2002

Behavioral Risk Factor Surveillance System Report

(BRFSS)

Mississippi State Department of Health

570 East Woodrow Wilson Drive

P. O. Box 1700

Jackson, MS 39215-1700

Introduction i
Methodology ii
Definition of Terms and Risk Factors iv
Survey Results
Health Care Coverage
Health Status
Tobacco Use
Diabetes
Folic Acid
Breast Cancer Screening16
Cervical Cancer Screening
Fruits and Vegetables
Arthritis
Exercise
Overweight
Asthma
Oral Health
Immunization
Alcohol Consumption
Usage of Seat Belts
Prostate Cancer Screening
Colorectal Cancer Screening
HIV/AIDS

Behavioral Risk Factor Surveillance System - Mississippi 2002

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 $\pm 3\%$ on risk factor prevalence estimates in the adult population. Prevalence estimates by individual demographic variables, comprising smaller sample sizes, do not achieve the same level of accuracy as the total sample.

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

B. QUESTIONNAIRE

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

C. DATA ANALYSIS

The data collected by the MSDH Office of Public Health Statistics was compiled and weighted by the CDC. Weighted counts were based on the 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 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 Visits - 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 $\leq 12\%$.

Survey Results

Health Care Coverage



Figure 1

higher than among patients with insurance.

Access to health servicesincluding preventive care, primarv 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

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

Behavioral Risk Factor Surveillance System - Mississippi 2002

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 noncoverage with a rate of 37.8 percent: 37.5 percent for whites and 38.1 percent for nonwhites (Figure 2).

	White		Nony	white	Total	
Groups	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

Persons Who Have No Kind of Health Care Plan

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.



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

Behavioral Risk Factor Surveillance System - Mississippi 2002

	W	hite	Nony	white	То	otal
Groups	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<="" td=""><td>185</td><td>42</td><td>182</td><td>48.4</td><td>368</td><td>45.1</td></high>	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

People Who Report Their Health as Being Fair or Poor

Tobacco Use



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 tobaccorelated 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





Behavioral Risk Factor Surveillance System - Mississippi 2002

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.

	Wł	nite	Nony	white	Та	otal
Groups	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

Persons Who Smoke Everyday or Some Days

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.

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



Figure 8

Behavioral Risk Factor Surveillance System - Mississippi 2002

percent.

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

	WI	hite	Non	white	То	otal
	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

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

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.

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

	WI	nite	Nony	white	То	otal
Groups	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

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

	WI	nite	Nony	white	Τα	otal
Groups	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

Take Multivitamins (Females 18-44)

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

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.



Behavioral Risk Factor Surveillance System - Mississippi 2002

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.



Figure 13

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.

	White		Nonwhite		Total	
Groups	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

Females 40+ Who Have Ever Had a Mammogram and CBE

	WI	nite	Nony	white	То	otal
Groups	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

Had a Mammogram and a CBE in the Past Two Years (Women 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.





Figure 14

Behavioral Risk Factor Surveillance System - Mississippi 2002

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.

	WI	nite	Nony	white	To	otal
Groups	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

Women 18 and Older Who Have Ever Had a Pap Test

	W	hite	Non	Nonwhite		Total	
Groups	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				<u> </u>	ſ'		
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	

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

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.

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.

	WI	White		Nonwhite		Total	
Groups	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	

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

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

	White		Nony	white	Total	
Groups	Number	Number Percent		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

Diagnosed With Arthritis

	White		Nony	white	Total	
Groups	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

Behavioral Risk Factor Surveillance System - Mississippi 2002

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 wellknown 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.



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



31

Behavioral Risk Factor Surveillance System - Mississippi 2002

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

	White Number Percent		Nony	white	Total	
Groups			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

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.

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 $(BMI \ge 25)$ or obese $(BMI \ge 30)$. Figure 20 shows how being overweight increases with age.



Figure 21

	White		Nonwhite		Total	
Groups	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

People Who Are Overweight or Obese

People Who Are Obese

	White		Nonwhite		Total	
Groups	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

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 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

	White		Nony	white	Total	
Groups	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

	White		Nonwhite		Total	
Groups	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

People Who Presently Have Asthma

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.





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).



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

	White		Nony	white	Total	
Groups	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

No Dental Visit in the Past Year

	White		Nony	white	Total	
Groups	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

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 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.





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

	ıps Number Percent N		Nony	white	Total	
Groups			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

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

	White		Nonwhite		Total	
Groups	Groups Number		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

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
---------	-----	-------	-----	--------	--------------

	Wł	nite	Nonwhite		Total		
Groups	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	

	W	hite	Nonwhite		Total	
Groups	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

Persons Who Sometimes, Seldom or Never Use Safety Belts

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 PS	A Test	(Males	40 +)
--------------------	--------	--------	--------------

	White		Nonwhite		Total	
Groups	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

	White		Nonwhite		Total	
Groups	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

PSA Test in Past Two Years (Males 40+)

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

Figure 31

sigmoidoscopy are widely used to screen for CRC, and barium enema and colonoscopy are used as diagnostic tests.

In 2001, the death rate for colorectal cancer in Mississippi was 54.6 per 100,000 among people age fifty-five and older. The U.S. Preventive Services Task Force recommends screening for colorectal cancer using high-sensitivity fecal occult blood testing, sigmoidoscopy, or colonoscopy beginning at age 50 years and continuing until age 75 years.

The 2002 BRFSS data for Mississippi indicates that 41.5 percent of those surveyed had ever had sigmoidoscopy or colonoscopy examination. For persons aged 50-59 the rate was 31.8 percent compared to 31.2 percent in 2001, for those 60-69 it was 44.8 percent an increase from 39.7 percent in 2001 and for those more than 70 the rate was 51.5 percent compared to 48.4 percent in 2001 (Figure 31).



Figure 32

	White		Nonwhite		Total	
Groups	Number	Percent	Number	Percent	Number	Percent
Sex Sex						
Male	212	43.7	37	25.9	249	39.1
Female	431	45.9	133	38.1	565	43.5
Age Group						
50-59	172	33.4	60	27.9	233	31.8
60-69	214	48.6	59	35.2	273	44.8
70+	257	56.5	51	38.2	308	51.5
Education						
< High School or GED	92	33.6	76	36.5	168	34.8
GED	218	46.0	33	22.6	252	40.6
Some College or Technical School	166	47.3	28	33.8	194	44.7
College Graduate	165	48.7	32	43.2	197	47.7
Income						
< \$15,000	104	38.4	49	27.8	153	33.4
\$15-\$24,999	96	44.0	35	40.2	131	42.7
\$25-\$34,999	101	52.9	17	35.8	118	49.2
\$35-\$49,999	94	47.5	16	36.1	111	45.8
\$50-\$74,999	65	45.5	8	35.4	73	43.9
\$75,000+	59	41.5	2	18.8	61	39.7
Employment Status						
Employed	186	36.5	45	26.7	231	34.2
Not employed	12	28.1	7	18.2	19	22.5
Student/Homemaker	48	44.2	5	23.1	54	40.5
Retired/Unable to work	397	52.2	113	38.3	510	47.8
Total	643	44.9	170	33.0	814	41.5

Ever Had Sigmoidoscopy or Colonoscopy (Persons Age 50+)

	White		Nonwhite		Total	
Groups	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

Had Blood Stool Test in Past Two Years (Persons Age 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.



AIDS is a life threatening condition representing the later stages of infection with the human immunodeficiency virus (HIV). Infection with HIV results in slow, progressive damage to the immune system and certain other organ systems. As the immune system weakens, certain opportunistic infections and cancers 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

Figure 33

Behavioral Risk Factor Surveillance System - Mississippi 2002

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

	Wł	nite	Nonwhite		Total	
Groups	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

	WI	White		Nonwhite		Total	
Groups	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	

Participated in High Risk Behavior During Past Year