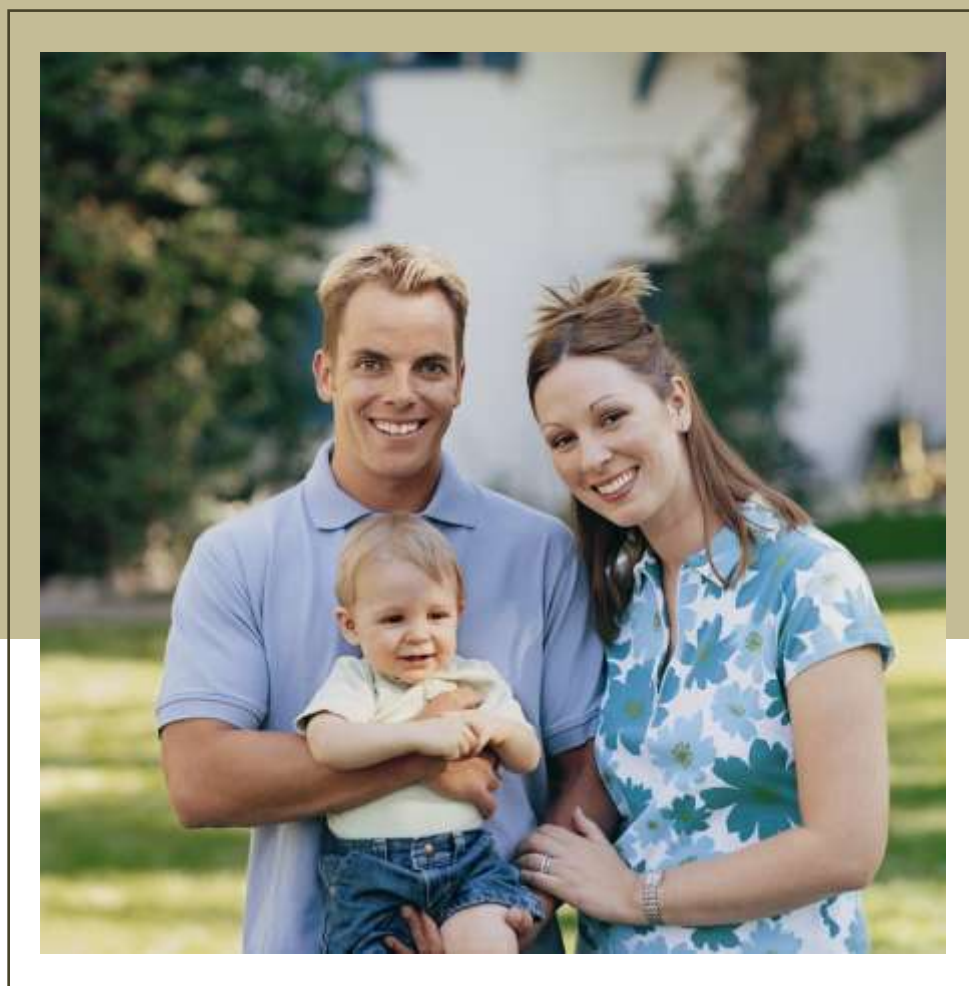


# BRFSS

## Behavioral Risk Factor Surveillance System



### 2009 Key Findings



Missouri Department of Health and Senior Services  
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## 2009 Behavioral Risk Factor Surveillance System Key Findings

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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 2009, 5,047 adults were interviewed January through December by the Health and Behavioral Risk Research Center at the University of Missouri-Columbia. Randomly selected household telephone numbers were called and an adult was randomly selected to participate in the survey. Data were aggregated and weighted by the U.S. Centers for Disease Control and Prevention to be representative of non-institutionalized adults in Missouri. This report summarizes key findings from the survey. Previous years of BRFSS data may be found in Annual Reports located on the Missouri Department of Health and Senior Services website at <http://www.dhss.mo.gov/BRFSS/Data.html>.

The 2009 BRFSS revealed the following health concerns or risks among Missouri adults:

- 80.1 percent consumed less than five servings of fruits and vegetables per day
- 38.2 percent had high cholesterol
- 35.0 percent were overweight
- 31.0 percent had arthritis
- 30.6 percent were obese
- 30.6 percent had high blood pressure
- 26.7 percent were physically inactive
- 23.1 percent smoked cigarettes
- 22.5 percent of males engaged in binge drinking of alcohol
- 16.4 percent of adults age 18-64 did not have health care coverage
- 15.3 percent did not get enough rest or sleep on 21 or more of the past 30 days
- 14.0 percent did not see a doctor when needed in the past 12 months due to cost
- 13.7 percent were taking medication or receiving treatment for a mental health condition
- 11.6 percent had cancer
- 9.5 percent had asthma
- 7.9 percent had diabetes

In general, a consistent finding throughout the study is that adults that have the lowest annual household incomes compared to those with the highest incomes were less healthy, engaged in health risk behaviors to a greater extent, had less access to health care coverage, and were less likely to receive needed emotional support.

# KEY FINDINGS

## **Overall Health Measures**

Most Missouri adults (83.9 percent) had excellent, very good or good general health while 16.1 percent had fair or poor health. Significantly more adults with annual household incomes of \$35,000 or greater had excellent or very good health compared to those with incomes of less than \$25,000. Almost one-quarter of adults (23.8 percent) experienced poor physical health on three or more of the past 30 days. More than one-quarter (26.8 percent) had mental health that was not good on three or more of the past 30 days. Slightly more than thirty (30.5) percent were kept from doing their usual activities on three or more of the past 30 days due to poor physical or mental health.

## **Access to Health Care**

Among adults age 18 to 64, 16.4 percent had no health care coverage. Significantly more males (19.5 percent) had no health care coverage compared to females (13.4 percent). Significantly more African-American adults (25.5 percent) than white adults (14.8 percent) had no health care coverage. Significantly more adults with annual household incomes less than \$35,000 had no health care coverage compared to those with incomes of \$35,000 or greater. Almost thirty-five (34.8) percent of those with annual household incomes less than \$15,000, 40.1 percent of those with incomes between \$15,000 and \$24,999, and 25.1 percent of those with incomes of \$25,000-\$34,999 had no health care coverage.

Fourteen (14.0) percent of adults needed to see a doctor in the past 12 months but could not because of the cost. Significantly more African-Americans (21.3 percent) than whites (12.2 percent) could not see a doctor due to cost. Significantly more adults with annual household incomes of less than \$25,000 did not see a doctor due to cost compared to those with incomes of \$25,000 or greater. Twenty (20.3) percent of adults had not seen a doctor for a routine checkup in two or more years. Almost three (2.7) percent had never seen a doctor for a checkup.

## **Health Risk Behaviors**

### *Inadequate Fruit and Vegetable Consumption*

Eighty (80.1) percent of Missouri adults consumed less than five servings of fruits and vegetables per day. Significantly more males (87.6 percent) than females (73.4 percent) consumed less than five servings per day. There were no significant differences in fruit and vegetable consumption among all income levels.

### *Physical Inactivity*

More than one quarter (26.7 percent) of Missouri adults participated in no leisure time physical activity or exercise in the past month. Significantly more African-Americans (40.0 percent) than whites (25.3 percent) were physically inactive. Significantly more adults with annual household incomes less than \$15,000 (40.5 percent) and \$15,000 to \$24,999 (40.4 percent) were physically inactive compared to adults with incomes of 35,000 to \$49,999 (27.0 percent), \$50,000 to \$74,999 (20.1 percent) and \$75,000 or greater (13.9 percent).

### *Current Cigarette Smoking*

Twenty-three (23.1) percent of Missouri adults smoke cigarettes everyday or some days. Significantly more adults with annual household incomes less than \$15,000 (34.5 percent) and \$15,000 to \$24,999 (37.1 percent) smoke compared to those with incomes of \$25,000 to \$34,999 (25.3), \$35,000-\$49,999 (25.8 percent), \$50,000-\$74,999 (21.2 percent), and \$75,000 or more (11.1 percent). More than one-half (54.5 percent) of current smokers stopped smoking for one day or longer in the past 12 months because they were trying to quit. Significantly more African-Americans (77.8 percent) than whites (50.2 percent) tried to stop smoking in the past year.

### *Heavy and Binge Alcohol Drinking*

Slightly more than four (4.2) percent of Missouri adults are considered heavy drinkers as defined by males having more than two drinks and females having more than one drink per day. There was no significant difference between males (4.7 percent) and females (3.7 percent) engaging in heavy drinking. Significantly more males (22.5 percent) than females (12.3 percent) had engaged in binge drinking on an 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.

### *Inadequate Sleep*

Almost forty-five (44.6) percent of Missouri adults did not get enough rest or sleep on six or more of the past 30 days, including 15.3 percent that did not get enough sleep on 21 or more days. Significantly more adults age 55 and older did not get enough sleep on 21 of the past 30 days than adults less than 55 years of age. Over one-half (57.2 percent) of adults age 65 and older did not get enough rest or sleep on 21 of the past 30 days.

## **Chronic Conditions and Diseases**

In 2009, Missouri adults had the following chronic diseases and conditions:

- **High Cholesterol – 38.2 percent**
- **Overweight – 35.0 percent**  
Significantly more males (41 percent) than females (29.3 percent) were overweight. Significantly more with annual household incomes of \$50,000-\$74,999 (38.4 percent) and \$75,000 and greater (39.3 percent) were overweight than those with income less than \$15,000 (27.3 percent).
- **Arthritis – 31.0 percent**  
Significantly more females (35.3 percent) than males (26.3 percent) had arthritis. Significantly more with annual household incomes of less than \$35,000 (approximately 40 percent each income level) had arthritis than those with incomes of \$35,000 and greater (approximately 25 percent each income level).
- **Obesity – 30.6 percent**  
Significantly more African-Americans (42.5 percent) than whites (29.7 percent) were obese.
- **High Blood Pressure (Hypertension) – 30.6 percent**  
Significantly more African-Americans (43.4 percent) than whites (29.7 percent) had high blood pressure. Significantly more with annual household incomes less than \$15,000 (41.5 percent) had high blood pressure than those with incomes of \$50,000-\$74,999 (24.7 percent) and \$75,000 and greater (24.3 percent).
- **Cancer – 11.6 percent**  
Slightly more than eighty-six (86.2) percent had one type of cancer, 12.0 percent had two, and 1.9 percent had three or more types of cancer. The majority (61.5 percent) had been diagnosed with cancer between 35 and 65 years of age.
- **Asthma (Current) – 9.5 percent**

- **Diabetes – 7.9 percent**
- **Pre-diabetes or borderline diabetes – 5.7 percent**
- **Heart Attack – 4.4 percent**  
Significantly more males (5.7 percent) than females (3.1 percent) had experienced a heart attack.
- **Coronary Heart Disease – 4.0 percent**
- **Stroke – 3.0 percent**

#### *Arthritis Burden*

Forty-four (44.1) percent of adults were limited in their usual activities due to arthritis or joint symptoms. Almost thirty (29.8) percent had arthritis or joint symptoms affect their work. Slightly more than fifteen (15.6) percent had arthritis or joint symptoms interfere a lot with their normal social activities during the past 30 days. On a scale of zero to ten, with ten being pain or aching as bad as it can be, 31.2 percent experienced pain of seven or greater during the past 30 days. The majority (68.8 percent) could do everything or most things they would like to do today.

### **Preventive Practices and Disease Management**

#### *Blood Cholesterol Testing*

Almost 80 (78.4) percent had ever had their blood cholesterol checked. About seventy-two (71.6) percent had their cholesterol checked within the past year. Significantly more African-Americans (87.6 percent) than whites (70.0 percent) had their cholesterol checked within the past year. Over eighty (82.0) percent of adults with annual household incomes of less than \$15,000 had their cholesterol checked within the past year, which was significantly greater than those with incomes of \$35,000 and greater.

#### *Arthritis Management*

Thirty-three (33.2) percent of adults with arthritis had a doctor or other health professional suggest they lose weight to help their arthritis or joint symptoms. Over half (57.1 percent) had a doctor or other health professional suggest physical activity or exercise to help their arthritis or joint symptoms. Slightly more than ten percent (10.5) had taken a class or course to teach them how to manage problems related to their arthritis or joint symptoms.

#### *High Blood Pressure Control and Management*

Among adults that had ever been told by a doctor they had high blood pressure:

- 79.4 percent were currently taking medication to control their high blood pressure. Significantly more females (84.8 percent) than males (73.8 percent) were taking medication.
- 65.8 percent were changing their eating habits to help lower or control high blood pressure.
- 66.9 percent were cutting down on salt.
- 29.5 percent were reducing alcohol use.
- 67.7 percent were exercising.
- 59.3 percent had a doctor or other health professional advise them to change their eating habits.
- 60.8 percent had a doctor or other health professional advise them to cut down on salt.
- 22.8 percent had a doctor or other health professional advise them to reduce alcohol use.
- 74.8 percent had a doctor or other health professional advise them to exercise.
- 88.1 percent had a doctor or other health professional advise them to take medication.
- 80.6 percent had been told on two or more different visits to a doctor or other health professional that they had high blood pressure.

### *Immunizations*

Almost forty (39.2) percent of adults had a flu shot within the past year. Significantly more females (42.6 percent) than males (35.4 percent) had a flu shot in the past year. Among adults age 65 and older, 72.5 percent had a flu shot within the past year. Also among adults age 65 and older, 68.3 percent had ever had a pneumonia vaccination.

### *HIV Testing and Risk*

Almost thirty-eight (37.9) percent of adults age 18-64 had ever been tested for HIV. Significantly more African-Americans (67.4 percent) than whites (34.2 percent) had been tested. Significantly more adults with annual household incomes of less than \$15,000 (50.5 percent) had been tested compared to adults with incomes of \$50,000-\$74,999 (33.8 percent) and \$75,000 or greater (34.0 percent). The majority of adults were tested at a private doctor or HMO office (42.8 percent) or a hospital or clinic (41.9 percent). Four (4.1) percent of adults engaged in behaviors during the past year that put them at risk for HIV.

### *Caregiving*

One-quarter (25.7 percent) of adults had provided regular care or assistance in the past month to a friend or family member with a health problem, long-term illness or disability.

### *Diabetes Testing*

Fifty-six (56.2) percent of Missouri adults that had never been told by a doctor they had diabetes had been tested for high blood sugar or diabetes within the past 3 years.

### *Diabetes Management*

Among adults that had ever been told by a doctor they had diabetes:

- 29.7 percent were taking insulin.
- 60.7 percent check their blood for glucose or sugar one or more times per day.
- 47.5 percent had seen a doctor for their diabetes four or times in the past 12 months, 41.9 percent had seen a doctor one-to-three times and 10.6 percent had not seen a doctor at all in the past 12 months.
- 50.4 percent had an “A One C” test three or more times in the past 12 months, 39.2 percent were tested one-to-two times, and 10.6 percent had never had the test or heard of the test.
- 75.3 percent had a health professional check their feet for sores or irritations one more times in the past 12 months and 24.7 percent had not had their feet checked at all.
- 68.9 percent had an eye exam in which their pupils were dilated within the past 12 months, 27.4 percent had the exam one or more years ago and 3.7 had never had the exam.
- 18.2 percent had been told by a doctor that diabetes has affected their eyes or that they have retinopathy.
- 58 percent had taken a course or class on how to manage their diabetes.

### *Heart Attack and Stroke Prevention and Rehabilitation*

- 25.8 percent of adults 35 years of age and older took aspirin daily or every other day
- 11.7 percent of adults age 35 and older that had not taken aspirin daily or every other day had a health problem or condition that prevented them from taking aspirin
- 41.1 percent of adults that had a heart attack had gone to outpatient rehabilitation
- 32.0 percent of adults that had a stroke had gone to outpatient rehabilitation

### *Heart Attack Signs and Symptoms Knowledge*

Missouri adults that think the following are symptoms of a heart attack:

- Pain or discomfort in the jaw, neck or back - 69.4 percent
- Feeling weak, lightheaded, or faint – 75.0 percent



- Chest pain or discomfort – 97.2 percent
- Trouble seeing in one or both eyes (is not a symptom) – 41.2 percent
- Pain or discomfort in the arms or shoulder – 94.5 percent
- Shortness of breath – 91.1 percent

#### *Stroke Signs and Symptoms Knowledge*

Missouri adults that think the following are symptoms of a stroke:

- Sudden confusion or trouble speaking – 97.5 percent
- Sudden weakness of face, arm or leg, especially on one side – 98.5 percent
- Trouble seeing in one or both eyes – 90.7 percent
- Sudden chest pain or discomfort (is not a symptom) – 42.2 percent
- Sudden trouble walking, dizziness, or loss of balance – 94.8 percent
- Severe headache with no known cause – 75.9 percent

More than eighty-six (86.9) percent of Missouri adults would first call 911 if they thought someone was having a heart attack or a stroke.

### **Emotional and Mental Health**

#### *Emotional Support and Life Satisfaction*

Almost eighty percent (79.9) of adults always or usually got the social and emotional support needed. Significantly more adults with annual household incomes of \$75,000 and greater (58.6 percent) always received the support needed compared to those with incomes of less than \$50,000. Ninety-four (94.2) percent of adults were very satisfied or satisfied with their life. Significantly more adults with annual household incomes of \$75,000 or greater (61.4 percent) were very satisfied with their lives than those with incomes of less than \$75,000.

#### *Mental Illness and Stigma*

Among Missouri adults during the past 30 days:

- 52.8 percent felt nervous a little or some of the time; 7.6 percent all or most of the time; 39.6 percent none of the time
- 20.0 percent felt hopeless a little or some of the time; 2.7 percent all or most of the time; 77.3 percent none of the time
- 50.8 percent felt restless or fidgety a little or some of the time; 7.4 percent all or most of the time; 41.7 percent none of the time
- 14.6 percent felt so depressed that nothing could cheer them up a little or some of the time; 1.9 percent all or most of the time; 83.5 percent none of the time
- 37.6 percent felt everything was an effort a little or some of the time; 8.1 percent all or most of the time; 54.3 percent none of the time
- 15.4 percent felt worthless a little or some of the time; 2.7 percent all or most of the time; 81.8 percent none of the time
- 4.6 percent were kept from doing their normal work or other usual activities on six or more days; 5.6 on one to five days; 89.7 percent on no days

Slightly more than thirteen (13.7) percent of adults were currently taking medicine or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem.

The majority of Missouri adults (70.9 percent) agree strongly that treatment can help people with mental illness lead normal lives. Twenty-one (21.2) percent agree strongly that people are generally caring and sympathetic to people with mental illness.