

Mississippi Behavioral Risk Factor Surveillance System (BRFSS) Summary Trend Report, 1990-99

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, excessive weight gain, unhealthy diet, and excess alcohol consumption. The Behavioral Risk Factor Surveillance System (BRFSS) is a program designed to estimate the prevalence of these and other health risk factors in each state. 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.

This report is a summary of responses to questions from the BRFSS on general health, health risk behaviors for chronic disease (including health care access), and preventive health/screening behaviors. The report covers the period from 1990 (when annual surveys began) to 1999 (the latest year for which data are available).

Methodology

A. Sampling design

The Mississippi BRFSS is a random sample telephone survey of the adult (18 years of age and older) civilian non-institutionalized population in the state. Using a system of random digit dialing and Computer Assisted Telephone Interviewing (CATI), the survey has the potential to reach 93% of all households in Mississippi (i.e., those that have telephones according to South Central Bell data). The survey is conducted on an ongoing basis throughout the year. A sample size of between approximately 1,600 and 2,300 persons is selected each year to give a 95% confidence interval of $\pm 3\%$ on risk factor prevalence estimates of the adult population.

Interviewers, contracted by the MSDH, contact 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 had 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 conducted during a two-week period each month. The response rate for the survey is greater than 90%.

B. Questionnaire

The questionnaire, designed through cooperative agreements with the CDC, contains questions from three categories. The first category contains questions on health status, access to health care, health awareness, health risk behaviors, and preventive health; the second contains demographic information (age, sex, race/ethnicity, education, annual household income, and employment status); and the third

contains questions addressing specific issues that are of particular interest to the state conducting the survey.

Limitations of the Data

Although BRFSS data are self-reported, the validity and reliability of this method of surveillance have been well established for many chronic diseases and risk behaviors. All data collection systems are subject to error, and records may be incomplete or contain inaccurate information. People may not remember essential information, a question may not mean the same thing to different respondents, and some individuals may not respond at all. It is not always possible to measure the magnitude of these errors or their impact on the data. The user must make his or her own evaluation of the data.

C. Data analysis

The data are sent to CDC editing, weighting, and analysis; further analysis is done by the MSDH Office of Public Health Statistics and Office of Community Health Services. The weighting factor takes into account the probability of selection into the sample and the age/race/sex distribution of the general population (based on the projected Mississippi population for that year). The estimates are considered representative of all adults in Mississippi who have telephones. All figures in this report are percentages, rounded to the nearest whole number.

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Note: only responses to questions on general health, health risk behaviors for chronic disease (including health care access), and screening behaviors are given here. All figures are percentages, rounded to the nearest whole number.

| Indicator | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--|------|------|------|------|------|------|------|------|------|------|
| Health status | | | | | | | | | | |
| Report that general health is fair or poor | | | | 22 | 21 | 21 | 21 | 22 | 21 | 21 |
| Report that physical health was not good for more than 7 days during the past 30 days | | | | 11 | 10 | 11 | 11 | 11 | 14 | 13 |
| Report that mental health was not good for more than 7 days during the past 30 days | | | | 11 | 10 | 9 | 9 | 9 | 12 | 13 |
| Report that poor physical/mental health prevented usual activities for more than 7 days during the past 30 days | | | | 8 | 10 | 19 | 18 | 13 | 7 | 15 |
| Cigarette smoking | | | | | | | | | | |
| Report that they are current cigarette smokers (have ever smoked 100 cigarettes and now smoke every day or some days) (HP 2000 Obj. 3.4) | 25 | 24 | 25 | 24 | 22 | 24 | 23 | 23 | 24 | 23 |
| High school education or less (HP 2000 Obj. 3.4a) | 29 | 27 | 30 | 27 | 27 | 28 | 27 | 28 | 28 | 32 |
| Blacks (HP 2000 Obj. 3.4d) | 24 | 22 | 19 | 20 | 19 | 22 | 21 | 18 | 21 | 19 |
| Report that they are former cigarette smokers (have ever smoked 100 cigarettes but do not smoke now) | 18 | 12 | 20 | 21 | 21 | 21 | 21 | 21 | 22 | 20 |
| Percent of current daily smokers who report that they have quit smoking for 1 day or longer during the past 12 months | 64 | 54 | 56 | 63 | 42 | 49 | 50 | 51 | 51 | 55 |
| Quit ratio (percent of ever smokers who are former smokers) | 43 | 45 | 45 | 46 | 49 | 46 | 48 | 48 | 48 | 47 |
| Alcohol use during the past month | | | | | | | | | | |
| Report acute (binge) drinking | 11 | 8 | 11 | 9 | | 9 | | 10 | | 12 |
| Report chronic drinking | 3 | 3 | 3 | 3 | | 3 | | 3 | | 4 |

| Indicator | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|------|------|------|------|------|------|------|------|------|------|
| Physical activity/exercise | | | | | | | | | | |
| Report that they are physically inactive (HP 2000 Obj. 1.5) | 39 | 43 | 48 | | 38 | | 40 | | 34 | |
| 65+ year olds | 51 | 55 | 63 | | 51 | | 49 | | 40 | |
| Income less than \$20,000 | 44 | 47 | 57 | | 47 | | 49 | | 44 | |
| Report sedentary lifestyle (sedentary or irregular physical activity profile) | 66 | 67 | 68 | | 67 | | 65 | | 61 | |
| Report frequent regular exercise (HP 2000 Obj. 1.3) | | | 14 | | 14 | | 17 | | 19 | |
| Report regular intensive exercise (HP 2000 Obj. 1.4) | 6 | 5 | 10 | | 10 | | 11 | | 10 | |
| Income less than \$20,000 (HP 2000 Obj. 1.4a) | 4 | 4 | 6 | | 7 | | 8 | | 8 | |
| Report that they are using physical activity/exercise to lose weight (or keep from gaining weight) | | 51 | 54 | | 45 | | 42 | | 40 | |
| Body weight and weight control | | | | | | | | | | |
| Respondents who are overweight (BMI \$27.8 for men, \$27.3 for women) (HP 2000 Obj. 1.2) | 26 | 28 | 30 | 32 | 32 | 32 | 34 | 34 | 36 | 40 |
| Black women | 37 | 47 | 48 | 50 | 44 | 45 | 46 | 48 | 49 | 54 |
| Respondents who are overweight (BMI \$25.0) | 45 | 47 | 51 | 53 | 52 | 53 | 53 | 56 | 57 | 64 |
| Respondents who are obese (BMI \$30) | 14 | 16 | 17 | 18 | 19 | 19 | 19 | 21 | 22 | 26 |
| Report that they are dieting to lose weight (or keep from gaining weight) | | 84 | 77 | | 72 | | 70 | | 71 | |
| Report that they are using physical activity/exercise to lose weight (or keep from gaining weight) | | 51 | 54 | | 45 | | 42 | | 40 | |
| At risk of developing diabetes | | | | | | | | | | |
| Respondents at risk of developing type 2 diabetes (because of obesity/overweight and/or lack of physical activity/exercise) | 33 | 33 | 34 | | 37 | | 36 | | 37 | |

| Indicator | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--|------|------|------|------|------|------|------|------|------|------|
| Diet/Nutrition | | | | | | | | | | |
| Report that they eat fruits/vegetables 5 or more times per day | | 9 | | | 14 | | 18 | | 16 | |
| Cholesterol awareness | | | | | | | | | | |
| Report that they have ever had a blood cholesterol test | 53 | 58 | 62 | 60 | | 60 | | 65 | | 67 |
| Percent of those tested who have had their blood cholesterol checked within the past year | 80 | 81 | 75 | 71 | | 69 | | 69 | | 67 |
| Percent of those tested who have had their blood cholesterol checked within the past 2 years | 95 | 93 | 91 | 88 | | 85 | | 82 | | 84 |
| Percent of those tested who have had their blood cholesterol checked within the past 5 years | 99 | 98 | 97 | 96 | | 92 | | 93 | | 92 |
| Percent of those tested who report that they have been told by a health professional that they have high blood cholesterol | 25 | 25 | 30 | 31 | | 25 | | 29 | | 30 |
| Diabetes | | | | | | | | | | |
| Report that have ever been told by a doctor that they have diabetes | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 8 | 8 |
| Percent of those with self-reported diabetes who have had two or more visits to a health care provider for their diabetes in the past year | | | | | | | 73 | 68 | 70 | |
| Percent of those with self-reported diabetes who have had at least four visits to a health care provider for their diabetes in the past year | | | | | | | 58 | 51 | 44 | |
| Percent of those with self-reported diabetes who have had two or more foot exams by a health care provider in the past year | | | | | | | 35 | 50 | 36 | |
| Percent of those with self-reported diabetes who have had at least four foot exams by a health care provider in the past year | | | | | | | 28 | 34 | 23 | |
| Percent of those with self-reported diabetes who have had a dilated eye exam within the past year | | | | | | | 55 | 53 | 54 | |
| Percent of those with self-reported diabetes who have had a dilated eye exam within the past 2 years | | | | | | | 70 | 71 | 67 | |

| Indicator | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|------|------|------|------|------|------|------|------|------|------|
| Mammography screening | | | | | | | | | | |
| Report that they have ever had a CBE and mammogram (Women 40+ years of age) (HP 2000 Obj. 16.11) | | 59 | 55 | 64 | 64 | 67 | 71 | 71 | 72 | 72 |
| Income less than \$10,000 (HP 2000 Obj. 16.11b) | | 47 | 37 | 52 | 48 | 50 | 55 | 68 | 73 | 57 |
| Less than a high school education (HP 2000 Obj. 16.11c) | | 46 | 39 | 53 | 48 | 49 | 56 | 59 | 54 | 59 |
| Women aged 70+ years of age (HP 2000 Obj. 16.11d) | | 52 | 47 | 59 | 51 | 57 | 60 | 61 | 61 | 67 |
| Black women (HP 2000 Obj. 16.11e) | | 48 | 41 | 59 | 57 | 49 | 60 | 61 | 66 | 61 |
| Report that they have had a CBE and mammogram in past 2 years (Women 50+ years of age) (HP 2000 Obj. 16.11) | | 46 | 39 | 50 | 49 | 48 | 53 | 60 | 57 | 57 |
| Income less than \$10,000 (HP 2000 Obj. 16.11b) | | 35 | 27 | 40 | 33 | 37 | 38 | 60 | 44 | 42 |
| Less than a high school education (HP 2000 Obj. 16.11c) | | 34 | 28 | 38 | 34 | 34 | 39 | 50 | 41 | 38 |
| Women aged 70+ years of age (HP 2000 Obj. 16.11d) | | 34 | 34 | 45 | 38 | 43 | 47 | 49 | 46 | 49 |
| Black women (HP 2000 Obj. 16.11e) | | 36 | 29 | 41 | 43 | 35 | 47 | 48 | 55 | 45 |
| Report that they have had a screening mammogram within the past year (Women 50-59 years of age) | 68 | 64 | 59 | 61 | 61 | 63 | 54 | 65 | 53 | 63 |
| Report that they have had a screening mammogram within the past 2 years (Women 50-59 years of age) | 84 | 80 | 77 | 84 | 84 | 78 | 82 | 84 | 71 | 81 |
| Report that they have had a screening mammogram within the past year (Women 60-69 years of age) | 73 | 69 | 62 | 64 | 64 | 62 | 61 | 72 | 48 | 58 |
| Report that they have had a screening mammogram within the past 2 years (Women 60-69 years of age) | 84 | 86 | 80 | 81 | 79 | 78 | 82 | 90 | 68 | 82 |

| Indicator | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--|------|------|------|------|------|------|------|------|------|------|
| Pap smear screening | | | | | | | | | | |
| Report that they have ever had a pap smear test (Women aged 18+ years of age) (HP 2000 Obj. 16.12) | | 94 | 91 | 93 | 94 | 92 | 93 | 96 | 93 | 95 |
| Income less than \$10,000 (HP 2000 Obj. 16.12d) | | 92 | 90 | 88 | 86 | 86 | 81 | 90 | 92 | 93 |
| Less than a high school education (HP 2000 Obj. 16.12c) | | 90 | 84 | 84 | 82 | 85 | 87 | 91 | 84 | 88 |
| Women aged 70+ years of age (HP 2000 Obj. 16.12b) | | 82 | 79 | 80 | 79 | 80 | 79 | 82 | 85 | 85 |
| Report that they have had a pap smear test in the past 3 years (Women aged 18+ years of age) (HP 2000 Obj. 16.12) | | 81 | 81 | 79 | 84 | 83 | 82 | 86 | 83 | 83 |
| Income less than \$10,000 (HP 2000 Obj. 16.12d) | | 73 | 76 | 70 | 72 | 72 | 64 | 74 | 76 | 70 |
| Less than a high school education (HP 2000 Obj. 16.12c) | | 65 | 63 | 63 | 66 | 70 | 66 | 74 | 61 | 66 |
| Women aged 70+ years of age (HP 2000 Obj. 16.12b) | | 57 | 49 | 50 | 58 | 51 | 50 | 55 | 63 | 53 |
| Report that they have had pap smear test in the past 3 years (Women 18-65 years of age) | | 91 | 89 | 87 | 89 | 89 | 89 | 90 | 83 | 87 |
| Colorectal cancer screening (Persons aged 50+ years of age) | | | | | | | | | | |
| Report that they have ever had a sigmoidoscopy/proctoscopy ¹ exam (HP 2000 Obj. 16.13) | | | | 33 | | 35 | | 35 | | 30 |
| Percent of those tested who have had a sigmoidoscopy/proctoscopy exam within the past year | | | | 30 | | 34 | | 28 | | 33 |
| Percent of those tested who have had a sigmoidoscopy/proctoscopy exam within the past 2 years | | | | 44 | | 57 | | 49 | | 52 |
| Percent of those tested who have had a sigmoidoscopy/proctoscopy exam within the past 5 years | | | | 66 | | 75 | | 71 | | 74 |

¹1993 and 1995-proctoscopy, 1997-proctoscopy and/or sigmoidoscopy, 1999-sigmoidoscopy and/or colonoscopy

| Indicator | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|------|------|------|------|------|------|------|------|------|------|
| Hypertension awareness | | | | | | | | | | |
| Report that they have ever been told by a health professional that they have high blood pressure | 28 | 30 | 28 | 30 | | 30 | 29 | 34 | | 33 |
| Report that they have had their blood pressure taken by a health professional within the past year | | 92 | 91 | 88 | | 86 | 87 | 89 | | 87 |
| Report that they have had their blood pressure taken by a health professional within the past 2 years | | 96 | 95 | 94 | | 92 | 93 | 94 | | 94 |
| Report that they have had their blood pressure taken by a health professional within the past 5 years | | 98 | 97 | 97 | | 96 | 96 | 97 | | 97 |
| Immunization | | | | | | | | | | |
| Report that they have had a flu shot within the past 12 months | | | | 19 | | 26 | | 28 | | 31 |
| Persons aged 65+ years of age (HP 2000 Obj. 20.11) | | | | 42 | | 57 | | 61 | | 62 |
| Report that they have ever had a pneumonia vaccination | | | | 14 | | 15 | | 17 | | 18 |
| Persons aged 65+ years of age (HP 2000 Obj. 20.11) | | | | 28 | | 39 | | 44 | | 48 |
| Health care access | | | | | | | | | | |
| Report that they have no kind of health care coverage | | 20 | 19 | 16 | 15 | 14 | 14 | 15 | 19 | 17 |
| Report that there was a time during the past 12 months that they needed to see a doctor but could not because of the cost | | 17 | 16 | 18 | 17 | 15 | 15 | 15 | 16 | 15 |