

# Missouri Behavioral Risk Factor Surveillance System

## 2013 Key Findings



Missouri Department of Health and Senior Services  
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# ACKNOWLEDGEMENTS

## Missouri Behavioral Risk Factor Surveillance System (BRFSS) 2013 Key Findings

### Special Thanks:

Thank you to more than 7,000 Missouri adults whose telephone numbers were randomly selected for participation in the 2013 BRFSS interview. This valuable information would not be available without their willingness to participate.

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# INTRODUCTION

The Missouri Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey of adults age 18 and older that collects a range of information on health issues. BRFSS data are used to identify emerging health problems, establish health objectives and track their progress, and develop and evaluate public health policies and programs.

In 2013, 7,119 adults were interviewed January through December by the Health and Behavioral Risk Research Center at the University of Missouri-Columbia. Randomly selected household landline telephone numbers were called and an adult was randomly selected to participate in the survey. Additionally, randomly selected adult cell telephone users participated in the interview. Cell phone interviews were added to the BRFSS because of the growing number of adults that use cell phones rather than landline telephones. Data from the landline and cell telephone interviews were aggregated and weighted by the U.S. Centers for Disease Control and Prevention (CDC) to be representative of non-institutionalized adults in Missouri. This report summarizes key findings from the survey.

**Please note:** In 2011, the CDC began using a new weighting methodology that allows the data to be more representative of the adult population. Previous years of BRFSS data may be found in reports located on the Missouri Department of Health and Senior Services website at <http://www.health.mo.gov/data/brfss/data.php>, but should not be compared to 2011, 2012 or 2013 data because of the new weighting method and combining data from landline and cell telephone interviews. A description of the new methodology may be found at the BRFSS web address.

The 2013 BRFSS revealed the following health concerns among Missouri adults:

- 38.8 percent had been told by a health professional that they had high cholesterol
- 35.1 percent were overweight
- 32.0 percent had been told by a health professional that they had high blood pressure
- 30.4 percent were obese
- 28.4 percent had been diagnosed with arthritis by a doctor
- 28.3 percent had engaged in no leisure time physical activity during the past 30 days
- 24.2 percent were limited in activities due to physical, mental or emotional problems
- 23.5 percent of males engaged in binge drinking of alcohol (5 or more drinks on one occasion)
- 22.1 percent smoked cigarettes, including 38.9 percent of those with annual household incomes of less than \$15,000
- 22.0 percent did not always wear a seat belt
- 18.8 percent of adults age 18-64 did not have health care coverage, including 39.9 percent of those with annual household incomes of less than \$15,000 and 36.0 percent of those with incomes of \$15,000-\$24,999
- 16.1 percent did not see a doctor when needed in the past 12 months due to cost

In general, a consistent finding throughout the survey is that adults that have the lowest education levels and annual household incomes compared to those with the highest education and income levels were less healthy, engaged in health risk behaviors to a greater extent, and were less likely to have health care coverage.

# 2013 BRFSS KEY FINDINGS

## **General Health Measures**

Most Missouri adults (81.6 percent) had excellent, very good or good general health while 18.4 percent had fair or poor health. A significantly greater percentage of adults with annual household incomes of less than \$15,000 had poor general health compared to those with incomes of \$15,000 or greater. One-quarter of adults (25.2 percent) experienced poor physical health on three or more of the past 30 days. Twenty-four (24.2) percent had mental health that was not good on three or more of the past 30 days. Thirty-three (33.0) percent were kept from doing their usual activities on three or more of the past 30 days due to poor physical or mental health.

## **Disability**

Twenty-four (24.2) percent of adults were limited in activities because of physical, mental or emotional problems. A significantly greater percentage of adults with annual household incomes of less than \$15,000 (49.8 percent) were limited in activities compared to those with incomes greater than \$15,000.

Because of physical, mental or emotional problems, 12.3 percent of adults had serious difficulty concentrating, remembering or making decisions, and 8.4 percent had difficulty doing errands alone such as visiting a doctor's office or shopping.

Sixteen (16.1) percent of adults had serious difficulty walking or climbing stairs, including 34.7 percent of those with annual household incomes of less than \$15,000. Five (4.7) percent of adults had difficulty dressing or bathing. Ten (10.4) percent of adults had a health problem that required them to use special equipment, such as a cane, wheelchair, special bed or special telephone. Five (4.7) percent were blind or had serious difficulty seeing, even when wearing glasses.

## **Access to Health Care**

Among adults age 18 to 64, 18.8 percent had no health care coverage. A significantly greater percentage of adults with annual household incomes less than \$15,000 (39.9 percent) and between \$15,000 and \$24,999 (36.0 percent) had no health care coverage compared to those with incomes of \$25,000-\$34,999 (23.0 percent), \$35,000-\$49,999 (13.1 percent), \$50,000-\$74,999 (5.7 percent), or \$75,000 or greater (2.7 percent)

Sixteen (16.1) percent of adults needed to see a doctor in the past 12 months but could not because of the cost. A significantly greater percentage of African-American adults (21.5 percent) than white adults (12.4 percent) could not see a doctor due to cost. A significantly greater percentage of adults with annual household incomes of less than \$15,000 (38.4 percent) and between \$15,000 and \$24,999 (30.9 percent) could not see a doctor due to cost compared to those with incomes of \$25,000-\$34,999 (13.8 percent), \$35,000-\$49,999 (12.0 percent), \$50,000-\$74,999 (9.6 percent), or \$75,000 or greater (3.2 percent).

## **Health Risk Behaviors**

### *Current Tobacco Use and Quitting*

Twenty-two (22.1) percent of Missouri adults smoked cigarettes every day or some days. A significantly greater percentage of adults with less than a high school education (38.8 percent) smoked cigarettes than adults with a high school education or GED (26.2 percent), some post high school education (20.9

percent) or a college degree (8.6 percent). More than one-half (57.4 percent) of current smokers stopped smoking for one day or longer in the past 12 months because they were trying to quit. Smokeless tobacco was used every day or some days by 9.7 percent of adult males.

#### *Physical Inactivity*

Twenty-eight (28.3) percent of Missouri adults participated in no leisure time physical activity or exercise in the past month. A significantly greater percentage of adults with less than a high school education (40.1 percent) and a high school education or GED (34.2 percent) were physically inactive compared to adults with post high school education (27.5 percent) or a college degree (15.1 percent).

Among adults who were physically active in the past month, 57.3 percent spent the most time walking, 23.5 percent ran or participated in aerobics and 19.2 percent spent the most time in other activities.

#### *Inadequate consumption of fruits and vegetables*

Only 13.5 percent of Missouri adults ate fruits and vegetables five or more times per day.

#### *Heavy and Binge Alcohol Drinking*

Six (6.0) percent of Missouri adults were considered heavy drinkers as defined by males having more than two drinks per day and females having more than one drink per day. A significantly greater percentage of males (7.6 percent) than females (4.5 percent) engaged in heavy drinking. A significantly greater percentage of males (23.5 percent) than females (11.3 percent) engaged in binge drinking on at least one occasion during the past month. Binge drinking is defined as having five or more drinks on one occasion for males and four or more drinks for females.

#### *Lack of Seatbelt Use*

Twenty-two (22.0) percent of Missouri adults did not always wear a seat belt. Twenty-nine (28.6) percent of males and 15.9 percent of females did not always wear a seat belt.

#### *Inadequate Sleep*

Five (4.8) percent of adults slept on average one to four hours in a 24-hour period. Eighty-six (86.3) percent slept five to eight hours and 8.8 percent slept nine or more hours.

### **Chronic Diseases and Conditions**

The percentage of Missouri adults that had the following chronic conditions or diseases in 2013:

- ***High Cholesterol – 38.8 percent***  
A significantly greater percentage of adults with less than a high school education (50.2 percent) and with a high school education or G.E.D. (42.9 percent) had high cholesterol compared to those with some post high school education (36.0 percent) or a college degree (32.1 percent).
- ***Overweight – 35.1 percent***  
A significantly greater percentage of males (41.9 percent) than females (28.3 percent) were overweight.
- ***Obesity – 30.4 percent***  
A significantly greater percentage of African-American adults (38.9 percent) were obese than white adults (29.5 percent).
- ***Hypertension (High Blood Pressure) – 32.0 percent***  
A significantly greater percentage of adults with less than a high school education (39.1 percent) and high school education or G.E.D. (37.2 percent) had high blood pressure compared to those with some post high school education (30.5 percent) or a college degree (22.9 percent).
- ***Arthritis – 28.4 percent***  
A significantly greater percentage of adults with annual household incomes of less than \$15,000 (37.4 percent) and \$15,000-\$24,999 (34.2 percent) had doctor-diagnosed arthritis than adults with

incomes of \$35,000-\$49,999 (26.0 percent), \$50,000-\$74,999 (25.3 percent) and \$75,000 or greater (21.0 percent)

- **Depressive Disorder – 21.3 percent**

A significantly greater percentage of females (25.1 percent) than males (17.3 percent) had been told by a health professional that they had a depressive disorder. A significantly greater percentage of adults with an annual household income of less than \$15,000 (40.6 percent) had a depressive disorder than those with a household income of \$15,000-\$24,999 (27.7 percent), \$25,000-\$34,999 (22.5 percent), \$35,000-\$49,999 (18.1 percent), \$50,000-\$74,999 (14.9 percent), or \$75,000 or greater (13.8 percent).

- **Asthma (Current) – 10.8 percent**

A significantly greater percentage of females (13.4 percent) than males (8.1 percent) currently had asthma. A significantly greater percentage of adults with an annual household income of less than \$15,000 (19.3 percent) had asthma than those with a household income of \$25,000-\$34,999 (8.4 percent), \$35,000-\$49,999 (9.5 percent), \$50,000-\$74,999 (8.6 percent) or \$75,000 or greater (7.5 percent).

- **Diabetes – 9.6 percent**

A significantly greater percentage of African-American adults (16.4 percent) had been told by a health professional they had diabetes compared to white adults (9.9 percent). Seven (7.1) percent of adults had been told they have **pre-diabetes**.

- **Cancer (Other than skin) – 7.7 percent**

A significantly greater percentage of females (9.4 percent) than males (6.0 percent) had been told by a health professional they had some form of cancer other than skin cancer. Seven (7.1) percent of adults had been diagnosed with **skin cancer**.

- **Chronic Obstructive Pulmonary Disease (COPD) – 7.6 percent**

A significantly greater percentage of males (8.9 percent) than females (6.2 percent) had been told by a health professional they had COPD.

- **Heart Attack – 5.4 percent**

A significantly greater percentage of males (7.4 percent) than females (3.5 percent) had been told by a health professional they had experienced a heart attack or a myocardial infarction.

- **Coronary Heart Disease – 4.6 percent**

A significantly greater percentage of males (5.7 percent) than females (3.6) had been told by a health professional that they had coronary heart disease or angina.

- **Stroke – 3.2 percent**

A significantly greater percentage of adults ages 65 and older (8.6 percent) than adults less than 65 years of age had been told by a health professional they had experienced a stroke.

- **Kidney Disease – 2.0 percent**

A significantly greater percentage of adults ages 65 and older (5.0 percent) than adults less than 65 years of age had been told by a health professional they had kidney disease.

## **Childhood Asthma Prevalence**

Adults with children under the age of 18 were asked to answer questions about a randomly selected child in the household. Responses were weighted to be representative of all children in Missouri under the age of 18. As a result, it was found that 11.4 percent of children under the age of 18 in Missouri had been told by a doctor or other health professional that they had asthma. Among those that had been told they had asthma, 68.6 percent still had the condition.

## **Preventive Practices**

### *Aspirin Consumption*

Twenty-eight (28.1) percent of adults took aspirin daily or every other day. Eight-six (86.1) percent took aspirin to reduce the chance of heart attack and 70.8 percent took it to reduce the chance of stroke.

### *Sodium (Salt) Consumption*

Sodium intake was being watched or reduced by 52.7 percent of Missouri adults. A significantly greater percentage of females (56.4 percent) than males (48.6 percent) were watching sodium intake. A significantly greater percentage of African-American adults (72.9 percent) than white adults (53.4 percent) were watching their sodium intake. Twenty-two (21.8) percent of adults had been advised by a doctor or other health professional to reduce sodium intake.

### *Blood Cholesterol Screening*

Seventy-eight (78.0) percent of adults had ever had their blood cholesterol checked. Seventy-four (73.9) percent had their cholesterol checked within the past five years and 26.0 percent had not had their cholesterol checked within the past five years or had never had it checked.

### *Blood Sugar (Diabetes) Screening*

Among adults that had never been told they had diabetes, 56.9 percent had a test for high blood sugar within the past three years. A significantly greater percentage of females (60.2 percent) than males (53.4 percent) had a test for high blood sugar within the past three years.

### *Immunizations*

Forty-three (42.6) percent of adults age 18 and older had a flu shot within the past year. Among adults age 65 and older, 69.5 percent had a flu shot within the past year. Also among adults age 65 and older, 71.0 percent had ever had a pneumococcal vaccination.

Sixty-two (62.3) percent of adults had received a tetanus shot since 2005. Twenty-three (22.6) percent received the Tdap tetanus vaccine, 6.6 percent received a tetanus shot that was not the Tdap vaccine, and 33.1 percent were not sure if the vaccine was Tdap.

### *HIV Testing*

Thirty-two (31.7) percent of adults age 18 and older had ever been tested for HIV. A significantly greater percentage of African-American adults (52.9 percent) than white adults (26.0 percent) had been tested. A significantly greater percentage of adults with annual household incomes of less than \$15,000 (47.3 percent) and \$15,000-\$24,999 (40.3 percent) had been tested than adults with incomes of \$25,000 and greater.

## **Chronic Disease Management**

### *Arthritis Burden and Management*

Fifty (50.3) percent of adults with arthritis and who had joint pain in the past 30 days were limited in their usual activities due to the condition. Thirty-three (32.7) percent had their work affected by the condition and 19.8 percent had social activities interfered with a lot. Twenty (19.5) percent rated their pain due to arthritis between seven and 10 on a scale of one to 10 with 10 being the greatest pain.

Fifty-five (54.7) percent of those with arthritis had a doctor or health professional suggest physical activity or exercise to help their arthritis or joint symptoms. Thirty-four (34.1) percent had weight loss suggested by a health professional. Eleven (11.3) percent had taken an education course or class to learn how to manage their arthritis or joint symptoms.

### *Diabetes Management*

Among adults that had been told by a doctor or other health professional they had diabetes:

- 85.2 percent had seen a doctor or other health professional for their diabetes one or more times in the past 12 months; 68.2 percent had seen a doctor or other health professional two or more times in the past 12 months
- 82.0 percent had a health professional test for A-one-C one or more times in the past 12 months; 70.7 percent had the test two or more times in the past 12 months

- 67.4 percent had a dilated eye exam within the past year
- 64.7 percent had a health professional check their feet for sores or irritations one or more times in the past year
- 64.1 percent checked their blood glucose one or more times per day
- 59.7 percent had taken a course or class in how to manage their diabetes
- 35.1 percent were taking insulin
- 18.4 percent had been told diabetes had affected their eyes or that they had retinopathy

#### *Heart Attack and Stroke Rehabilitation*

Among adults that had a heart attack, 36.2 percent went to outpatient rehabilitation. Among adults that had a stroke, 32.0 percent went to outpatient rehabilitation.

#### *Hypertension (High Blood Pressure) Control and Management*

Among adults that had been told by a doctor or other health professional their blood pressure was high –

The percentage that were doing the following to lower or control their high blood pressure:

- 82.9 percent were taking medication
- 71.4 percent were changing their eating habits
- 68.8 percent were cutting down on salt
- 62.6 percent were exercising
- 28.5 percent were cutting down on alcohol use

The percentage that had a doctor or other health professional advise them to do the following to help lower or control their high blood pressure:

- 91.9 percent were advised to take medication
- 69.6 percent were advised to exercise
- 58.4 percent were advised to cut down on salt
- 54.4 percent were advised to change their eating habits
- 21.1 percent were advised to reduce alcohol use

### **Policy and Environmental Change**

#### *Secondhand Smoke Policy*

Seventy-five (74.6) percent of Missouri adults would support a local law that would make all indoor workplaces in their community smoke-free, including restaurants, bars and casinos. This is a statistically significant increase from 2011 when 69.4 percent of adults supported a local smoke-free law. Sixty-six (65.7) percent of adults would support a change in Missouri state law that would make all workplaces smoke-free by prohibiting smoking in all indoor workplaces state-wide, including restaurants, bars and casinos. There was no change from 2011 in the percentage of adults that supported a change in the state smoke-free law.