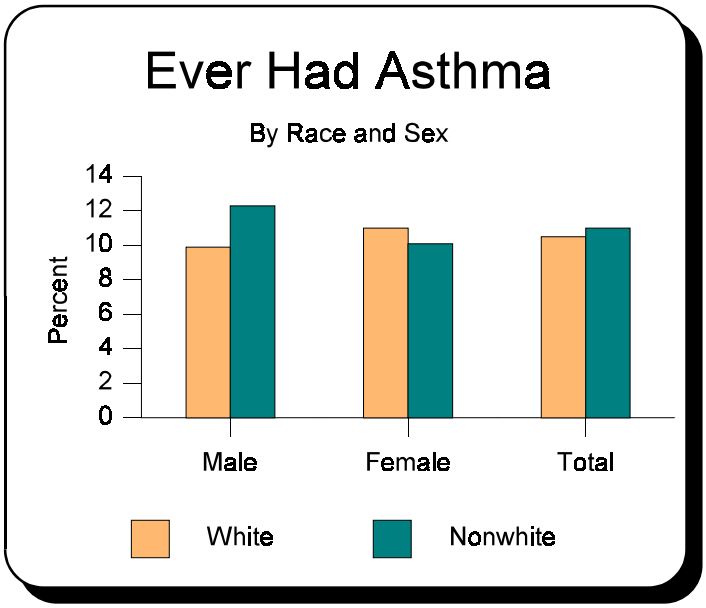


**Figure 22**

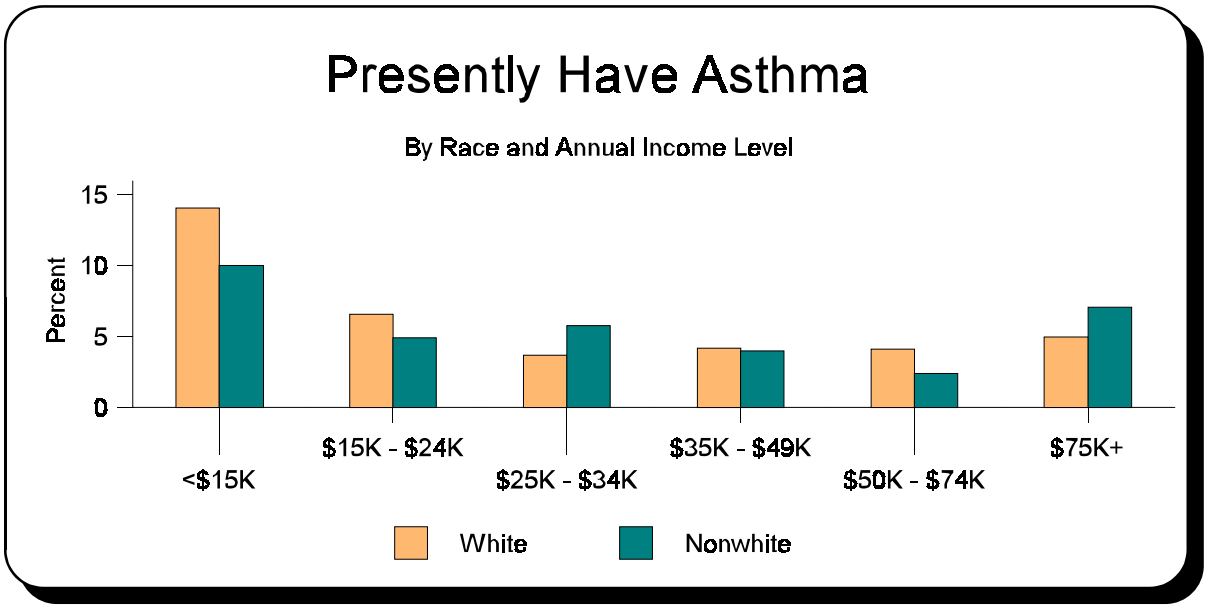


**Figure 23**

In Mississippi, the 2002 BRFSS survey revealed that 10.6 percent of the respondents said that they had ever had asthma, an increase from 9.2 in 2001. The nonwhite rate was 11.0 percent compared to 10.5 percent for white respondents. A little more than six percent of the

respondents reported they currently have asthma. Figure 23 shows that the rate for current asthma is more than double in both races when the annual income is below $15 thousand annually. Women of both races reported a higher rate of current asthma than men.

## Ever Diagnosed With Asthma

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 102 | 9.9 | 39 | 12.3 | 142 | 10.7 |
| Female | 193 | 11.0 | 92 | 10.1 | 286 | 10.6 |
| **Age Group** | | | | | | |
| 18-24 | 23 | 12.2 | 11 | 8.8 | 34 | 10.6 |
| 25-34 | 47 | 11.6 | 21 | 15.2 | 68 | 13.0 |
| 35-44 | 51 | 9.4 | 23 | 8.1 | 74 | 8.9 |
| 45-54 | 46 | 8.2 | 33 | 12.0 | 80 | 9.6 |
| 55-64 | 53 | 11.3 | 21 | 12.3 | 75 | 11.6 |
| 65+ | 74 | 10.9 | 21 | 10.6 | 95 | 10.8 |
| **Education** | | | | | | |
| < High School | 59 | 13.9 | 49 | 17.5 | 108 | 15.5 |
| High School Graduate or GED | 99 | 11.0 | 33 | 8.8 | 132 | 10.0 |
| Some College or Technical School | 67 | 8.9 | 29 | 9.5 | 98 | 9.2 |
| College Graduate | 70 | 9.7 | 17 | 8.8 | 87 | 9.4 |
| **Income** | | | | | | |
| < $15,000 | 70 | 18.4 | 49 | 13.4 | 120 | 15.7 |
| $15 - $24,999 | 48 | 10.3 | 29 | 11.5 | 77 | 10.9 |
| $25 - $34,999 | 33 | 7.7 | 11 | 11.7 | 45 | 9.0 |
| $35 - $49,999 | 34 | 7.8 | 10 | 5.6 | 44 | 7.2 |
| $50 - $74,999 | 30 | 8.3 | 3 | 5.6 | 33 | 7.8 |
| $75,000+ | 33 | 10.0 | 6* | 15.5 | 39 | 10.8 |
| **Employment Status** | | | | | | |
| Employed | 139 | 9.2 | 52 | 8.8 | 192 | 9.0 |
| Not Employed | 13 | 11.5 | 14 | 7.9 | 27 | 9.1 |
| Student/Homemaker | 35 | 12.5 | 11 | 16.7 | 46 | 13.7 |
| Retired/Unable to Work | 108 | 12.6 | 54 | 16.2 | 163 | 13.8 |
| **Total** | 295 | 10.5 | 131 | 11.0 | 428 | 10.6 |

* Sample size less than 50

## People Who Presently Have Asthma

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 54 | 4.7 | 22 | 5.4 | 76 | 4.9 |
| Female | 133 | 7.6 | 67 | 6.5 | 200 | 7.1 |
| **Age Group** | | | | | | |
| 18-24 | 10 | 5.2 | 3 | 1.4 | 13 | 3.4 |
| 25-34 | 32 | 7.8 | 12 | 6.7 | 44 | 7.3 |
| 35-44 | 33 | 5.3 | 17 | 5.1 | 50 | 5.2 |
| 45-54 | 25 | 4.6 | 25 | 9.1 | 50 | 6.1 |
| 55-64 | 36 | 7.2 | 18 | 10.9 | 54 | 8.1 |
| 65+ | 51 | 7.3 | 13 | 6.0 | 64 | 6.9 |
| **Education** | | | | | | |
| < High School | 44 | 10.1 | 36 | 9.2 | 80 | 9.6 |
| High School Graduate or GED | 66 | 6.6 | 24 | 5.3 | 90 | 6.0 |
| Some College or Technical School | 36 | 4.2 | 19 | 5.7 | 55 | 4.6 |
| College Graduate | 41 | 5.8 | 8 | 3.3 | 49 | 5.1 |
| **Income** | | | | | | |
| < $15,000 | 56 | 14.1 | 39 | 10.0 | 95 | 11.8 |
| $15 - $24,999 | 32 | 6.6 | 20 | 4.9 | 52 | 5.8 |
| $25 - $34,999 | 17 | 3.7 | 6 | 5.8 | 23 | 4.3 |
| $35 - $49,999 | 16 | 4.2 | 7 | 4.0 | 23 | 4.1 |
| $50 - $74,999 | 17 | 4.1 | 2 | 2.4 | 19 | 3.8 |
| $75,000+ | 17 | 5.0 | 3* | 7.1 | 20 | 5.3 |
| **Employment Status** | | | | | | |
| Employed | 75 | 4.6 | 31 | 3.9 | 106 | 4.4 |
| Not Employed | 9 | 7.3 | 12 | 6.0 | 21 | 6.4 |
| Student/Homemaker | 18 | 6.8 | 5 | 3.6 | 23 | 5.7 |
| Retired/Unable to Work | 85 | 9.7 | 41 | 12.7 | 126 | 10.7 |
| **Total** | 187 | 6.2 | 89 | 6.0 | 276 | 6.1 |

* Sample size less than 50

## Oral Health

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

A full dentition is defined as having 28 natural teeth, exclusive of third molars and teeth removed for orthodontic treatment or as a result of trauma. Most persons can keep their teeth for life with optimal personal, professional and population based preventive practices. Early tooth loss has been shown to be a predictor of eventual edentulism. As teeth are lost, the ability to chew and speak decreases along with the ability to function properly socially. The 2010 national goal for the proportion of adults who have never had permanent teeth extracted is 42 percent. According to the 2002 BRFSS Survey for Mississippi 40.3 percent of the respondents reported having none of their permanent teeth removed.

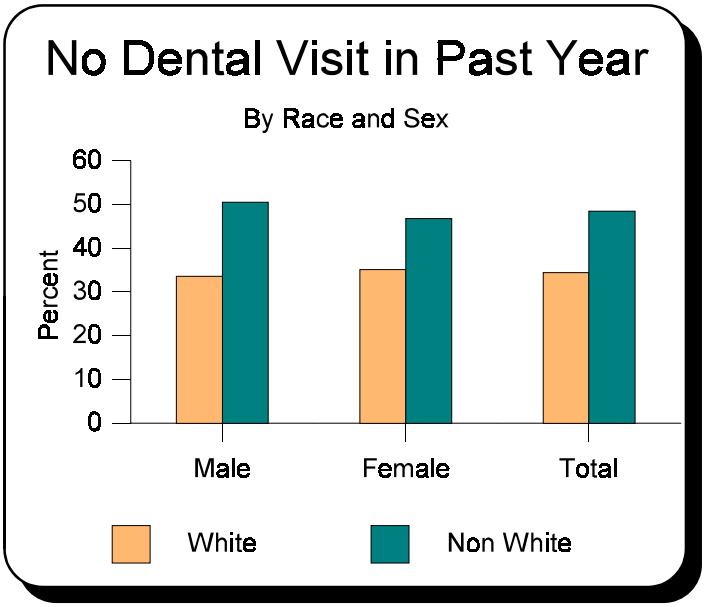


**Figure 24**

Older people reported the loss of permanent teeth much more frequently than their younger counterparts. More that 78 percent of respondents in the 18-24 age category reported no loss of permanent teeth while slightly less than eleven percent in the over age 65 category reported no loss of permanent teeth. The rate for white respondents with no permanent tooth loss was 43.3 percent; for nonwhites it was 35.0 percent.

Oral health diseases such as tooth decay and periodontal diseases are common health problems in Mississippi, yet 39.3 percent of respondents from the 2002 BRFSS Survey reported that they have not seen a dentist within the last 12 months. Failure to see a dentist within the past year was observed most frequently among nonwhite respondents who have less than a high school education (66.1 percent), nonwhites whose annual income is less than $15,000 per year (58.5 percent), and then whites whose annual income is less than $15,000 per year (55.5 percent).

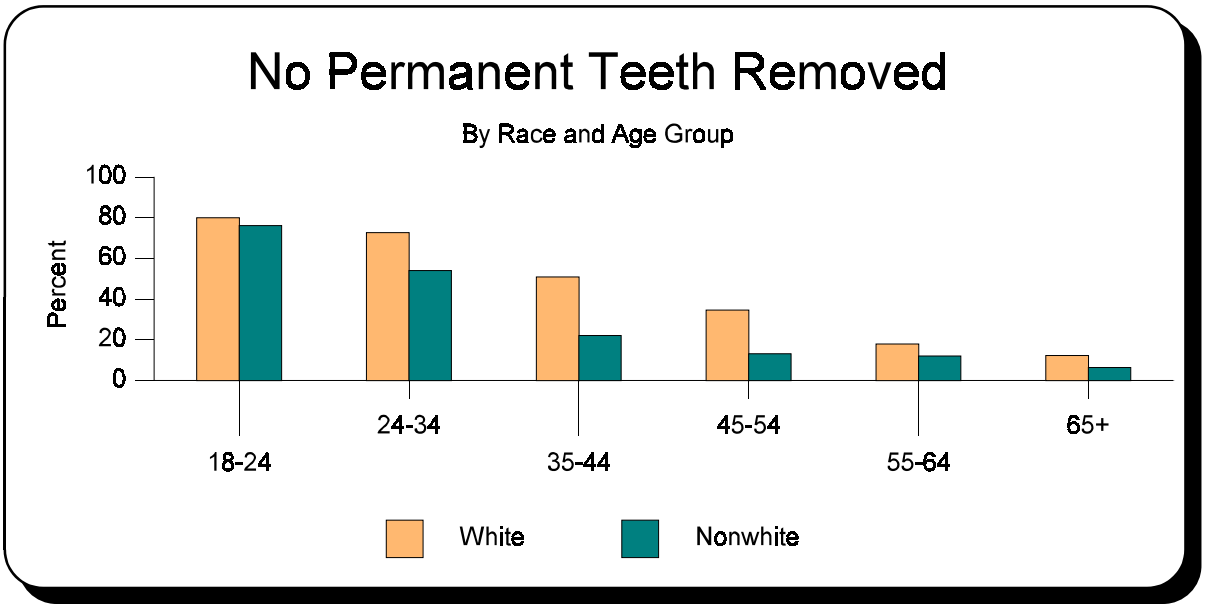


**Figure 25**

Predictably, people with incomes above $75,000 per year reported the lowest number of visits outside a year with a rate of 13.7 percent. The survey revealed that as the income of the respondents decreases, so also the number of visits to a dentist within a year decreases. With respect to race, 50.5 percent of the nonwhite males reported visits to a dental facility more than one year ago compared to 33.6 percent for white males. The rate for nonwhite females was 46.8 percent while white females reported a rate of 35.1 percent.

## No Permanent Teeth Ever Extracted

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 394 | 43.7 | 114 | 42.4 | 513 | 43.2 |
| Female | 680 | 42.9 | 223 | 29.0 | 906 | 37.7 |
| **Age Group** | | | | | | |
| 18-24 | 143 | 80.1 | 97 | 76.2 | 243 | 78.3 |
| 25-34 | 283 | 72.8 | 103 | 54.0 | 388 | 64.9 |
| 35-44 | 265 | 51.0 | 66 | 22.1 | 332 | 40.0 |
| 45-54 | 201 | 34.6 | 37 | 13.2 | 238 | 27.4 |
| 55-64 | 91 | 17.9 | 19 | 12.0 | 110 | 16.2 |
| 65+ | 85 | 12.3 | 11 | 6.4 | 97 | 10.9 |
| **Education** | | | | | | |
| < High School | 59 | 19.8 | 46 | 20.6 | 105 | 20.1 |
| High School Graduate or GED | 247 | 34.7 | 109 | 35.3 | 360 | 34.9 |
| Some College or Technical School | 314 | 49.0 | 93 | 43.6 | 409 | 47.3 |
| College Graduate | 451 | 59.9 | 87 | 43.4 | 540 | 55.8 |
| **Income** | | | | | | |
| < $15,000 | 81 | 27.6 | 77 | 28.5 | 160 | 28.2 |
| $15 - $24,999 | 130 | 35.5 | 93 | 41.5 | 224 | 38.3 |
| $25 - $34,999 | 159 | 44.0 | 38 | 30.4 | 197 | 39.6 |
| $35 - $49,999 | 188 | 45.7 | 42 | 38.3 | 232 | 43.9 |
| $50 - $74,999 | 201 | 54.9 | 22 | 38.4 | 223 | 51.8 |
| $75,000+ | 200 | 59.8 | 18* | 49.5 | 218 | 58.4 |
| **Employment Status** | | | | | | |
| Employed | 759 | 51.5 | 218 | 39.8 | 982 | 47.4 |
| Not Employed | 36 | 49.2 | 33 | 32.0 | 69 | 37.7 |
| Student/Homemaker | 146 | 57.6 | 42 | 57.6 | 190 | 57.5 |
| Retired/Unable to Work | 132 | 15.4 | 42 | 14.3 | 175 | 15.1 |
| **Total** | 1,074 | 43.3 | 337 | 35.0 | 1,419 | 40.3 |

* Sample size less than 50

## No Dental Visit in the Past Year

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 354 | 33.6 | 183 | 50.5 | 542 | 39.2 |
| Female | 600 | 35.1 | 444 | 46.8 | 1,050 | 39.3 |
| **Age Group** | | | | | | |
| 18-24 | 43 | 24.8 | 50 | 41.7 | 94 | 32.4 |
| 25-34 | 132 | 34.2 | 98 | 47.8 | 231 | 39.4 |
| 35-44 | 152 | 32.9 | 124 | 46.8 | 277 | 38.0 |
| 45-54 | 172 | 31.9 | 132 | 49.6 | 304 | 37.6 |
| 55-64 | 161 | 36.5 | 97 | 53.1 | 261 | 41.2 |
| 65+ | 290 | 43.1 | 124 | 60.3 | 416 | 47.6 |
| **Education** | | | | | | |
| < High School | 221 | 54.4 | 210 | 66.1 | 432 | 59.9 |
| High School Graduate or GED | 337 | 38.9 | 220 | 48.0 | 561 | 42.3 |
| Some College or Technical School | 223 | 30.5 | 122 | 43.1 | 349 | 34.3 |
| College Graduate | 173 | 22.4 | 72 | 33.0 | 246 | 25.1 |
| **Income** | | | | | | |
| < $15,000 | 212 | 55.5 | 213 | 58.5 | 428 | 57.1 |
| $15 - $24,999 | 191 | 46.7 | 162 | 53.0 | 356 | 49.8 |
| $25 - $34,999 | 143 | 34.7 | 69 | 46.7 | 213 | 38.3 |
| $35 - $49,999 | 135 | 32.5 | 41 | 29.6 | 176 | 31.6 |
| $50 - $74,999 | 84 | 23.4 | 17 | 26.7 | 101 | 23.7 |
| $75,000+ | 46 | 13.6 | 8* | 14.6 | 54 | 13.7 |
| **Employment Status** | | | | | | |
| Employed | 449 | 30.2 | 297 | 42.0 | 751 | 34.1 |
| Not Employed | 46 | 47.2 | 64 | 54.7 | 111 | 51.8 |
| Student/Homemaker | 107 | 37.3 | 48 | 58.7 | 157 | 43.9 |
| Retired/Unable to Work | 351 | 41.8 | 216 | 57.6 | 569 | 47.1 |
| **Total** | 954 | 34.4 | 627 | 48.5 | 1,592 | 39.3 |

* Sample size less than 50

## Immunization

Influenza and pneumonia was the sixth leading cause of death in Mississippi in 2001 having a death rate of 26.4 per 100,000 population. 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 2010* goal for influenza vaccinations is that 90 percent of the noninstitutionalized people age 65 and older be vaccinated in the preceding twelve months.

In the 2002 BRFSS survey, 62.7 percent of the respondents age 65 and older reported they had received the influenza vaccine in the last 12 months. In 2001 the rate was 61.8 percent. The proportion vaccinated in this age group reflected a marked difference according to race: 66.9 percent of whites reported having been vaccinated compared to only 50.6 percent for nonwhites. Vaccination rates did not differ greatly by sex: 30.7 percent of males and 30.2 percent of females reported receiving vaccine.

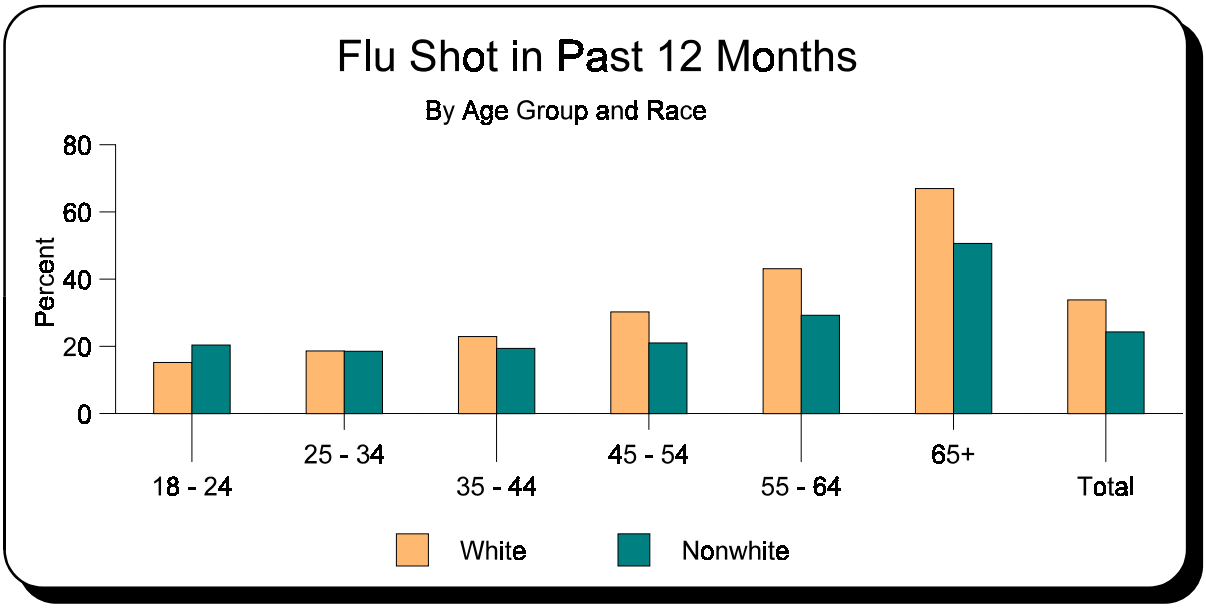


**Figure 26**

The target for persons age 18 to 64 who are noninstitutionalized is 60 percent. In Mississippi only 24.1 percent of respondents in this age group reported have a flu shot within the previous twelve months an increase from 22.2 percent reported in 2001. The prevalence for whites was 26.1 percent and for nonwhites it was 20.8 percent.

## Flu Shot in Past 12 Months

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 366 | 32.9 | 99 | 26.4 | 469 | 30.7 |
| Female | 705 | 34.7 | 235 | 22.7 | 943 | 30.2 |
| **Age Group** | | | | | | |
| 18-24 | 28 | 15.2 | 23 | 20.4 | 51 | 17.5 |
| 25-34 | 71 | 18.6 | 41 | 18.5 | 113 | 18.6 |
| 35-44 | 120 | 22.9 | 56 | 19.4 | 177 | 21.5 |
| 45-54 | 166 | 30.2 | 50 | 21.0 | 217 | 27.3 |
| 55-64 | 203 | 43.1 | 53 | 29.2 | 258 | 39.3 |
| 65+ | 477 | 66.9 | 108 | 50.6 | 586 | 62.7 |
| **Education** | | | | | | |
| < High School | 168 | 33.5 | 108 | 28.5 | 276 | 31.0 |
| High School Graduate or GED | 325 | 34.1 | 103 | 24.3 | 430 | 30.1 |
| Some College or Technical School | 245 | 28.9 | 56 | 18.9 | 305 | 26.0 |
| College Graduate | 332 | 38.8 | 65 | 25.9 | 397 | 35.5 |
| **Income** | | | | | | |
| < $15,000 | 170 | 38.7 | 101 | 28.1 | 273 | 33.0 |
| $15 - $24,999 | 153 | 29.9 | 79 | 22.8 | 232 | 26.4 |
| $25 - $34,999 | 140 | 30.5 | 34 | 21.2 | 175 | 27.6 |
| $35 - $49,999 | 165 | 33.1 | 36 | 24.9 | 202 | 31.0 |
| $50 - $74,999 | 143 | 35.0 | 13 | 19.7 | 157 | 32.4 |
| $75,000+ | 117 | 33.9 | 12* | 23.8 | 129 | 32.5 |
| **Employment Status** | | | | | | |
| Employed | 464 | 27.5 | 151 | 21.7 | 619 | 25.5 |
| Not Employed | 22 | 19.8 | 21 | 18.4 | 43 | 18.6 |
| Student/Homemaker | 71 | 20.3 | 14 | 11.6 | 85 | 17.5 |
| Retired/Unable to Work | 514 | 57.8 | 148 | 39.9 | 664 | 52.0 |
| **Total** | 1,071 | 33.8 | 334 | 24.3 | 1,412 | 30.4 |

* Sample size less than 50

## Alcohol Consumption

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

Alcohol use has been linked with a substantial proportion of injuries and deaths from motor vehicle crashes, falls, fires and drowning. It also is a factor in homicide, suicide, marital violence and child abuse and has been associated with high risk sexual behavior. Persons who drink even relatively small amounts of alcoholic beverages may contribute to alcohol related death and injury in occupational incidents especially if they drink before operating a vehicle. In 1998, alcohol use was associated with 38 percent of all motor vehicle crash fatalities, a significantly lower percentage than in the 1980's.

According to the 2002 BRFSS survey, 24 percent of white respondents in the 18-24 year age group said they had indulged in binge drinking in the past 30 days (Figure 27) which is a marked decrease from 33.5 percent reported in 1999. Nonwhite respondents in the same age group reported a binge drinking rate of 19.3 percent which is much higher that the 9.9 percent reported in 1999. Males were over four times more likely to indulge in binge drinking than females. Only 4.7 percent of female respondents said they had five or more drinks on one occasion during the last thirty days compared to 20.5 percent for males.

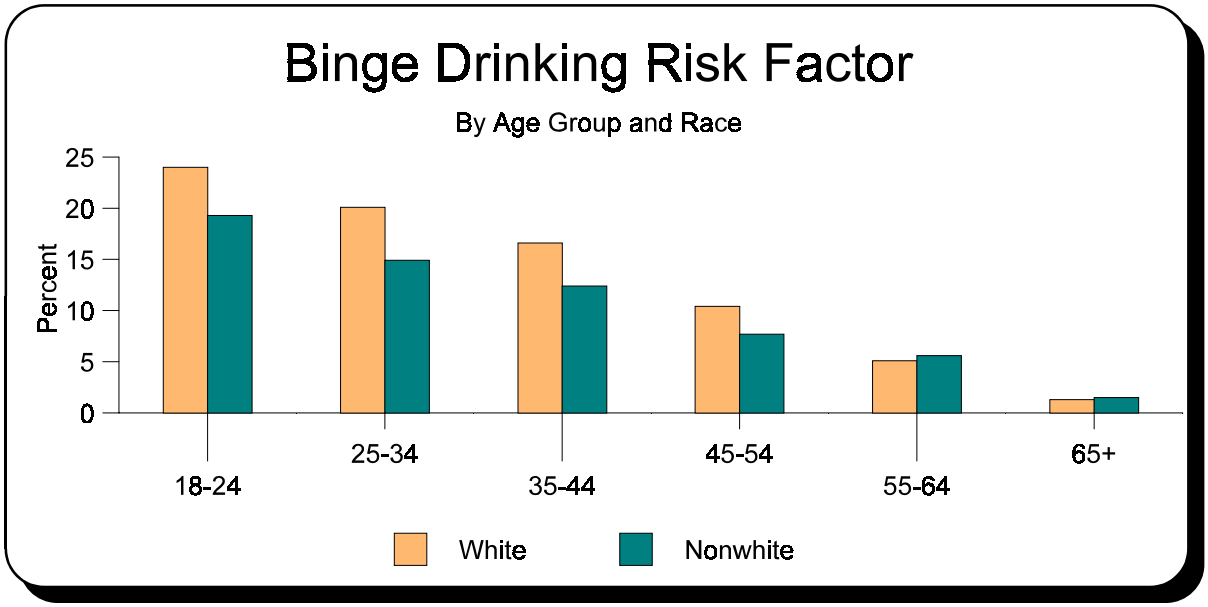


**Figure 27**

## Binge Drinking Risk Factor

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 182 | 20.2 | 65 | 20.7 | 251 | 20.5 |
| Female | 74 | 5.1 | 40 | 4.0 | 114 | 4.7 |
| **Age Group** | | | | | | |
| 18-24 | 42 | 24.0 | 16 | 19.3 | 60 | 22.0 |
| 25-34 | 71 | 20.1 | 27 | 14.9 | 99 | 18.3 |
| 35-44 | 63 | 16.6 | 29 | 12.4 | 93 | 15.0 |
| 45-54 | 49 | 10.4 | 22 | 7.7 | 71 | 9.5 |
| 55-64 | 21 | 5.1 | 8 | 5.6 | 29 | 5.2 |
| 65+ | 10 | 1.3 | 3 | 1.5 | 13 | 1.3 |
| **Education** | | | | | | |
| < High School | 25 | 12.4 | 14 | 8.2 | 39 | 10.4 |
| High School Graduate or GED | 79 | 13.3 | 44 | 13.2 | 125 | 13.4 |
| Some College or Technical School | 84 | 14.0 | 29 | 11.9 | 114 | 13.4 |
| College Graduate | 68 | 9.8 | 17 | 10.9 | 86 | 10.1 |
| **Income** | | | | | | |
| < $15,000 | 28 | 12.2 | 23 | 10.8 | 52 | 11.5 |
| $15 - $24,999 | 41 | 13.6 | 41 | 14.7 | 83 | 14.2 |
| $25 - $34,999 | 33 | 12.8 | 17 | 18.0 | 50 | 14.3 |
| $35 - $49,999 | 47 | 12.7 | 10 | 10.9 | 57 | 12.1 |
| $50 - $74,999 | 46 | 13.9 | 5 | 8.5 | 52 | 13.7 |
| $75,000+ | 47 | 16.5 | 2* | 4.1 | 49 | 14.8 |
| **Employment Status** | | | | | | |
| Employed | 198 | 16.4 | 64 | 11.3 | 265 | 14.8 |
| Not Employed | 10 | 15.0 | 16 | 18.8 | 26 | 17.2 |
| Student/Homemaker | 25 | 10.1 | 12 | 22.5 | 38 | 14.1 |
| Retired/Unable to Work | 23 | 3.1 | 13 | 3.6 | 36 | 3.3 |
| **Total** | 256 | 12.4 | 105 | 11.5 | 365 | 12.1 |

* Sample size less than 50

## Usage of Seat Belts

Spinal cord injuries (SCI's) and traumatic brain injuries (TBI's) often remove individuals from study and work during the most productive stages of life. They also cause many others to become disabled requiring the need of state support for the remainder of their lives. Mississippi ranks among the highest in the nation in the percentages of people with severe disabilities, motor vehicle fatalities and unintentional injury deaths.

Mississippi's motor vehicle fatality rate in 2001 (27.4 per 100,000 population) is nearly twice the national average of 14.8 per 100,000. Over the past eleven years, the rate of motor vehicle fatalities has declined significantly. However, it remains the leading cause of spinal cord injury (57 percent).

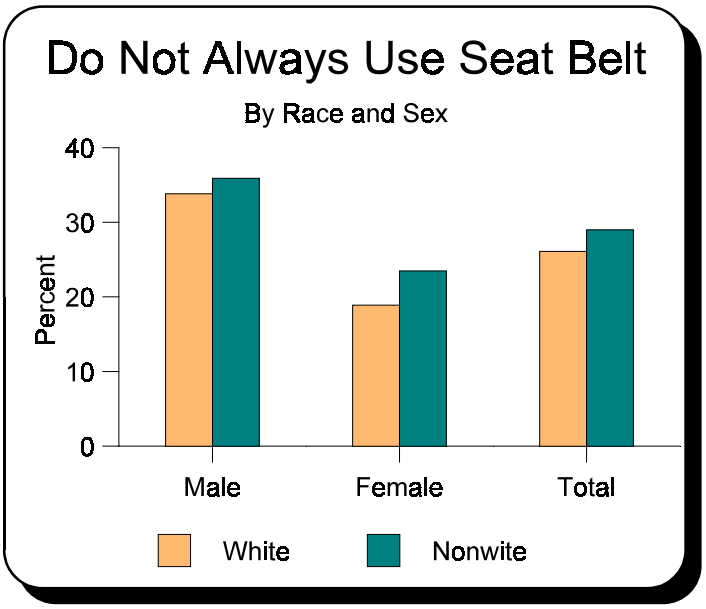


**Figure 28**

Between 1997 and 2001, the overall fatality rate declined by 4.8 percent.

Mississippi's seat belt usage rate saw the largest decrease in the country between 1998 and 2000. During this period, seat belt usage rates in Mississippi dropped from 58 percent in 1998 to 54.5 percent in 1999 and to 50.4 percent in 2000, a 7.6 percent decrease.

Fatalities related to alcohol have decreased by 31 percent during the past five years.

When properly installed, child safety seats reduce the risk of death by about 70 percent for infants and 55 percent for toddlers ages 1 to 4. It is estimated that only five percent of child passenger safety seats are installed correctly in Mississippi. The child fatality rate has increased slightly in the state from 9.1 per 100,000 population in 1997 to 10.2 in 2000.

The *Healthy People 2010* objective is to increase safety belt use to 92 percent of the population. The 2002 BRFSS data revealed that 85.8 percent of Mississippians say they always or nearly always use a seat belt while 72.7 percent say they always use a seat belt.

## Persons Who Never Use Safety Belts

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 327 | 33.8 | 122 | 35.9 | 453 | 34.6 |
| Female | 324 | 18.9 | 200 | 23.5 | 529 | 20.7 |
| **Age Group** | | | | | | |
| 18-24 | 63 | 39.1 | 52 | 42.9 | 117 | 40.9 |
| 25-34 | 114 | 29.9 | 58 | 29.1 | 174 | 30.0 |
| 35-44 | 128 | 27.2 | 68 | 25.6 | 197 | 26.5 |
| 45-54 | 129 | 24.9 | 74 | 28.6 | 204 | 26.2 |
| 55-64 | 94 | 21.5 | 38 | 24.1 | 133 | 22.3 |
| 65+ | 120 | 17.6 | 31 | 16.9 | 151 | 17.4 |
| **Education** | | | | | | |
| < High School Graduate | 105 | 30.6 | 77 | 26.6 | 183 | 28.8 |
| High School Graduate or GED | 208 | 27.7 | 109 | 29.0 | 319 | 28.2 |
| Some College or Technical School | 184 | 27.4 | 91 | 37.1 | 279 | 30.5 |
| College Graduate | 154 | 20.7 | 43 | 21.5 | 198 | 20.9 |
| **Income** | | | | | | |
| < $15,000 | 84 | 23.3 | 89 | 27.7 | 174 | 25.7 |
| $15 - $24,999 | 106 | 28.7 | 100 | 35.6 | 206 | 31.9 |
| $25 - $34,999 | 102 | 30.4 | 36 | 24.7 | 140 | 28.9 |
| $35 - $49,999 | 104 | 23.7 | 32 | 28.5 | 136 | 24.8 |
| $50 - $74,999 | 90 | 26.9 | 10 | 17.8 | 102 | 26.2 |
| $75,000+ | 74 | 22.4 | 7* | 17.3 | 81 | 21.7 |
| **Employment Status** | | | | | | |
| Employed | 418 | 30.3 | 204 | 32.5 | 626 | 31.1 |
| Not Employed | 28 | 37.8 | 30 | 31.9 | 60 | 34.5 |
| Student/Homemaker | 53 | 18.4 | 20 | 25.9 | 74 | 20.8 |
| Retired/Unable to Work | 150 | 17.7 | 68 | 20.1 | 219 | 18.5 |
| **Total** | 651 | 26.1 | 322 | 29.0 | 982 | 27.2 |

* Sample size less than 50

## Persons Who Sometimes, Seldom or Never Use Safety Belts

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 169 | 19.0 | 67 | 21.8 | 238 | 19.9 |
| Female | 129 | 7.9 | 91 | 11.3 | 223 | 9.0 |
| **Age Group** | | | | | | |
| 18-24 | 32 | 24.0 | 29 | 27.8 | 63 | 25.9 |
| 25-34 | 52 | 14.7 | 31 | 17.1 | 83 | 15.5 |
| 35-44 | 65 | 15.3 | 28 | 10.2 | 94 | 13.4 |
| 45-54 | 55 | 10.6 | 25 | 10.6 | 80 | 10.6 |
| 55-64 | 36 | 8.6 | 26 | 16.3 | 63 | 10.8 |
| 65+ | 55 | 7.9 | 18 | 11.5 | 73 | 8.8 |
| **Education** | | | | | | |
| < High School Graduate | 52 | 16.8 | 52 | 19.9 | 105 | 18.4 |
| High School Graduate or GED | 110 | 15.6 | 48 | 15.5 | 158 | 15.4 |
| Some College or Technical School | 82 | 14.1 | 38 | 18.0 | 123 | 15.4 |
| College Graduate | 54 | 7.3 | 18 | 8.0 | 72 | 7.5 |
| **Income** | | | | | | |
| < $15,000 | 40 | 12.2 | 42 | 13.8 | 82 | 13.0 |
| $15 - $24,999 | 53 | 16.0 | 54 | 23.4 | 107 | 19.5 |
| $25 - $34,999 | 48 | 17.1 | 19 | 15.1 | 68 | 16.6 |
| $35 - $49,999 | 49 | 12.3 | 17 | 16.0 | 66 | 13.2 |
| $50 - $74,999 | 31 | 10.1 | 1 | 1.1 | 33 | 8.7 |
| $75,000+ | 36 | 10.7 | 1* | 2.3 | 37 | 9.5 |
| **Employment Status** | | | | | | |
| Employed | 209 | 16.9 | 94 | 16.8 | 304 | 16.8 |
| Not Employed | 17 | 23.2 | 17 | 20.2 | 36 | 21.9 |
| Student/Homemaker | 18 | 5.5 | 9 | 15.4 | 28 | 8.7 |
| Retired/Unable to Work | 53 | 5.7 | 38 | 12.0 | 91 | 7.8 |
| **Total** | 298 | 13.1 | 158 | 16.0 | 461 | 14.1 |

* Sample size less than 50

## Prostate Cancer Screening

According to the U. S. Department of Health and Human Services prostate cancer is the most commonly diagnosed form of cancer (other than skin cancer) in males and the second leading cause of cancer death among males in the United States. New cases of prostate cancer peaked in 1992 at 190.8 per 100,000 people and declined on average by 8.5 percent each year from 1992 to 1996. Prostate cancer death rates peaked in 1991 at 26.7 per 100,000 people; rates decreased on average by 2.1 percent each year from 1991 to 1995. Causes of the trends are unclear but may be attributed to a number of factors that are under investigation.

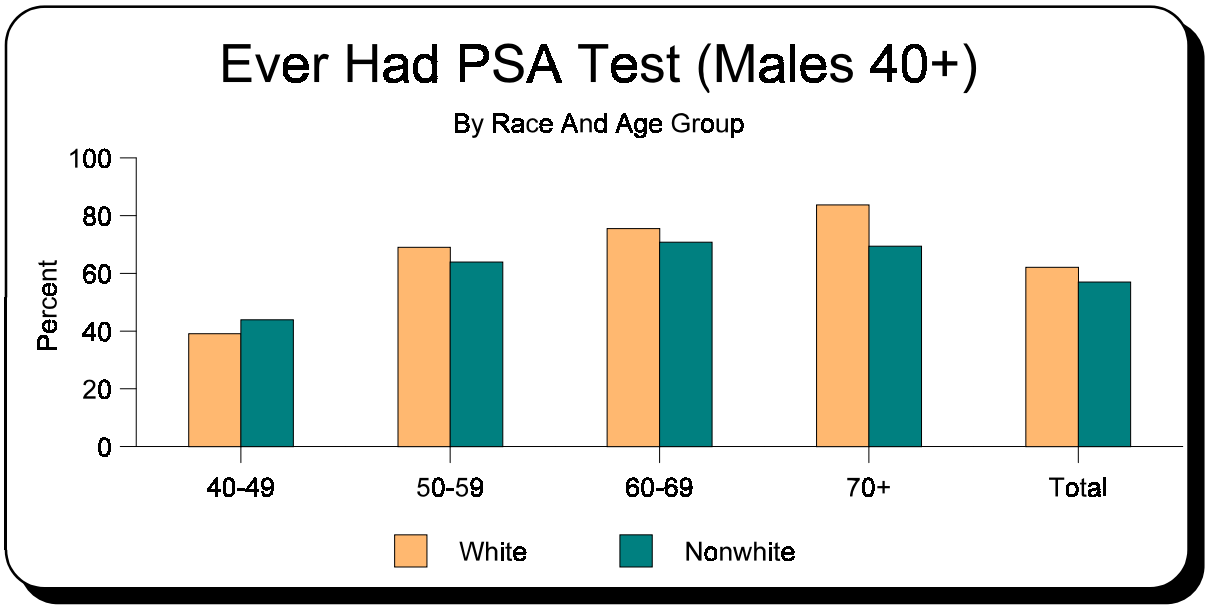


**Figure 29**

In 2001 the death rate in Mississippi among males for prostate cancer was 29.9 per 100,000: 25.4 for whites and 37.5 for nonwhites. Prostate cancer is most common in men aged 65 years and older, who account for approximately 80 percent of all cases of prostate cancer. Digital rectal examination (DRE) and the prostate-specific antigen (PSA) test are two commonly used methods for detecting prostate cancer.

Although several treatment alternatives are available for prostate cancer, their impact on reducing death from prostate cancer when compared with no treatment in patients with operable cancer is uncertain. Efforts aimed at reducing deaths through screening and early detection remain controversial because of the uncertain benefits and potential risks of screening, diagnosis, and treatment.

The 2002 BRFSS survey for Mississippi indicated that 60.5 percent of males more than 40 years of age reported ever having had a PSA test. The overall rate for white respondents was 62.1 percent while nonwhites reported a rate of 57.0 percent. There was a notable difference in rates for men age 60 and older. In the 60-69 age category, the screening rate for whites was 75.5

percent compared to 70.8 percent for nonwhites and for men 70 and older, whites had a rate of 83.7 percent while nonwhites had a rate of only 69.4 percent.

Only 52.2 percent of males over 40 years of age reported having a PSA test within the past two years. The rate for white respondents was 53.4 percent compared to 49.9 percent for nonwhites. There was a conspicuous difference by race in rates for men more than 70 years of age. White males reported a rate of 78.1 percent while in the nonwhite group the rate was on 42.3 percent. Nonwhite males in the 40 to 69 age group reported a higher rate of PSA testing in the past two years than did white males.

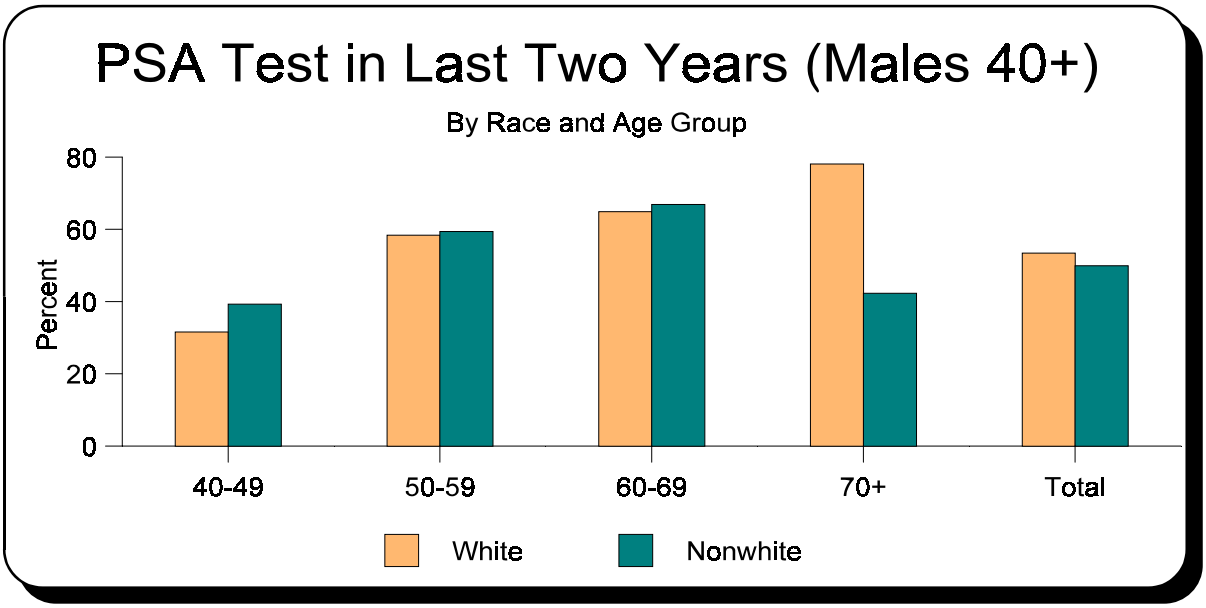


**Figure 30**

## Ever Had PSA Test (Males 40+)

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Age Group** | | | | | | |
| 40-49 | 87 | 39.1 | 38 | 43.9 | 125 | 40.4 |
| 50-59 | 146 | 69.0 | 38 | 63.9 | 184 | 67.8 |
| 60-69 | 120 | 75.5 | 34 | 70.8 | 154 | 74.2 |
| 70+ | 102 | 83.7 | 18* | 69.4 | 121 | 80.0 |
| **Education** | | | | | | |
| < High School | 43 | 47.7 | 39 | 48.7 | 82 | 48.2 |
| High School Graduate or GED | 125 | 55.4 | 39 | 59.4 | 165 | 56.3 |
| Some College or Technical School | 113 | 62.1 | 28* | 59.0 | 141 | 61.1 |
| College Graduate | 174 | 75.2 | 20* | 66.9 | 194 | 73.9 |
| **Income** | | | | | | |
| < $15,000 | 39 | 42.9 | 31 | 52.9 | 70 | 47.0 |
| $15 - $24,999 | 52 | 57.9 | 24 | 42.6 | 76 | 50.8 |
| $25 - $34,999 | 63 | 63.2 | 19* | 66.5 | 82 | 64.0 |
| $35 - $49,999 | 89 | 61.3 | 16* | 65.5 | 105 | 61.9 |
| $50 - $74,999 | 83 | 69.4 | 10* | 74.8 | 93 | 70.1 |
| $75,000+ | 92 | 69.2 | 12* | 86.0 | 104 | 71.2 |
| **Employment Status** | | | | | | |
| Employed | 249 | 55.7 | 63 | 52.7 | 312 | 54.8 |
| Not Employed | 6* | 42.5 | 9* | 38.8 | 15* | 39.9 |
| Student/Homemaker | 0* | 0.0 | 0* | 0.0 | 0* | 0.0 |
| Retired/Unable to Work | 199 | 76.2 | 56 | 68.8 | 256 | 73.7 |
| **Total** | 455 | 62.1 | 128 | 57.0 | 584 | 60.5 |

* Sample size less than 50

## PSA Test in Past Two Years (Males 40+)

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Age Group** | | | | | | |
| 40-49 | 70 | 31.6 | 33 | 39.3 | 103 | 34.0 |
| 50-59 | 120 | 58.4 | 35 | 59.4 | 155 | 58.6 |
| 60-69 | 104 | 64.9 | 31 | 66.9 | 135 | 65.5 |
| 70+ | 94 | 78.1 | 11* | 42.3 | 105 | 69.0 |
| **Education** | | | | | | |
| < High School | 39 | 43.2 | 30 | 38.5 | 69 | 40.9 |
| High School Graduate or GED | 106 | 47.1 | 37 | 57.0 | 143 | 49.6 |
| Some College or Technical School | 94 | 52.6 | 25* | 52.8 | 119 | 52.4 |
| College Graduate | 149 | 65.1 | 17* | 56.5 | 166 | 63.8 |
| **Income** | | | | | | |
| < $15,000 | 32 | 37.0 | 24 | 42.4 | 56 | 39.0 |
| $15 - $24,999 | 44 | 49.8 | 20 | 38.2 | 64 | 44.5 |
| $25 - $34,999 | 53 | 52.3 | 17* | 59.4 | 70 | 54.0 |
| $35 - $49,999 | 78 | 52.9 | 15* | 60.5 | 93 | 54.2 |
| $50 - $74,999 | 73 | 61.1 | 9* | 66.3 | 82 | 61.8 |
| $75,000+ | 77 | 59.6 | 11* | 77.5 | 88 | 61.7 |
| **Employment Status** | | | | | | |
| Employed | 206 | 46.4 | 55 | 47.1 | 261 | 46.5 |
| Not Employed | 5* | 36.7 | 9* | 38.8 | 14* | 38.2 |
| Student/Homemaker | 0* | 0.0 | 0* | 0.0 | 0* | 0.0 |
| Retired/Unable to Work | 177 | 68.5 | 46 | 57.4 | 223 | 64.7 |
| **Total** | 388 | 53.4 | 110 | 49.9 | 498 | 52.2 |

* Sample size less than 50

## Colorectal Cancer Screening

Colorectal cancer (CRC) is the second leading cause of cancer-related deaths in the United States. An estimated 130,200 cases (66,600 females and 63,600 males) of CRC and 56,300 deaths (28,500 females and 27,800 males) from CRC were expected to occur in 2000. When cancer-related deaths are estimated separately for males and females, however, CRC becomes the third leading cause of cancer death behind lung and breast cancers for females and behind lung and prostate cancers for males.

Risk factors for CRC may include age, personal and family history of polyps or colorectal cancer, inflammatory bowel disease, inherited syndromes, physical inactivity (colon only), obesity, alcohol use and a diet high in fat and low in fruits and vegetables. Detecting and removing precancerous colorectal polyps and detecting and treating the disease in its earliest stages will reduce deaths from CRC. Fecal Occult Blood Testing and sigmoidoscopy are widely used to screen for CRC, and barium enema and colonoscopy are used as diagnostic tests.

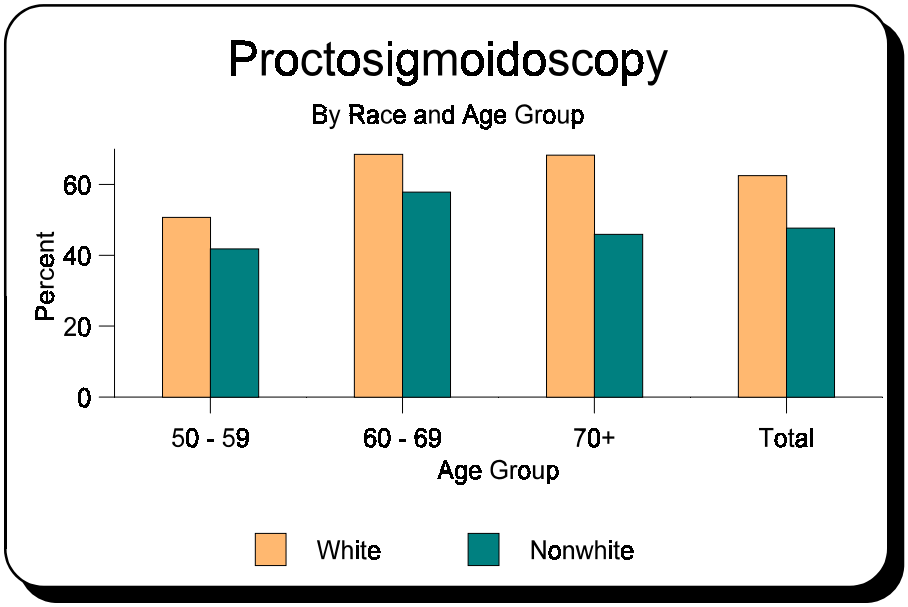


**Figure 31**

In 2001, the death rate for colorectal cancer in Mississippi was 54.6 per 100,000 among people age fifty-five and older. 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 2002 BRFSS data for Mississippi indicates that 59.3 percent of those surveyed had ever had sigmoidoscopy or colonoscopy examination. For persons aged 50-59 the rate was 48.4 percent compared to 31.2 percent in 2001, for those 60-69 it was 66.5 percent and increase from 39.7 percent in 2001 and for those more than 70 the rate was 63.9 percent compared to 48.4 percent in 2001 (Figure 31).

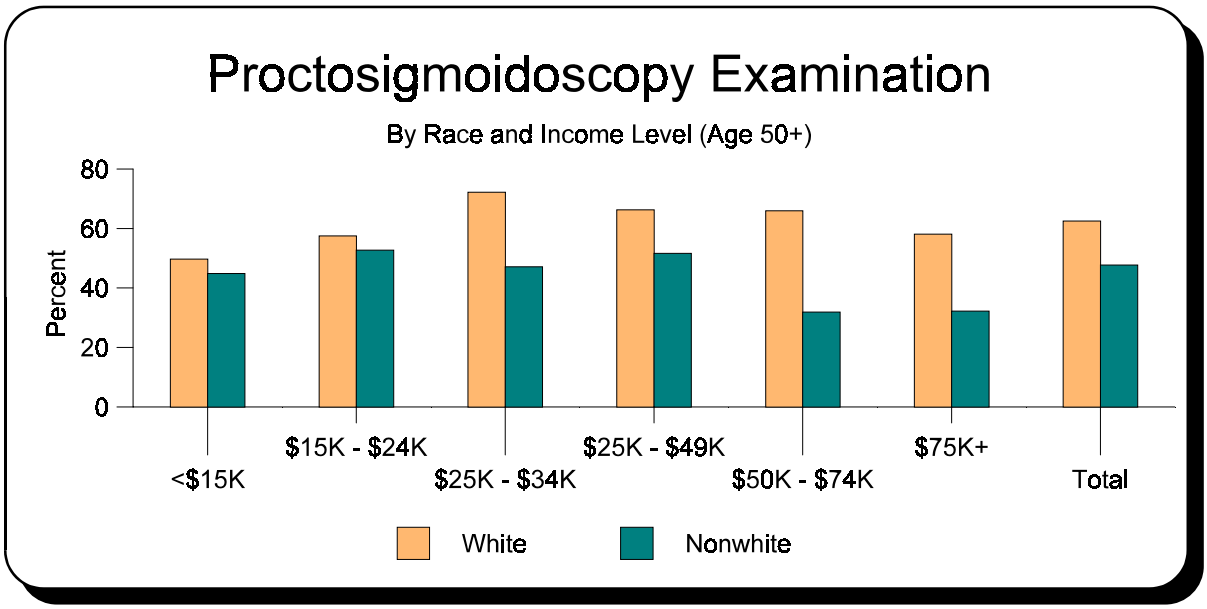
Proctosigmoidoscopy Examination
By Race and Income Level (Age 50+)
Percent
80
60
40
20
0
<$15K
$15K - $24K
$25K - $34K
$25K - $49K
$50K - $74K
$75K+
Total
White
Nonwhite

**Figure 32**

## Ever Had Sigmoidoscopy or Colonoscopy (Persons Age 50+)

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 118 | 61.2 | 15* | 36.1 | 133 | 56.2 |
| Female | 220 | 63.7 | 61 | 55.9 | 282 | 61.8 |
| **Age Group** | | | | | | |
| 50-59 | 83 | 50.7 | 28 | 41.8 | 112 | 48.4 |
| 60-69 | 123 | 68.5 | 29* | 57.8 | 152 | 66.5 |
| 70+ | 132 | 68.3 | 19* | 45.9 | 151 | 63.9 |
| **Education** | | | | | | |
| < High School | 41 | 48.1 | 28 | 46.9 | 69 | 47.6 |
| High School Graduate or GED | 102 | 62.7 | 16* | 44.6 | 119 | 59.0 |
| Some College or Technical School | 89 | 64.1 | 16* | 43.0 | 105 | 60.1 |
| College Graduate | 105 | 67.5 | 15* | 60.6 | 120 | 66.7 |
| **Income** | | | | | | |
| < $15,000 | 36 | 49.7 | 24 | 44.9 | 60 | 47.8 |
| $15 - $24,999 | 44 | 57.5 | 14* | 52.7 | 58 | 55.6 |
| $25 - $34,999 | 57 | 72.2 | 7* | 47.1 | 64 | 68.7 |
| $35 - $49,999 | 55 | 66.3 | 9* | 51.6 | 65 | 64.4 |
| $50 - $74,999 | 39 | 66.0 | 4* | 31.9 | 43 | 60.4 |
| $75,000+ | 35 | 58.1 | 1* | 32.2 | 36 | 56.6 |
| **Employment Status** | | | | | | |
| Employed | 97 | 58.7 | 22 | 38.2 | 119 | 54.0 |
| Not Employed | 6* | 50.8 | 2* | 15.8 | 8* | 36.4 |
| Student/Homemaker | 22* | 62.8 | 0* | 0.0 | 23* | 58.9 |
| Retired/Unable to Work | 213 | 64.9 | 52 | 56.9 | 265 | 63.0 |
| **Total** | 338 | 62.5 | 76 | 47.7 | 415 | 59.3 |

* Sample size less than 50

## Had Blood Stool Test in Past Two Years (Persons Age 50+)

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 131 | 26.5 | 34 | 24.0 | 165 | 25.8 |
| Female | 200 | 22.9 | 63 | 17.4 | 264 | 21.3 |
| **Age Group** | | | | | | |
| 50-59 | 100 | 20.1 | 39 | 20.9 | 140 | 20.4 |
| 60-69 | 116 | 27.1 | 34 | 18.9 | 150 | 24.8 |
| 70+ | 115 | 27.7 | 24 | 20.5 | 139 | 25.7 |
| **Education** | | | | | | |
| < High School | 46 | 20.2 | 35 | 17.0 | 81 | 18.6 |
| High School Graduate or GED | 99 | 21.3 | 23 | 19.2 | 123 | 20.8 |
| Some College or Technical School | 83 | 24.2 | 21 | 29.7 | 104 | 25.1 |
| College Graduate | 102 | 32.3 | 17 | 23.5 | 119 | 30.8 |
| **Income** | | | | | | |
| < $15,000 | 39 | 17.8 | 30 | 18.1 | 69 | 17.8 |
| $15 - $24,999 | 50 | 25.0 | 16 | 18.7 | 67 | 23.3 |
| $25 - $34,999 | 41 | 22.2 | 10* | 19.8 | 51 | 21.7 |
| $35 - $49,999 | 53 | 25.7 | 10* | 31.5 | 63 | 26.6 |
| $50 - $74,999 | 39 | 27.1 | 8* | 40.5 | 47 | 29.2 |
| $75,000+ | 37 | 28.3 | 2* | 15.2 | 39 | 27.3 |
| **Employment Status** | | | | | | |
| Employed | 91 | 17.2 | 36 | 25.2 | 127 | 18.9 |
| Not Employed | 7* | 20.2 | 3* | 11.2 | 11 | 16.8 |
| Student/Homemaker | 23 | 21.9 | 2* | 5.9 | 25 | 18.7 |
| Retired/Unable to Work | 210 | 30.8 | 56 | 19.6 | 266 | 27.4 |
| **Total** | 331 | 24.6 | 97 | 20.2 | 429 | 23.3 |

* Sample size less than 50

## HIV/AIDS

Acquired Immunodeficiency Syndrome (AIDS) received designation as a legally reportable disease in July 1983. By 1990, AIDS had become the tenth leading cause of death in the United States. Individuals engaging in certain risky behaviors have greater risk of contracting AIDS. These behaviors include sharing needles and/or syringes, having unprotected sex (anal, oral or vaginal), having multiple sex partners, having a history of sexually transmitted diseases, abusing intravenous drugs and having sex with a person engaged in one of these risky behaviors. There were 348 new cases of AIDS and 397 cases of HIV reported in Mississippi in 2002.

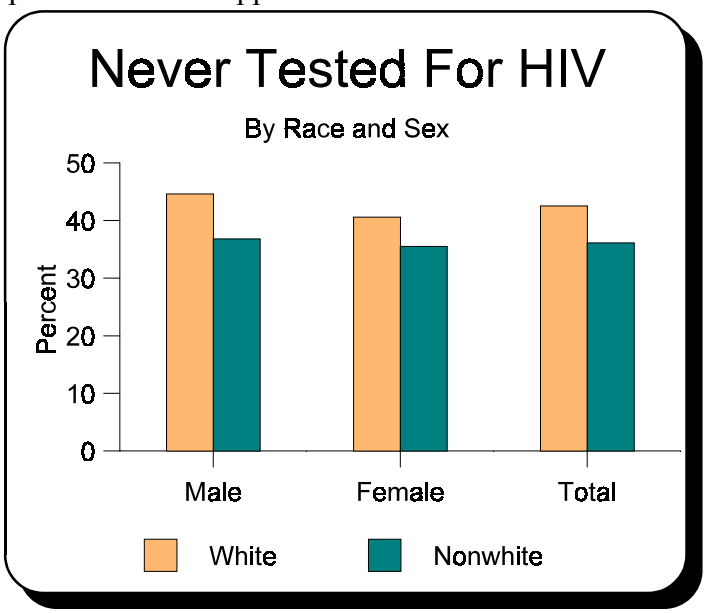


**Figure 33**

AIDS is a life threatening condition representing the later stages of infection with the human immuno-deficiency virus (HIV). Infection with HIV results in slow, progressive damage to the immune system and certain other organ systems. As the immune system weakens, certain opportunistic infections and cancers not normally seen in healthy individuals result in severe and frequently fatal illness. Between 800,000 and 900,000 persons in the United States are estimated to be infected with HIV, and many are unaware that they have the virus.

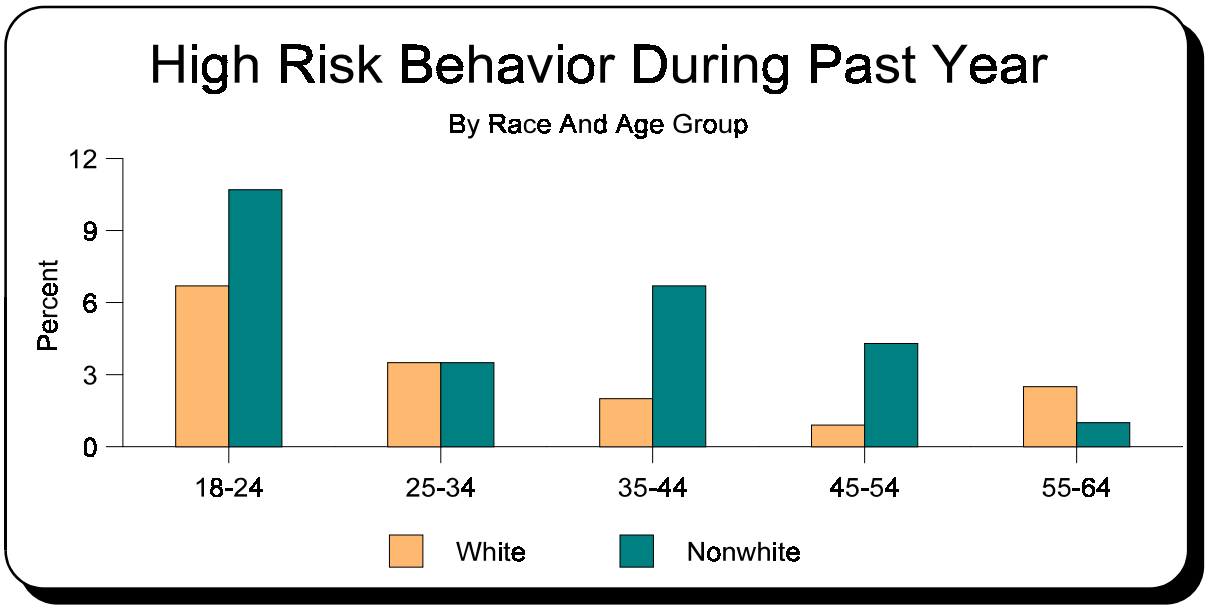


**Figure 34**

Questions about HIV and AIDS were only asked of those persons between the ages of 18 and 64. One of the questions was whether the respondent had ever been tested for the AIDS virus. Slightly more that forty percent of the respondents reported that they had never been tested. Nonwhites were more likely to have been tested that whites. The rate for nonwhite males not tested was 36.8 percent and for nonwhite females it was 35.5 percent. For white respondents the rate was 44.6 for males and 40.6 for females.

## Never Tested For HIV

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 436 | 44.6 | 128 | 36.8 | 566 | 42.0 |
| Female | 672 | 40.6 | 330 | 35.5 | 1,006 | 38.6 |
| **Age Group** | | | | | | |
| 18-24 | 84 | 48.4 | 50 | 42.5 | 134 | 45.4 |
| 25-34 | 114 | 31.2 | 38 | 18.9 | 153 | 26.5 |
| 35-44 | 223 | 45.7 | 99 | 38.9 | 323 | 43.1 |
| 45-54 | 357 | 67.3 | 147 | 55.0 | 506 | 63.2 |
| 55-64 | 330 | 70.9 | 124 | 66.5 | 456 | 69.6 |
| **Education** | | | | | | |
| < High School | 135 | 40.2 | 101 | 29.5 | 237 | 35.2 |
| High School Graduate or GED | 335 | 41.9 | 185 | 43.6 | 525 | 42.6 |
| Some College or Technical School | 319 | 45.4 | 87 | 29.0 | 406 | 40.2 |
| College Graduate | 319 | 41.9 | 83 | 37.3 | 402 | 40.6 |
| **Income** | | | | | | |
| < $15,000 | 111 | 36.0 | 128 | 34.5 | 240 | 35.1 |
| $15 - $24,999 | 162 | 39.7 | 114 | 33.3 | 277 | 36.6 |
| $25 - $34,999 | 160 | 39.9 | 64 | 39.4 | 224 | 39.5 |
| $35 - $49,999 | 213 | 46.1 | 42 | 35.2 | 256 | 43.2 |
| $50 - $74,999 | 176 | 48.1 | 28 | 39.4 | 205 | 47.1 |
| $75,000+ | 170 | 50.9 | 17* | 42.9 | 187 | 49.8 |
| **Employment Status** | | | | | | |
| Employed | 774 | 50.4 | 277 | 39.1 | 1,053 | 46.5 |
| Not Employed | 43 | 48.4 | 55 | 49.4 | 100 | 49.2 |
| Student/Homemaker | 122 | 46.6 | 37 | 37.6 | 161 | 43.8 |
| Retired/Unable to Work | 168 | 20.3 | 87 | 20.9 | 255 | 20.4 |
| **Total** | 1,108 | 42.5 | 458 | 36.1 | 1,572 | 40.2 |

* Sample size less than 50

## Participated in High Risk Behavior During Past Year

| Groups | White | | Nonwhite | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Sex** | | | | | | |
| Male | 25 | 3.0 | 23 | 8.0 | 48 | 4.7 |
| Female | 24 | 1.7 | 28 | 2.7 | 52 | 2.0 |
| **Age Group** | | | | | | |
| 18-24 | 10 | 6.7 | 11 | 10.7 | 21 | 8.5 |
| 25-34 | 13 | 3.5 | 10 | 3.5 | 23 | 3.5 |
| 35-44 | 12 | 2.0 | 14 | 6.7 | 26 | 3.7 |
| 45-54 | 5 | 0.9 | 13 | 4.3 | 18 | 2.0 |
| 55-64 | 9 | 2.5 | 3 | 1.0 | 12 | 2.1 |
| **Education** | | | | | | |
| < High School | 14 | 4.8 | 17 | 8.1 | 31 | 6.3 |
| High School Graduate or GED | 10 | 2.3 | 15 | 4.8 | 25 | 3.2 |
| Some College or Technical School | 14 | 2.3 | 13 | 5.2 | 27 | 3.2 |
| College Graduate | 11 | 1.0 | 6 | 1.5 | 17 | 1.1 |
| **Income** | | | | | | |
| < $15,000 | 9 | 4.5 | 19 | 6.7 | 28 | 5.6 |
| $15 - $24,999 | 11 | 3.8 | 13 | 5.1 | 24 | 4.4 |
| $25 - $34,999 | 7 | 1.8 | 8 | 5.4 | 15 | 2.9 |
| $35 - $49,999 | 9 | 2.4 | 3 | 2.6 | 12 | 2.4 |
| $50 - $74,999 | 4 | 0.6 | 1 | 1.3 | 5 | 0.7 |
| $75,000+ | 3 | 0.6 | 2* | 4.7 | 5 | 1.1 |
| **Employment Status** | | | | | | |
| Employed | 36 | 2.9 | 27 | 5.1 | 63 | 3.6 |
| Not Employed | 3 | 4.7 | 10 | 10.5 | 13 | 8.3 |
| Student/Homemaker | 3 | 1.9 | 3 | 2.4 | 6 | 2.0 |
| Retired/Unable to Work | 7 | 0.9 | 11 | 3.4 | 18 | 1.7 |
| **Total** | 49 | 2.3 | 51 | 5.1 | 100 | 3.3 |

* Sample size less than 50

MISSISSIPPI STATE DEPARTMENT OF HEALTH

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*Equal Opportunity In Employment/Services*