POLICY ACADEMY STATE PROFILE

North Dakota's Population

NORTH DAKOTA'S POPULATION (IN 1000S) BY AGE GROUP

	< 9 years	10-19 years	20-29 years	30-39 years	40-49 years	50-59 years	60-69 years	70-79 years	80+ years
Female	41	42	51	37	41	47	31	21	20
Male	43	45	58	41	43	49	31	18	12
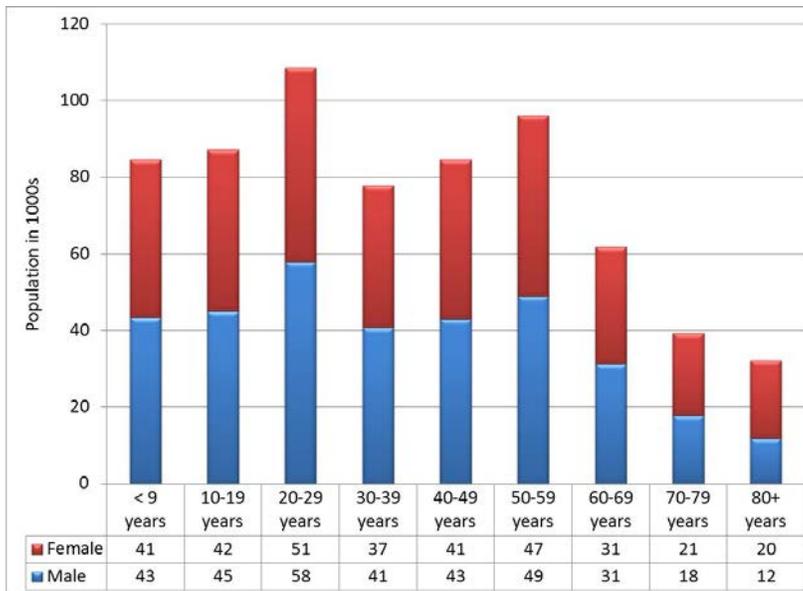
Source: U.S. Census Bureau 2010

North Dakota is home to nearly 700,000 people. Of these, approximately 230,000 (34%) are over 50; 130,000 (20%) are over 60; 70,000 (11%) are over 70; and 30,000 (5%) are over 80. The proportion of females rises with each age group to 64% of the 80+ group.

The racial/ethnic composition of older North Dakotans is as follows:

Race/Ethnicity of North Dakotans

Age	White	Black	Am Indian AK Native	Other	White not Hispanic
<55	88.4%	1.4%	6.3%	3.9%	87.1%
55+	96.6%	0.2%	2.3%	0.9%	96.1%

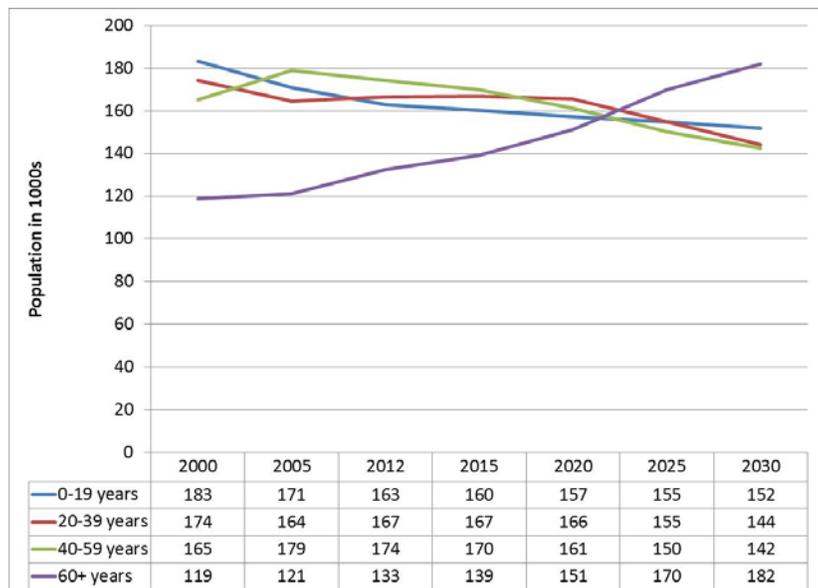Source: U.S. Census Bureau, 2009 Projections

THE NUMBER OF OLDER NORTH DAKOTANS IS GROWING (POPULATION IN 1000S)

The proportion of North Dakota's population that is over 60 is growing while the proportion that is under 60 is shrinking. The U.S. Census Bureau estimates that nearly 30 percent of North Dakota's population will be over age 60 by the year 2030, an increase of 41% percent from 2012.

Projected North Dakota Population

Age Group	2012	2020	2030
0 to 19	25.6%	24.8%	24.5%
20 to 39	26.2%	26.1%	23.2%
40 to 59	27.4%	25.4%	22.9%
60+	20.8%	23.8%	29.3%

Source: U.S. Census Bureau, 2009 Projections

|	2000	2005	2012	2015	2020	2025	2030
0-19 years	183	171	163	160	157	155	152
20-39 years	174	164	167	167	166	155	144
40-59 years	165	179	174	170	161	150	142
60+ years	119	121	133	139	151	170	182

Source: U.S. Census Bureau, 2009 Projections

Suicide Among Older North Dakotans

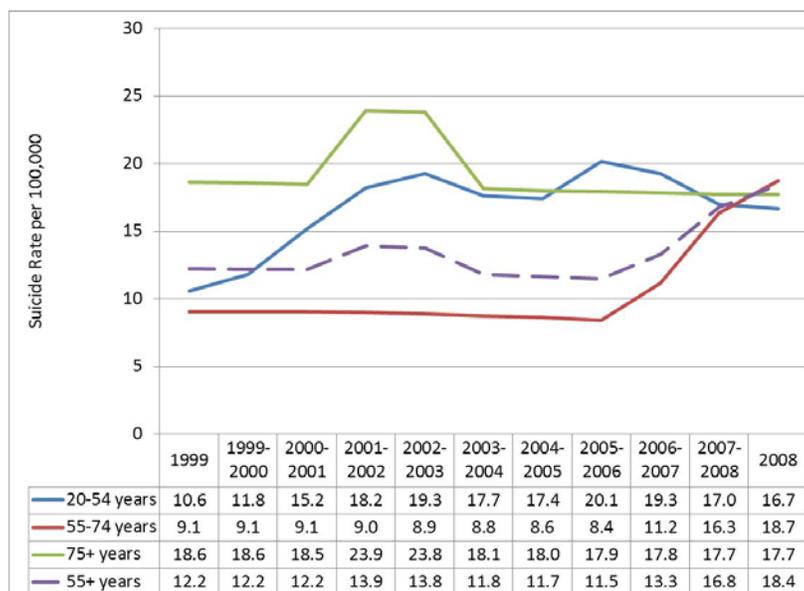## 2008 SUICIDE RATE PER 100,000 - NORTH DAKOTA COMPARED TO REGION AND NATION

The overall suicide rate among older North Dakotans (over age 55) is lower than the rate among younger age groups. In 2008, the latest year in which comparable national data were available, an estimated 31 North Dakotans over age 55 committed suicide. The suicide overall rate among North Dakotans age 55+ of 18.4 per 100,000 was higher than the U.S. rate of 15.5 and the regional rate of 16.1. The surrounding region includes Colorado, Iowa, Kansas, Missouri, Montana, Montana, 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.

	20-54 years	55-74 years	75+ years
North Dakota	18.4	13.8	17.8
Region	19.2	15.8	17.8
USA	15.0	14.5	15.9
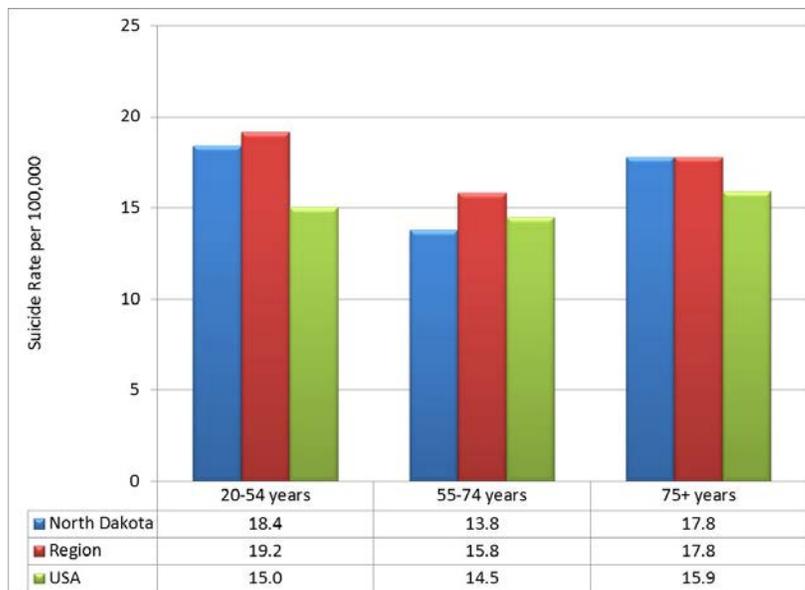
Source: Centers for Disease Control Vital Statistics, 2008

TREND IN SUICIDE RATE IN NORTH DAKOTA POPULATION

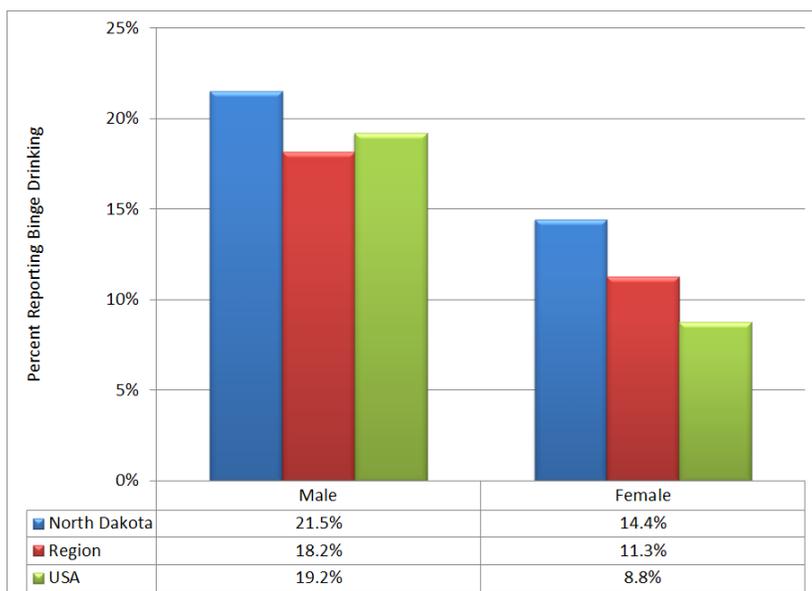|	1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008
20-54 years	10.6	11.8	15.2	18.2	19.3	17.7	17.4	20.1	19.3	17.0	16.7
55-74 years	9.1	9.1	9.1	9.0	8.9	8.8	8.6	8.4	11.2	16.3	18.7
75+ years	18.6	18.6	18.5	23.9	23.8	18.1	18.0	17.9	17.8	17.7	17.7
55+ years	12.2	12.2	12.2	13.9	13.8	11.8	11.7	11.5	13.3	16.8	18.4

Source: Centers for Disease Control Vital Statistics, 2009

The rate of suicide among older North Dakotans age 55+ (shown with the dashed line) fluctuated from a high of 18.4 per 100,000 in 2008 to a low of 11.4% per 100,000 in 2006. As this chart shows, the rate has been fairly consistently higher among those in the 75+ 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 North Dakotans

30-Day Binge Drinking among older North Dakotans by GENDER

	Male	Female
North Dakota	21.5%	14.4%
Region	18.2%	11.3%
USA	19.2%	8.8%

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 in one event for women and 4 or more for men. Binge drinking is higher among men: 21.5% of North Dakota males age 50and over reported binge drinking while 14.4% of females reported similar behavior. The confidence intervals around the North Dakota estimates are ± 2.3% and ± 1.4% percent respectively.

30-Day Binge Drinking Among Older North Dakotans by AGE GROUP

Binge drinking tends to decrease with age. 23.4% of North Dakotans age 50-64 reported binge drinking, while 8.4% in the 65+ age group reported similar behavior. The confidence intervals around the North Dakota estimates are ± 1.9 and ± 1.2 percent respectively. The following table shows these data by age group and gender.

**North Dakotans Reporting Binge Drinking by Age Group and Gender**

	Male	Female
50-64 years	28.0%	19.8%
65 and older	10.3%	7.3%

	50-64 years	65 and older
North Dakota	23.4%	8.4%
Region	19.2%	7.2%
USA	19.2%	8.8%
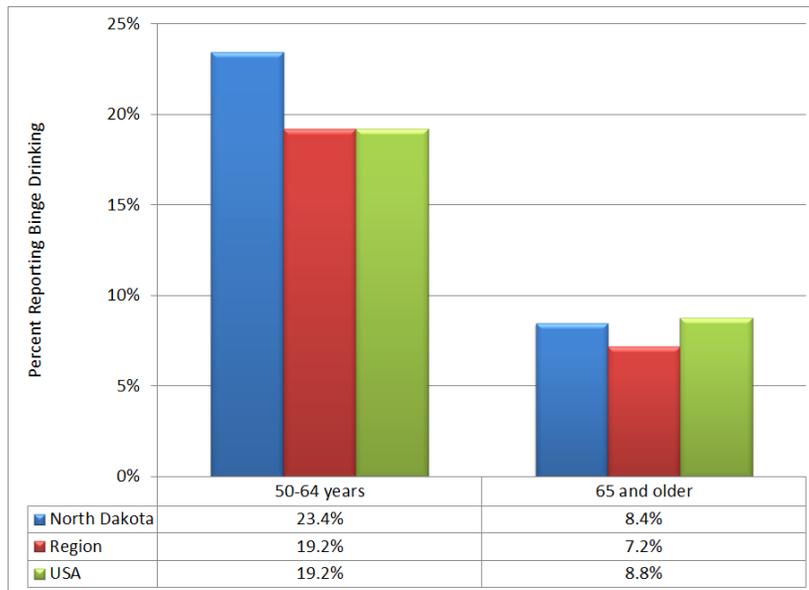
Source: Behavioral Risk Factor Surveillance System, 2011

ILLICIT 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 North Dakotans are not available; however the SAMHSA NSDUH Report (http://www.oas.samhsa.gov/2k9state/Cover.pdf), provides general information about substance use in North Dakota.
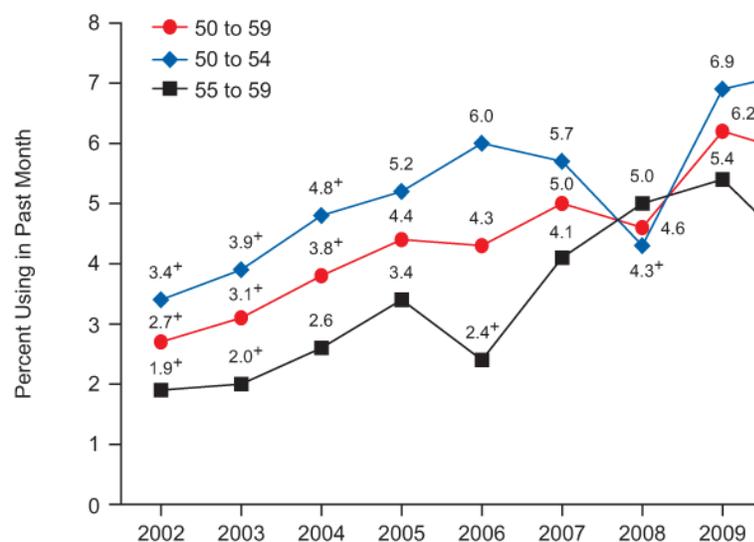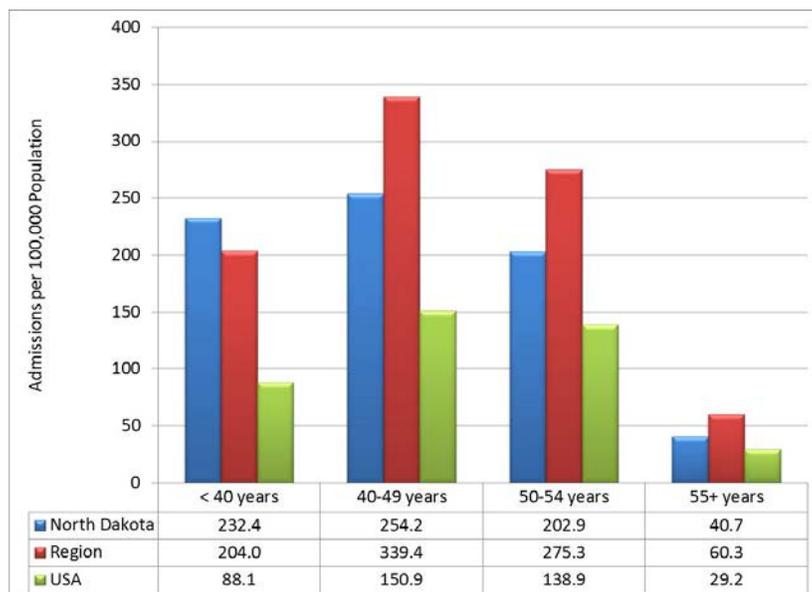

Source: National Survey on Drug Use and Health, 2010
Volume 1. Summary of National Findings

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 NORTH DAKOTANS IN SUBSTANCE ABUSE TREATMENT

	< 40 years	40-49 years	50-54 years	55+ years
North Dakota	232.4	254.2	202.9	40.7
Region	204.0	339.4	275.3	60.3
USA	88.1	150.9	138.9	29.2

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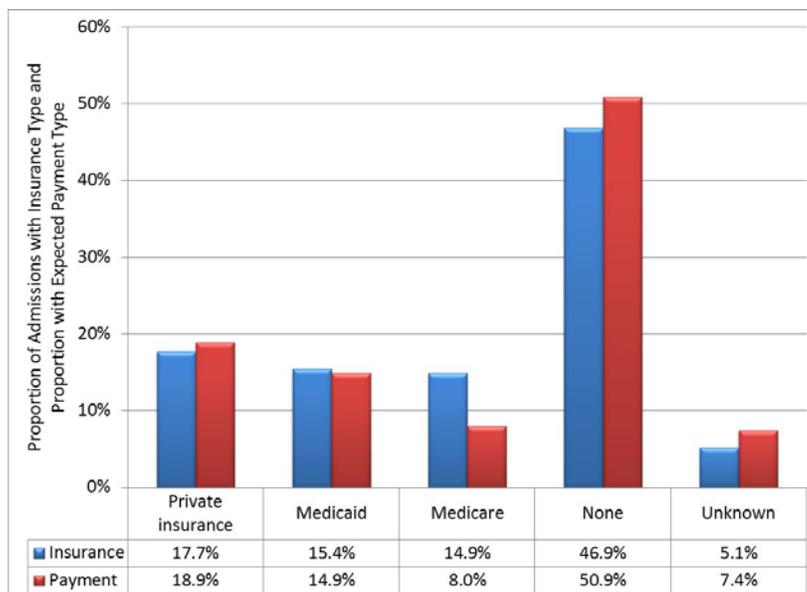Includes only those clients reported to SAMHSA

175 North Dakotans age 50 and older were admitted to substance abuse treatment in State-funded facilities in 2009, a rate of 76.2 per 100,000 age 50 plus. This rate was lower than the regional and higher than the national average. Characteristics of admittees include:

- More than 66% of the admissions were males, very close to the national and regional rates.
- 79% percent (138 individuals with known race) were White.
- 2% (4 individuals with known race) were Black/African American.
- 3% (5 individuals with known ethnicity) identified themselves as being of Hispanic descent.
- 38% (67 individuals) were referred to treatment by the criminal justice system.
- 27% (48 individuals) entered treatment through self or other individual-referral.
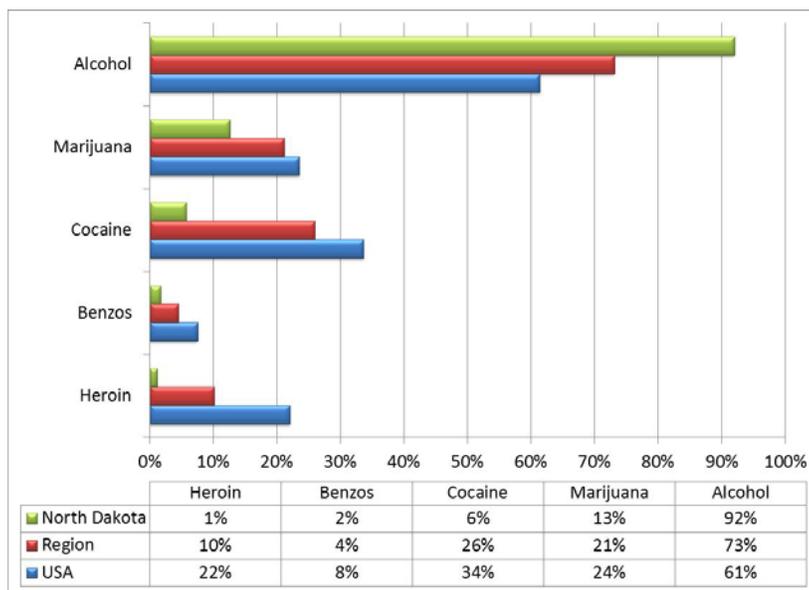
TREATMENT ADMISSIONS AMONG AGE 50 AND OLDER BY INSURANCE TYPE

More than 15 percent of older North Dakotans who were admitted to substance abuse treatment were insured by the State's Medicaid program, and Medicaid was the expected source of payment at a nearly identical rate.Around 18 percent of admittees had private insurance, and again, this was the expected source of payment at a close rate. In nearly 60 percent of cases, the source of payment was "none" or "unknown". In these instances, the bills are likely directed toward the State's Substance Abuse Block Grant / State-funded treatment programs.

	Private insurance	Medicaid	Medicare	None	Unknown
Insurance	17.7%	15.4%	14.9%	46.9%	5.1%
Payment	18.9%	14.9%	8.0%	50.9%	7.4%

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

AGE 50 AND OLDER TREATMENT ADMISSIONS - SUBSTANCES USED

	Heroin	Benzos	Cocaine	Marijuana	Alcohol
North Dakota	1%	2%	6%	13%	92%
Region	10%	4%	26%	21%	73%
USA	22%	8%	34%	24%	61%

Source; Treatment Episode Data Set, 2009[1]
Includes only those clients reported to SAMHSA

Alcohol was - by far - the most frequent drug of use among older North Dakotans in publicly financed substance abuse treatment in 2009. Alcohol was mentioned as the primary, secondary or tertiary substance of abuse in more than 90 percent of admissions among those age 50 and older. This was higher than both the national and regional rates.

Other substance of primary, secondary or tertiary abuse included: Marijuana at 19 percent; cocaine at 6 percent; benzodiazepines/tranquilizers at 2 percent; and heroin at 1 percent.

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[1] **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

	Yes (Known)	Unknown
North Dakota	49.4%	0.6%
Region	39.1%	25.3%
USA	41.8%	28.3%
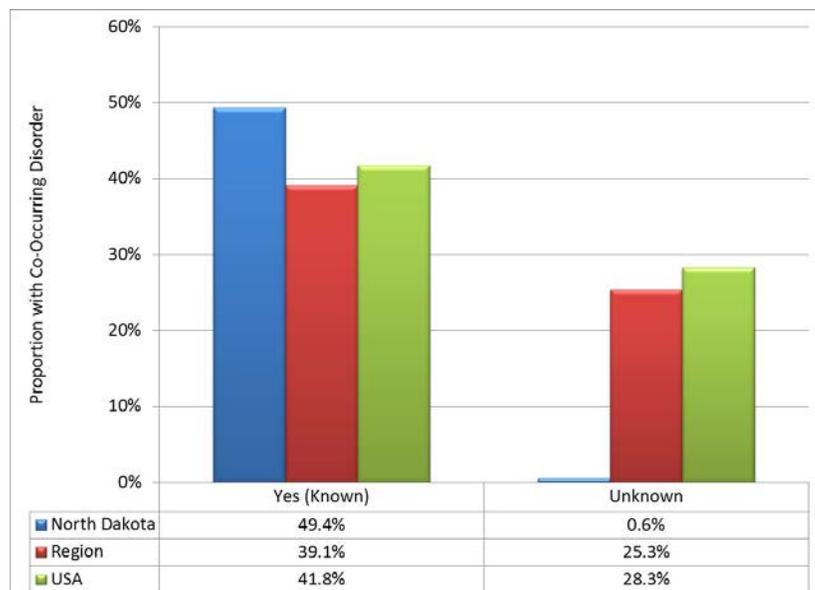
Source: Treatment Episode Data Set, 2009
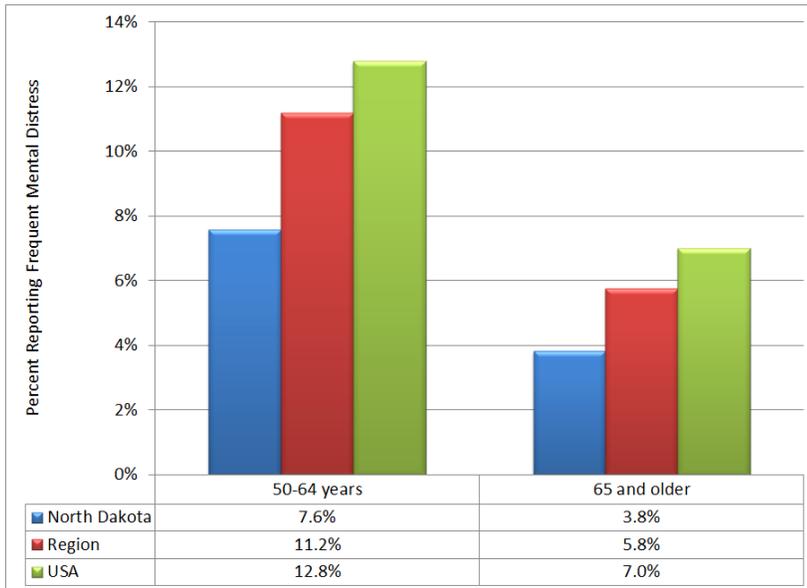Includes only those clients reported to SAMHSA

Research shows a strong relationship between substance use and mental health disorders. Studies show 30-80 % 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 older North Dakotans (50+) who were admitted to substance abuse treatment and also had a mental health diagnosis. While this rate appears higher the nation or region, reporting practices are a factor in these results.

OLDER NORTH DAKOTAS ADMITTED TO STATE MENTAL HEALTH FACILITIES

Just under 6 percent of the people served by the North Dakota mental health system were age 65 or older (3.0% percent were age 65 to 74 and 2.7% percent were age 75 or older). This represents a total of approximately 974 people. These data and more are available at: http://www.samhsa.gov/dataoutcomes/urs/2010/NorthDakota.pdf

Mental Health

OLDER NORTH DAKOTANS REPORTING FREQUENT MENTAL DISTRESS BY AGE

	50-64 years	65 and older
North Dakota	7.6%	3.8%
Region	11.2%	5.8%
USA	12.8%	7.0%

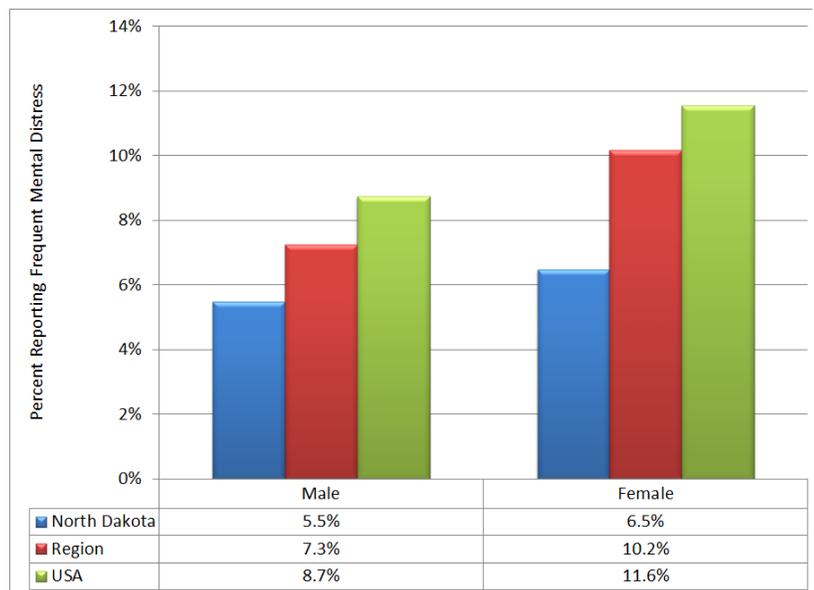Source: Behavioral Risk Factor Surveillance System, 2010

The Behavioral Rise 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 as experiencing frequent mental distress (FMD). This chart shows that older North Dakotans experience FMD at lower rates than the national or region. 7.6 percent of those in the 50-64 age group and 3.8 percent of those in the 65+ age group reported FMD. Confidence intervals around national / regional estimates and North Dakota are ± 0.2 and ± 1.5% respectively.

FREQUENT MENTAL DISTRESSBY BY GENDER

While older North Dakota males are more likely to binge drink, females are more likely to report FMD. 6.5 percent of females reported FMD while nearly 5.5 percent of males reported FMD. Confidence intervals around national/regional estimates and North Dakota estimates are ± 0.2 and ± 1.5% respectively. The following table breaks these data down by age and gender.

North Dakotans Reporting Frequent Mental Distress by Age and Gender

	Male	Female
50-64 years	7.0%	8.0%
65 and older	2.8%	4.5%

	Male	Female
North Dakota	5.5%	6.5%
Region	7.3%	10.2%
USA	8.7%	11.6%

Source: Behavioral Risk Factor Surveillance System, 2011

OTHER MEASRUES 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 North Dakota. 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 for older North Dakotans are shown below:

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2010

Age Group						
	Age 50+		Age 50–64		Age 65+	
Indicator	Data %	Confidence Interval	Data %	Confidence Interval	Data %	Confidence Interval
Core BRFSS Indicators (2010)						
Rarely or never get social or emotional support (revised)	8.3	(7.1-9.4)	5.3	(4.0-6.6)	12.0	(9.9-14.1)
Very dissatisfied or dissatisfied with life (revised)	3.6	(2.8-4.4)	4.5	(3.3-5.7)	2.5	(1.5-3.5)
Anxiety and Depression Optional Module Indicators (2006)[2]						
Current Depression	4.8	(3.8–6.1)	6.0	(4.5–8.0)	3.1	(2.1–4.5)
Lifetime Diagnosis of Depression	15.7	(14.1–17.3)	19.2	(16.8–21.7)	11.4	(9.5–13.5)
Lifetime Diagnosis of Anxiety Disorder	8.6	(7.4–9.9)	10.3	(8.5–12.4)	6.5	(5.1–8.2)

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[2] Data available at http://apps.nccd.cdc.gov/MAHA/StateDetails.aspx?State=ND

PEOPLE WITH FREQUENT MENTAL DISTRESS REPORT POOR PHYSICAL HEALTH

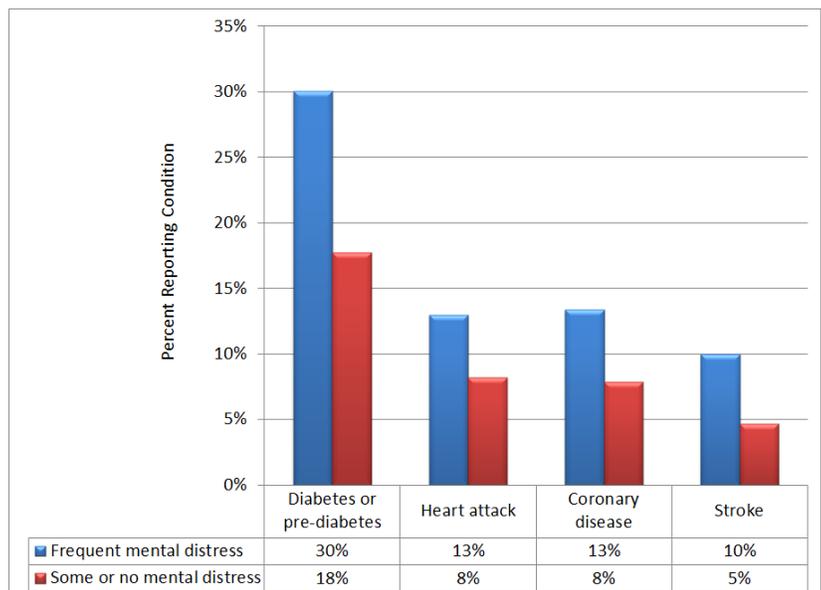|	No mental distress	Some mental distress	Frequent mental distress
Series1	18%	27%	58%
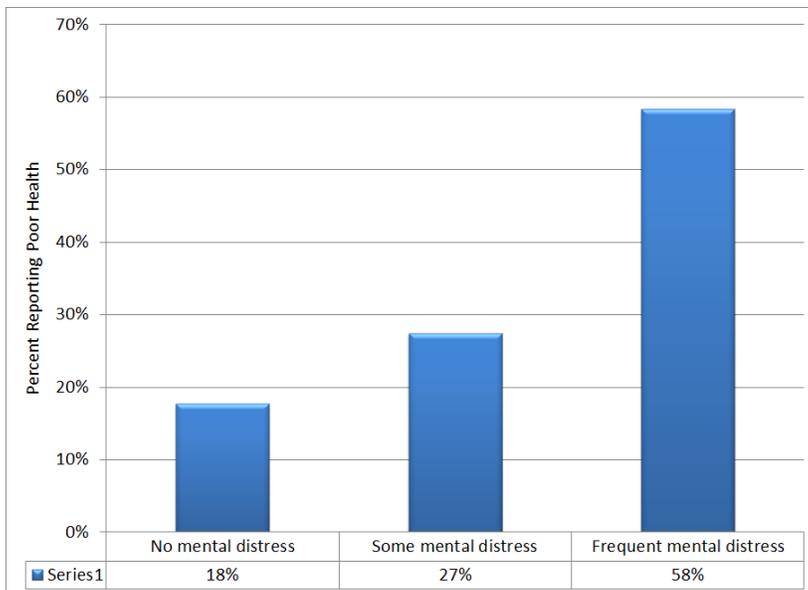
Older Americans who experienced frequent mental distress were more likely to report that their physical health was poor or fair (as opposed to good, very good or excellent). As shown here, while 18 percent of older Americans with no mental distress reported poor or fair physical health, nearly 60 percent – 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.

	Diabetes or pre-diabetes	Heart attack	Coronary disease	Stroke
Frequent mental distress	30%	13%	13%	10%
Some or no mental distress	18%	8%	8%	5%

Source: Behavioral Risk Factor Surveillance System, 2011

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/SAMHDA/). 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.