



Behavioral Risk Factor Surveillance System

*2001 South Dakota Summary
(Published August, 2003)*

The following is a summary of the South Dakota Behavioral Risk Factor Surveillance System telephone survey. A more comprehensive report is available upon request.

OVERVIEW

The South Dakota Behavioral Risk Factor Surveillance System (BRFSS) was initiated in 1987 by the South Dakota Department of Health with the assistance of the Centers for Disease Control and Prevention (CDC). CDC provided financial and technical assistance, developed the questionnaire, designed the methodology, and processed the data from the core questionnaire. The South Dakota Department of Health supervised the survey process, processed the data from state-specific questions, and designed and distributed the report.

The BRFSS is designed to collect information on the health behaviors of adults over time. For the 2001 survey, standard demographic questions were included along with sections on general health status, arthritis, disability, diabetes, asthma, hypertension and cholesterol awareness, colorectal and prostate cancer screening, women's health, health care access, immunization, firearms, tobacco use, alcohol consumption, exercise, physical activity, HIV/AIDS. South Dakota also added several state-specific questions to the end of the core questionnaire on diabetes, child oral health, women's health, health care coverage, firearms, and injury control.

Eligible respondents for the survey were individuals 18 years of age or older who resided a majority of the time at the household contacted. In households with more than one eligible respondent, a random selection was made to determine the actual respondent. The survey was completed by 5,119 respondents. All 5,119 interviews were completed between January 1, 2001, and December 31, 2001, at an approximate rate of 427 interviews per month.

If you would like more information about the South Dakota Behavioral Risk Factor Surveillance System, or have any questions or comments, please contact Mark Gildemaster at (605) 773-3596.

SURVEY RESULTS

Hypertension

Hypertension is a major risk factor for both heart disease and stroke. The BRFSS definition of risk is respondents who report they have ever been told by a health professional that they have high blood pressure. Of the respondents surveyed, 24.1 percent have been told they have high blood pressure. When taking gender into consideration, 24.3 percent of females and 23.9 percent of males reported that they have high blood pressure.

Asthma

Asthma's impact on health, quality of life, and the economy is substantial. The first effort to systematically collect state-based asthma prevalence data was started in 1999 with an optional two-question asthma module. In 2001, two questions were included in the core of the BRFSS questionnaire and will be included in the future. An optional module will also be available. In 2001, 7.7 percent of respondents had been told they have asthma. The *Healthy People 2010* goals and objectives are to reduce the number of deaths, hospitalizations, emergency department visits, school or work days missed and limitations on activity due to asthma.

Immunization

Adults aged 65 and older are recommended to get a yearly immunization against influenza, more commonly referred to as the "flu shot". When respondents aged 65 and over were asked if they have had an influenza vaccination within the past 12 months, 25.9 percent said they had not.

Physical Inactivity

Based on the BRFSS definition of risk, 25.4 percent of the survey respondents were considered at risk from no physical activity. By gender, 26.3 percent of females and 24.5 percent of males reported no physical activity in the past month. Respondents who made \$75,000 or more reported less physical inactivity than the other income groups as did college graduates at 13.4 percent compared to 31.0 percent for high school graduates.

Overweight or Obese

Based on Body Mass Index (BMI), an estimated 59.5 percent of South Dakota's adults were overweight or obese in 2001. Comparing gender, 69.5 percent of males were overweight/obese compared to 49.4 percent of females. Considering age and income, those in the 55-64 year old age group and those earning \$35,000 to \$49,999 annually were the most likely to be overweight/obese. Respondents who have less than a high school education were also the most likely to be overweight/obese.

Cigarette Smokers

In South Dakota, 22.3 percent of the respondents reported smoking cigarettes. Of the male respondents, 23.2 percent smoked cigarettes compared to only 21.4 percent of the female respondents. By specific age group, the prevalence of smoking cigarettes was the highest among the 18-24 year old age group (30.6 percent). Among income groups, the highest proportion (31.3 percent) of smokers was found in those earning \$15-\$24,999 annually.

Table 1
Behavioral Risk Factor Surveillance System, 2001
 Percent of Adult South Dakotans with Reported Risk by Gender, Age, Income, and Education

	Hypertension	Physical Inactivity	Overweight / Obese Based on BMI	Cigarette Smokers
Overall Totals	24.1%	25.4%	59.5%	22.3%
Gender				
Male	23.9%	24.5%	69.5%	23.2%
Female	24.3%	26.3%	49.4%	21.4%
Age				
18-24	5.1%	12.3%	40.0%	30.6%
25-34	8.2%	19.9%	53.2%	24.8%
35-44	13.8%	21.8%	62.0%	26.0%
45-54	24.1%	26.4%	67.5%	21.3%
55-64	41.4%	31.1%	71.9%	16.5%
65 +	50.8%	37.9%	61.9%	7.3%
Income				
Under \$15,000	30.8%	38.6%	54.8%	27.2%
\$15-\$24,999	27.4%	32.8%	59.7%	31.3%
\$25-\$34,999	23.9%	26.0%	58.7%	25.6%
\$35-\$49,999	20.2%	22.4%	62.9%	22.0%
\$50-\$74,999	16.8%	16.7%	62.6%	16.5%
\$75,000 +	20.4%	13.2%	60.7%	10.6%
Education				
Less than High School	38.2%	47.8%	60.2%	29.6%
High School Grad/GED	25.4%	31.0%	60.0%	28.5%
Some College/Tech.	22.4%	23.0%	58.8%	22.2%
College Graduate	19.4%	13.4%	59.2%	12.4%

Behavioral Risk Factor Surveillance System Definitions

Hypertension: Respondents who report they have not had their blood pressure checked within the past two years.

Physical Inactivity: Respondents who report that they have had no physical activity in the last month.

Overweight / Obese Based on Body Mass Index: Body Mass Index (BMI) is a common measure expressing the relationship (or ratio) of weight-to-height. BMI is a mathematical formula

in which a person's body weight in pounds is divided by his or her height in inches divided by height in inches (again) times 703 (i.e., $((wt/ht)/ht \times 703)$). The BMI is more highly correlated with body fat than any other indicator of height and weight. Individuals with a BMI of 25 to 29.9 are considered overweight, while individuals with a BMI of 30 or more are considered obese.

Cigarette Smoking: South Dakotans who report smoking at least 100 cigarettes in their lifetime and who now smoke.