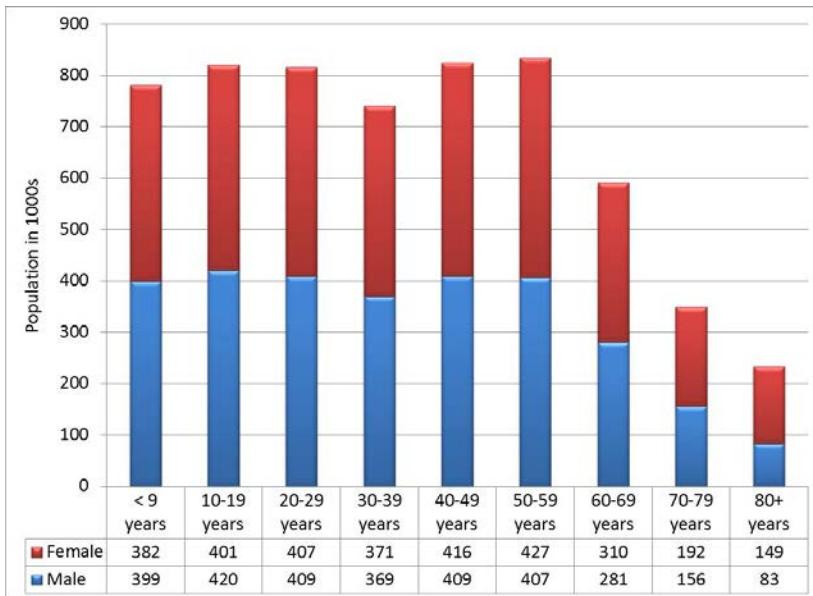


## POLICY ACADEMY STATE PROFILE

### Missouri's Population

MISSOURI'S POPULATION (IN 1000S) BY AGE GROUP



Source: U.S. Census Bureau 2010

Missouri is home to nearly 6 million people. Of these, more than 2 million (34%) are over 50; 1.2 million (20%) are over 60; nearly 600,000 (10%) are over 70; and more than 243,000 (4%) are over 80. The proportion of females rises with each age group to 63% of the 80+ group.

The racial/ethnic composition of older Missourians is as follows:

#### Race/Ethnicity of Missourians

Age	White	Black	Am Indian AK Native	Other	White not Hispanic
<55	81.3%	12.6%	0.4%	5.7%	78.9%
55+	89.6%	8.0%	0.3%	2.1%	88.8%

Source: U.S. Census Bureau 2009 Projections

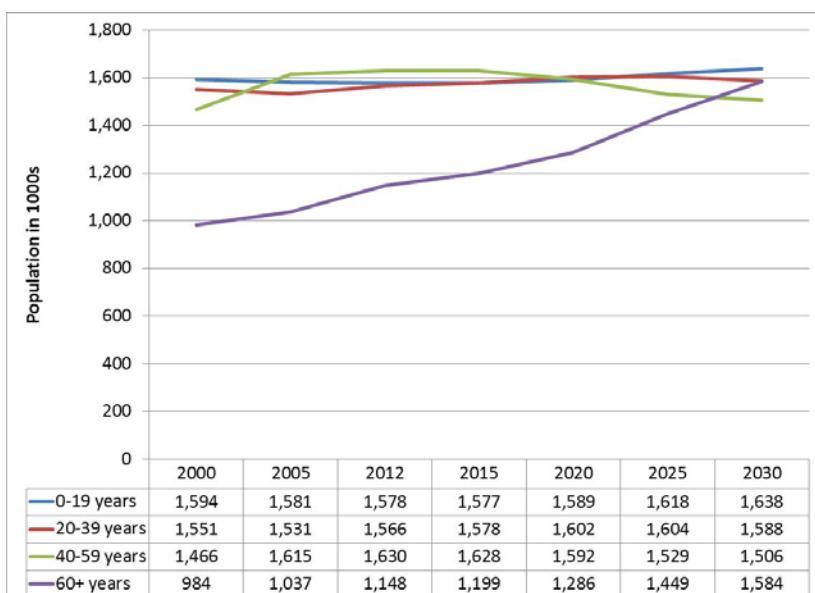
#### THE NUMBER OF OLDER MISSOURIANS IS GROWING (POPULATION IN 1000S)

The proportion of Missouri's population that is over 60 is growing while the proportion that is under 60 is shrinking. The U.S. Census Bureau estimates that more than 25 percent of Missouri's population will be over age 60 by the year 2030, an increase of 29% percent from 2012.

#### Projected Missouri Population

Age Group	2012	2020	2030
0 to 19	26.6%	26.2%	25.9%
20 to 39	26.5%	26.4%	25.1%
40 to 59	27.5%	26.2%	23.8%
60+	19.4%	21.2%	25.1%

Source: U.S. Census Bureau 2009 Projections



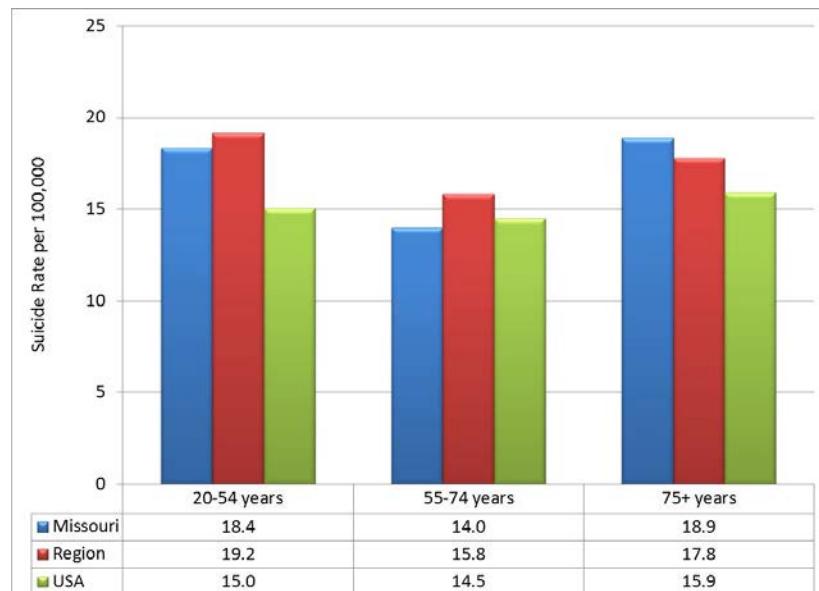
Source: U.S. Census Bureau 2009 Projections

## Suicide Among Older Missourians

### 2008 SUICIDE RATE PER 100,000 POPULATION - MISSOURI COMPARED TO REGION AND NATION

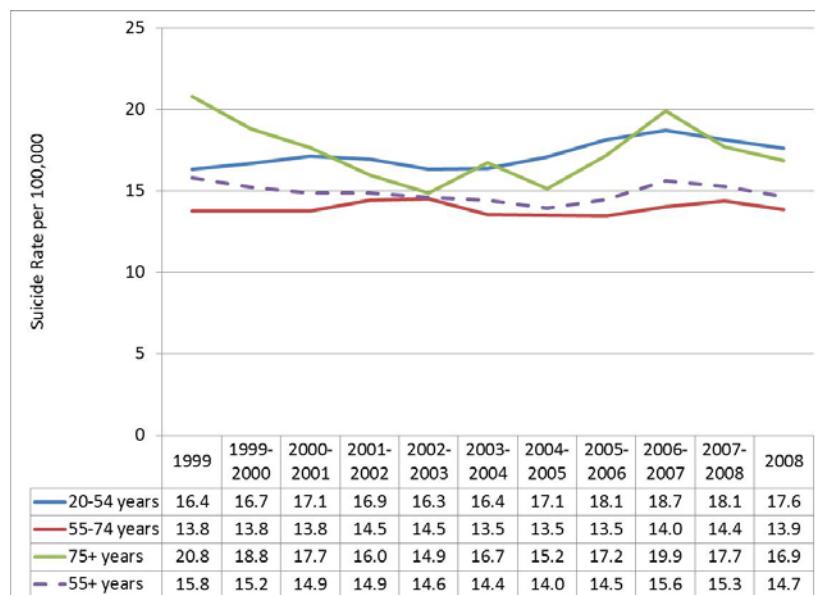
The overall suicide rate among older Missourians (over age 55) is lower than the rate among younger age groups; however, the rate among those 75+ is higher. In 2008, the latest year in which comparable national data were available, 218 Missourians over age 55 committed suicide. As this graph illustrates, the suicide rate among older Missourians age 75+ was higher than the rate in the U.S. and the surrounding region (Colorado, Iowa, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah and Wyoming).

Please Note: States vary in their reporting practices surrounding suicide deaths. The apparent rate of suicide is influenced by these reporting practices.



Source: Centers for Disease Control Vital Statistics 2008

### TREND IN SUICIDE RATE MISSOURI POPULATION



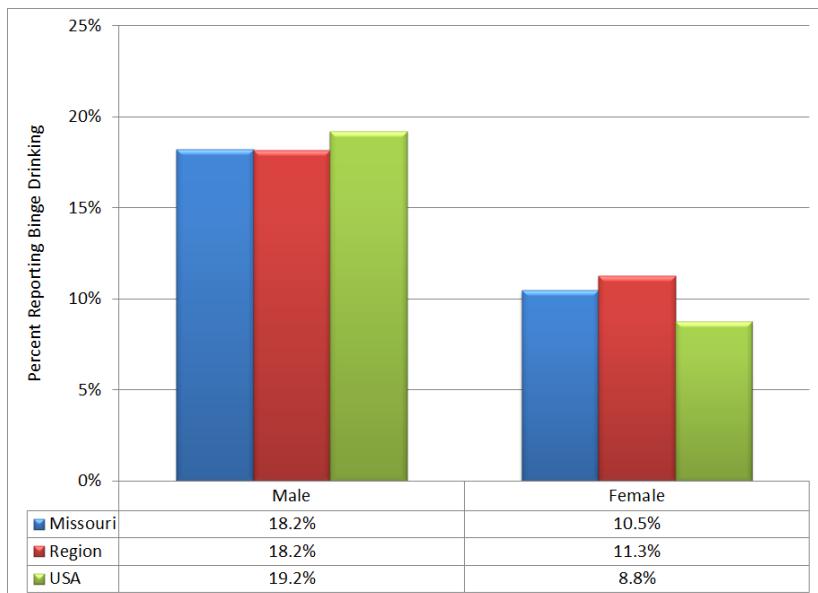
Source: Centers for Disease Control Vital Statistics 2009

The rate of suicide among older Missourians age 55+ (shown with the dashed line) fluctuated from a high of 15.8 per 100,000 in 1999 to a low of 14.4 per 100,000 in 2003-2004. As this chart shows, the rate is consistently higher among the 75+ than the 55-74 year age group.

Please Note: Again, states vary in their reporting practices surrounding the reporting of suicide deaths – practices vary from year to year and from state to state. The number of suicides is generally low, so even a small difference in reported numbers may make the rate appear to fluctuate widely. Therefore, the rates shown here are averaged across two years to reduce some of this variability.

# Substance Abuse and Substance Abuse Treatment among Older Missourians

## 30-DAY BINGE DRINKING AMONG OLDER MISSOURIANS BY GENDER



Source: Behavioral Risk Factor Surveillance System 2011

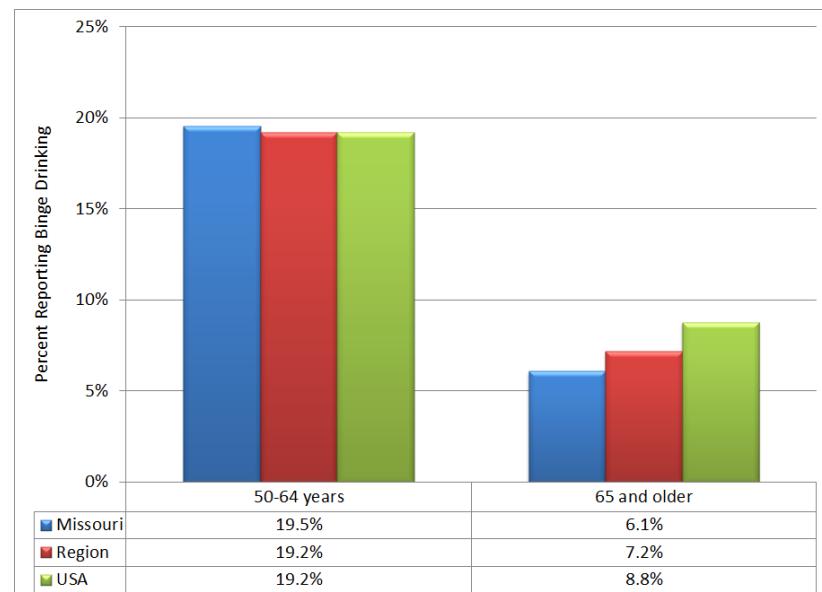
Duke Medicine News (August 17, 2009) notes that binge drinking can cause: “serious problems, such as stroke, cardiovascular disease, liver disease, neurological damage and poor diabetes control.” Binge drinkers are more likely to take risks like driving while intoxicated, and to experience falls and other accidents. Older people have less tolerance for alcohol. Therefore, this table defines a “binge” as 3 or more drinks for women and 4 or more for men in one event. Binge drinking is higher among men. 18.2 percent of Missouri males age 50 and over reported binge drinking while 10.5 percent of females reported similar behavior. The confidence intervals around the regional /national and Missouri estimates are less than  $\pm$  0.2 and  $\pm$  1.6 percent respectively.

## 30-DAY BINGE DRINKING AMONG OLDER MISSOURIANS BY AGE GROUP

Binge drinking tends to decrease with age. 19.5 percent of Missourians age 50-64 reported binge drinking, while 6.1 percent in the 65+ age group reported similar behavior. The confidence intervals around the regional /national and Missouri estimates are less than  $\pm$  0.2 and  $\pm$  1.6 percent respectively. The following table breaks these data down by age and gender.

### Missourians Reporting Binge Drinking by Age Group and Gender

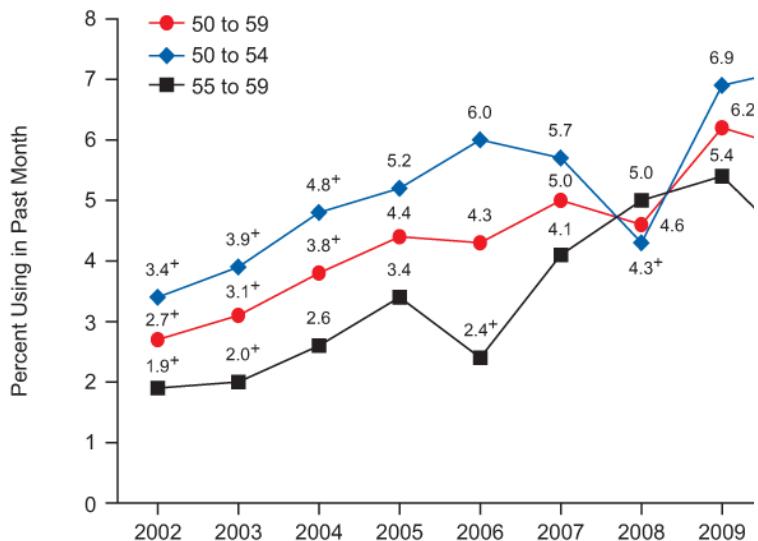
	Male	Female
50-64 years	25.6%	15.4%
65 and older	8.7%	4.4%



Source: Behavioral Risk Factor Surveillance System 2011

## ILICIT DRUG USE AMONG OLDER AMERICANS

Nationally, illicit drug use has more than doubled among 50-59 year olds since 2002. The rate rose from 3.4 to 7.2 percent among 50-54 year olds and from 1.9 to 4.1 percent among 55-59 year olds. According to the Substance Abuse and Mental Health Services Administration, “These patterns and trends partially reflect the aging into these age groups of members of the baby boom cohort, whose rates of illicit drug use have been higher than those of older cohorts.” Specific data about substance abuse among older Missourians are not available; however the SAMHSA NSDUH Report (<http://www.oas.samhsa.gov/2k9state/Cover.pdf>), provides general information about substance use in Missouri.



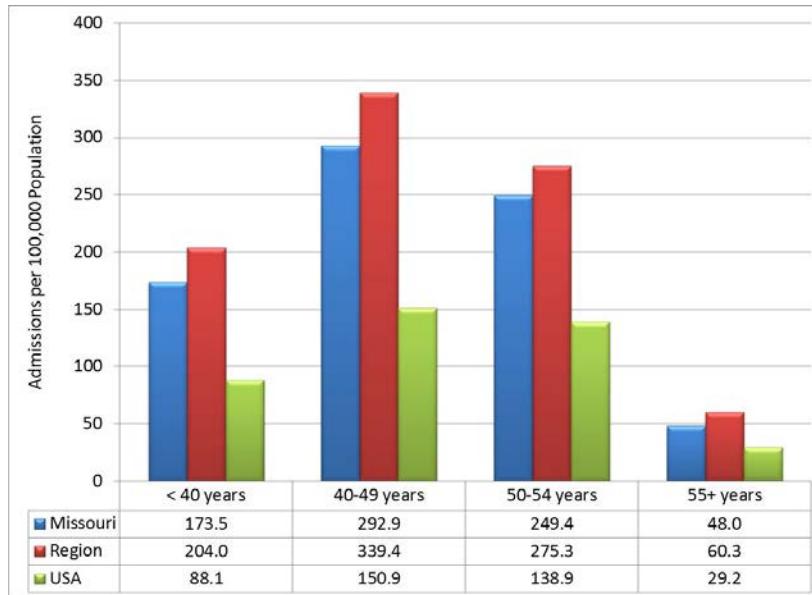
Source: National Survey on Drug Use and Health, 2010  
Volume 1. Summary of National Findings

## DRUG-RELATED EMERGENCY DEPARTMENT VISITS INVOLVING PHARMACEUTICAL MISUSE AND ABUSE BY OLDER ADULTS

The Substance Abuse and Mental Health Service Administration’s Center for Behavioral Health Statistics and Quality periodically releases reports from the Drug Abuse Warning Network (DAWN). DAWN comprises a nationwide network of hospital emergency rooms (ER) primarily located in large metropolitan areas. DAWN data consist of professional reviews of ER records to determine the likelihood and extent to which alcohol and other drug abuse was involved. The November 25, 2010, DAWN Report showed that (quote):

- In 2004, there were an estimated 115,803 emergency department (ED) visits involving pharmaceutical misuse and abuse by adults aged 50 or older; in 2008, there were 256,097 such visits, representing an increase of 121.1 percent
- One fifth (19.7 percent) of ED visits involving pharmaceutical misuse and abuse among older adults were made by persons aged 70 or older
- Among ED visits made by older adults, pain relievers were the type of pharmaceutical most commonly involved (43.5 percent), followed by drugs used to treat anxiety or insomnia (31.8 percent) and antidepressants (8.6 percent)
- Among patients aged 50 or older who visited the ED for pharmaceutical misuse or abuse, more than half (52.3 percent) were treated and released, and more than one third (37.5 percent) were admitted to the hospital

## OLDER MISSOURIANS IN SUBSTANCE ABUSE TREATMENT



Source: Treatment Episode Data Set, 2009  
Includes only those clients reported to SAMHSA

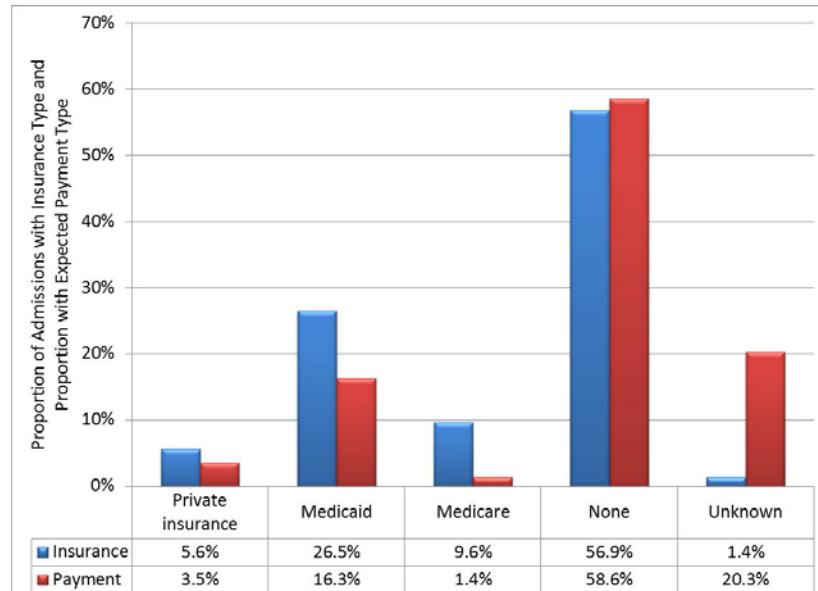
Nearly 1,900 Missourians age 50 and older were admitted to substance abuse treatment in State-funded facilities in 2009, a rate of 92.6 per 100,000 age 50 plus. This rate was lower than the regional and higher than the national averages.

Characteristics of the admittees include:

- 69% (1,272 individuals) were males, very close to the national and regional rates.
- 58% percent (1,071 individuals with known race) were White.
- 35% (645 individuals) were Black/African American.
- 4% (66 individuals) identified themselves as being of Hispanic descent.
- 39% (717 individuals) were referred to treatment by the criminal justice system.
- 41% (767 individuals) entered treatment through self or other individual-referral.

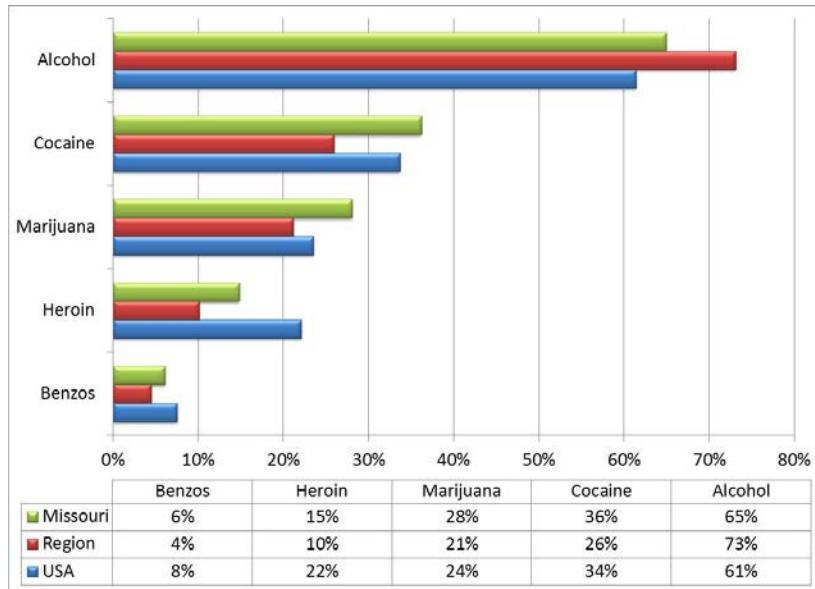
## TREATMENT ADMISSIONS AMONG AGE 50 AND OLDER BY INSURANCE TYPE

More than 26 percent of older Missourians who were admitted to substance abuse treatment were insured by the State's Medicaid program. However, Medicaid was listed as the expected source of payment in just over 16 percent of the cases. Private insurance and Medicare were listed as expected sources of payment in about 5 percent of cases. In the remaining 80 percent of cases, the expected source of payment was "none" or "unkown." In these instances, care was likely billed to the State's Substance Abuse Block Grant programs.



Source: Treatment Episode Data Set, 2009  
Includes only those clients reported to SAMHSA

## AGE 50 AND OLDER TREATMENT ADMISSIONS - SUBSTANCES USED



Source; Treatment Episode Data Set, 2009<sup>1</sup>

Alcohol was - by far - the most frequent drug of primary, secondary or tertiary abuse among older Missourians in publicly financed substance abuse treatment in 2009. Alcohol was mentioned in about 65 percent of admissions among those age 50 plus. This was lower than the regional but higher than the national rate.

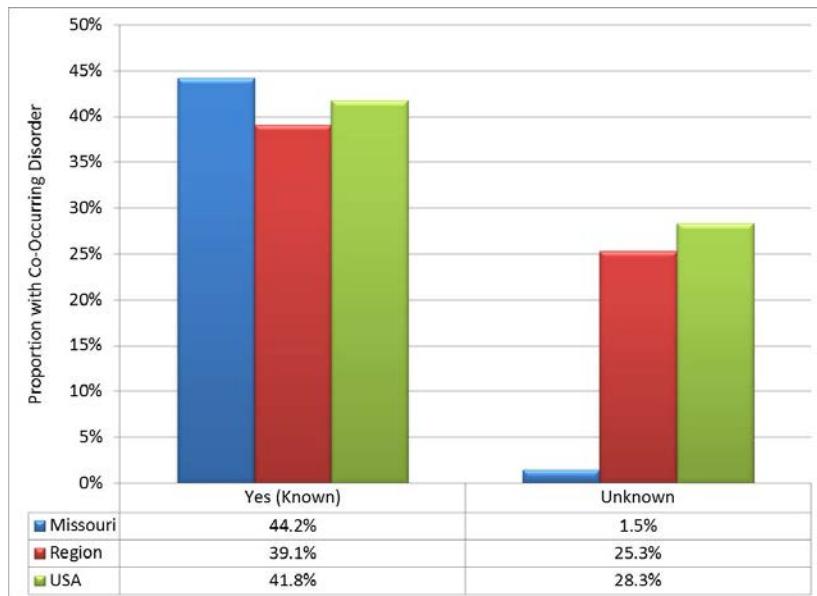
Other drugs of primary, secondary or tertiary abuse include: Cocaine at 36 percent; marijuana at 28 percent; heroin at 15 percent; and benzodiazepines / tranquilizers at 6 percent.

Please note: Data include only those clients reported to SAMHSA

<sup>1</sup> TEDS Limitations: TEDS data are collected by states that accept Substance Abuse Prevention and Treatment (SAPT) Block Grant funds. Guidelines suggest that states should report all clients admitted to publicly financed treatment; however, states are inconsistent in applying the guidelines. States also have freedom to structure and implement different quality controls over the data. For example, states may collect different categories of information to answer TEDS questions. Information is then "walked over" to TEDS definitions.

# Substance Abuse and Mental Health

## CO-OCCURRING MENTAL HEALTH DISORDERS



Source: Treatment Episode Data Set, 2009  
Includes only those clients reported to SAMHSA

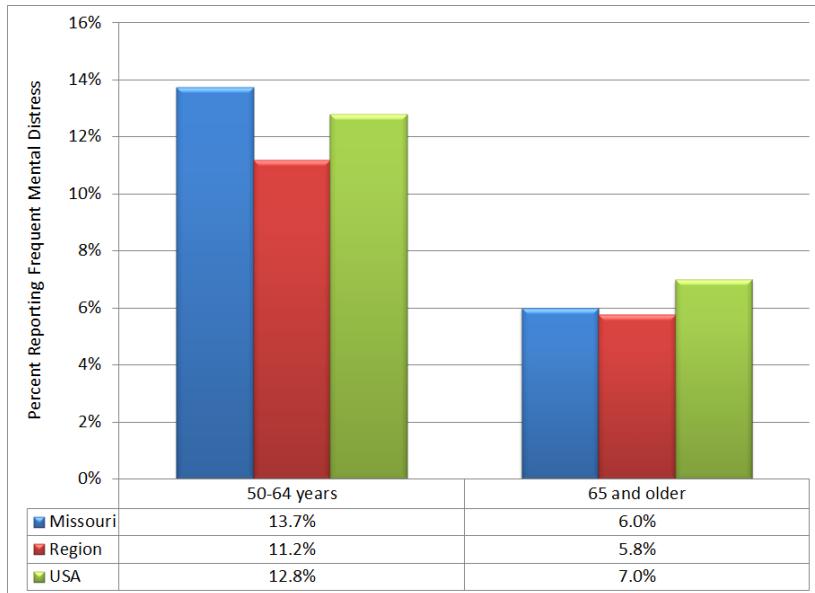
Research shows a strong relationship between substance use and mental health disorders. Studies show 30-80 percent of people with substance abuse or mental health disorders also have a co-occurring substance abuse/mental health disorder. The graph to the right shows the proportion of Missourians age 50 and older who were admitted to substance abuse treatment and also had a mental health diagnosis. While this rate appears higher than the nation or region; however, reporting practices are a factor in these results.

## OLDER MISSOURIS ADMITTED TO STATE MENTAL HEALTH FACILITIES

Around 3 percent of the people served by the Missouri mental health system were age 65 or older (2.4% percent were age 65 to 74 and 0.6% percent were age 75 or older). This represents a total of approximately 2,240 people. These data and more are available at: <http://www.samhsa.gov/dataoutcomes/urs/2010/Missouri.pdf>

# Mental Health

## OLDER MISSOURIANS REPORTING FREQUENT MENTAL DISTRESS BY AGE GROUP



Source: Behavioral Risk Factor Surveillance System, 2011

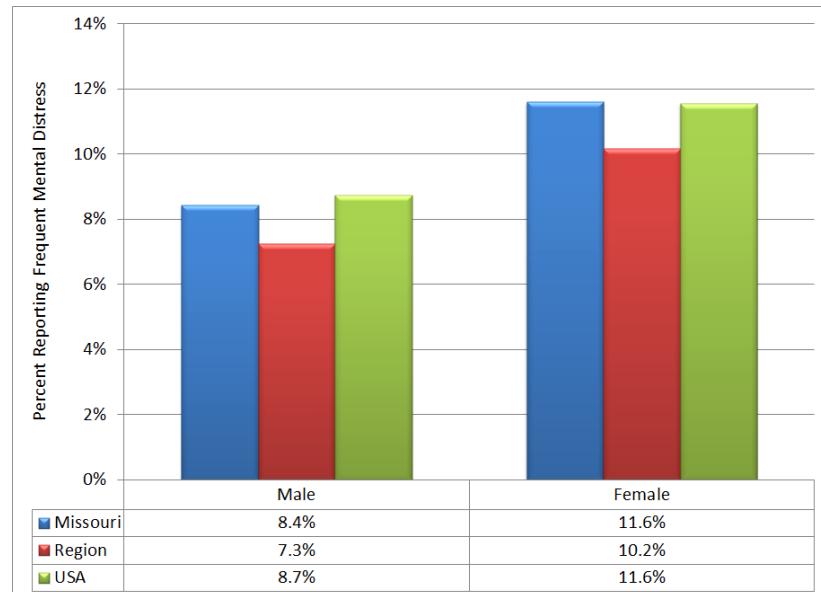
The Behavioral Risk Factor Surveillance System (BRFSS), a household survey conducted in all 50 states and several territories, asks the following question: "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The Centers for Disease Control defines those individuals reporting 14 or more "Yes" days in response to this question as experiencing frequent mental distress (FMD). This chart shows that older Missourians in the 50-64 year age group experience FMD at higher rates than the 65 and older group. 13.7 percent of those in the 50-64 and 6.0 percent in the 65 and older age group reported FMD. Confidence intervals around national / regional estimates are less than  $\pm 0.2$  percent for regional / national and less than  $\pm 1.5$  percent for Missouri estimates.

## OLDER MISSOURIANS REPORTING FREQUENT MENTAL DISTRESS BY GENDER

Older Missouri males and females are equally likely to report FMD. 11.6 percent of females and 8.4 percent of males reported FMD. The confidence interval around the regional / national estimates was less than  $\pm 0.2$  percent. The interval around the Missouri estimates was less than  $\pm 1.5$  percent. The following table breaks these data down by age and gender.

### Missourians Reporting Frequent Mental Distress by Age and Gender

	Male	Female
50-64 years	11.6%	15.2%
65 and older	4.4%	7.1%



Source: Behavioral Risk Factor Surveillance System, 2011

## OTHER MEASURES OF MENTAL HEALTH

The Behavioral Health Risk Factor Surveillance System (BRFSS) collected other measures showing risk factors for mental and/or physical illness. These included:

- Social and Emotional Support (2010). The BRFSS asked, “How often do you get the social and emotional support you need?” The responses included: “always,” “usually,” “sometimes,” “rarely” or “never.”
- Life Satisfaction (2010). The BRFSS asked, “In general, how satisfied are you with your life?” The responses included: “Very satisfied,” “Satisfied,” “Dissatisfied” or “Very dissatisfied.”
- Current Depression (2006). In 2006, the BRFSS included a special Anxiety and Depression module which was collected in 38 states and several jurisdictions, including Missouri. The measure presented below was derived from this module.
- Lifetime Diagnosis of Depression (2006). The BRFSS asked, “Has a doctor or other healthcare provider EVER told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?”
- Lifetime Diagnosis of Anxiety Disorder (2006). The BRFSS asked, “Has a doctor or other healthcare provider EVER told you that you have an anxiety disorder (including acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic attacks, panic disorder, posttraumatic stress disorder, or social anxiety disorder)?”

The results of these surveys are shown below for older Missourians:

### BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2010

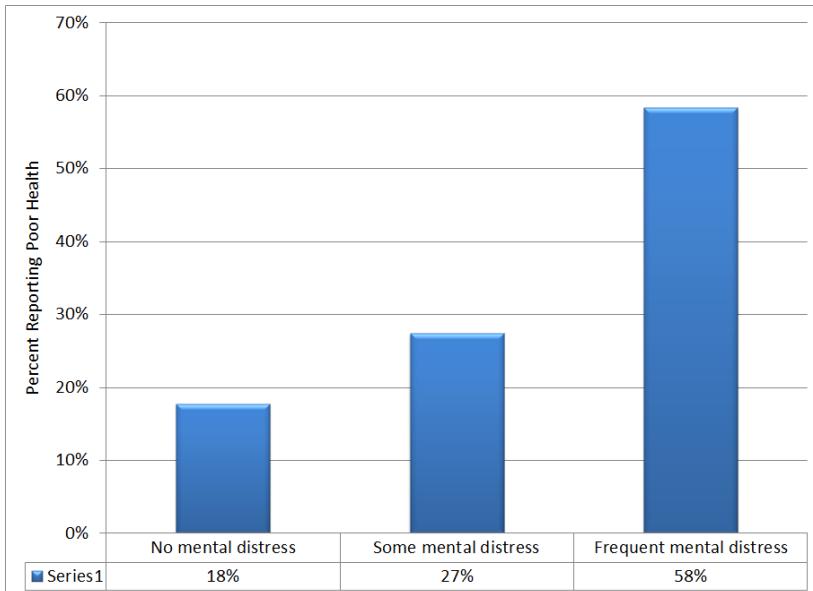
Indicator	Age Group					
	Age 50+		Age 50–64		Age 65+	
	Data %	Confidence Interval	Data %	Confidence Interval	Data %	Confidence Interval
<b>Core BRFSS Indicators (2010)</b>						
Rarely or never get social or emotional support (revised)	8.5	(7.7-8.5)	7.1	(6.6-7.6)	9.6	(8.9-10.2)
Very dissatisfied or dissatisfied with life (revised)	5.3	(5.0-5.6)	6.9	(6.4-7.3)	3.2	(2.8-3.6)

### Anxiety and Depression Optional Module Indicators (2006)<sup>2</sup>

Current Depression	8.4	(7.1–9.9)	10.6	(8.7–12.8)	5.4	(4.0–7.3)
Lifetime Diagnosis of Depression	17.4	(15.4–19.5)	20.7	(17.8–23.9)	12.9	(10.7–15.6)
Lifetime Diagnosis of Anxiety Disorder	10.1	(8.7–11.7)	11.6	(9.6–13.9)	8.2	(6.5–10.2)

<sup>2</sup> Data available at <http://apps.nccd.cdc.gov/MAHA/StateDetails.aspx?State=AR>

## PEOPLE WITH FREQUENT MENTAL DISTRESS REPORT POOR PHYSICAL HEALTH



Older Americans who experienced frequent mental distress were more likely to report that their physical health was poor or fair (as opposed to good, very good or excellent). As shown here, while 18 percent of older Americans with no mental distress reported poor or fair physical health, nearly 60 percent – nearly triple the rate – of those with frequent mental distress reported poor/fair health. Older Americans with frequent mental distress were also much more likely to report that they had experienced serious health problems.

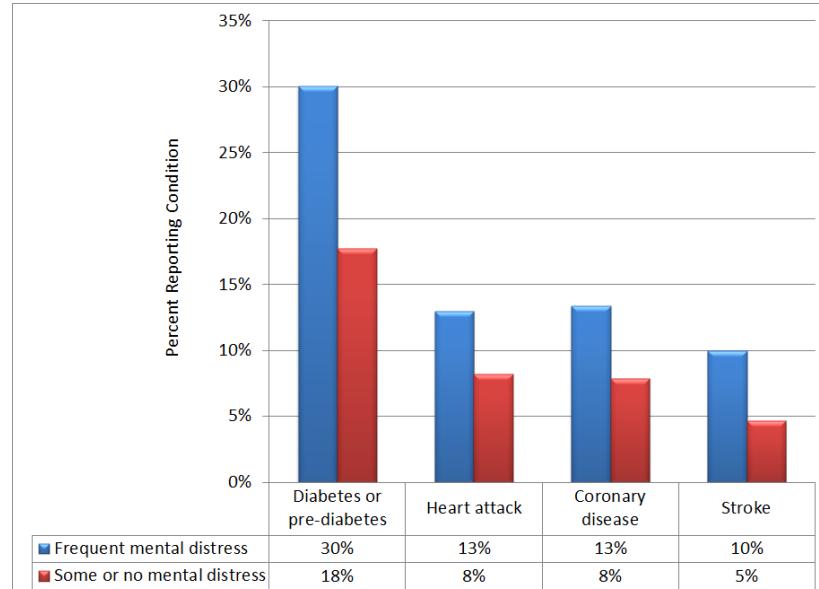
These differences are statistically significant.

Source: Behavioral Risk Factor Surveillance System, 2011

## RELATIONSHIP BETWEEN MENTAL DISTRESS AND SERIOUS HEALTH PROBLEMS

Older Americans who experience frequent mental distress, such as symptoms of depression or anxiety, are more likely to report that they had chronic health problems. People with frequent mental distress experienced strokes at twice the rate of those with some or no mental distress (10 percent versus 5 percent). They experienced coronary disease, heart attack and diabetes/pre-diabetes at more than 1.5 times the rate of those with some or no mental distress (13 versus 8 percent for coronary disease and heart attack, 30 versus 18 percent for diabetes/pre-diabetes).

These differences are statistically significant.



Source: Behavioral Risk Factor Surveillance System, 2011

## DATA SOURCES

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (<http://www.cdc.gov/brfss/>). Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, 2010 and 2011. The BRFSS is “the world’s largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984. Currently, data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam.” BRFSS data are collected by local jurisdictions and reported to the CDC.

VITAL STATISTICS (<http://www.cdc.gov/nchs/nvss.htm>). Centers for Disease Control and Prevention (CDC), *National Vital Statistics System*, Atlanta, Georgia: U.S. Department of Health and Human Services, 2009. The CDC Web site describes the National Vital Statistics System as “the oldest and most successful example of inter-governmental data sharing in Public Health and the shared relationships, standards, and procedures form the mechanism by which NCHS collects and disseminates the Nation's official vital statistics. These data are provided through contracts between NCHS and vital registration systems operated in the various jurisdictions legally responsible for the registration of vital events – births, deaths, marriages, divorces, and fetal deaths.”

CENTER FOR MENTAL HEALTH SERVICES UNIFORM REPORTING SYSTEM (URS) (<http://www.samhsa.gov/dataoutcomes/urs/>). Center for Mental Health Services (CMHS), *Uniform Reporting System*, U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 2010. States that receive CMHS Block Grants are required to report aggregate data to the URS. URS reports including information about utilization of mental health services as well as client demographic and outcome information.

NATIONAL SURVEY ON DRUG USE AND HEALTH (NSDUH) (<https://nsduhweb.rti.org/>). United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health, 2010. ICPSR32722-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2011-12-05. doi:10.3886/ICPSR32722.v1 The NSDUH, managed by SAMHSA, is “an annual nationwide survey involving interviews with approximately 70,000 randomly selected individuals aged 12 and older.” NSDUH data are most frequently used by State planners to assess the need for substance abuse treatment. NSDUH data also include information about mental health needs.

TREATMENT EPISODE DATA SET (TEDS) (<http://www.icpsr.umich.edu/icpsrweb/SAMHIDA/>). United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Office of Applied Studies. Treatment Episode Data Set -- Admissions (TEDS-A), 2009. ICPSR30462-v2. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2012-07-18. doi:10.3886/ICPSR30462.v2 States that participate in the Substance Abuse Prevention and Treatment (SAPT) Block Grant submit individual client data to the TEDS. The TEDS includes both admission and discharge data sets, and some 1.5 million admissions are reported annually. TEDS includes information about utilization of substance abuse treatment services as well as client demographic and outcome information.

U.S. CENSUS BUREAU (<http://www.census.gov/people/>). Two main sources of Census Bureau data were used in this report: (1) Population estimates, and (2) Population projections. Population projections and estimates were created using 2010 Census Data.

**This profile was developed by the Substance Abuse and Mental Health Services Administration in partnership with the U.S. Administration on Aging.**