Substance Abuse, Mental Illness and Associated Consequences in Nebraska

An Epidemiological Profile

December 2015

Nebraska Department of Health and Human Services
Division of Behavioral Health
Statewide Epidemiological Outcomes Workgroup

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Section 1:

Introduction to Nebraska's Statewide Substance Abuse Epidemiological Profile 2015

Executive Summary

In Nebraska, substance abuse continues to place an enormous strain on the health care system, the criminal justice system, and the substance abuse treatment system. In addition, mental health and suicide affect a large number of Nebraskans and the systems that serve them. The following is a summary of the key findings for substance abuse and mental illness and their associated consequences in Nebraska.

Substance Use in Nebraska

Substance use is common in Nebraska with alcohol being the most prevalent substance reported.

- In 2013, more than one in every five Nebraska high school students (22.1%) reported drinking alcohol during the past month, about 1 in every 10 smoked cigarettes (10.9%), and approximately one in every nine used marijuana (11.7%) in the same timeframe.
- In 2013, two of three Nebraska young adults ages 19 to 25 (68%) reported drinking alcohol in the past month.
- In 2014, one of five Nebraska adults (20.3%) reported binge drinking in the past month.
- In addition, about one-sixth of adults over 18 (17.3%) smoked cigarettes and approximately one in every 15 used illicit drugs (6.7%) in the past month.

Compared to the U.S., alcohol use in Nebraska is higher than average while smoking and most drug use shows a similar rate.

- Binge drinking among Nebraska residents was higher than residents nationally according to the Behavioral Risk Factor Surveillance System (BRFSS) measure on self-reported binge drinking. However, high school students reported lower binge drinking rates than their national counterparts. *(source: YRBS)*
- In 2011, three in every five pregnant women (64.7%) reported drinking alcohol during the three months before pregnancy, ranking Nebraska fifth highest among the 25 states that participated in the Pregnancy Risk Assessment Monitoring System (PRAMS) survey.
- Cigarette smoking among Nebraska residents was very similar to residents nationally while drug use tended to be slightly lower (although the differences were generally non-significant).

Substance use among youth has changed both positively and negatively over the past 15 years.

- Alcohol use (including binge drinking) and cigarette smoking among Nebraska high school students declined since the early 1990s, but remained constant among adults during the same time period.
- Since 2011, cigarette smoking appears to have declined among high school students and adults.
- Marijuana use among Nebraska high school students has remained fairly constant since 2011.
- Overall, lifetime non-marijuana illicit drug use among high school students has decreased from 2005 to 2013.

Consequences of Substance Abuse in Nebraska

Substance abuse contributes to death and medical care

- In 2010, there were an estimated 542 alcohol-related deaths. In 2014, there were an estimated 2,500 smoking-related deaths, and 128 deaths in which drugs were listed as the primary cause of death.
- In 2013, there were 10,662 alcohol-attributable hospitalizations, and 10,901 drug-attributable hospitalizations.

Alcohol-impaired driving rates are high and alcohol is commonly found in fatal motor vehicle crashes

- In 2013, 6.8 percent of high school students in Nebraska report driving after drinking in the past month, while in 2014 Nebraska adults were more likely than adults nationally to report past month alcohol-impaired driving (2.5 percent and 1.7 percent).
- Over one-third (36.9%) of all fatal motor vehicle crashes in 2014 involved alcohol, totaling 69 alcohol-involved fatal crashes.

Substance abuse places a tremendous strain on the criminal justice system

- In 2013, there were 9,326 adult arrests for driving under the influence (DUI), 6,203 arrests for non-DUI alcohol-related crime, and 8,369 arrests for possession or sales/manufacturing of illicit drugs in Nebraska.
- Of all adults sentenced to probation in 2014, close to half (41 percent) were sentenced for DUI, an increase since the year 2000 (37.6 percent), while about one in every nine were sentenced for a drug-related offense (11.2 percent), an increasing trend since 2000 (5.4 percent).
- Maintaining the 714 persons incarcerated for drug convictions in 2014 cost the state of Nebraska over $20 million dollars.

Alcohol is the primary drug of choice in substance abuse treatment admissions

- In 2014, alcohol was listed as the primary drug of choice during more than six in every 10 substance abuse treatment admissions (62 percent) in the state, followed by methamphetamine (14 percent) marijuana (10 percent), and other opiates (e.g., morphine, heroin, etc.) at five percent.

Mental Health and Suicide in Nebraska

Depression affects a significant number of Nebraska youth and adults

- From 2012-2013, one in 15 Nebraska residents (6.6 percent) reported a major depressive episode in the past year.
- In 2013, one in five high school students (19.5 percent) reported they felt sad or hopeless every day for two weeks in a row.

Mental Illness is a concern for many Nebraska residents

- Nearly one in five (18 percent) adults 18 and older reported having a mental illness in the last year from 2012-2013.
- Nearly one in 24 adults 18 and older (4.2 percent) reported having a serious mental illness in the last year from 2012-2013.

Suicide is a significant concern to public health problem in Nebraska

- In 2013 there were 220 deaths due to suicide making it the 10th highest cause of death.

Demographic Differences in Nebraska

Differences by age

- Residents in their late teens and early 20s were the most likely age group to drink alcohol as well as use tobacco and illicit drugs. In addition, they were also more likely than other age groups to drive after drinking and to be involved in an alcohol-related crash.
- Residents 26-34 years old were more likely to engage in binge drinking and be admitted into substance abuse treatment.
- Residents ages 45-54 had the highest age-specific death rate due to suicide.

Differences by gender

- Among Nebraska high school students, males and females reported similar percentages for alcohol use, cigarette smoking and illicit drug use. However, among adults, men were more likely than women to binge drink, to drive after drinking, to use tobacco products, and to be admitted into substance abuse treatment.
- Males in Nebraska have a higher age-adjusted mortality rate from suicide then females do.

Differences by urban/rural

- Residents of the most rural Nebraska counties reported the highest percentage for binge drinking, smokeless tobacco use and a higher rate of suicide; however, alcohol use and cigarette smoking were relatively similar across urban/rural counties.
- Urban/rural differences for illicit drug use were largely unavailable.

Differences by race/ethnicity

- Among Nebraska adults, Native Americans had the highest death rates for chronic liver disease and the highest rates for cigarette smoking. They also represent a higher percent of those receiving substance abuse treatment.
- Among those persons receiving treatment, 3.7 percent are Native Americans while one percent of the total state population is Native Americans.
- Racial and ethnic differences for illicit drug use were largely unavailable.

INTRODUCTION

Substance abuse, including the use of tobacco, illicit drugs and the misuse of alcohol, affects virtually every community across America. As a result, substance abuse places an enormous burden on the health care system, the criminal justice system, the substance abuse treatment system, and subsequently, the economy as a whole. In addition, substance abuse and misuse are one set of behavioral health problems that represent an ongoing threat to public safety, disrupts families, and shatters individual lives.

Behavioral health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Behavioral health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society.

Purposes of the Report

This report examines data on alcohol, tobacco and illicit drug use and their associated consequences in Nebraska. In addition, it focuses on mental health indicators in Nebraska in relation to risk and protective factors for youth.

The primary purpose of this report is to present an epidemiological profile of the State of Nebraska that identifies substance abuse and mental health needs, existing data to help guide future data collection and analysis, as well as identification of gaps in the data available.

Working together as a broad group of stakeholders the overall goal for the SEOW is to encourage use of this data to inform state and community decision makers regarding substance abuse and mental illness prevention programs, practices and policies, as well as promote positive behavioral health and well-being.

Overview and Background

State Epidemiological Profile Report History

The mission of the Nebraska Statewide Epidemiology Outcomes Workgroup (SEOW) is to guide decision making and planning for prevention at the state and local levels by providing assessment and ongoing monitoring of epidemiological data in Nebraska.

The SEOW was originally formed in March 2007 to make decisions regarding the collection and reporting of data related to substance abuse, including the consequences of and factors that contribute to substance abuse in the state of Nebraska. Led by the DHHS Division of Public Health, the initial tasks of the workgroup included creating an epidemiological profile report on substance abuse in Nebraska and establishing a set of criteria to facilitate the selection of substance abuse prevention priorities for the Strategic Prevention Framework State Incentive Grant. This information provided the foundation for the 2008 Nebraska substance abuse strategic plan. As a continuation of this work, in the fall of 2013, the DHHS Division of Behavioral Health (DBH) revised the statewide strategic plan for prevention.

In 2013, the Division of Behavioral Health was awarded the Strategic Prevention Framework Partnerships for Success. Guided by the Prevention Advisory Council and the SEOW this five-year grant focuses on the prevention of underage alcohol use for youth aged 12-20 in 11 counties throughout the state.

With an emphasis on connecting shared risk and protective factors the SEOW is now charged with characterizing behavioral health indicators to determine the scope and extent of mental illness, substance abuse and related problems in Nebraska.

Updating the Report

In 2012 the report was updated by identifying the original report sources and updating data when available. A similar approach was used in this update. Whenever possible, newer data was added to the data presented in the 2012 report to create longer trends. In some instances, the original data source was not available or had been revised. Therefore, in a few instances, data in the 2015 report may not be reported identically to the way it was reported in 2007 or 2012. This report will focus on updating data on substance abuse along with risk and protective factors. This report also adds information on mental health and suicide in Nebraska.

In 2015 the SEOW reviewed the indicators used in the previous epidemiological reports and refined them. Several were eliminated and one new section, Mental Health and Suicide, was added to the report.

Population Estimates for Nebraska and the United States by Demographics

Table 1.1: Demographics of

Population by Gender, Age, and Race/Ethnicity, 2013 U.S. Census Estimates Data*

		State of Nebraska		United States	
		N**	%***	N**	%***
Total		1,841,625	100.0%	311,536,594	100.0%
Gender					
	Female	928,147	50.4%	153,247,412	49.2%
	Male	913,478	49.6%	158,289,182	50.8%
Age					
	<10	260,693	14.2%	40,461,172	13.0%
	10-19	253,634	13.8%	42,387,683	13.6%
	20-34	379,430	20.6%	63,811,164	20.5%
	35-54	474,691	25.8%	85,380,430	27.4%
	55-64	220,592	12.0%	37,645,103	12.1%
	65-84	213,384	11.6%	36,177,477	11.6%
	85+	39,201	2.1%	5,673,565	1.8%
Race/Ethnicity^					
	White	1,624,312	88.2%	230,592,579	74.0%
	Black	84,228	4.6%	39,167,010	12.6%
	Asian	34,144	1.9%	15,231,962	4.9%
	N. American	17,662	1.0%	3,066,656	1.0%
	Hispanic	173,903	9.4%	51,786,591	16.6%
	Minority	337,727	18.3%	114,486,176	36.7%

*2013 population estimates from the U.S. Census Bureau

**Number of residents by demographic

***Percentage of residents by demographic

^Race represents individuals who identified only one race (opposed to multiple races); N American includes American Indian and Native Hawaiian and Other Pacific Islander, Hispanic can be of any race; Minority represents individuals who identified themselves as being of a non-White race, multi-racial, or Hispanic.

METHODOLOGICAL OVERVIEW

To gain a comprehensive understanding of substance use and associated consequences in Nebraska, 19 data sources were chosen for this report. While other data sources contain information on substance abuse within Nebraska, the SEOW selected these 19 sources because they were readily available and met the purposes of the report. The following is a list of each of the data sources included in this report including a brief summary of some of the statistical methods used to develop it.

The following data sources were included within this report:

Indicator	Data Source
Alcohol-Related Motor Vehicle Crash Data	Nebraska Department of Roads
Alcohol Sales	National Institute for Alcohol Abuse and Alcoholism
Behavioral Risk Factor Surveillance System	Division of Public Health / NDHHS
Cigarette Sales	Nebraska Department of Revenue
Drug Recognition Expert Data	Nebraska Office of Highway Safety
Fatality Analysis Reporting System	National Highway Traffic Safety Administration
Incarceration and Parole Data	Nebraska Department of Correctional Services
Magellan Substance Abuse Treatment Database	Division of Behavioral Health / NDHHS
Mortality Data	Nebraska Vital Records / Division of Public Health / NDHHS
Alcohol-Related Disease Impact (ARDI) software	CDC
National Survey on Drug Use and Health	SAMHSA
Nebraska Hospital Discharge Data	Division of Public Health / NDHHS
Nebraska Trauma Registry	Division of Public Health / NDHHS
Nebraska Young Adult Alcohol Opinion Survey	Division of Behavioral Health / NDHHS
Pregnancy Risk Assessment Monitoring System	Division of Public Health / NDHHS
Probation Data	Nebraska Office of Probation Administration
Smoking-Related Fires	Nebraska State Fire Marshal's Office
Uniform Crime Reporting	Nebraska Crime Commission
Youth Risk Behavior Survey	Division of Public Health / NDHHS

Some of the statistical methods used in this report:

• *Age-adjustment:* This is a statistical method used to compare risk between populations while controlling for differences in age that may exist between populations. While age-adjusted rates and percentages are useful for comparing populations, the process modifies the rate/percentage within the population and subsequently should be viewed as a relative index rather than the actual rate/percentage within the population.

• *Statistical significance testing:* Unless noted, all statements within this report highlighting differences between groups reflect statistically significant differences where (page 5).

• *Urban/Rural analysis:* Because Nebraska is a sparsely populated State, with the majority of the population clustered along the eastern edge, it was divided into four urban and rural categories for this report. Categories were defined by county, but were based on the largest city size within each county. Regional differences beyond urban/rural were not included in this report.

Limitations exist for each of the data sources and statistical methods included within this report, as with any data source or statistical method. As a result, it is important to understand the limitations so that interpretation does not extend beyond them. For further detail on the methods used within this report see the Methodology section (page 143).

Section 2:

Alcohol Indicators in Nebraska: Consumption Patterns and Consequences

ALCOHOL – SUMMARY OF KEY FINDINGS

ALCOHOL USE IN NEBRASKA

Alcohol use is common among youth and young adults

- In 2013, just more than one out of five (22.1 percent) high school students, an estimated 22,000 individuals, reported alcohol usage in the last 30 days.
- In 2013, two of three young adults (68.1 percent) ages 19-25, an estimated 128,000 individuals, reported alcohol usage in the last 30 days.

Binge drinking has particularly high rates in Nebraska

- Binge drinking among Nebraska residents (20.3 percent) was higher than residents nationally for adults 18 and over, based on self-reported surveys.
- In 2013, one out of every seven high school students (13.6 percent), an estimated 14,000 individuals, reported binge drinking in the last month.

Alcohol use preceding and during pregnancy is high in Nebraska

- In 2011, three in every five pregnant women (64.7 percent) reported drinking alcohol during the three months before pregnancy, ranking Nebraska fifth among the 25 states who participated in the Pregnancy Risk Assessment Monitoring System (PRAMS) survey.
- In 2011, six percent of pregnant women continued to drink alcohol during the last three months of pregnancy, a rate that has remained stable for over 10 years.

Alcohol is a commonly sold product and has continued to grow

- Nebraska has seen an overall increase in the estimated sales of alcohol since 2000 from 22,288 gallons per 10,000 population to 23,136 in 2010 for those age 14 and older. This is higher than the national average of 22,608 gallons per 10,000 population nationally in 2010.

CONSEQUENCES OF ALCOHOL USE IN NEBRASKA

Alcohol use is a major contributor to death and medical care

- Alcohol use killed an estimated 542 Nebraska residents in 2010.
- In 2013, there were 10,622 hospitalizations in Nebraska in which an alcohol-attributable condition was listed on the hospitalization record.
- Of the 10,124 admissions to Nebraska Trauma Centers in 2014, 8.2 percent had blood alcohol content levels over the legal limit.

Alcohol use is commonly found as a factor in motor vehicle crashes

- Over one-third (36.9 percent) of all fatal motor vehicle crashes in 2014 involved alcohol, with 69 alcohol-involved fatal crashes.
- In addition there were 674 alcohol-involved crashes in 2014 that resulted in an injury to one or more persons.

Alcohol impaired driving is particularly high in Nebraska

- In 2014, adults in Nebraska were significantly more likely to have engaged in alcohol-impaired driving than their national counterparts, 2.5 percent and 1.7 percent, respectively.
- In 2013, 6.8 percent of high school students reported alcohol-impaired driving in the last 30 days.

Alcohol places a tremendous strain on the criminal justice system

- In 2013, DUI accounted for 15 percent of total arrests accounting for the second leading arrest offense behind drug possession and sales.
- Of all the adults sentenced to probation in Nebraska during 2014, 41 percent were for DUI, making it the largest reason for probation.
- In 2013, there were an additional 6,203 adult arrests for non-DUI alcohol-related crime in Nebraska (e.g., public intoxication, minor in possession, purchasing for a minor, selling to a minor).

Alcohol dependence or abuse affects many Nebraskans

- In 2012 and 2013, 7.8 percent or approximately 119,000 Nebraskans, were estimated to be alcohol dependent or abusing alcohol.

Alcohol is the primary drug of choice in substance abuse treatment admissions

- In 2014, alcohol was listed as the primary drug of choice during six of every 10 substance abuse treatment admissions (62.1 percent).

DEMOGRAPHIC DIFFERENCES

Differences by age

- In general younger adults had higher levels of alcohol use and consequences, but specific indicators had different age groups that were most likely affected (table 2.1).

Table 2.1

Alcohol Indicators and Nebraska Residents	
Indicator	Most Likely Age Group
Binge Alcohol Use	25-34
Heavy Alcohol Use	18-24
Alcohol-Associated Inpatient Hospitalization	45-64
Trauma Centers BAC > .08	25-35
Alcohol-Impaired Driving	19-25
Alcohol-related Crashes	20-24
Alcohol Dependence/Abuse	18-25
Treatment for Alcohol	25-34

Differences by gender

- Men were more likely than women to binge drink, to drive after drinking, to die or be injured in an alcohol-related crash, to die from an alcohol-related death, to be arrested for DUI or other alcohol offenses, and to receive treatment for alcohol abuse.
- Male and female high school students reported a similar percentage for current alcohol use, binge drinking and driving after drinking.
- There is also no difference in gender for young adults 19-25 for binge drinking, and driving after drinking.

Differences by urban/rural

- While most alcohol use indicators were relatively similar across urban/rural counties, residents of rural counties reported the highest percentage of current binge drinking from 2011-2014.

Differences by race/ethnicity

- Native Americans were the most likely racial and ethnic group to die from chronic liver disease.

Alcohol Consumption: General Consumption Patterns and Concerns

In the United States, alcohol is used more frequently than all other illicit drugs combined and it is the drug most likely associated with injury or death (citation needed). Alcohol is by far the most widely used substance in the state according to both adult and youth surveys. Because there is a strong relationship between alcohol and a large number of negative outcomes (e.g., homicides, suicides, chronic diseases, and accident related deaths and injuries) alcohol use in Nebraska remains an important issue for substance abuse prevention efforts occurring throughout the state.

Alcohol sales data in Nebraska are collected at the wholesale level. Estimates are based on the number of gallons of alcohol sold, not necessarily the number of gallons consumed. Nebraska has seen an overall increase in the estimated sales of alcohol since 2000 from 22,288 gallons per 10,000 population to 23,136 in 2010 (Figure 2.1).

Figure 2.1

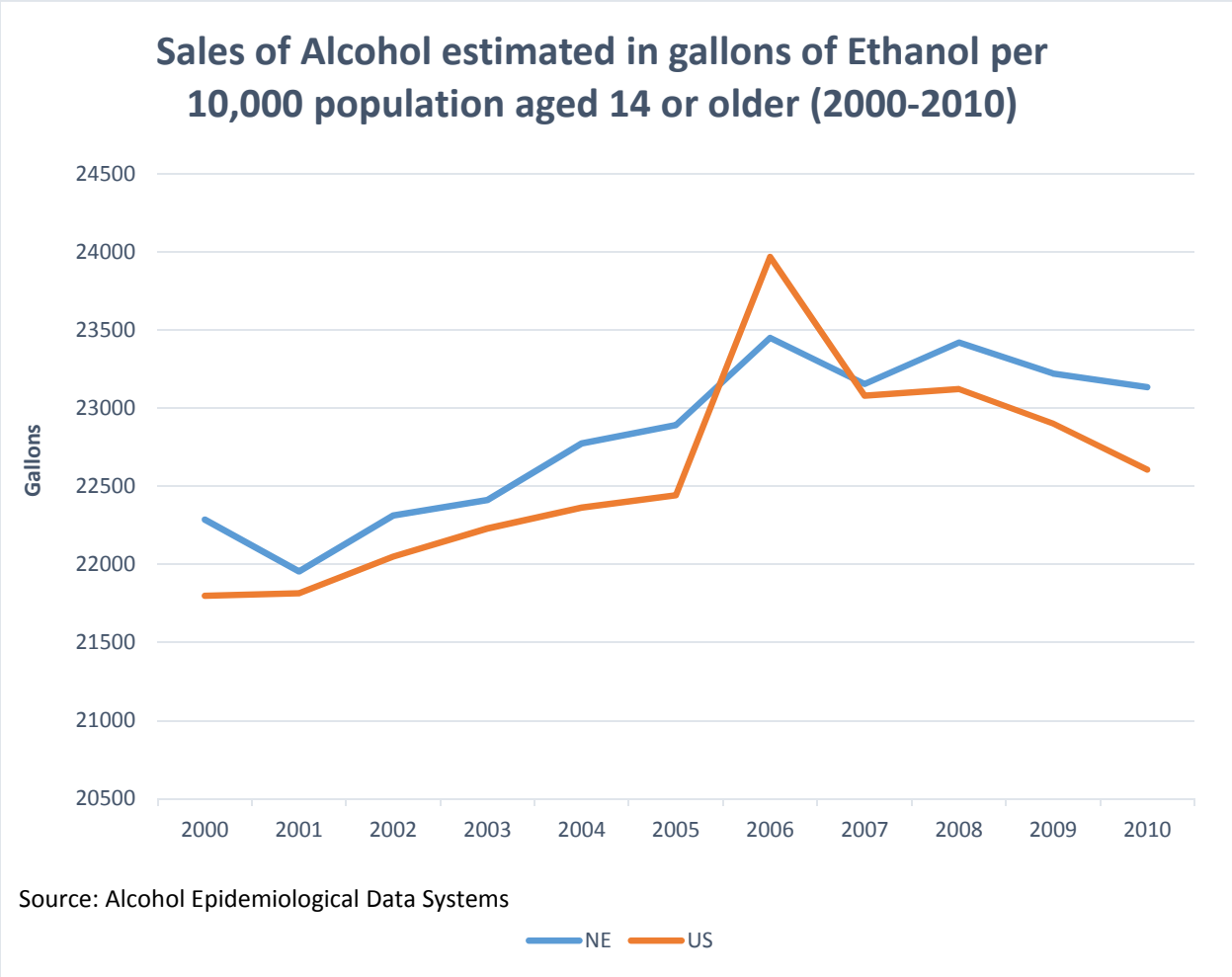
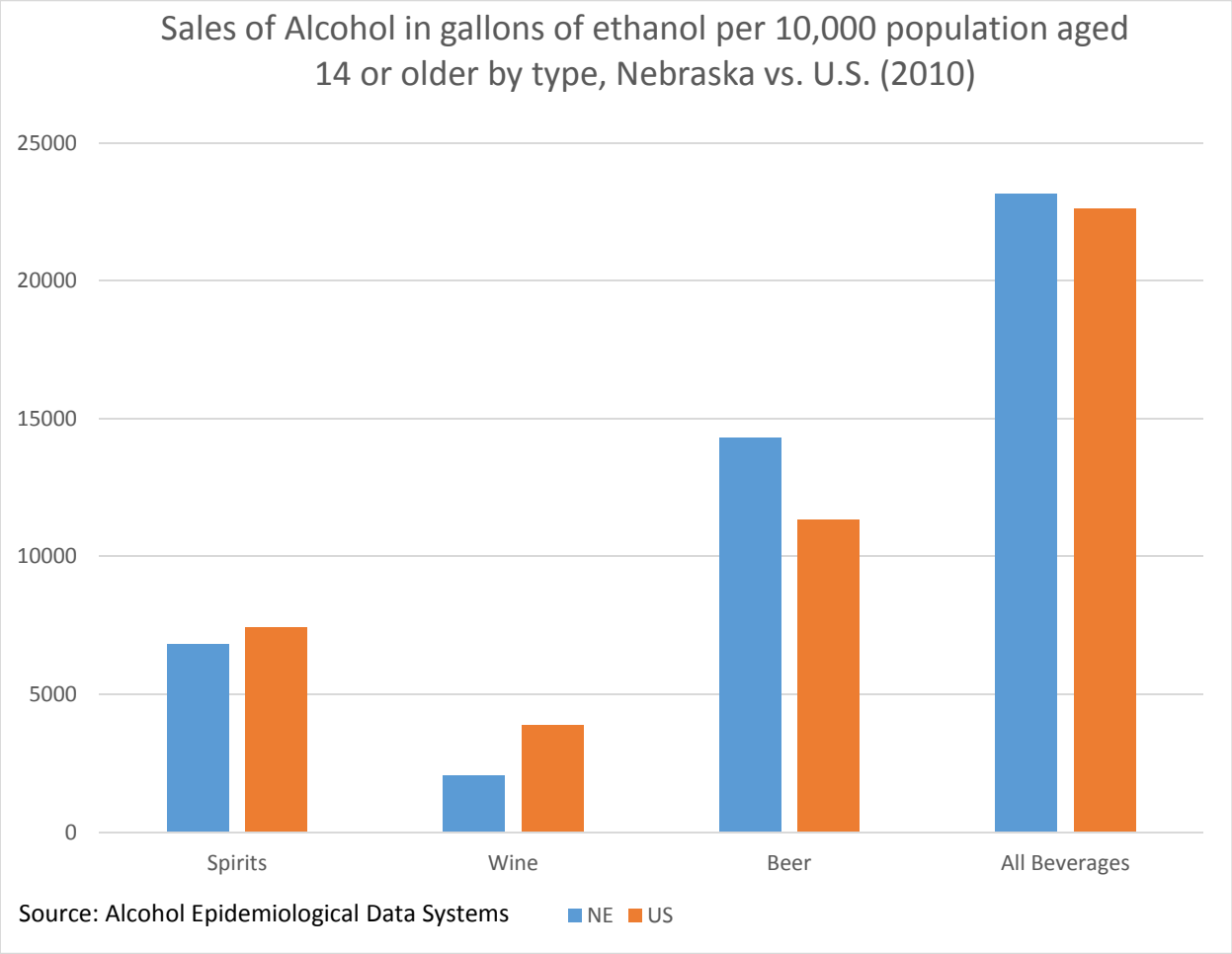


Figure 2.2



Of all of the alcohol sold, the largest volume is beer, followed by spirits and then wine (Figure 2.2). The overall trend of sales has been fairly consistent for beer, while there has been a slight increase in spirit and wine sales.

Adult Alcohol Consumption: Binge Drinking

While there is not a mutually agreed upon definition for binge drinking, the term generally refers to the consumption of alcohol at levels resulting in impairment. The definition of binge drinking used for this report is: males consuming five drinks in a row and females consuming four drinks in a row in a setting.

Binge Drinking Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Binge Drinking among Adults 18 and older	BRFSS	2014	20.3%	287,000	16.0%	Higher	Decreasing

Current Levels of Binge Drinking in Nebraska

In 2014, about one in every five Nebraska adults (20.3 percent), an estimated 287,000 adults, reported binge drinking during the 30 days preceding the survey.

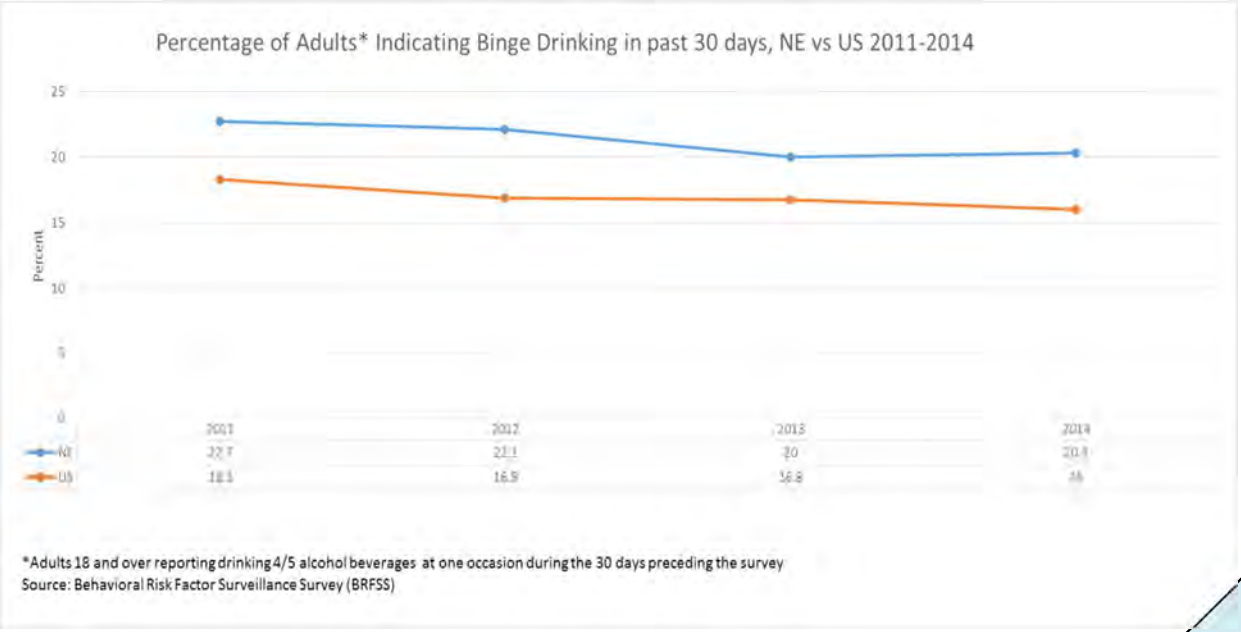
Compared to the Nation

In 2014, adults in Nebraska were more likely than adults nationally to binge drink, 20.3 percent and 16 percent, respectively.

Trends

From 2011 to 2014 the percent of Nebraska adults who reported recent binge drinking of alcohol dropped slightly from 22.7 percent in 2011 to 20.3 percent in 2013, but is significantly higher than the United States as a whole for each year it is reported (Figure 2.3).

Figure 2.3



Adult Alcohol Consumption: Binge Drinking Demographics

Differences by Age

Adults 18-34 were the most likely to report current binge drinking with 25-34 year olds having the highest rate at 34.6 percent. Starting at age 35 the percentage reporting binge drinking declines from 25.5 percent for 35-44 year olds to a low of 0.6 percent for those 85 and older.

Differences by Gender

There is a significant difference between males and females. Males are significantly more likely (27.8 percent) to report they current binge drinking then females (15.1 percent) for the years 2011-2014 combined.

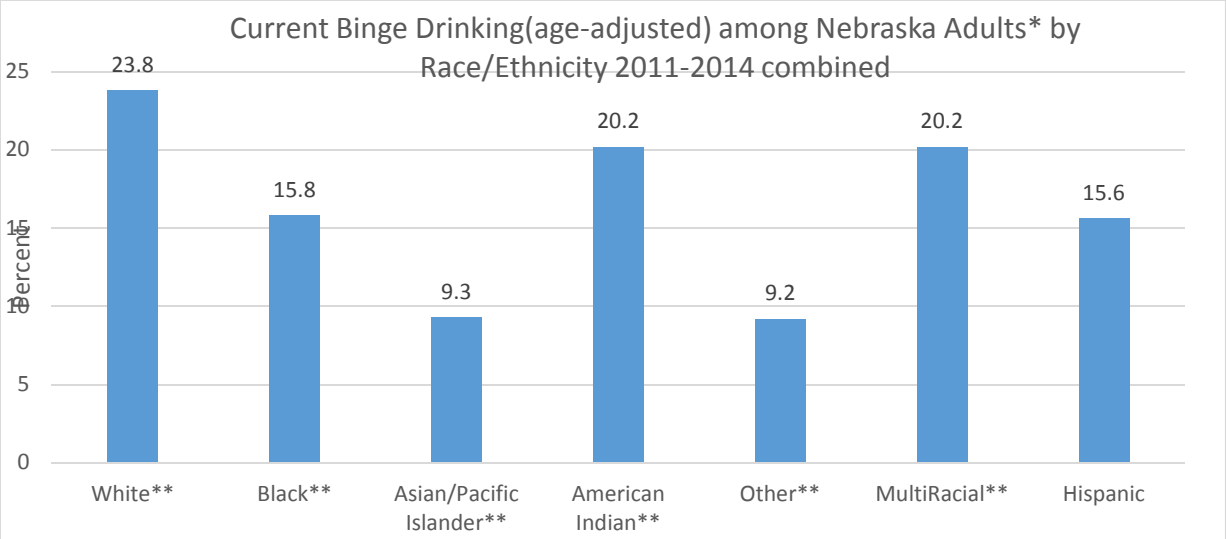
Differences by Urban/Rural

Adults living within rural counties reported the highest percentage of current binge drinking (23.5 percent) for the years 2011-2014. Adults in Urban-Large counties reported the next highest percentage of current binge drinking (22 percent) while those in small urban counties reported the lowest percentage (21.2 percent).

Differences by Race/Ethnicity

When looking at differences in current binge drinking from 2011 to 2014, beyond differences in age (age-adjustment used), persons identifying as white reported the highest percentage (23.8 percent) which was significantly higher than all other racial and ethnic groups except for American Indian and Multiracial. The two lowest percentages were Asian (9.3 percent) and Other (9.2 percent) for adults who currently binge drink. Figure 2.4 provides a breakdown of current binge drinking among Nebraska adults by race/ethnicity.

Figure2.4



*Adults 18 and over reporting at least one alcoholic beverage during the 30 days preceding the survey
**Non-Hispanic
Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Adult Alcohol Consumption: Heavy Alcohol Use

Heavy drinking refers to the self-reported consumption of more than 60 drinkers for men (an average of more than two drinks per day) and 30 drinks for women (an average of more than one drink per day) during the past month or 30 days preceding the survey.

Heavy Drinking Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Heavy Drinking among Adults 18 and older	BRFSS	2014	6.4%	91,000	5.9%	Non-Significant	Stable

Current Levels of Heavy Drinking in Nebraska

In 2014, nearly one in every 16 Nebraska adults (6.4 percent), an estimated 91,000 adults, reported heavy drinking during the 30 days preceding the survey.

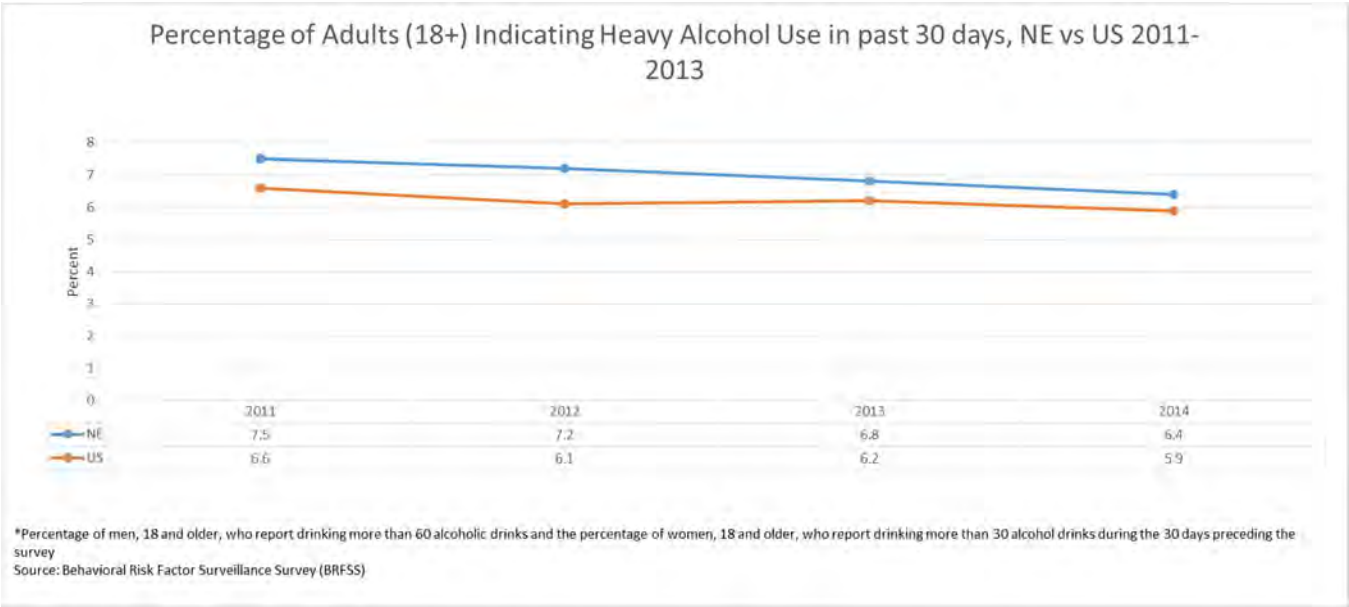
Compared to the Nation

In 2014, adults in Nebraska were similar to adults nationally to report heavy alcohol use, 6.4 percent and 5.9 percent, respectively.

Trends

As shown in figure 2.5 Nebraska has a significantly higher percentage of adults who are heavy alcohol users compared to the U.S. population for years 2011 and 2012. The percentage of Nebraska adults who report heavy alcohol use has shown a decline over the period shown.

Figure 2.5



Adult Alcohol Consumption: Heavy Alcohol Use by Demographics

Differences by Age

Adults 18-34 were the most likely to report current heavy alcohol use with 18-24 year olds having the highest rate at 9.9 percent. Starting at age 35 the percentage reporting heavy alcohol use declines from seven percent for 35-44 year olds to a low of 1.7 percent for those 85 and older.

Differences by Gender

As with other alcohol use questions there is a significant difference between males and females for heavy alcohol use. Males are significantly more likely (8.1 percent) to report they current heavy alcohol use then females (5.9 percent) for the years 2011-2014 combined.

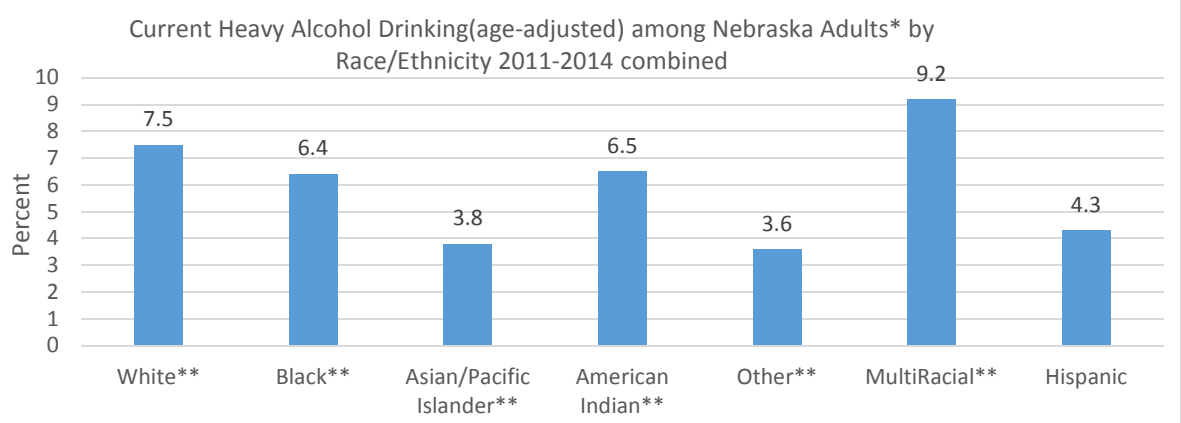
Differences by Urban/Rural

There is no significant differences between Nebraskans by urban and rural location. Adults living within rural counties reported the highest percentage of current heavy drinking (7.5 percent) for the years 2011-2014, but the difference from more urban areas is not significant. Adults in Urban-Large counties reported the next highest percentage of current heavy drinking (7.2 percent), while those in small urban counties reported the lowest percentage (6.6 percent), but again all differences are not statistically significant.

Differences by Race/Ethnicity

When looking at differences in current heavy drinking from 2011 to 2014, beyond differences in age (age-adjustment used), there were no other significant differences. Multi-racial respondents reported the highest percentage (9.2 percent). The three lowest percentages were Asian (3.8 percent), other race (3.6 percent) and Hispanic (4.3 percent). Figure 2.6 provides a breakdown of current heavy drinking among Nebraska adults by race/ethnicity.

Figure 2.6



*Percentage of men, 18 and older, who report drinking more than 60 alcoholic drinks and the percentage of women, 18 and older, who report drinking more than 30 alcoholic drinks during the 30 days preceding the survey
**Non-Hispanic
Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Adult Alcohol Consumption: Alcohol Use by Pregnant Women

The Pregnancy Risk Assessment Monitoring System (PRAMS) collects data from pregnant women regarding health behaviors and attitudes. The current survey data comes from surveys completed between 2000 and 2011. PRAMS includes questions about alcohol use before and during pregnancy.

Alcohol and Pregnancy Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Trend
Alcohol use among pregnant women during the three months before pregnancy	PRAMS	2011	64.7%	Increasing
Alcohol use among pregnant women during the last three months of pregnancy	PRAMS	2011	6.0%	Increasing

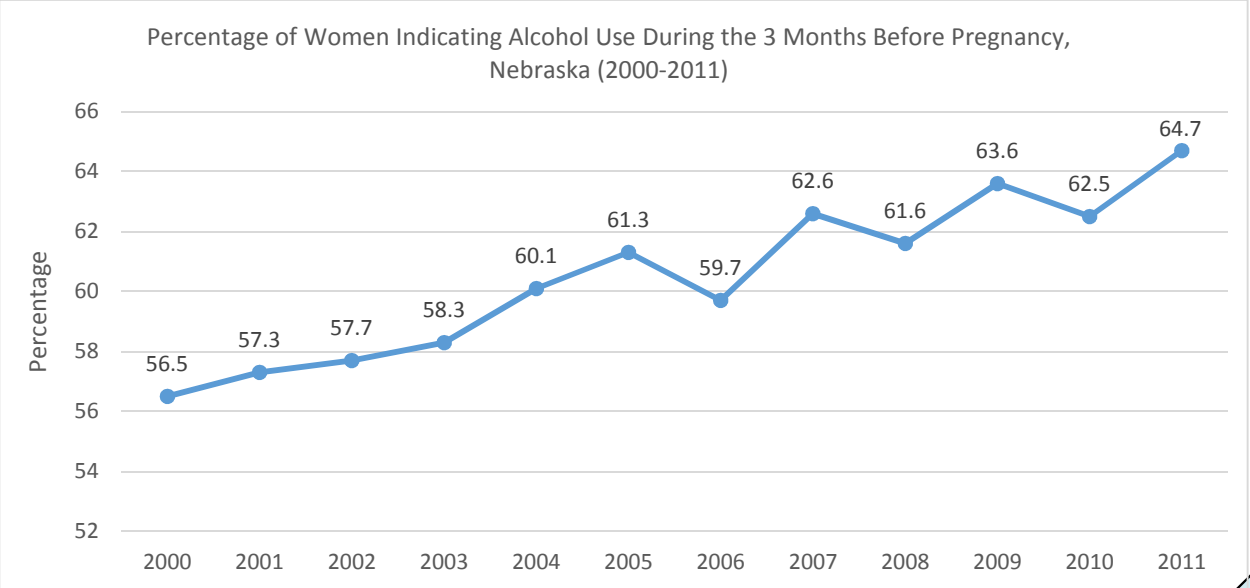
Current Levels of Alcohol Use before Pregnancy

PRAMS asked women following their delivery if they have used alcohol during the three months before their pregnancies. In 2011, nearly two in three Nebraska women who were pregnant (64.7 percent), reported using alcohol during the three months before pregnancy.

Trends

As shown by Figure 2.7 the percentage reporting alcohol use before pregnancy has increased steadily since 2000. In 2000, 56.5 percent reported using alcohol during the three months before pregnancy and by 2011 that percent has increased to 64.7 percent.

Figure 2.7



Source: Pregnancy Risk Assessment Monitoring System (PRAMS), 2000-2011.

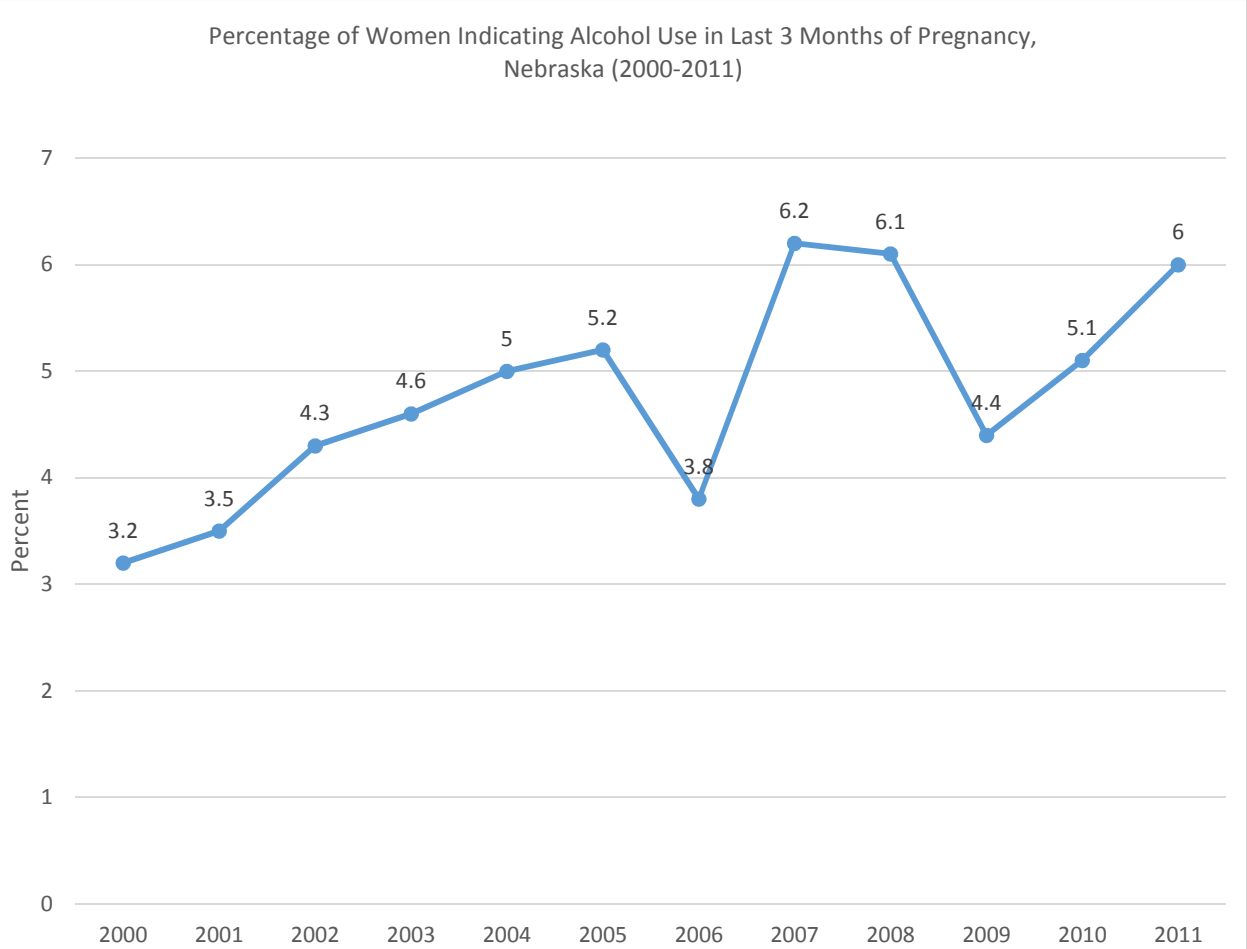
Current Levels of Alcohol Use during Pregnancy

PRAMS asked women following their delivery if they have used alcohol during the last three months of their pregnancies. In 2011, nearly six percent of Nebraska women who were pregnant, reported using alcohol during the last three months of pregnancy.

Trends

As shown by Figure 2.8 the percentage reporting alcohol use during pregnancy has increased with some variability since 2000. In 2000 3.2 percent reported using alcohol during the last three months of pregnancy and by 2011 that percent has nearly doubled to six percent.

Figure 2.8



Source: Pregnancy Risk Assessment Monitoring System (PRAMS), 2000-2011.

Young Adult Alcohol Consumption in Nebraska

When looking at alcohol use data it is consistently shown that young adults (ages 19 to 25) have the highest level of alcohol use and consequences along with the fact that many are not legally able to use alcohol. In order to understand this age group better Nebraska has sponsored the Nebraska Young Adult Alcohol Opinion Survey to understand alcohol use and consumption patterns among this age group. The survey has been conducted in 2010, 2012 and the latest survey was completed in 2013.

Young Adult Alcohol Consumption in Nebraska: Current Alcohol Use

Young Adult Current Alcohol Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Trend
Current Alcohol Use among Adults 19-25	NYAAOS	2013	68.1%	128,000	Stable

Current Alcohol Use in Nebraska among Young Adults

In 2013, more than two in every three Nebraska young adults (68 percent), an estimated 128,000 young adults, reported drinking alcohol during the 30 days preceding the survey.

Trends

From 2010 to 2014 the percent of Nebraska young adults who report recent consumption of alcohol has remained fairly stable with 67.9 percent of young adults reporting past month alcohol use in 2010 and 68.1 percent reporting it in 2013.

Young Adult Alcohol Consumption: Current Alcohol Use by Demographics

Differences by Age

Young adults 23-25 years of age were the most likely to report current alcohol use (78 percent). Young adults ages 21-22, however, have a very similar percentage (75.7 percent). Young adults 19-20 years of age have a significantly lower percentage (47.9 percent), however, they are not legally able to consume alcohol.

There is no significant difference between males and females. Males (67.9 percent) and females (68.4 percent) have nearly identical percentages of current alcohol use.

Young Adult Alcohol Consumption in Nebraska: Binge Drinking

Young Adult Binge Drinking Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Trend
Binge Drinking among Adults 19-25	NYAAOS	2013	44.9%	84,000	Stable
Binge Drinking among Adults who are Past Month Alcohol Users 19-25	NYAAOS	2013	66.3%	84,000	Stable
Binge Drinking More Than Once in the Past Month among Adults 19-25	NYAAOS	2013	33.0%	62,000	Stable

Binge Drinking in Nebraska among Young Adults

- In 2013, nearly half of Nebraska young adults (45 percent), an estimated 84,000 young adults, reported binge drinking during the 30 days preceding the survey.
- Just looking at those who report drinking alcohol a much higher percentage, two in three, (66 percent) reported binge drinking.
- One in three (33 percent), an estimated 62,000 young adults, reported binge drinking more than once a month.

Trends

- From 2010 to 2013 the percent of Nebraska young adults who reported binge drinking has remained fairly stable with 43.8 percent of young adults reporting past month binge drinking in 2010 and 44.9 percent reporting it in 2013.
- Similarly looking at binge drinking just among those who drink alcohol 64.8 percent reported binge drinking in 2010 and 66.3 percent reported this in 2013.
- The percentage of those who binge drank more than once a month has been fairly stable with 31.7 percent reporting binge drinking more than once in 2010 and 33 percent reporting this in 2013.

Young Adult Alcohol Consumption: Binge Drinking by Demographics

Differences by Age

- Young adults 21-22 years of age were the most likely to report current binge drinking (51.7 percent). Young adults ages 23-25, however, have a very similar percentage (49 percent). Young adults 19-20 years of age have a significantly lower percentage (33.3 percent).
- When looking at just those young adults who report drinking alcohol in the past month there is no significant difference between 19-20 year olds (70.1 percent), 21-22 year olds (68.7 percent) and 23-25 year olds (63 percent) in past month binge drinking.
- Similar to overall binge drinking, young adults 21-22 years of age were the most likely to report binge drinking more than once (39.2 percent). Young adults ages 23-25, however, have a very similar percentage (35.1 percent). Young adults 19-20 years of age have a significantly lower percentage (24.5 percent).

Differences by Gender

- There is no significant difference between males and females in current binge drinking. Males (45.9 percent) and females (43.9 percent) have nearly identical percentages of current binge drinking.
- When looking at just young adults who report drinking alcohol in the past month there is also no significant difference between males and females. Males (68.2 percent) and females (64.3 percent) have very similar percentages of current binge drinking.
- There is a significant difference among gender when looking at binge drinking more than once per month. Males (35.7 percent) are significantly more likely than females (30.2 percent) to report binge drinking more than once.

Young Adult Perceptions about Alcohol

The Nebraska Young Adult Alcohol Opinion Survey also asked questions looking at perceived risks of binge drinking and perceptions about how wrong it is for individuals to drink alcohol or become intoxicated with alcohol.

Young Adult Perceptions about Alcohol: Perceived Risks

Young Adult Perceived Great Risk of Binge Drinking Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Trend
Perceive Great Risk from Binge Drinking among Adults 19-25	NYAAOS	2013	30.1%	Stable

Current Perceived Great Risk of Binge Drinking in Nebraska among Young Adults

In 2013, almost one of three Nebraska young adults (30 percent) reported perceiving great risk from binge drinking.

Trends

From 2010 to 2013 the percent of Nebraska young adults who report perceiving great risk from binge drinking has remained fairly stable with 32.1 percent of young adults reporting great risk from binge drinking in 2010 and 30.1 percent reporting it in 2013.

Young Adult Perceptions about Alcohol: Perceived Risks by Demographics

Differences by Age

There was no significant difference between 19-20 year olds (33. percent), 21-22 year olds (30.9 percent) and 23-25 year olds (27.4 percent) who reported perceiving great risk of binge drinking in 2013.

Differences by Gender

Females are significantly more likely (37.3 percent) to perceive great risk from binge drinking then males (23.2 percent) in 2013.

Young Adult Perceptions about Alcohol: Social Norms about Underage Drinking

Young Adult Norms about Underage Drinking Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Trend
Wrong or Very Wrong for Individuals Under 18 Years Old to Have One or Two Drinks among Adults 19-25	NYAAOS	2013	81.2%	Stable
Wrong or Very Wrong for Individuals 18-20 Years Old to Have One or Two Drinks among Adults 19-25	NYAAOS	2013	53.7%	Stable

Young Adult Views about Underage Drinking In Nebraska

- In 2013, four out of five of Nebraska young adults (81 percent) stated that is was wrong or very wrong for individuals under 18 years of age to have one or two drinks of alcohol.
- A smaller percentage (54 percent) stated that it was wrong or very wrong for individuals 18-20 years of age to have one or two drinks of alcohol.

Trends

- From 2012 to 2013, the question was not asked in 2010, the percent of Nebraska young adults who state that it is wrong or very wrong for individuals under 18 years of age to have one or two drinks of alcohol has remained fairly stable with 80 percent in 2012 and 81.2% in 2013.
- From 2010 to 2013 the percent of Nebraska young adults who state that it is wrong or very wrong for individuals 18-20 years of age to have one or two drinks of alcohol has remained fairly stable with 51.8 percent of young adults stating it is wrong or very wrong in 2010 and 53.7 percent stating it in 2013.

Young Adult Perceptions about Alcohol: Social Norms about Underage Drinking by Demographics

Differences by Age

- Most young adults 21-22 (83.1 percent) and 23-25 (83.5 percent) report it is wrong or very wrong for individuals under 18 years of age to have one or more drinks while those 19-20 (76.4 percent) are less likely to view that this behavior is wrong or very wrong.
- A majority of young adults 21-22 (56.8 percent) and 23-25 (58 percent) report it is wrong or very wrong for individuals 18-20 years of age to have one or more drinks while those 19-20 (45.1 percent) are less likely to view this as wrong or very wrong.

Differences by Gender

- Females are significantly more likely (84.5 percent) to state it is wrong or very wrong for individuals under 18 to have one or more drinks of alcohol then males (78 percent).
- There is no significant difference, however, when looking at how wrong it is for individuals 18-20 years old have one or more drinks of alcohol by gender. Both males (51.3 percent) and females (56.3 percent) have similar perceptions of how wrong it is for those 18-20 years of age to drink alcohol.

Young Adult Perceptions about Alcohol: Social Norms about Binge Drinking

Young Adult Norms about Binge Drinking Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Trend
Wrong or Very Wrong for Individuals Under 18 Years Old to Drink five or more drinks at one time among Adults 19-25	NYAAOS	2013	93.0%	Stable
Wrong or Very Wrong for Individuals 18-20 Years Old to Drink five or more drinks at one time among Adults 19-25	NYAAOS	2013	78.8%	Increasing
Wrong or Very Wrong for Individuals 21Years Old and older to Drink five or more drinks at one time among Adults 19-25	NYAAOS	2013	21.9%	Stable

Young Adult Views about Binge Drinking In Nebraska

- In 2013, more than nine out of 10 of Nebraska young adults (93 percent) stated that is was wrong or very wrong for individuals under 18 years of age to have five or more drinks of alcohol at one time.
- A smaller percentage (79 percent) stated that it was wrong or very wrong for individuals 18-20 years of age to have five or more drinks of alcohol at one time.
- About one in five (22 percent) state it was wrong or very wrong for individuals 21 and older to have five or more drinks of alcohol at one time.

Trends

- From 2012 to 2013, the questions was not asked in 2010, the percent of Nebraska young adults who state that it is wrong or very wrong for individuals under 18 year of age to have five or more drinks of alcohol at one time has dropped slightly with 95.5 percent stating it is wrong or very wrong in 2012 and 93 percent stating it in 2013.
- From 2012 to 2013, the question wording was changed in 2012, the percent of Nebraska young adults who state that it is wrong or very wrong for individuals 18-20 years of age to have five or more drinks of alcohol at one time has increased with 71.2 percent of young adults stating it is wrong or very wrong in 2012 and 78.8 percent stating it in 2013.
- From 2012 to 2013, the questions wording was changed in 2012, the percent of Nebraska young adults who state that it is wrong or very wrong for individuals 21 years of age and older to have five or more drinks of alcohol at one time has remained fairly stable with 18.8 percent of young adults stating it is wrong or very wrong in 2012 and 21.9 percent stating it in 2013.

Young Adult Perceptions about Alcohol: Social Norms about Binge Drinking by Demographics

Differences by Age

- Young adults 21 and older are more likely to disapprove of underage binge drinking for individuals under 18 years of age. Most young adults 21-22 (94.6 percent) and 23-25 (94.5 percent) report it is wrong or very wrong for individuals under 18 years of age to have five or more drinks at one time while those 19-20 (89.7 percent) are less likely to view that are wrong or very wrong.
- Young adults 21 and older are also more likely to disapprove of underage binge drinking for individuals 18-20 years of age. Approximately four out of five young adults 21-22 (80.5 percent) and 23-25 (83.8 percent) report it is wrong or very wrong for individuals 18-20 years of age to have five or more drinks at one time while those 19-20 (70.7 percent) are less likely to view that are wrong or very wrong.
- There is no significant difference for disapproval of binge drinking for individuals 21 years and older by age group. Slightly more than one in five adults 19-20 (22.9 percent), 21-22 (22.7 percent) and 23-25 (20.5 percent) view it is wrong or very wrong for individuals 21 years and older to have five or more drinks at one time.

Differences by Gender

- There is no significant difference between genders when looking at whether it is wrong or very wrong for individuals under 18 years of age to have five or more drinks of alcohol at one time. More than nine out of ten males (91.7 percent) and females (94.5 percent) view that as wrong or very wrong.
- Females are significantly more likely (82.9 percent) to state it is wrong or very wrong for individuals 18-20 to have five or more drinks of alcohol at one time than males (74.9 percent).
- There is no significant difference when looking at how wrong it is for individuals 21 years and older have five or more drinks of alcohol at one time by gender. Both males (21.8 percent) and females (22 percent) have similar perceptions of how wrong it is for those 21 years and older of age to have five or more drinks of alcohol at one time.

Youth Alcohol Consumption: Lifetime Use

Data concerning youth alcohol consumption are available through the Youth Risk Behavior Survey (YRBS). The YRBS is part of the National Youth Risk Behavioral Surveillance System that was established by the Centers for Disease Control and Prevention (CDC). The YRBS targets youth enrolled in graded 9-12 attending public schools in Nebraska.

Lifetime Alcohol Use by Youth Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Youth Lifetime Alcohol Use among Grades 9-12	YRBS	2013	52.1%	52,000	66.2%	Lower	Decreasing

Lifetime Alcohol Use in Nebraska among Youth

In 2013, approximately half of Nebraska high school students (52.1 percent), an estimated 52,000 youth, reported drinking alcohol during their lifetime.

Compared to the Nation

In 2013, youth in Nebraska were less likely than youth nationally to ever use alcohol, 52.1 percent and 66.2 percent, respectively, a 14.1 percent difference.

Trends

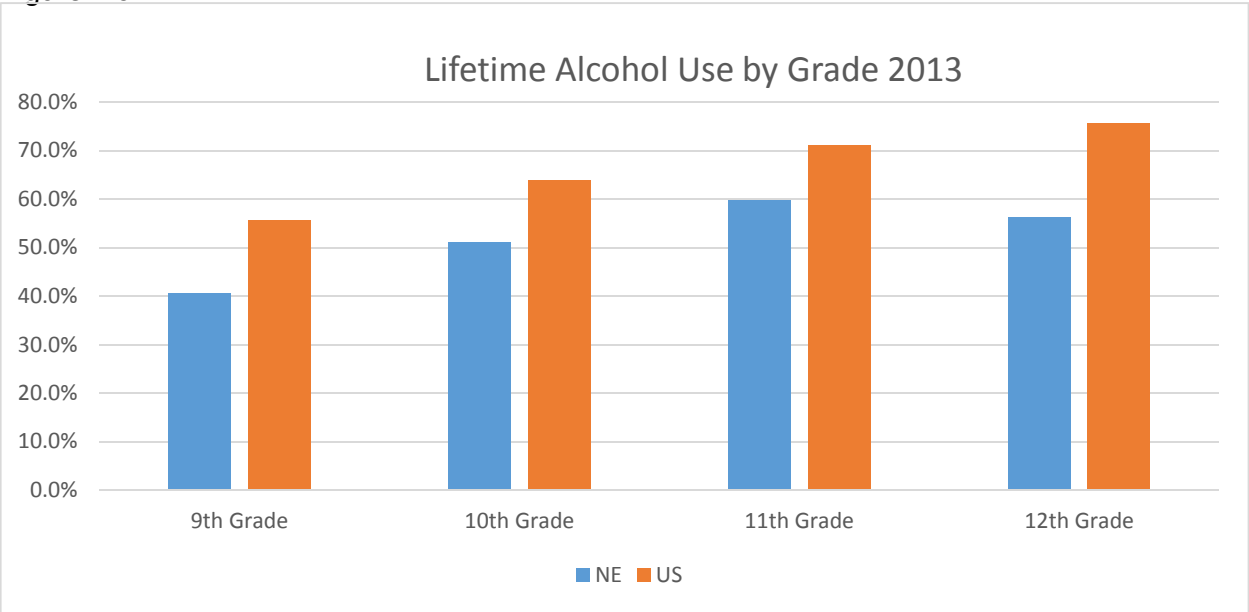
There has been a decline in the rate of lifetime use by high school students. In 2011 three out of every five (60.6 percent) reported drinking alcohol sometime in their life but in 2013 52.1 percent reported drinking alcohol.

Youth Alcohol Consumption: Lifetime Use by Demographics

Differences by Grade

Lifetime alcohol use increases as youth move up into higher grades. In 9th grade less than half (40.7 percent) reported alcohol use, but by 12th grade nearly three in five (56.2 percent) reported alcohol use. In each grade the U.S. rate is higher than the Nebraska rate (Figure 2.9).

Figure 2.9



Differences by Gender

Lifetime alcohol use does not differ significantly by gender. Fifty percent of high school males report lifetime alcohol use while 54.2 percent of females report lifetime alcohol use.

Youth Alcohol Consumption: Past Month Use

While alcohol use rates looking from a lifetime perspective provide information on understanding experimentation with alcohol, 30 days use rates provide a better estimate of recent and/or current alcohol use.

Current Alcohol Use by Youth Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Youth Current Alcohol Use among Grades 9-12	YRBS	2013	22.1%	22,000	34.9%	Lower	Decreasing

Current Alcohol Use in Nebraska among Youth

In 2013, approximately one in five of Nebraska high school students (22.1 percent), an estimated 22,000 youth, reported drinking the 30 days preceding the survey.

Compared to the Nation

In 2013, youth in Nebraska were less likely than youth nationally to currently use alcohol, 22.1 percent and 34.9 percent, respectively.

Trends

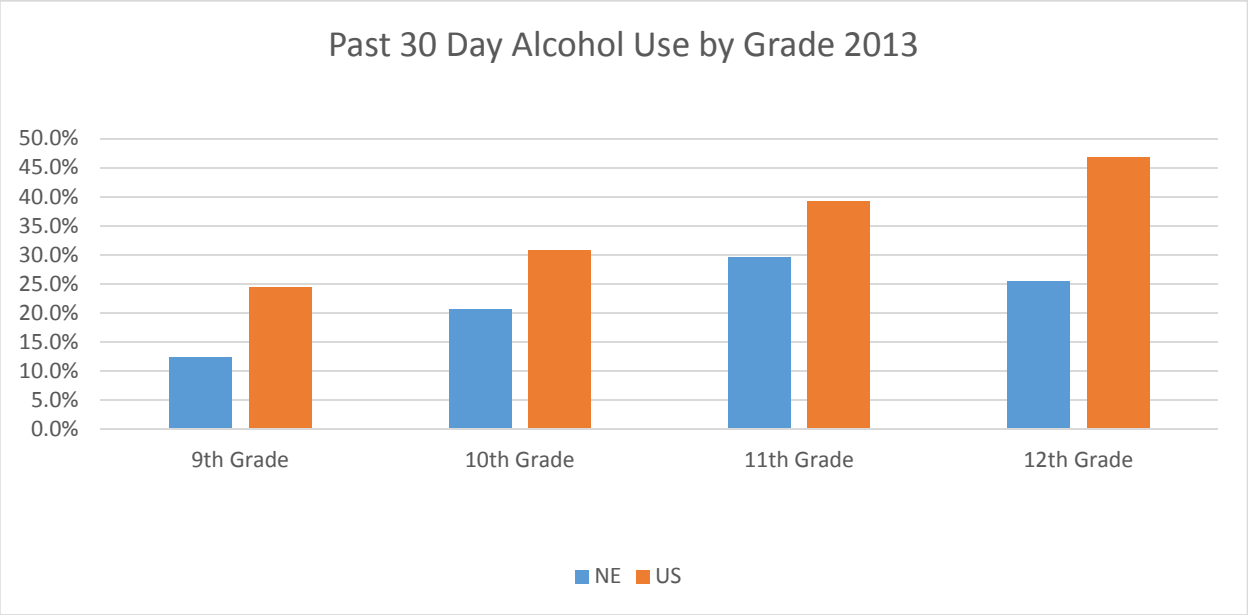
There has been a slight decline in the rate of past month use by high school students. In 2011 one in four (26.6 percent) reported drinking alcohol in the past 30 days but in 2013 22.1 percent reported drinking alcohol in the past 30 days.

Youth Alcohol Consumption: Past Month Use by Demographics

Differences by Grade

Past month alcohol use increases as youth move up into higher grades. In 9th grade one in eight (12.4 percent) reported alcohol use but by 12th grade the percent had doubled (25.5 percent) reported alcohol use in the past month (Figure 2.10).

Figure 2.10



Differences by Gender

Past month alcohol use does not differ significantly by gender. One in five (20.8 percent) males report past month alcohol use while 23.5 percent of females report past month alcohol use.

Youth Alcohol Consumption: Binge Drinking

Binge drinking, which is indicated by the consumption of five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey on the YRBS is associated with injuries, motor vehicle crashes, violence, fetal alcohol spectrum disorder and a number of other chronic and acute conditions.

Binge Alcohol Use by Youth Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Youth Binge Alcohol Use among Grades 9-12	YRBS	2013	13.6%	14,000	20.8%	Lower	Stable

Binge Alcohol Use in Nebraska among Youth

In 2013, approximately one in seven of Nebraska high school students (13.6 percent), an estimated 14,000 youth, reported binge drinking the 30 days preceding the survey.

Compared to the Nation

In 2013, youth in Nebraska were less likely than youth nationally to binge drink, 13.6 percent and 20.8 percent, respectively.

Trends

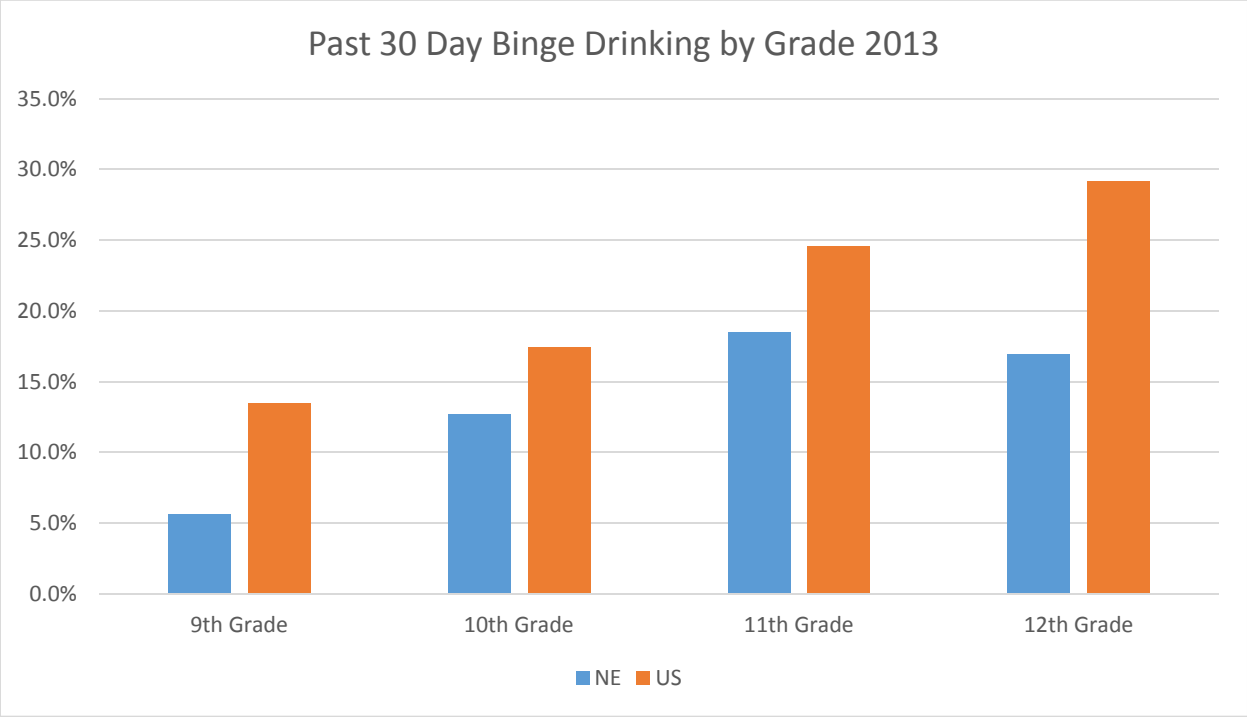
There has been a slight decline in the percent of high school students who binge drink but the difference is not significant. In 2011 one in six (16.4 percent) reported binge drinking alcohol in the past 30 days, but in 2013, 13.6 percent reported binge drinking alcohol in the past 30 days.

Youth Alcohol Consumption: Binge Drinking by Demographics

Differences by Grade

Similar to other alcohol use past month binge drinking increases as youth move up into higher grades. In 9th grade one in twenty (5.6 percent) reported past month binge drinking, but by 12th grade one in six (16.9 percent) reported binge drinking in the past month (Figure 2.11).

Figure 2.11



Differences by Gender

Past month binge drinking use does not differ by gender. One in seven (13.7 percent) males report past month binge drinking while 13.5 percent of females report past month binge drinking.

Youth Alcohol Consumption: Heavy Drinking

Heavy drinking, which is indicated by the consumption of ten or more drinks of alcohol in a row on one or more of the 30 days preceding the survey is a new question asked by the YRBS 2013 to determine heavy alcohol use in addition to binge drinking.

Heavy Alcohol Use by Youth Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Youth Heavy Alcohol Use among Grades 9-12	YRBS	2013	3.8%	4,000	6.1%	Non-significant	None

Heavy Alcohol Use in Nebraska among Youth

In 2013, approximately one in twenty six of Nebraska high school students (3.8 percent), an estimated 4,000 youth, reported heavy drinking the 30 days preceding the survey.

Compared to the Nation

In 2013, youth in Nebraska were slightly less likely but not significantly more likely than youth nationally to use alcohol heavily, 3.8 percent and 6.1 percent, respectively.

Trends

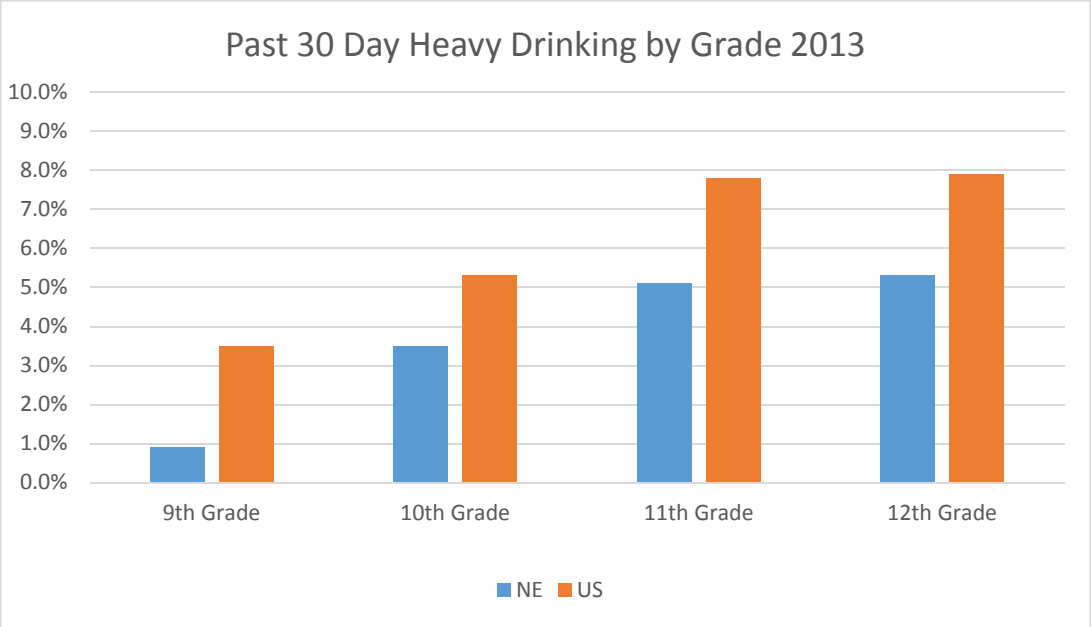
There are no trends since this is a new question.

Youth Alcohol Consumption: Heavy Drinking by Demographics

Differences by Grade

Similar to other alcohol use past month heavy drinking increases as youth move up into higher grades. In 9th grade less than one percent (0.9 percent) reported past month heavy drinking but by 12th grade that rate had increased five times (5.3 percent) (Figure 2.12).

Figure 2.12



Differences by Gender

Unlike other alcohol comparisons there is a significant difference by gender for heavy drinking. Males are significantly more likely (5.4 percent) to have consumed ten or more drinks in a row in the past month then females (two percent).

Youth Alcohol Consumption: Early Initial Alcohol Use among Youth

Recent research has found an association between the age at which a person first uses alcohol and alcohol problems later in life. One proposed strategy to prevent alcohol dependence or abuse in adulthood is to delay the onset of alcohol use. According to a special 2003 National Survey on Drug Use and Health (NSDUH) report, persons reporting first use of alcohol before age 15 were more than five times as likely to have past year alcohol dependence or abuse compared with persons who first used alcohol at age 21 or older. The YRBS asked students if they have drank alcohol before the age of 13.

Early Initial Alcohol Use by Youth Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Youth Early Initial Alcohol Use (Before 13 years old) among Grades 9-12	YRBS	2013	12.9%	13,000	18.6%	Lower	Decreasing

Early Initial Alcohol Use in Nebraska among Youth

In 2013, approximately one in eight of Nebraska high school students (12.9 percent), an estimated 13,000 youth, reported they had their first use of alcohol before they were 13 years old.

Compared to the Nation

In 2013, youth in Nebraska were slightly less likely than youth nationally to have drank alcohol before age 13, 12.9 percent and 18.6 percent, respectively.

Trends

There has been a significant decrease in the percent of high school students who drink alcohol before age 13. In 2011 one in six (16.5 percent) indicated they had consumed alcohol before age 13 but that has dropped to 12.9 percent in 2013.

Youth Alcohol Consumption: Early Initial Alcohol Use among Youth by Demographics

Differences by Grade

Early initial alcohol use does not differ significantly by grade.

Differences by Gender

Early initial alcohol use does not differ significantly by gender. Males (14.8 percent) are about as likely as females (10.9 percent) to report using alcohol before age 13.

Consequences of Alcohol Consumption: Overview

Death due to alcohol consumption has multiple dimensions. Alcohol-related deaths can result from chronic use (e.g., alcoholic cirrhosis of the liver) as well as acute use (e.g., alcohol involvement in a motor vehicle crash). In addition, alcohol-related deaths are either classified as directly (100 percent) attributable to alcohol use (e.g., alcohol poisoning) or partially attributable to alcohol use (those in which alcohol is often a contributing factor; e.g., homicide). For conditions in which alcohol is not the direct cause of death, but rather a contributing factor, alcohol-attributable fractions (AAFs) can be applied to death certificate data to generate estimates of the number of alcohol-related deaths. Estimates of the number of alcohol-related deaths presented in this report were calculated using the Centers for Disease Control and Prevention (CDC) Alcohol-Related Disease Impact (ARDI) software. Table 2.2 shows alcohol related causes of death and injury and the percentage that can be attributed to alcohol.

Table 2.2

Causes of Death or Injury or Diseases That are Attributable to Alcohol	
Cause/Disease	**Percentage Directly Attributable to Alcohol**
Chronic Causes	
Acute pancreatitis	24%
Alcohol abuse	100%
Alcohol cardiomyopathy	100%
Alcohol dependence syndrome	100%
Alcohol polyneuropathy	100%
Alcohol-induced chronic pancreatitis	100%
Alcoholic gastritis	100%
Alcoholic liver disease	100%
Alcoholic myopathy	100%
Alcoholic psychosis	100%
Chronic pancreatitis	84%
Degeneration of nervous system due to alcohol	100%
Epilepsy	15%
Esophageal varices	40%
Fetal alcohol syndrome	100%
Fetus and newborn affected by maternal use of alcohol	100%
Gastro esophageal hemorrhage	47%
Liver cirrhosis, unspecified	40%
Portal hypertension	40%
Spontaneous abortion (females only)	04%
Acute Causes	
Air-space transport	18%
Alcohol poisoning	100%
Aspiration	18%
Child maltreatment	16%

Drowning	34%
Excessive blood alcohol level	100%
Fall injuries	32%
Fire injuries	32%
Firearm injuries	18%
Homicide	47%
Hypothermia	42%
Motor-vehicle non-traffic crashes	18%
Motor-vehicle traffic crashes	
Occupational and machine injuries	18%
Other road vehicle crashes	18%
Poisoning (not alcohol)	29%
Suicide	23%
Suicide by and exposure to alcohol	100%
Water transport	18%
Demographics	
Males	
0-14	15%
15-19	26%
20-24	46%
25-34	49%
35-44	47%
45-54	41%
55-64	28%
65+	12%
Females	
0-14	15%
15-19	20%
20-24	36%
25-34	37%
35-44	34%
45-54	28%
55-64	16%
65+	08%
Source: Centers for Disease Control and Prevention. Alcohol Related Disease Impact (ARDI) application, 2013. Available at http://apps.nccd.cdc.gov/DACH_ARDI/Default.aspx.	

Alcohol-Related Mortality and Morbidity: Alcoholism Fatalities

There are a number of deaths each year attributable to alcohol use. The CDC calculates the number of alcohol-related deaths using their Alcohol-Related Disease Impact (ARDI) Software. There were an average of 542 deaths each year from 2006 to 2010 from alcohol related causes estimated through the ARDI software. Both chronic and acute causes contribute nearly equally to death with 55 percent from chronic causes and 45 percent from acute causes.

In 2010 with an estimated 542 deaths due to alcohol-attributable causes it becomes the 7th most common cause of death in Nebraska, following cancer, 3,437; heart disease, 3,344; chronic lung disease 903; cerebrovascular disease, 877; accidents, 696, and Alzheimer's disease, 565.

Table 2.3 Alcohol-Related Death Indicator Summary Table

Indicator	Data Source	Year	Number of Deaths Nebraska*	Number of Deaths U.S.*
Alcohol-Related Death Estimate	ARDI	2010	542	106,434
Centers for Disease Control and Prevention. Alcohol Related Disease Impact (ARDI) application, 2013. Available at http://nccd.cdc.gov/DPH_ARDI/Default.aspx.				

Alcohol-Related Mortality and Morbidity: Alcoholism Fatalities by Demographics

Differences by Gender

From 2006 to 2010 males have nearly twice the number of deaths due to alcohol for both chronic and acute causes (Table 2.4).

Table 2.4 Alcohol-Related Death by Gender and Type

Cause	Male Deaths	Female Deaths	Overall Deaths
Chronic Causes	206	92	298
Acute Causes	164	80	244
Total for All Alcohol-Attributable Causes	370	172	542
Deaths attributable to Alcohol from 2006 to 2010			
Centers for Disease Control and Prevention. Alcohol Related Disease Impact (ARDI) application, 2013. Available at http://nccd.cdc.gov/DPH_ARDI/Default.aspx.			

Differences by Age

From 2006 to 2010 those aged 65 or more have the highest number of deaths followed by those 50-64 years of age. For those aged 50 or more a majority of the deaths came from chronic alcohol use while for those 0-34 almost all of the deaths come from acute alcohol use. While the number of deaths is higher for those 65 and older the percent of deaths is higher from alcohol-attributable causes for those younger than 35. For those under twenty 7.5 percent of all deaths came from alcohol-attributable causes compared to 1.8 percent of those 65 and older from alcohol-attributable causes. For those 20-34, 23 percent of all deaths are from alcohol-attributable causes (Table 2.5).

Table 2.5 Alcohol-Related Death by Age and Type

Cause	0-19	20-34	35-49	50-64	65+	Overall Deaths
Chronic Causes	0	2	40	97	150	289
Acute Causes	20	60	57	39	68	244
Total for All Alcohol-Attributable Causes	20	62	97	136	218	533
Total for All Causes of Death	266	270	639	2188	11808	15171

Deaths attributable to Alcohol from 2006 to 2010 from the Centers for Disease Control and Prevention. Alcohol Related Disease Impact (ARDI) application, 2013. Available at http://nccd.cdc.gov/DPH_ARDI/Default.aspx.

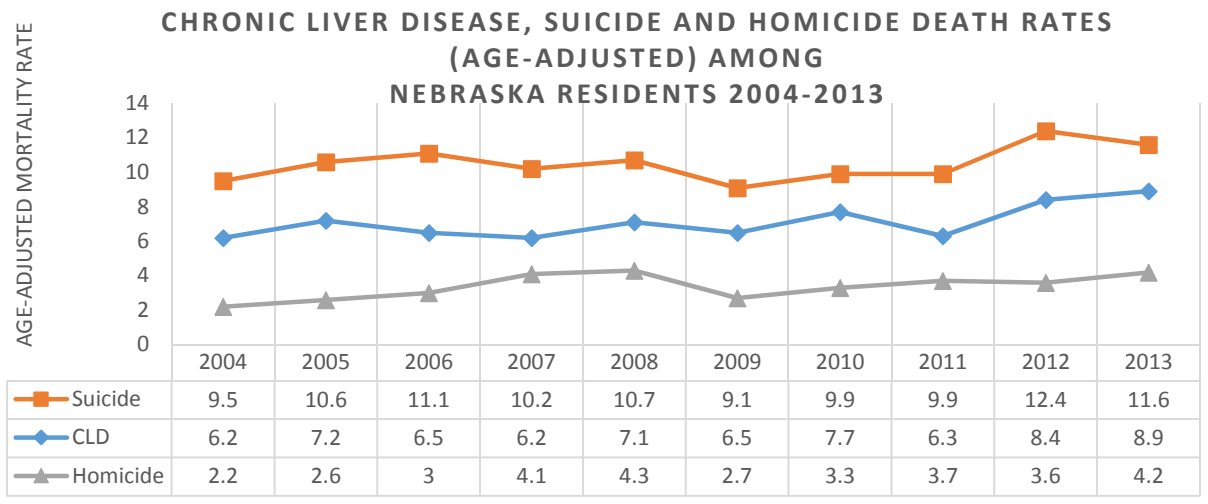
Alcohol-Related Mortality and Morbidity: Specific Causes of Death

Table 2.6 Alcohol-Related Death Indicator Summary Table by Causes of Death

Indicator	Data Source	Year	Nebraska AA Rate*	Number of Deaths	National AA Rate*	Nebraska vs. Nation	Trend
Chronic Liver Disease	Vital Records**	2013	8.9	181	10.2	Lower	Increasing (04-13)
Death due to homicide	Vital Records**	2013	4.2	76	5.2	Lower	Increasing (04-13)
Death due to suicide	Vital Records**	2013	11.6	220	12.6	Lower	Increasing (04-13)
*Age-Adjusted death rate per 100,000 population							
**Nebraska data were obtained from Nebraska vital records. U.S. data were obtained from CDC Wonder (on-line)							

When looking at specific causes of death, there are three causes where alcohol is often a contributing factor, chronic liver disease, homicide, and suicide (Figure 2.13).

Figure 2.13



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Suicide	9.5	10.6	11.1	10.2	10.7	9.1	9.9	9.9	12.4	11.6
CLD	6.2	7.2	6.5	6.2	7.1	6.5	7.7	6.3	8.4	8.9
Homicide	2.2	2.6	3	4.1	4.3	2.7	3.3	3.7	3.6	4.2

Source: Nebraska Vital Records

In 2013, chronic liver disease killed 181 Nebraska residents (Table 2.7). While not all chronic liver disease deaths result from alcohol use, alcohol abuse is the most common cause of liver disease.

Table 2.7 Chronic Liver Disease and Cirrhosis				
Year	**Nebraska AA Rate***	**Number of Deaths**	**National AA Rate***	**Nebraska vs. Nation**
2008	7.1	134	9.2	Lower
2009	6.5	136	9.1	Lower
2010	7.7	157	9.4	Lower
2011	6.3	129	9.7	Lower
2012	8.4	175	9.9	Lower
2013	8.9	181	10.2	Lower
*Age-Adjusted death rate per 100,000 population				

In 2013, homicide killed 76 Nebraska residents (Table 2.8). National estimates suggest that alcohol is involved in 47 percent of all homicide deaths among persons 15 and older.

Table 2.8 Homicide				
Year	**Nebraska AA Rate***	**Number of Deaths**	**National AA Rate***	**Nebraska vs. Nation**
2008	4.3	78	5.9	Lower
2009	2.7	48	5.5	Lower
2010	3.3	58	5.3	Lower
2011	3.7	64	5.3	Lower
2012	3.6	65	5.4	Lower
2013	4.2	76	5.2	Lower
*Age-Adjusted death rate per 100,000 population				

In 2013, suicide killed 220 Nebraska residents (Table 2.9). National estimates suggest that alcohol is involved in 23 percent of all suicide deaths among persons 15 and older. For more about Suicide mortality see Section V.

Table 2.9 Suicide				
Year	**Nebraska AA Rate***	**Number of Deaths**	**National AA Rate***	**Nebraska vs. Nation**
2008	10.7	191	11.6	Lower
2009	9.1	170	11.8	Lower
2010	9.9	186	12.1	Lower
2011	9.9	184	12.3	Lower
2012	12.4	232	12.6	Lower
2013	11.6	220	12.6	Lower
*Age-Adjusted death rate per 100,000 population				

Alcohol-Related Mortality and Morbidity: Specific Causes of Death by Demographics

Differences by Gender

Deaths in Nebraska due to chronic liver disease, suicide, and homicide were all higher for males than females.

Differences by Urban/Rural

Deaths in Nebraska due to chronic liver disease, suicide, and homicide varied by urban or rural location.

- For chronic liver disease there was no difference between urban large, urban small or rural counties.
- For suicide urban large counties had significantly lower mortality rates than either urban small or rural counties.
- For homicide urban large counties have significantly higher mortality rates than either urban small or rural counties.

Differences by Race/Ethnicity

Deaths in Nebraska due to chronic liver disease, suicide, and homicide had some significant differences based upon race and ethnicity.

- Native Americans have a significantly higher mortality rate (57.5 percent) for chronic liver disease than Whites (7.2 percent).
- Whites have a significantly higher mortality rate (11 percent) for suicide compared to either Blacks (6.2 percent) or Hispanics (5.2 percent).
- Hispanics have a significantly higher mortality rate (12.4 percent) for chronic liver disease compared to Whites (7.2 percent) and a higher rate for homicide (five percent) compared to whites (two percent).
- African Americans have a significantly higher mortality rate (26.3 percent) for homicide compared to Whites (two percent).

Alcohol-Related Mortality and Morbidity: Alcohol-Attributable Hospitalizations

The Nebraska hospital discharge database and the Nebraska trauma registry database are two data sources in Nebraska that contain information on hospital care. For this report, Nebraska hospital discharge data were limited to information on inpatient care received at acute care hospitals in Nebraska while trauma registry data were limited to inpatient care received through seven trauma centers within Nebraska that were reporting data into the Nebraska Trauma Registry (NTR) at the time of the report.

Alcohol-Related Mortality and Morbidity: Inpatient Alcohol-Attributable Hospitalizations Data Source: Nebraska Hospital Discharge Data

In 2013, there were 10,622 hospitalizations in Nebraska, this includes non-residents who received hospitalizations in Nebraska, in which an alcohol-attributable condition was listed as either the primary reason for or a contributing factor to the hospitalization. The number of alcohol-attributable hospitalizations has doubled since 2004 when there were 5,840. In addition to the hospitalizations in which alcohol was a direct contributor, it is likely that alcohol use indirectly contributed to a much larger number of hospitalizations. For example, alcohol use can contribute to hospitalizations indirectly through altering judgment that may lead to injury or through contributing to chronic health problems such as high blood pressure.

Inpatient Alcohol-Attributable Hospitalizations by Demographics

Differences by Age

In 2013, nearly nine in 10 inpatient hospitalizations occurred for those between the ages 18-64. Those aged 45-64 had the largest amount with 4,920 hospitalizations occurring for this age group.

Differences by Gender

In 2013, there were nearly twice as many alcohol-attributable hospitalizations for males (7,451) as there were for females (3,165).

Alcohol-Related Mortality and Morbidity: Trauma Center Hospitalizations Data Source: Nebraska Trauma Registry

In contrast to hospital discharge data, patients receiving care at Nebraska trauma centers are tested (at the discretion of each trauma center) for alcohol and drugs in their system at the time of admission. As a result, information is available on the patient's blood alcohol concentration (BAC) at the time of admission. Again, the following results are limited to inpatient hospitalizations through seven trauma centers currently reporting data into the NTR.

Alcohol Involvement in Trauma Center Hospitalizations

In 2014, there were 10,124 inpatient trauma center hospitalizations among Nebraska residents, of which 1,087 (10.7 percent) were among patients who had alcohol in their system at the time of admission. When separating hospitalizations by BAC, 260 hospitalizations (2.6 percent) had a BAC <0.08 while 827 (8.1 percent) had a BAC >0.08 (the level defined as legally intoxicated for Nebraska adults 21 and older). It is possible that there was a larger number of hospitalizations among patients with a BAC <0.08 (in particular) who may not have been tested as a result of failing to show visible signs of impairment.

When comparing hospitalization demographically, males were more likely than females to have alcohol in their system at the time of admission (14 percent and 6.4 percent, respectively) while patients18-24 (21.2 percent), 25-34 (25.2 percent), and 35-44(19.6 percent) were the most likely age-groups to have legally intoxicating blood alcohol levels in their system. (Table 2.10).

Table (2.10) Trauma Center Hospitalizations in which Alcohol was in Patients System at the Time of Admission*, 2014

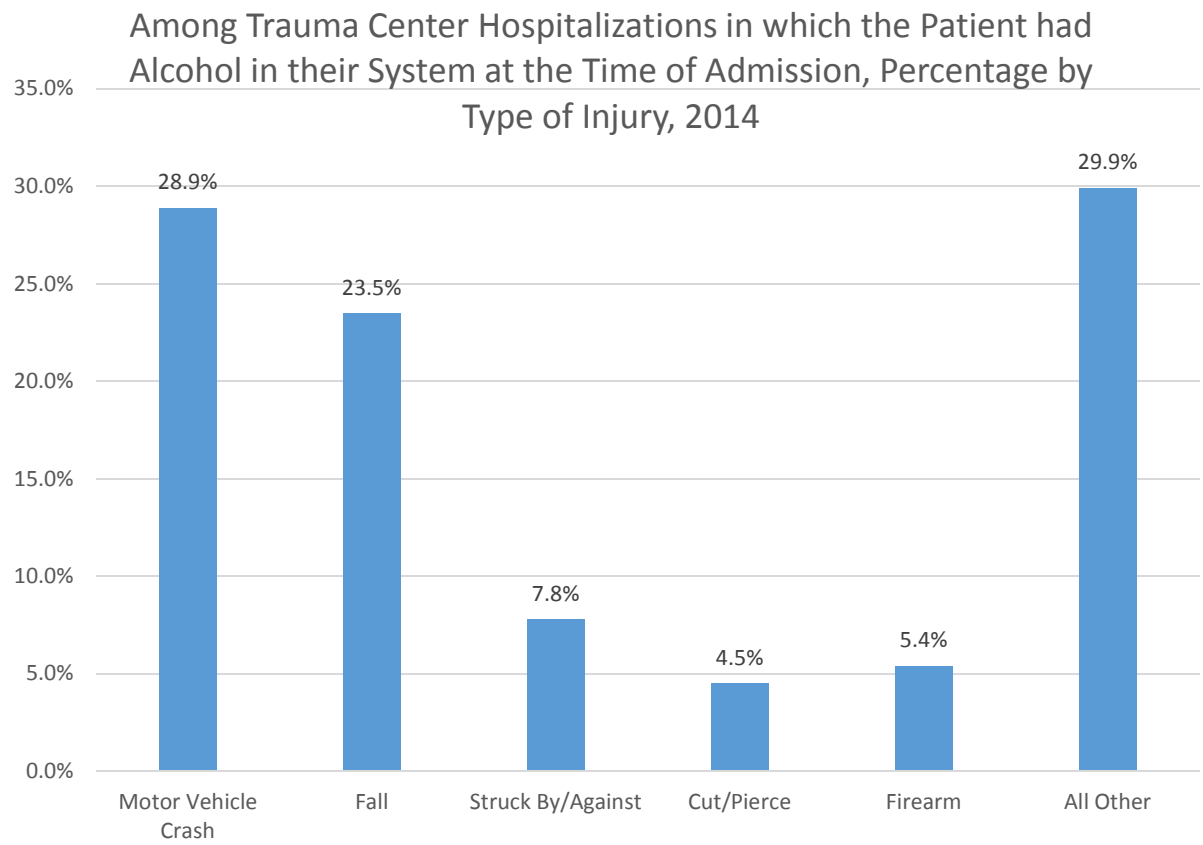
Demographic	Total # of Hospitalizations	Number and % of all hospitalizations with BAC < .08		Number and % of all hospitalizations with BAC > or = .08		Number and % of all hospitalizations with any alcohol involvement	
		Number	Percent	Number	Percent	Number	Percent
Total	10124	260	2.57%	827	8.17%	1087	10.74%
Gender							
Male	5846	186	3.18%	630	10.78%	816	13.96%
Female	4258	74	1.74%	197	4.63%	271	6.36%
Age							
<18	1444	9	0.62%	16	1.11%	25	1.73%
18-24	970	65	6.70%	141	14.54%	206	21.24%
25-35	1058	52	4.91%	215	20.32%	267	25.24%
35-44	849	32	3.77%	134	15.78%	166	19.55%
45-64	2139	74	3.46%	266	12.44%	340	15.9%
65+	3661	28	0.76%	55	1.50%	83	2.27%

*Includes inpatient hospitalizations through seven Nebraska trauma centers

Source: Nebraska Trauma Registry

Among hospitalizations in which the patient had alcohol in their system at the time of admission, motor vehicle crashes accounted for 28.9 percent, followed by falls (23.5 percent), and struck by/against (7.8 percent) (Figure 2.13).

Figure 2.13



*Includes all motrized vehicle crashes occuring on public and private property
Note: Includes inpatient hospitalizations though seven Nebraska trauma centers
Source: Nebraska Trauma Registry

Alcohol-Impaired Driving

Alcohol consumption impairs an individual's ability to drive a motor vehicle in a safe manner. Alcohol-related crashes result in a large number of deaths, injuries and property damage each year in Nebraska. This section of the epidemiological profile focuses on data related to drinking and driving and alcohol related motor vehicle crashes.

Alcohol-Impaired Driving: Reported Alcohol Impaired Driving

Adult Alcohol-Impaired Driving Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Alcohol-Impaired Driving Among Adults	BRFSS	2014	2.5%	35,000	1.7%	Higher	Decreasing

Alcohol-Impaired Driving in Nebraska

In 2014, 2.5 percent of adults, an estimated 35,000 adults, reported drinking alcohol and driving during the 30 days preceding the survey.

Compared to the Nation

In 2014, adults in Nebraska were more likely than adults nationally to drink alcohol and drive, 2.5 percent and 1.7 percent, respectively.

Trends

There has been a decreased from 3.4 percent in 2012 to 2.5 percent in 2014.

Alcohol-Impaired Driving: Reported Alcohol Impaired Driving by Demographics

Differences by Age

Those aged 18-44 are significantly more likely to report drinking and driving than other age groups.

Differences by Gender

Males are more likely than females to drink and drive with a rate four times that of females

Differences by Urban/Rural

While rural residents had a higher rate (3.6 percent) then more urban residents the difference is not statically significant.

Differences by Race/Ethnicity

White residents are significantly more likely (3.4 percent) to report drinking and driving then Black residents (1.5 percent), American Indian residents (1.1 percent) and Hispanics (1.7 percent).

Table 2.11 Reported Drinking and Driving in Nebraska in Adults (18+)	
Gender	
Male	4.8%
Female	1.2%
Age	
18-44	4.0%
45-64	2.9%
65 and older	0.8%
Urban/Rural	
Urban Large	2.9%
Urban Small	3.0%
Rural	3.6%
Race/Ethnicity	
White NH	3.4%
Black NH	1.5%
Asian NH	2.3%
American Indian NH	1.1%
Other NH	2.6%
Multi-Racial NH	2.9%
Hispanic	1.7%
Source: Behavioral Risk Factor Surveillance Survey for years 2012 and 2014 combined	

Alcohol-Impaired Driving: Reported Alcohol Impaired Driving by Young Adults

When looking at young adults using the Nebraska Young Adult Alcohol Opinion Survey it is clear that a large percentage report alcohol impaired driving

Young Adult Alcohol-Impaired Driving Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Trend
Past Year Alcohol Impaired Driving among Adults 19-25	NYAAOS	2013	21.9%	41,000	Decreasing
Past Month Driving After Binge Drinking among Adults 19-25	NYAAOS	2013	6.4%	12,000	Decreasing

Young Alcohol-Impaired Driving in Nebraska

In 2013, 21.9 percent of young adults aged 19 to 25, an estimated 41,000 young adults, reported drinking alcohol and driving during in the past year. In addition 6.4 percent, an estimated 12,000 young adults, reported binge drinking and driving in the past month before taking this survey.

Trends

The percentage of young adults who drank alcohol and drove has declined since 2010. In 2010 30.3 percent reported drinking alcohol and driving in the past year but by 2013 the percent decreased to 21.9 percent. Similarly the percent who reported binge drinking and driving has declined. In 2010 8.4 percent reported binge drinking and driving the past month and by 2013 the percentage had decreased to 6.4 percent.

Alcohol-Impaired Driving: Reported Alcohol Impaired Driving by Young Adults by Demographics

Differences by Age

In 2013 young adults age 23-25 report significantly higher (26.4 percent) alcohol impaired driving in the past year compared to 21-22 year olds (21.5 percent) and 19-20 year olds (16 percent). There was no significant difference in past month driving after binge drinking.

Differences by Gender

In 2013 there is no significant difference between males (23.7 percent) and females (20 percent) in reported alcohol impaired driving in the past year. Males are significantly more likely (eight percent) to report past month driving after binge drinking then females (4.4 percent).

Alcohol-Impaired Driving: Reported Alcohol Impaired Driving or Riding with Alcohol Impaired Driver by Youth

Similar to the BRFSS for adults the YRBS tracks drinking and driving among high school students along with the percent who rode with a driver who had been drinking.

Youth Alcohol-Impaired Driving Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs Nation	Trend
Past 30 day drove after drinking alcohol among high school students	YRBS	2013	6.8%	7,000	10.0%	Lower	Stable
Past Month Rode with Driver who had been drinking alcohol	YRBS	2013	20.3%	20,000	21.9%	Non-significant	Decreasing

Youth Alcohol-Impaired Driving in Nebraska

In 2013, one in fifteen (6.8 percent) of high school students an estimated 7,000 youths, reported drinking alcohol and driving during in the past 30 days from taking this survey. In addition one in five (20.3 percent) of high school students, an estimated 20,000 youths, reported riding with a driver who had been drinking alcohol in the past 30 days before taking this survey.

Compared to the Nation

- In 2013, youth in Nebraska were less likely than youth nationally to drink and drive, 6.8 percent and 10 percent, respectively.
- Nebraska youth were not significantly different compared to youth nationally to ride with a driver who had been drinking 20.3 percent and 21.9 percent respectively.

Trends

- There has been a virtually no difference in the percent of high school students who report drinking and driving the past 30 days. In 2011, 7.2 percent reported drinking and driving in the past 30 days but in 2013, 6.8 percent reported binge drinking alcohol in the past 30 days.
- The percent of high school youth who have ridden with a driver who had been drinking alcohol did decline. In 2011 23.9 percent reported riding with a driver who had been drinking in the past 30 days but in 2013, 20.3 percent reported that.

Alcohol-Impaired Driving: Reported Alcohol Impaired Driving or Riding with Alcohol Impaired Driver by Youth by Demographics

Differences by Grade

Young students are less likely to drinking and drive. Ninth graders (2.6 percent) are significantly less likely than twelfth graders (8.2 percent) to report drinking and driving. There is no significant difference for youth riding with a driver who has been drinking alcohol.

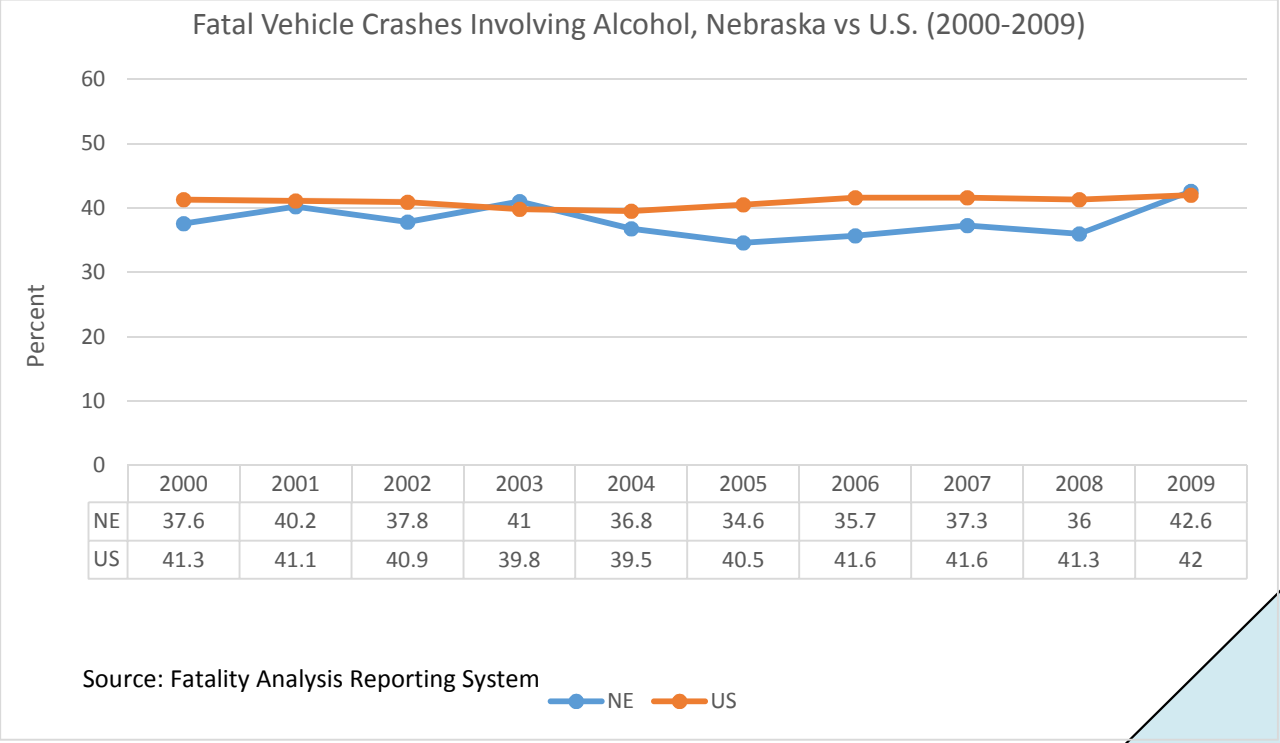
Differences by Gender

Past month drinking and driving does not differ by gender. Males (7.3 percent) are as likely as females (6.3 percent) to report drinking and driving. There is also no significant difference between males (19.3 percent) and females (21.3 percent) in youth riding with a driver who has been drinking

Alcohol-Related Motor Vehicle Crash Fatalities and Injuries: Fatal Vehicle Crashes Involving Alcohol

The National Highway Traffic Safety Administration (NHTSA) collects national and state estimates of alcohol-related crashes and fatalities through the Fatality Analysis Reporting System (FARS). Fatal vehicle crashes involving alcohol account for approximately 40 percent of U.S. traffic fatalities across the nation. Figure 2.14 displays the percent of fatal vehicle crashes involving alcohol for both Nebraska and the U.S. Nebraska has a slightly lower but very similar percent of fatal vehicle crashes involving alcohol, although in 2009 the percentage reaches the U.S. average.

Figure 2.14



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
NE	37.6	40.2	37.8	41	36.8	34.6	35.7	37.3	36	42.6
US	41.3	41.1	40.9	39.8	39.5	40.5	41.6	41.6	41.3	42

Alcohol-Related Motor Vehicle Crash Fatalities and Injuries: Fatalities and Injuries by Demographics

Differences by Age

Table 2.12 shows the number and percentage of alcohol involved injury and fatal crashes by age group for 2014. The two age groups with the highest risk are individuals 20-24 years old and those 25-34 years old. Both groups have approximately one-fourth of all individuals involved in injury crashes (26.7 percent for 20-24 year olds and 25.8 percent for 25-34 year olds). They also comprise nearly one-fourth of all fatal crash victims in 2014 (21.7 percent for both age groups).

Table 2.12 Number and Percentage of Alcohol Involved Injury and Fatal Vehicle Crashes by Age Group, Nebraska 2014

	Under 15	15-19	20-24	25-34	35-44	45-54	55-74	75 and older	Age not known
Injury Crashes	14	82	180	174	102	69	44	5	4
Injury Crashes %	2.1%	12.2%	26.7%	25.8%	15.1%	10.2%	6.5%	0.7%	0.6%
Fatal Crashes	0	6	15	15	12	13	7	1	0
Fatal Crashes %	0.0%	8.7%	21.7%	21.7%	17.4%	18.9%	10.1%	1.4%	0.0%
Total Crashes	14	88	195	189	114	82	51	6	4
Total Crashes %	1.9%	11.8%	26.2%	25.4%	15.3%	11.0%	6.9%	0.8%	0.5%

Differences by Gender

Table 2.13 provides a gender comparison for alcohol-related crashes by gender of the driver. Males were more than three times are likely as females to be involved in alcohol related crashes for both injury and fatal crashes.

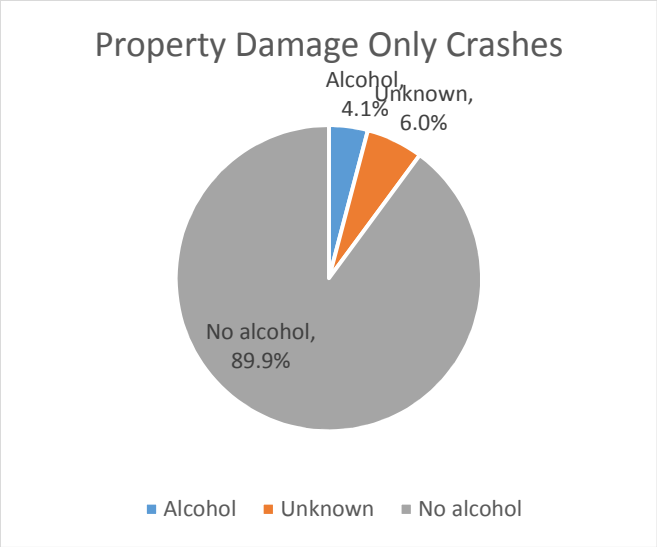
Table 2.13 Gender of Driver in Alcohol Related Injury and Fatal Crashes, Nebraska (2014)

	Injury Crashes		Fatal Crashes		Total Crashes	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Male	492	76.2%	54	77.1%	546	76.3%
Female	146	22.6%	15	21.4%	161	22.5%
Not Stated	8	1.2%	1	1.4%	9	1.3%
Total	646	100.0%	70	100.0%	716	100.0%

Alcohol-Related Motor Vehicle Crash Fatalities and Injuries: Alcohol Involvement and Crash Severity Source: Nebraska Department of Highway Safety

As crash severity increases, so does alcohol involvement. Data from 2014 illustrates that Property Damage Only Crashes, Injury Crashes, and Fatal Crashes involved alcohol about 4.1 percent, 7.1 percent and 36.9 percent of the time, respectively(Figures 2.15-2.17). It must be noted that currently only fatal crashes require alcohol testing, so the other categories may be understated.

Figure 2.15-Figure 2.16



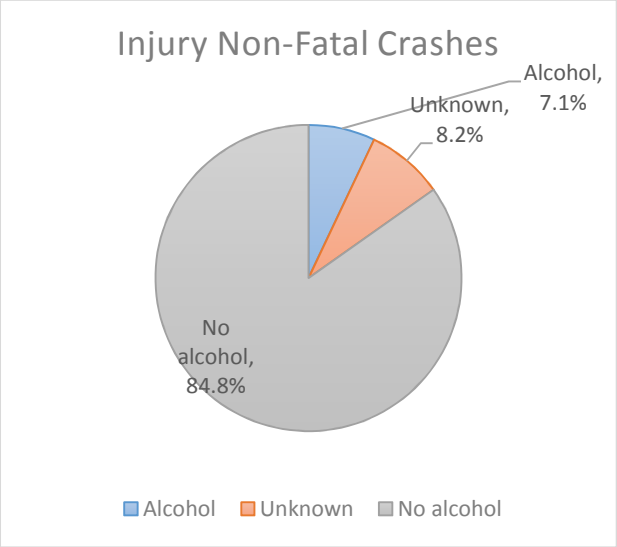
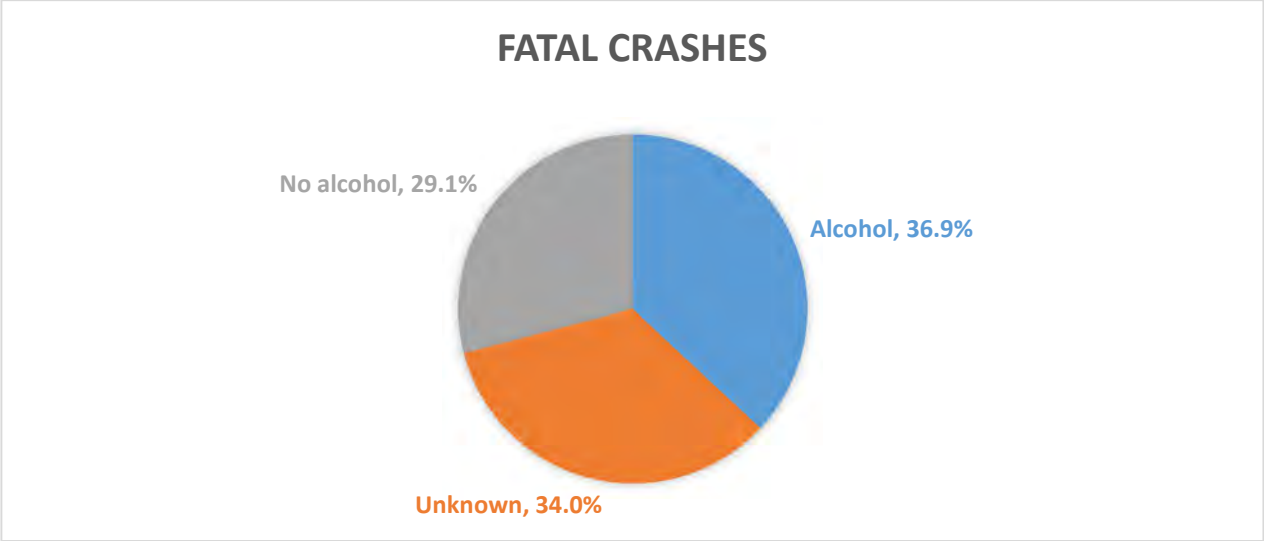


Figure 2.17



Alcohol-Related Legal Consequences

In addition to the lives impacted by alcohol abuse, alcohol use can place a tremendous strain on the legal system. For this report, legal consequences of alcohol use are separated into three categories, including (1) arrests, convictions, probation, and incarceration for driving under the influence (DUI), (2) arrests for alcohol-related crime (excluding DUI), and (3) reported violent crimes (including aggravated assaults, sexual assaults, and robberies).

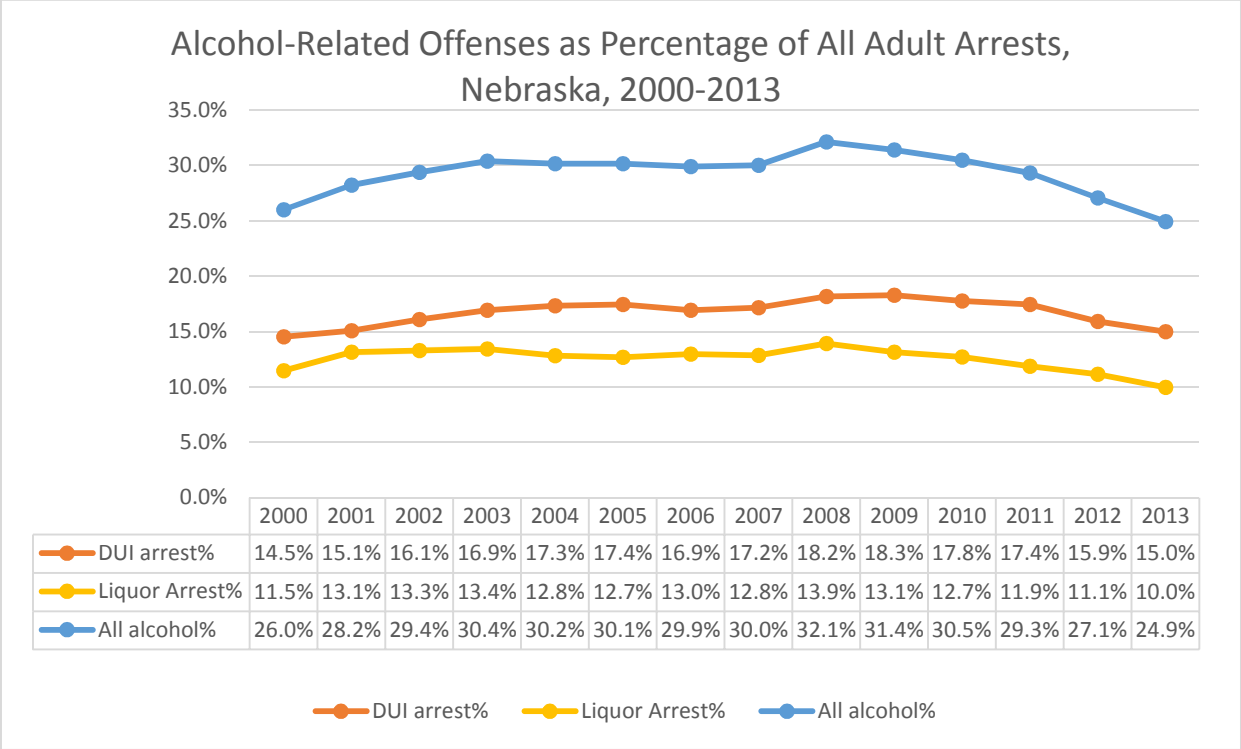
Alcohol-Related Legal Consequences: Driving Under the Influence (DUI) and Liquor Law Arrests

Data Source: Uniform Crime Reports, Nebraska Crime Commission
Note: DUI may contain legal consequences for driving under the influence of drugs and not alcohol

From 2000-2013, arrests for adult DUI and other liquor law offenses combined accounted for between 15,000 to 24,000 arrests per year in Nebraska. The percentage of alcohol arrests ranged from 26 percent in 2000 to 32 percent in 2008, before decreasing to 24.9 percent in 2013 (Figure 2.18).

Liquor law offenses include the violation of laws or ordinances prohibiting the manufacture, sale, purchase, transportation, possession, or use of alcoholic beverages.

Figure 2.18



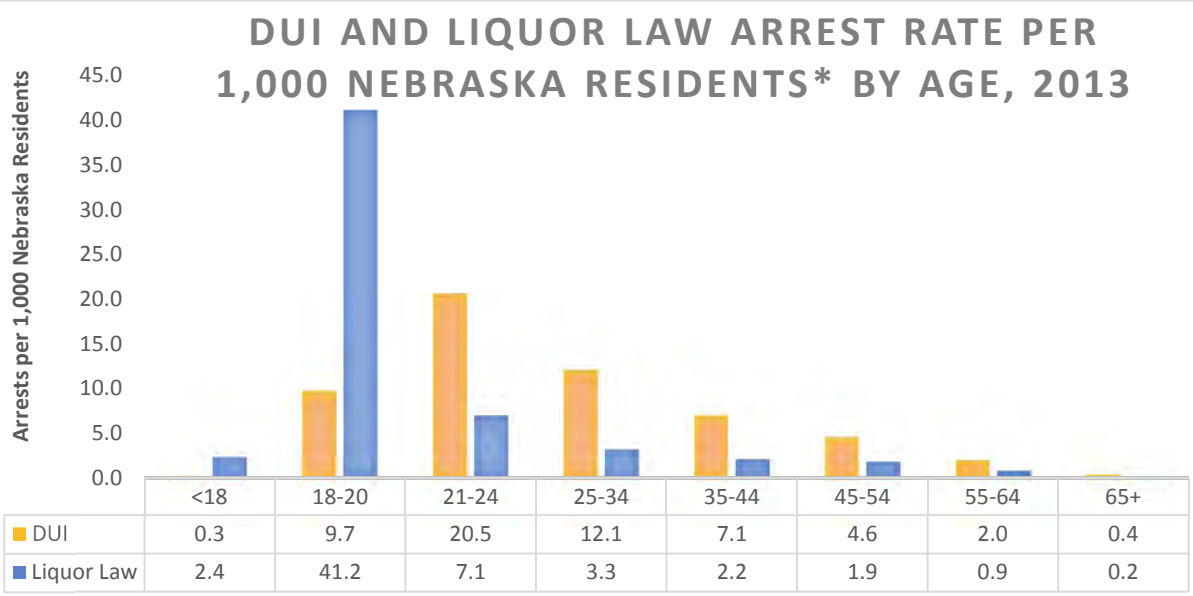
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
DUI arrest%	14.5%	15.1%	16.1%	16.9%	17.3%	17.4%	16.9%	17.2%	18.2%	18.3%	17.8%	17.4%	15.9%	15.0%
Liquor Arrest%	11.5%	13.1%	13.3%	13.4%	12.8%	12.7%	13.0%	12.8%	13.9%	13.1%	12.7%	11.9%	11.1%	10.0%
All alcohol%	26.0%	28.2%	29.4%	30.4%	30.2%	30.1%	29.9%	30.0%	32.1%	31.4%	30.5%	29.3%	27.1%	24.9%

Alcohol-Related Legal Consequences: Driving Under the Influence (DUI) and Liquor Law Arrests by Demographics

Differences by Age

Persons in the 21-24 year demographic group have had the highest DUI arrest rates while adults 18-20 have the highest liquor law arrest rates (Figure 2.19).

Figure 2.19



	<18	18-20	21-24	25-34	35-44	45-54	55-64	65+
DUI	0.3	9.7	20.5	12.1	7.1	4.6	2.0	0.4
Liquor Law	2.4	41.2	7.1	3.3	2.2	1.9	0.9	0.2

* Age-specific rate per 1,000 residents
Note: May include some non-resident arrests
Source: Nebraska Crime Commission

Differences by Gender

Males account for 75 percent of all DUI arrests and 68 percent of all Liquor Law violation arrests in 2013.

Differences by Race/Ethnicity

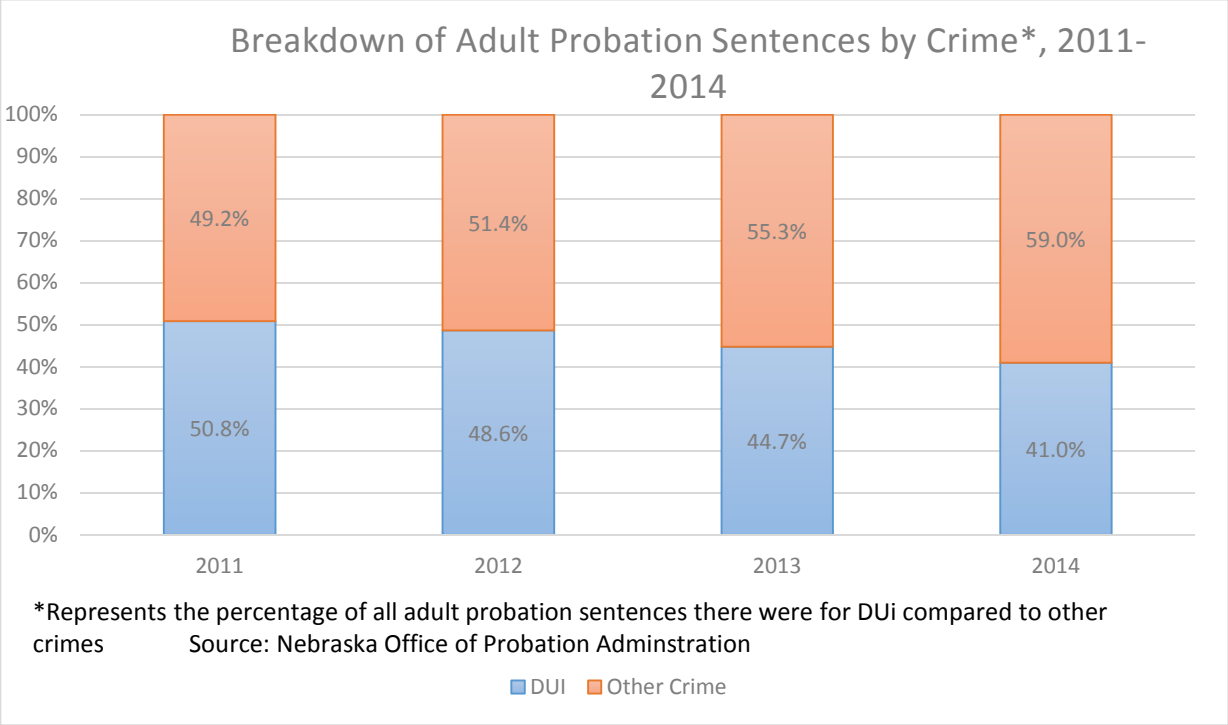
Of the DUI offenders arrested in 2013, 90 percent were identified as White, 7.1 percent Black, 2.0 percent Native American, 0.7 percent Asian, and 0.1 percent unknown. Liquor law arrests for the same period were identified as 86.5 percent White, 9.1 percent Black, 3.6 percent Native American, 0.6 percent Asian, and 0.2 percent unknown.

Alcohol-Related Legal Consequences: Probation for DUI

Data Source: Nebraska Office of Probation Administration

Of all the 11,028 adults sentenced to probation in Nebraska more than two out of every five (41 percent) are for DUI (Figure 2.20). Driving under the influence continues to be the largest reason for probation from 2011 to 2014.

Figure 2.20



Alcohol-Related Legal Consequences: Incarceration for DUI

In addition to the adult DUI probationers, 610 offenders were sentenced to Nebraska prisons from 2011 to 2013. Yearly sentences ranged from 184 persons (2011) to 213 persons (2013) with a general upward trend. Throughout the 1990s, the largest number of DUI incarcerations for any single year was 49, compared to 100 or more each year since 2000. In 2013, the Nebraska Department of Corrections indicated that it costs $28,182 to incarcerate an inmate for one year. At this rate, the cost to maintain the DUI offenders sentenced in 2013 amounts to over $6 million dollars annually.

All newly admitted inmates (regardless of their offense) are asked to report drug use during the five years preceding their incarceration. For Fiscal Year 2015 61.3 percent reported using alcohol in that time frame indicating alcohol use is very common among incoming inmates.

Alcohol Dependence Abuse, and Treatment: Alcohol Abuse and Dependence

Dependence and abuse are clinical terms used to characterize patterns of alcohol use associated with significant social, psychological and physical problems for the user and/or others that may be affected by the user. The National Survey on Drug Use and Health (NSDUH) defines alcohol dependence and abuse using criteria stated in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

Alcohol Dependence and Abuse Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Alcohol Dependence or Abuse in Past Year among Persons 12 and Older	NSDUH	2012/ 2013	7.8%	119,000	6.7%	Non-significant	Decreasing

Current Levels of Alcohol Dependence or Abuse in Nebraska

In 2013, nearly one in every 13 Nebraskans 12 years of age and older (7.8 percent), an estimated 119,000 people, reported alcohol dependency or abuse.

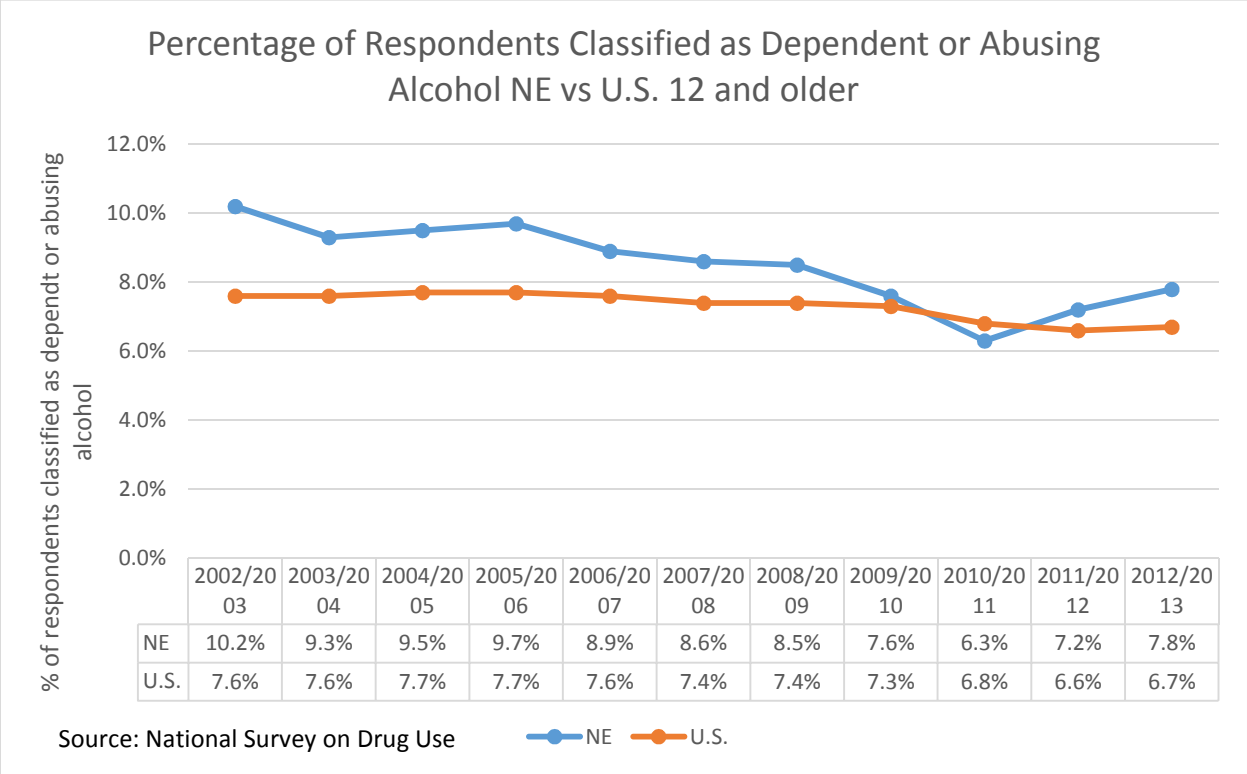
Compared to the Nation

In 2013, adults in Nebraska were more likely than adults nationally to report alcohol dependency or abuse, 7.8 percent and 6.7 percent, respectively, but the difference is non-significant.

Trends

Figure 2.21 shows the percentage of Nebraska and U.S. adults 12 and older who meet the definition of alcohol dependence or abuse form the DSM-IV. While the U.S. as whole has seen a slight decrease in the percent who classified as dependent or abusing alcohol Nebraska has seen a more significant decrease from 2003. In 2012 the percent who classified as dependent or abusing has increased and has gone above the U.S. rate although the difference in not statistically significant.

Figure 2.21



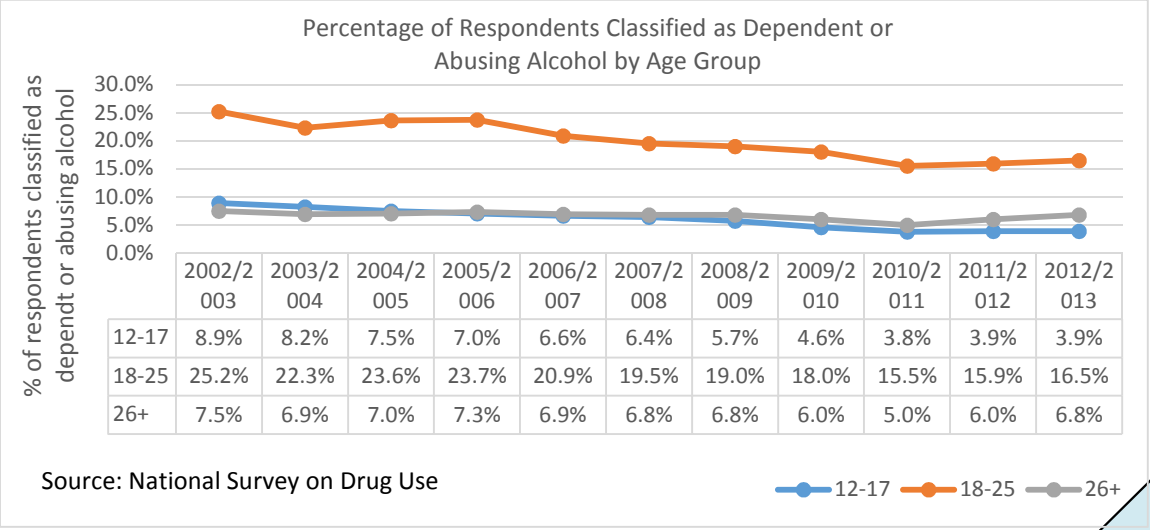
	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
NE	10.2%	9.3%	9.5%	9.7%	8.9%	8.6%	8.5%	7.6%	6.3%	7.2%	7.8%
U.S.	7.6%	7.6%	7.7%	7.7%	7.6%	7.4%	7.4%	7.3%	6.8%	6.6%	6.7%

Source: National Survey on Drug Use

Alcohol Dependence Abuse, and Treatment: Alcohol Abuse and Dependence by Age Group

Figure 2.22 shows the percentage of Nebraska residents who meet the definition of alcohol dependence or abuse form the DSM-IV by age group. Nebraskans aged 18-25 have the highest rates for being dependent on or abusing alcohol from 2003 to 2013. Nebraskans aged 18-25 have also seen a decrease in the percent who are dependent or abusing alcohol however, there has been a slight increase in 2012. Nebraskans aged 12-17 have also seen a decrease but it is smaller than those 18-25. Those aged 26 and older, however, have seen a slight increase from 2011 to 2013.

Figure 2.22



	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
12-17	8.9%	8.2%	7.5%	7.0%	6.6%	6.4%	5.7%	4.6%	3.8%	3.9%	3.9%
18-25	25.2%	22.3%	23.6%	23.7%	20.9%	19.5%	19.0%	18.0%	15.5%	15.9%	16.5%
26+	7.5%	6.9%	7.0%	7.3%	6.9%	6.8%	6.8%	6.0%	5.0%	6.0%	6.8%

Source: National Survey on Drug Use

Alcohol Dependence Abuse, and Treatment: Adults in Need of Treatment but not receiving Treatment

The National Survey on Drug Use and Health (NSDUH) asked respondents that indicated they needed treatment for alcohol use if they were receiving treatment.

Adults in Need of Treatment for Alcohol but not receiving Treatment Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Needing Treatment for Alcohol but not receiving any in Past Year among Persons 12 and Older	NSDUH	2012/2013	7.6%	116,000	6.4%	Non-significant	Decreasing

Current Levels of Alcohol Dependence or Abuse in Nebraska

In 2013, nearly one in every 13 Nebraskans aged 12 and older (7.6 percent), an estimated 116,000 people, reported needing treatment for alcohol but not receiving any.

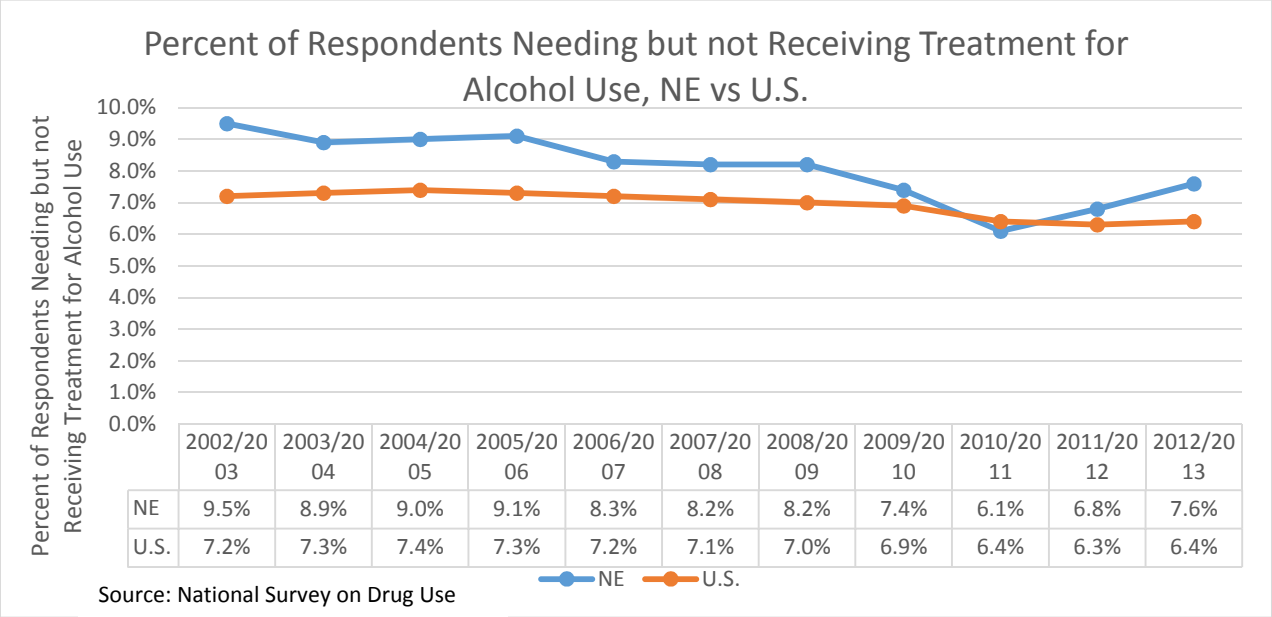
Compared to the Nation

In 2013, adults in Nebraska were more likely than adults nationally to report alcohol dependency or abuse, 7.8 percent and 6.7 percent, respectively, but the difference is non-significant.

Trends

Figure 2.23 shows that Nebraska has had a higher percent that indicated they needed treatment for alcohol use but were not receiving it for every year but 2011. Both Nebraska and the U.S. saw a decrease in the percent that indicated they needed treatment but weren't receiving any, although Nebraska has seen a much steeper decrease. Nebraska's percent that indicated they needed treatment did see an increase starting in 2012 and continuing to 2013.

Figure 2.23



	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
NE	9.5%	8.9%	9.0%	9.1%	8.3%	8.2%	8.2%	7.4%	6.1%	6.8%	7.6%
U.S.	7.2%	7.3%	7.4%	7.3%	7.2%	7.1%	7.0%	6.9%	6.4%	6.3%	6.4%

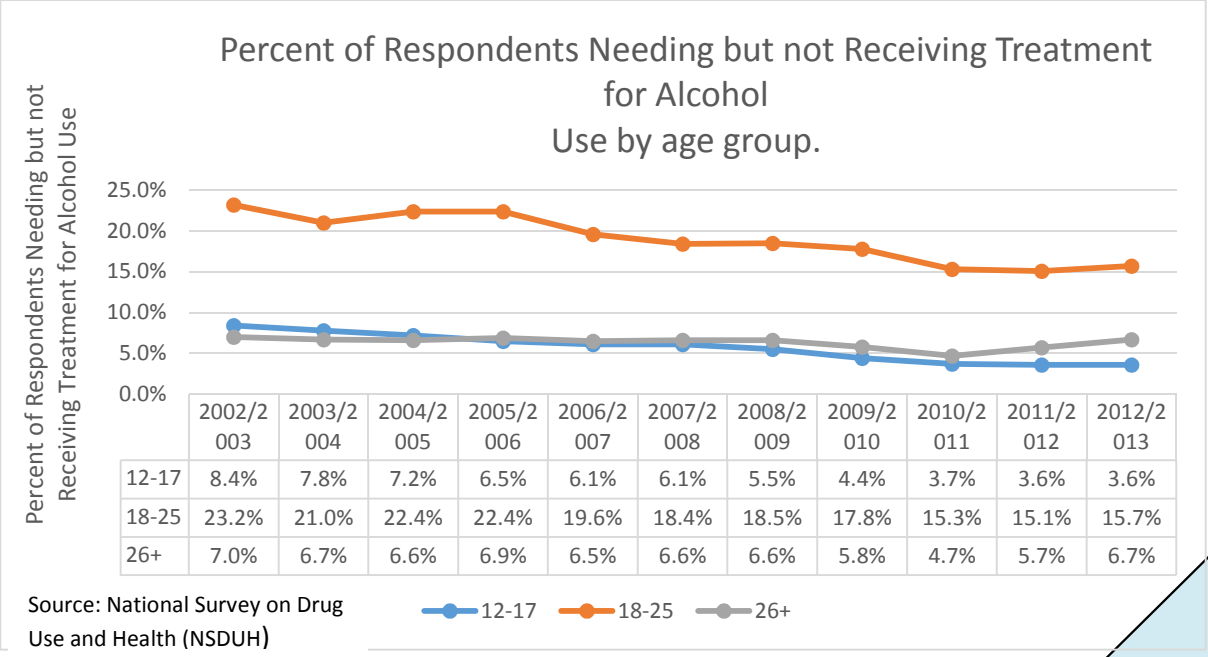
Source: National Survey on Drug Use

Alcohol Dependence Abuse and Treatment: Adults in Need of Treatment by Age

Figure 2.24 shows the percentage of Nebraska residents who indicated a need for treatment for alcohol use but were not receiving it by age group. Nebraskans aged 18-25 had the highest percent of those indicating they needed treatment for alcohol use but were not receiving it.

Nebraskans aged 12-17 and those 18-25 have seen a substantial decrease in the percent who need treatment for alcohol use but are not receiving it. Conversely adults aged 26 and older have seen a gradual increase in the percent who need treatment for alcohol use and are not receiving it starting in 2012.

Figure 2.24



	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
12-17	8.4%	7.8%	7.2%	6.5%	6.1%	6.1%	5.5%	4.4%	3.7%	3.6%	3.6%
18-25	23.2%	21.0%	22.4%	22.4%	19.6%	18.4%	18.5%	17.8%	15.3%	15.1%	15.7%
26+	7.0%	6.7%	6.6%	6.9%	6.5%	6.6%	6.6%	5.8%	4.7%	5.7%	6.7%

Source: National Survey on Drug Use and Health (NSDUH)

Alcohol Dependence Abuse, and Treatment: Adults in Need of Treatment but not receiving Treatment

The National Survey on Drug Use and Health (NSDUH) asked respondents that indicated they needed treatment for alcohol use if they were receiving treatment.

Adults in Need of Treatment for Alcohol but not receiving Treatment Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Needing Treatment for Alcohol but not receiving any in Past Year among Persons 12 and Older	NSDUH	2012/2013	7.6%	116,000	6.4%	Non-significant	Decreasing

Current Levels of Alcohol Dependence or Abuse in Nebraska

In 2013, nearly one in every 13 Nebraskans 12 and older (7.6 percent), an estimated 116,000 people, reported needing treatment for alcohol but not receiving any.

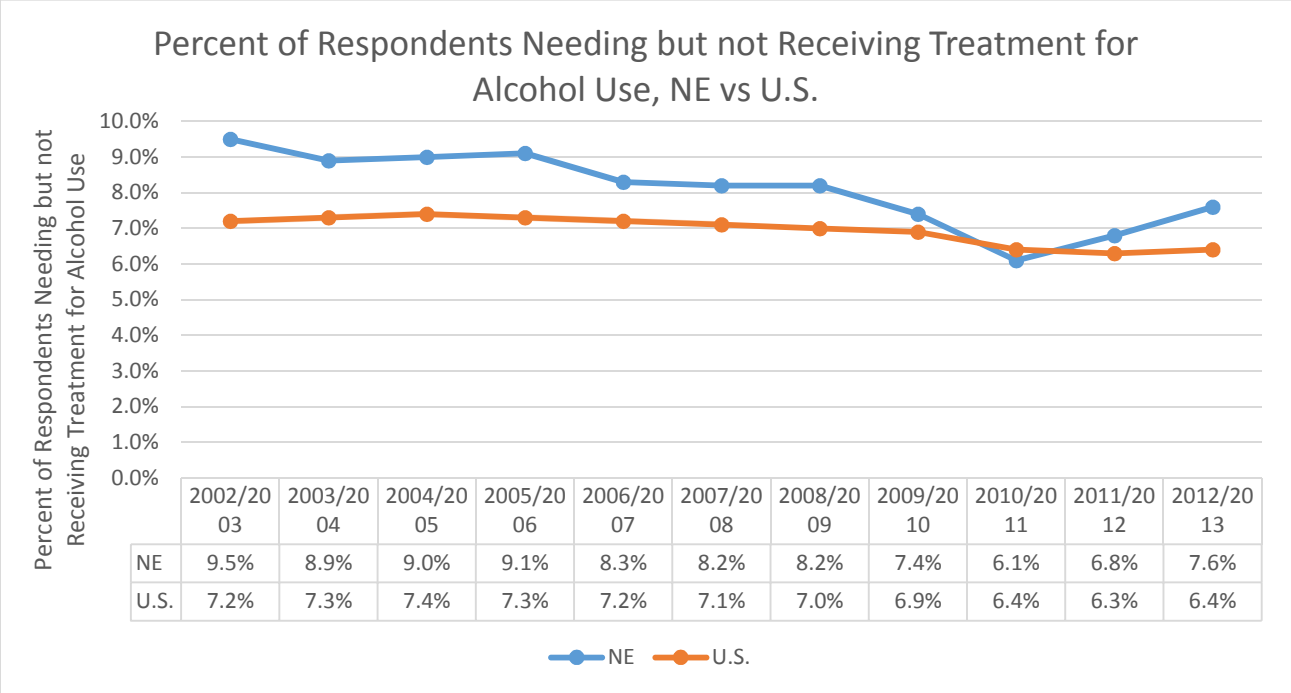
Compared to the Nation

In 2013, adults in Nebraska were more likely than adults nationally to report alcohol dependency or abuse, 7.8 percent and 6.7 percent, respectively, but the difference is non-significant.

Trends

Figure 2.25 shows that Nebraska has had a higher percent that indicated they needed treatment for alcohol use but were not receiving it for every year but 2011. Both Nebraska and the U.S. saw a decrease in the percent that indicated they needed treatment but weren't receiving any although Nebraska has seen a much steeper decrease. Nebraska's percent that indicated they needed treatment did see an increase starting in 2012 and continuing to 2013.

Figure 2.25



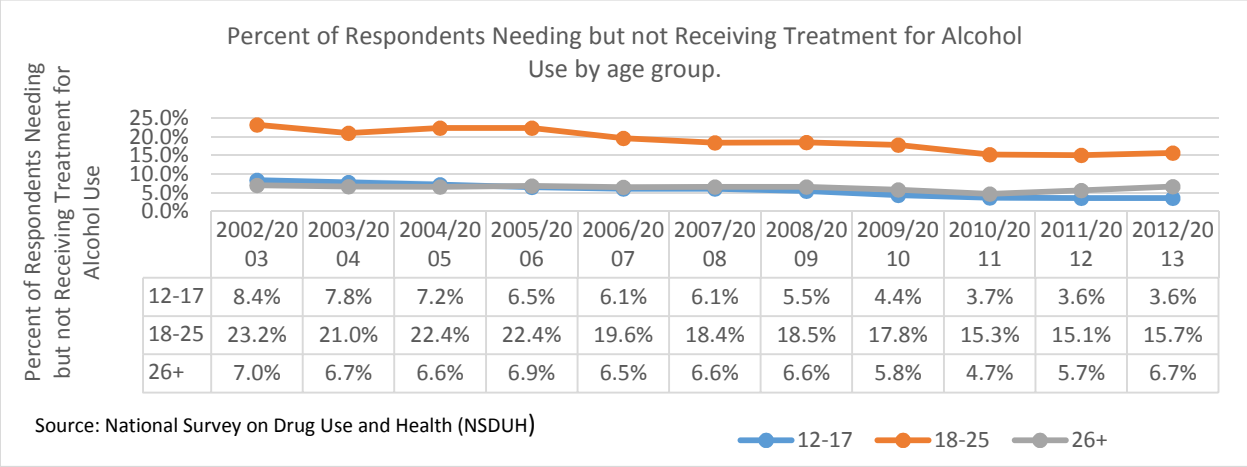
	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
NE	9.5%	8.9%	9.0%	9.1%	8.3%	8.2%	8.2%	7.4%	6.1%	6.8%	7.6%
U.S.	7.2%	7.3%	7.4%	7.3%	7.2%	7.1%	7.0%	6.9%	6.4%	6.3%	6.4%

Alcohol Dependence Abuse, and Treatment: Adults in Need of Treatment by Age

Figure 2.26 shows the percentage of Nebraska residents who indicated a need for treatment for alcohol use but were not receiving it by age group. Nebraskans aged 18-25 had the highest percent of those indicating they needed treatment for alcohol use but were not receiving it.

Nebraskans aged 12-17 and those 18-25 have seen a substantial decrease in the percent who need treatment for alcohol use but are not receiving it. Conversely adults aged 26 and older have seen a gradual increase in the percent who need treatment for alcohol use and are not receiving it starting in 2012.

Figure 2.26



	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
12-17	8.4%	7.8%	7.2%	6.5%	6.1%	6.1%	5.5%	4.4%	3.7%	3.6%	3.6%
18-25	23.2%	21.0%	22.4%	22.4%	19.6%	18.4%	18.5%	17.8%	15.3%	15.1%	15.7%
26+	7.0%	6.7%	6.6%	6.9%	6.5%	6.6%	6.6%	5.8%	4.7%	5.7%	6.7%

Source: National Survey on Drug Use and Health (NSDUH)

Alcohol Treatment
Source: Magellan Database, Nebraska Division of Behavioral Health

Treatment data presented in this report include services funded through the NDHSS, Division of Behavioral Health (DBH) as well as select private treatment services that submit patient data to the state.

In 2014, there were 13,537 substance abuse treatment admissions among 12,494 individuals. During admission, individuals were asked to report their primary, 2nd and 3rd drugs of choice. The following information is based on data from those who reported drug of choice on their admission form.

Alcohol Involvement in Substance Abuse Treatment Services

- In 2014 alcohol was listed as the primary drug of choice in 62.1 percent of adult admissions in Nebraska, and was listed as one of the top three drugs of choice in 77.4 percent of all admissions. Alcohol was followed methamphetamine (primary drug of choice during 13.9 percent of admissions).
- Alcohol has consistently been listed as the primary drug of choice from 2011 (69.7 percent) to 2014 (62.1 percent) although it has decreased slightly.
- In 2014 males in Nebraska were more likely than females to report alcohol as their primary drug of choice (67.8 percent and 50.6 percent respectively) as well as to report alcohol as one of their top three drugs of choice (81.6 percent and 68.8 percent respectively).

Treatment Admission Demographics

- Table 2.14 provides the demographics for all substance abuse treatment admissions (regardless of their drug of choice) for gender, age, race, and urban/rural.

Demographics of Individuals Admitted for Substance Abuse Treatment in Nebraska, 2014

	Number	Percent		Number	Percent
Total	12,494	100.0%	Gender		
			Male	8,275	66.2%
Race/Ethnicity*			Female	4,219	33.8%
NH Asian	93	0.7%			
NH Black	1,066	8.5%	Age		
NH Multi-Racial	60	0.5%	<12	2	0.0%
NH Native American/Native Hawaiian	451	3.7%	12-17	201	1.6%
NH White	9,318	74.6%	18-20	903	7.2%
Hispanic**	1,148	9.2%	21-24	1,987	15.9%
Unknown	358	2.9%	25-34	4,095	32.8%
			35-44	2,514	20.1%
Urban Rural			45-54	1,934	15.5%
Large Urban	7,422	60.3%	55-64	764	6.1%
Small Urban	3,424	27.8%	65+	93	0.7%
Rural	1,465	11.9%	Unknown	1	0.0%

*NH indicates Non-Hispanic
**Hispanics can be of any race
Note: Numbers represent individuals, not the number of admissions
Source: Magellan Database, Nebraska Division of Behavioral Health

Section 3:

Tobacco Use in Nebraska: Prevalence and Consequences

TOBACCO – SUMMARY OF KEY FINDINGS

Tobacco Use in Nebraska

Cigarette smoking is the most common form of tobacco use

- Cigarette smoking among Nebraska residents 18 and older was similar to their national counterparts, with 17.3 percent of adults currently smoking cigarettes in 2014 compared to 18.1 percent nationwide.
- In 2013, more than one in every 10 Nebraska high school students smoked cigarettes during the past month (10.9 percent) which is lower than the national average of 15.7 percent.
- Since 2011, cigarette smoking appears to have declined among high school students and adults.

Cigarettes are a commonly sold product in Nebraska and have a higher per capita sales rate than the U.S. as a whole.

- Nebraska has seen an overall decrease in the estimated sales of tobacco, similar to the U.S. as a whole.
- Nebraska does have higher per capita cigarette sales than the U.S. as a whole since 2008 indicating more cigarette sales, per capita, in Nebraska compared to the U.S. average.

Although less common than smoking, smokeless tobacco use remains relatively common

- In 2013, nearly one in every 13 Nebraska high school students used smokeless tobacco during the past month (7.7 percent) while about one in every 21 adults (4.7 percent) reported past month use in 2014.
- Smokeless tobacco use among residents in Nebraska was similar to residents nationally.
- Since the 2011, smokeless tobacco use appears to have declined among adults and remained relatively stable among high school students.

Consequences of Tobacco Use in Nebraska

Cigarette smoking is a major contributor to death and medical care

- Smoking killed an estimated 2,500 Nebraska residents in 2014.
- In 2014, an estimated $795 million will be spent for smoking-related medical costs among Nebraska residents.

Cigarette smoking causes fires

- The Nebraska State Fire Marshall's office reported that seven people died and there was $12 Million dollars in economic loss due to fires caused by smoking between 2011 and 2013.

Demographic Differences

Differences by age

- Residents between the ages of 18 and 34 were more likely to use tobacco products; although, as a result of the long latency period for health consequences from tobacco use, older residents were the most likely to die or be hospitalized.

Differences by gender

- Adult males are more likely to smoke cigarettes than females but there is no difference between genders for high school youth.
- Smokeless tobacco use is higher for males for both adults and high school students.

Differences by urban/rural

- Among Nebraska adults, cigarette smoking varied little by urban/rural while smokeless tobacco use was more common in rural Nebraska counties.

Differences by race/ethnicity

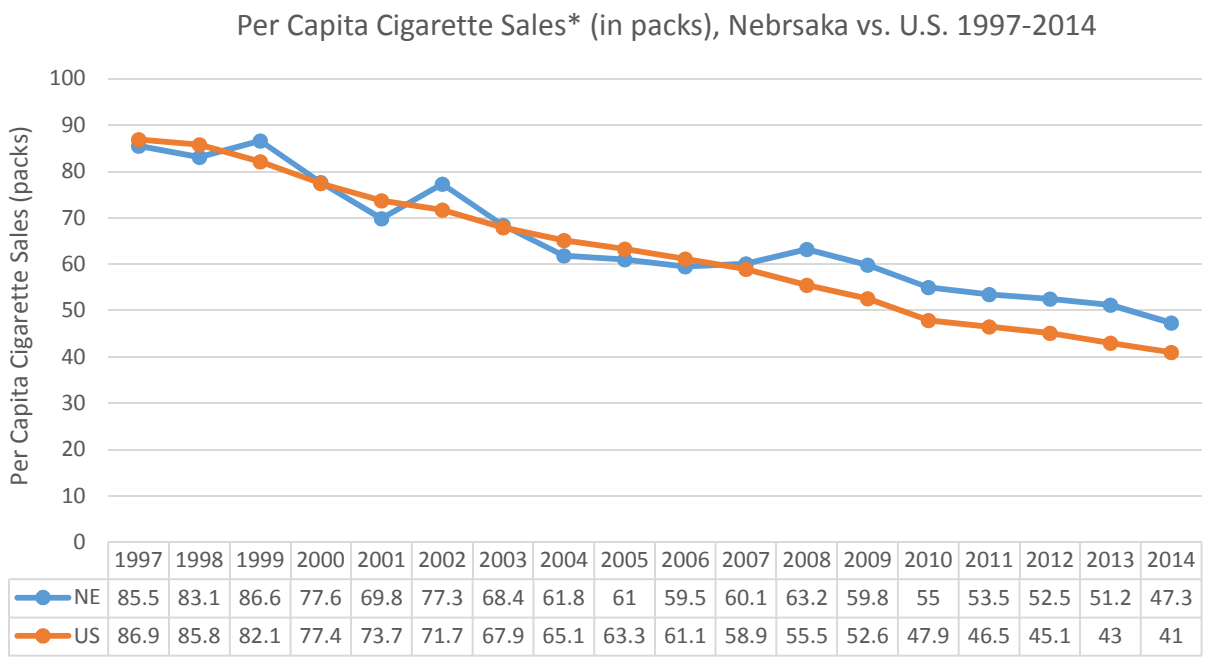
- Native American adults reported a higher percentage of current cigarette compared to African Americans and whites.
- There was no significant difference by race/ethnicity (when adjusting by age) for smokeless tobacco use.

Tobacco Consumption: General Consumption Patterns and Concerns

Tobacco use, (including cigarette smoking, cigar and pipe smoking and smokeless tobacco use), is the single most preventable cause of death and disease in society and has a massive impact on the public's health[1]. The adverse health effects from cigarette smoking account for an estimated 443,000 deaths every year the United States and another 8.6 million suffer from a serious illness as a result of smoking[1].

Tobacco sales data in Nebraska is collected at the wholesale level. Estimates are based on the number of packs of cigarettes sold, not necessarily the number of packs consumed. Nebraska has seen an overall decrease in the estimated sales of tobacco per person, similar to the U.S. as a whole, since 1997 from 85.5 to 47.3 in 2014 (Figure 3.1). Nebraska does have higher per capita cigarette sales then the U.S. as a whole since 2008 indicating more cigarette sales, per capita, in Nebraska compared to the U.S. average.

Figure 3.1



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
NE	85.5	83.1	86.6	77.6	69.8	77.3	68.4	61.8	61	59.5	60.1	63.2	59.8	55	53.5	52.5	51.2	47.3
US	86.9	85.8	82.1	77.4	73.7	71.7	67.9	65.1	63.3	61.1	58.9	55.5	52.6	47.9	46.5	45.1	43	41

*Per capita sales among persons of all ages at the wholesaler (not retailer) level
Source: The Tax Burden on Tobacco, Volume 49, 2014, prepared by Orzechowski and Walker, Arlington, VA

Adult Tobacco Consumption in Nebraska: Past Month Cigarette Use

Current Cigarette Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Current Cigarette Use among Adults 18 and older	BRFSS	2014	17.3%	245,000	18.1%	Non-significant	Decreasing

Current Cigarette Use in Nebraska

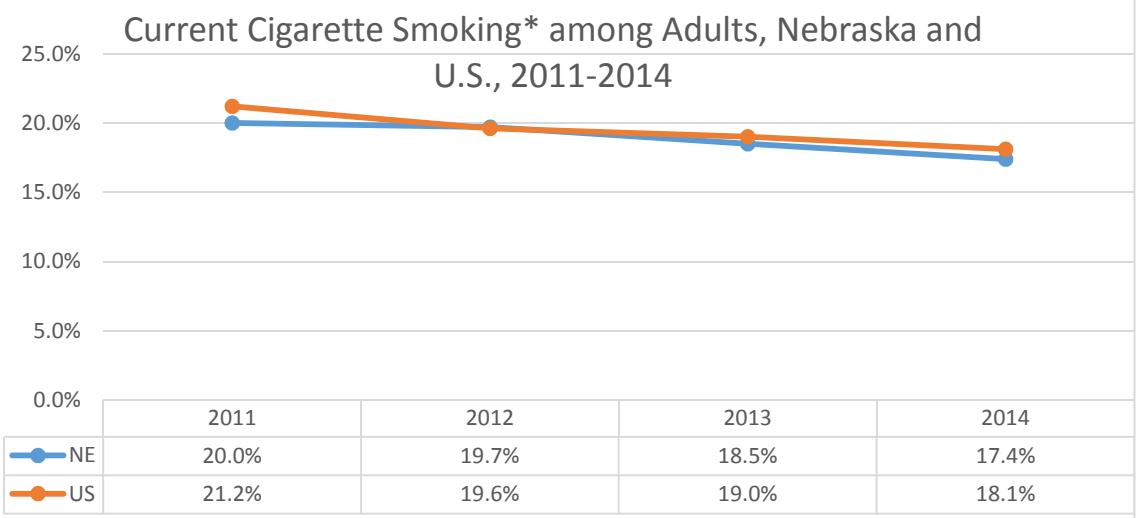
In 2014, approximately one in every six Nebraska adults (17.3 percent), an estimated 245,000 adults, reported current cigarette use. Current cigarette use is defined as reported smoking at least 100 cigarettes in their lifetime and reported smoking every day or some days.

Compared to the Nation

In 2014, adults in Nebraska smoking cigarettes at a rate similar to adults nationally, 17.3 percent and 18.1 percent, respectively.

Trends

Figure 3.2 shows the percent of adults who currently smoke cigarettes in Nebraska and the United States. From 2011 to 2014 the rate of cigarette use has been nearly the same for both Nebraska and the United States. There has been a small but statistically significant decrease in the percent of adults who use cigarettes in Nebraska 30-day cigarette use.
Figure 3.2



	2011	2012	2013	2014
NE	20.0%	19.7%	18.5%	17.4%
US	21.2%	19.6%	19.0%	18.1%

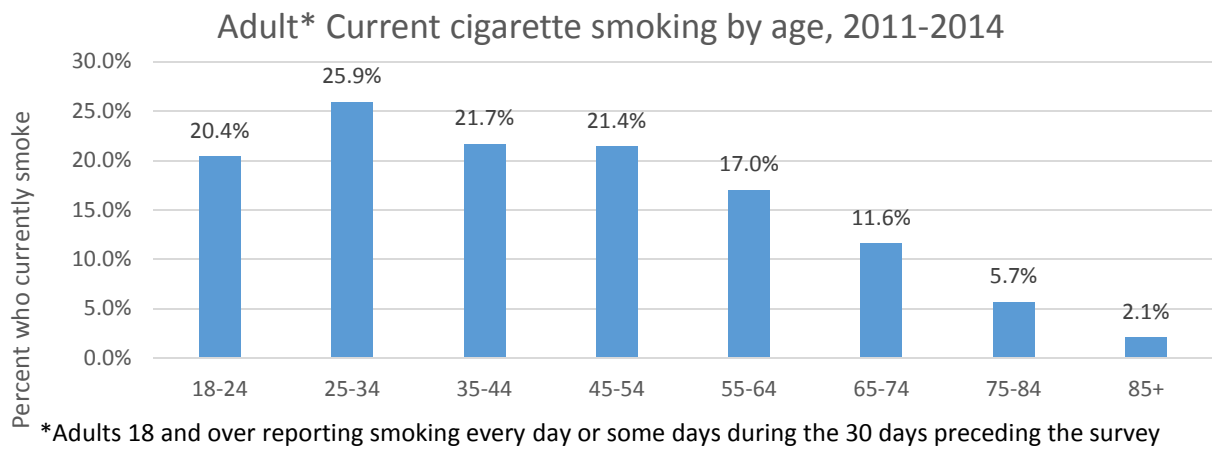
*Adults 18 and over who have smoked at least 100 cigarettes in their lifeteime and reported smoking every day or some days
Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Adult Tobacco Consumption in Nebraska: Past Month Cigarette Use by Demographics

Differences by Age

Figure 3.3 compares the percent of adults who smoke cigarettes in the past month by age group from 2011 to 2014. Nebraskans aged 25-34 had the highest percentage of current cigarette use while current cigarette use begins to decrease at age 55 and continues to decline among older Nebraskans.

Figure 3.3



*Adults 18 and over reporting smoking every day or some days during the 30 days preceding the survey
Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Differences by Gender

Between 2011 and 2014 males are significantly more likely (20.5 percent) to report current cigarette smoking then females (17.3 percent).

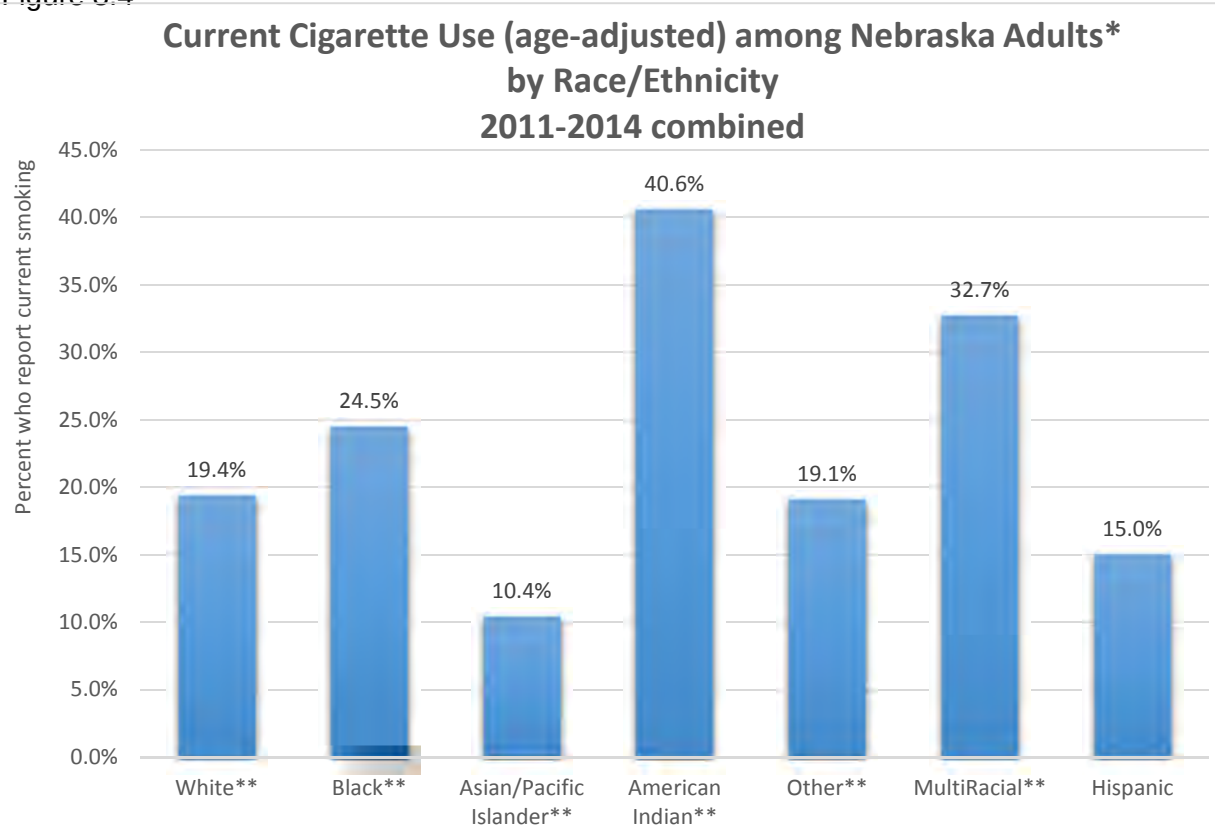
Differences by Urban/Rural

Between 2011 and 2014 there was little difference between urban and rural counties. Residents of urban-small counties reported the highest (20.5 percent) rate of current smoking which was significantly higher than residents of rural counties (18.8 percent). Residents of Urban-large counties reported current smoking in the middle (19 percent), but it was not significantly different than either urban small or rural residents.

Differences by Race/Ethnicity

Between 2011 and 2014, beyond differences in age (using age-adjustment), American Indian (40.6 percent) adults and Multi-Racial (32.7 percent) adults reported the highest percentage, making them more likely than adults of all other racial and ethnic groups to smoke cigarettes. African Americans (24.5 percent) reported the next highest percentages followed by Whites (19.4 percent) with Hispanics (15 percent) and Asians (10.4 percent) having the lowest reported cigarette use (Figure 3.4)

Figure 3.4



*Adults 18 and over reporting smoking every day or some days during the 30 days preceding the survey
**Non-hispanic
Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Adult Tobacco Consumption in Nebraska: Past Month Smokeless Tobacco Use

Current Smokeless Tobacco Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Current Smokeless Tobacco Use among Adults 18 and older	BRFSS	2014	4.7%	67,000	4.2%	Non-significant	Decreasing

Current Smokeless Tobacco Use in Nebraska

In 2014, approximately one in every 21 Nebraska adults (4.7 percent), an estimated 67,000 adults, reported currently using smokeless tobacco every day or on some days.

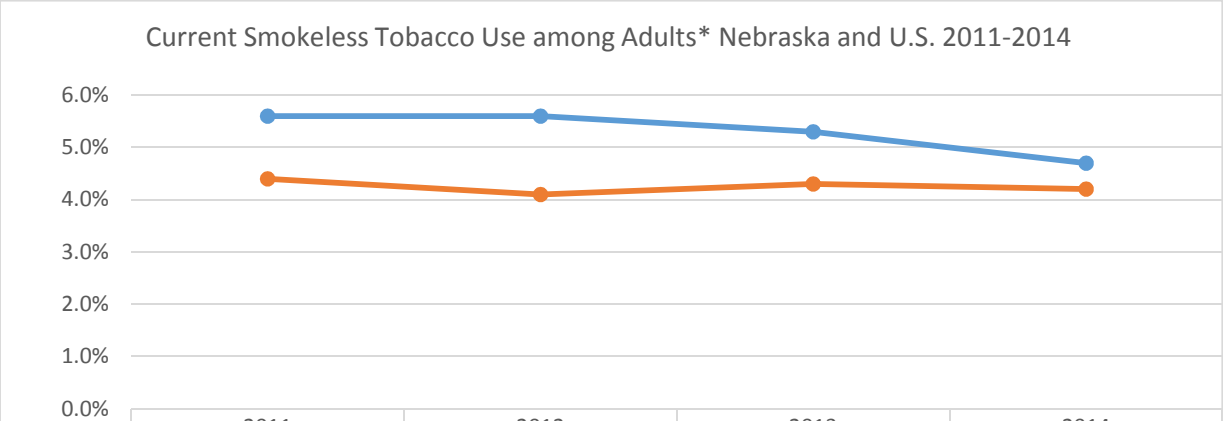
Compared to the Nation

In 2014, adults in Nebraska were slightly more likely to use smokeless tobacco than adults nationally, 4.7 percent and 4.2 percent, respectively but the difference was not statistically significant.

Trends

Figure 3.5 shows the percent of adults who currently use smokeless tobacco in Nebraska and the United States. From 2011 to 2014 the rate of smokeless tobacco use has been significantly higher for Nebraska compared to the Nation as a whole. There has been a small but statistically significant decrease in the percent of adults who use smokeless in Nebraska from 2011 to 2014.

Figure 3.5



	2011	2012	2013	2014
NE	5.6%	5.6%	5.3%	4.7%
US	4.4%	4.1%	4.3%	4.2%

*Adults 18 and over reporting currenlty using smokeless tobacco produces (e.g. chewing tobacco or snuff) every day or some days
Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Adult Tobacco Consumption in Nebraska: Past Month Smokeless Tobacco Use by Demographics

Differences by Age

Nebraskans aged 18-34 had the highest percentage of current cigarette use while current cigarette use begins to decrease at age 35 and continues to decline among older Nebraskans.

Differences by Gender

Between 2011 and 2014 males are twelve times more likely (9.6 percent) to report they current use smokeless tobacco then females (0.8 percent).

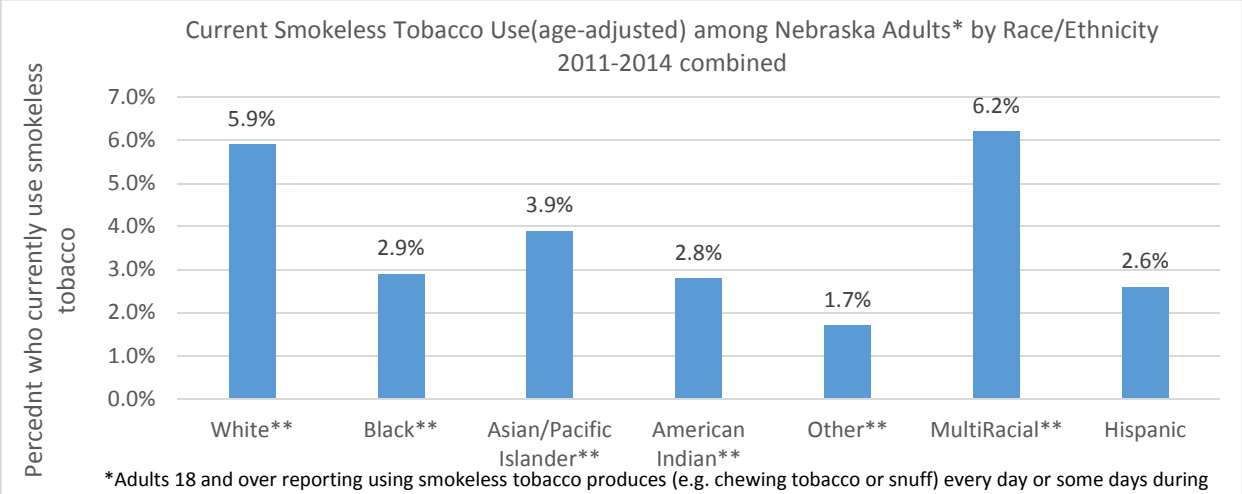
Differences by Urban/Rural

Between 2011 and 2014 there was a significant difference between urban and rural counties. Residents of Rural counties reported the highest (8.4 percent) rate of current smokeless tobacco which was significantly higher than other more urban counties. Residents of Urban small counties reported a lower rate current use of smokeless tobacco (6.9 percent), but it was still significantly higher than residents of Urban-large counties (3.8 percent).

Differences by Race/Ethnicity

Between 2011 and 2014, beyond differences in age (using age-adjustment), there was not much difference between races and ethnicities. Whites (5.9 percent) and Multi-Racial (6.2 percent) residents reported the highest percentage. Black (2.9 percent) American Indian (2.8 percent), Other (1.7percent) and Hispanic (2.6 percent) reported the lowest percentage (Figure 3.6).

Figure 3.6



*Adults 18 and over reporting using smokeless tobacco produces (e.g. chewing tobacco or snuff) every day or some days during the 30 days preceding the survey
**Non-hispanic
Source: Behavioral Risk Factor Surveillance Survey (BRFSS)

Youth Tobacco Consumption: Past Month Cigarette Use

Similar to alcohol rates looking from a lifetime perspective provide information on understanding experimentation with cigarette use, 30 days use rates provide a better estimate of recent and/or current cigarette use.

Current Cigarette Use by Youth Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend	Lifetime Cigarette Use Nebraska
Past Month Cigarette Use among Youth in Grades 9-12	YRBS	2013	10.9%	11,000	15.7%	Lower	Decreasing	31.9%

Current Cigarette Use in Nebraska among Youth

In 2013, approximately one in 10 Nebraska high school students (10.9 percent), an estimated 11,000 youth, reported smoking cigarettes in the past month.

Compared to the Nation

In 2013, youth in Nebraska were less likely than youth nationally to currently use cigarettes, 10.9 percent and 15.7 percent, respectively.

Trends

There has been a decline in the rate of past month use by high school students. In 2011 nearly two out of every seven (15 percent) reported smoking cigarettes in the past month but in 2013 10.9 percent reported smoking cigarettes.

Youth Tobacco Consumption: Past Month Cigarette Use by Demographics

Differences by Grade

Older youth were more likely than younger youth to have smoked cigarettes in the past 30 days. Youth in 9th and 11th grades reported significantly less cigarette use in 2013 than in 2011.

Differences by Gender

Similar to lifetime use there was no significant difference between males and females in past month cigarette smoking among youth. In 2013 10.9 percent of males reported smoking cigarettes while 10.8 percent of females reported smoking cigarettes.

Youth Tobacco Consumption: Past Month Smokeless Tobacco Use

In addition to looking at cigarette use the YRBS asked youth if they have used smokeless tobacco in the past 30 days. Smokeless tobacco includes chewing tobacco, snuff or dip.

Current Smokeless Tobacco Use by Youth Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Past Month Smokeless Tobacco Use among Youth in Grades 9-12	YRBS	2013	7.7%	8,000	8.8%	Non-significant	Stable

Current Smokeless Tobacco Use in Nebraska among Youth

In 2013, approximately one in 13 of Nebraska high school students (7.7 percent), an estimated 8,000 youth, reported using smokeless tobacco in the past month.

Compared to the Nation

In 2013, youth in Nebraska were similar to youth nationally to use smokeless tobacco, 7.7 percent and 8.8 percent, respectively.

Trends

Unlike other several other tobacco measures there is no significant difference in past month smokeless tobacco use. In 2011, 6.4 percent reported past month smokeless tobacco use while in 2013, 7.7 percent reported past month smokeless tobacco use.

Youth Tobacco Consumption: Past Month Smokeless Tobacco Use by Demographics

Differences by Grade

Similar to other tobacco measures older youth were more likely than younger youth to report past month smokeless tobacco use. There was no significant difference between grades from 2011 to 2013.

Differences by Gender

Unlike other tobacco use questions there was a significant difference between males and females in past month smokeless tobacco use. In 2013 12.9 percent of males reported past month smokeless tobacco use while 2.3 percent of females reported past month smokeless tobacco use.

Consequences of Tobacco Consumption: Overview

Each year cigarette smoking, as well as other forms of tobacco, contributes to a large number of chronic disease deaths, including deaths due to cancer, cardiovascular disease and respiratory disease. The following page will discuss smoking-attributable deaths overall along with estimated costs. Then additional discussion will be placed on specific conditions in which tobacco is estimated to have a significant impact on. Finally the report will look at fire deaths due to smoking.

Tobacco-Related Mortality and Morbidity: Deaths and Medical Costs due to Smoking

Smoking-Related Death Indicator Summary Table

Indicator	Data Source	Year	Number of Deaths Nebraska*
Smoking-Related Death Estimate	CDC*	2014	2,500

* Centers for Disease Control and Prevention. *Best Practices for Comprehensive Tobacco Control Programs*—2014. Atlanta: U.S. Department of Health and Human Services, Center for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014;

The Center for Disease Control (CDC) estimates the deaths each year attributable to smoking. In 2014 it was estimated that 2,500 Nebraska residents died due to smoking. In addition the CDC estimates that 38,000 youth ages 0-17 are projected to die due to smoking.

In addition to the mortality due to smoking there is additional medical costs from smoking-related diseases. The CDC estimated that in 2014, $795 million will be spent on medical costs due to smoking[2].

The CDC has recently updated its estimates to better account for smoking related deaths. As a result there is no trend data available for this report.

In addition to the health consequences of tobacco use there are accidental deaths due to smoking related fires that occur. The Nebraska State Fire Marshall's office reported seven deaths and $12 million dollars property damages from the fires caused by smoking and smoking related materials from 2011 to 2013.

References
Tobacco Use

1. Centers for Disease Control and Prevention. CDC Vital Signs, Tobacco Use, September 2010. Retrieved July 2015 from http://www.cdc.gov/vitalsigns/TobaccoUse/Smoking/index.html
2. Centers for Disease Control and Prevention. *Best Practices for Comprehensive Tobacco Control Programs*—2014. Atlanta: U.S. Department of Health and Human Services, Center for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014;

Section 4:

Illicit Drug Use in Nebraska: Prevalence and Consequences

ILLICIT DRUGS – SUMMARY OF KEY FINDINGS

Illicit Drug Use in Nebraska

Drug use is common among youth and adults

- From 2012 through 2013, one out every 13 of Nebraska youth aged 12-17 (eight percent), an estimated 12,000 youth reported using illicit drugs in the past month according to the National Survey of Drug Use and Health.
- During that same time period about one in every 15 Nebraska residents 18 and older (6.7 percent) reported using illicit drugs in the past month.

Marijuana use is the most common illicit drug

- In 2013, about one in nine Nebraska high school students (11.7 percent) reported past month marijuana use,
- Nearly one in 20 (5.4 percent) adults 18 and older reported past month use of marijuana in 2012-2013.
- In Nebraska, marijuana is common in drug-related crimes, accounting for nearly three-fourths of all drug possession arrests in 2013, and was the most common substance found in drivers who were caught driving under the influence of drugs from 2006-2014. In 2015, more than half of all new prison inmates in Nebraska reported using marijuana during the five years prior to their incarceration.

Cocaine use has slightly dropped but is still used.

- In 2013, about one in every 31 Nebraska high school students (3.2 percent) reported using cocaine sometime in their lifetime.
- During the combined years of 2012 and 2013, about one in every 77 (1.3 percent) adults 18 and older reported past year cocaine use.
- In Nebraska, cocaine appears to be relatively common in drug-related crimes, is a commonly used drug among newly incarcerated prison inmates (in 2015 one-seventh of all new prison inmates in Nebraska reported using cocaine during the five years prior their incarceration), and was the fourth most commonly reported illicit drug during substance abuse treatment admissions in 2014.

Prescription drug abuse is a growing problem.

- In 2013, about one in every 10 Nebraska high school students (10.4 percent) reported using prescription drugs without a doctor's prescription sometime in their lifetime.
- During the combined years of 2012 and 2013, about one in every 28 (3.5 percent) adults 18 and older reported non-medical use of pain relievers during the past year.

Heroin use is low but continues to be used in Nebraska.

- In 2013, about one in every 83 Nebraska high school students (1.2 percent) reported using heroin sometime in their lifetime.
- During the combined years of 2010 and 2013, about one in every 125 (0.8 percent) residents 12 and older reported using heroin sometime in their lifetime.

Methamphetamine use is common in drug-related crimes

- In 2013, about one in every 50 Nebraska high school students (two percent) reported using methamphetamine (meth) during their lifetime.
- From 2010-2013 about one in every 333 adults 18 and older (0.3 percent) reported using methamphetamine in the past year. This is down from 1.2 percent in 2002-2005.
- In Nebraska, meth appears to be relatively common in drug-related crimes and is the second most commonly used drug (after marijuana) among newly incarcerated prison inmates (in 2015, one-third of all new prison inmates in Nebraska reported using meth during the five years prior their incarceration), and when examining the primary drugs of choice, meth accounted for 23.95 percent of illicit drug substance abuse treatment admissions in 2014.

Consequences of Illicit Drug Use in Nebraska

Drug use is a contributor to death and medical care

- Drug use was directly responsible for killing 128 Nebraska residents in 2013.
- In 2013, there were 10,901 hospitalizations in Nebraska in which a drug-attributable condition was listed on the hospitalization record.
- The number of drug-attributable hospitalizations has doubled since 2004 when there were 5,390. In addition to the 10,901 hospitalizations in which drugs were a direct contributor

Drug use places a tremendous strain on the criminal justice system

- In 2010, there were 8,369 arrests for possession or sales/manufacturing of illicit drugs in Nebraska, making it the third most common arrest offense (following DUI and larceny) accounting for one in every nine adult arrests (11.3 percent) and one in every eight juvenile arrests (12.9 percent). However, possession accounted for the majority of these arrests (adults – 6,144 arrests, 87.6 percent and juveniles -1,028 arrests, 75.8 percent).
- In 2014, law enforcement drug recognition experts (DREs) examined 671 drivers for impairment by non-alcoholic substances.
- In 2014, there were 1,987 adults sentenced to probation for a drug offense in Nebraska. Since 2011, the number of adults sentenced to probation for a drug offense has increased rising from 1,468 in 2011 to 1,987 in 2014
- In 2014, 714 individuals were incarcerated for convictions in which a drug-related offense was the most serious offense committed.
- Drug-related offenses are the second most common reasons for male incarceration and the most common reason for female incarceration.
- The Nebraska Department of Corrections reports that the expense to house and maintain these inmates is estimated to cost over 20 million dollars annually.

Treatment admissions for drug use are common

- In 2014, there were 8,255 admissions to Nebraska substance abuse treatment centers in which a non-alcoholic drug was listed at the primary drug of choice, accounting for nearly four in 10 admissions (37.9 percent) with Methamphetamine being the most common (13.9 percent).

Demographic Differences

Differences by age

- Residents ages 18-25 were the most likely to use illicit drugs. Residents 25-34 were more likely to receive substance abuse treatment residents 45-54 were most likely to die as a direct drug related death (Table 4.1).

Table 4,1

Drug Indicators and Nebraska Residents	
Indicator	**Most Likely Age Group**
Marijuana Use	18-25
Cocaine Use	18-25
Non-Medical Pain Reliever Use	18-25
Trauma Centers drug-related admission	18-24
Drug-related deaths	45-54
Substance Abuse Treatment	25-34
Illicit Drug Dependence/Abuse	18-25

Differences by gender

- Among Nebraska high school students, did not vary much except for cocaine use, steroid use and injected drugs in which males reported higher use than females
- Males were more likely to be admitted into substance abuse treatment.

Differences by urban/rural

- Larger urban counties had higher age-adjusted mortality rates for drug-related deaths then more rural counties

Differences by race/ethnicity

- These findings were not available for this report.

Illicit Drug Consumption: Patterns and Concerns

Nebraska, like the U.S., have rates of use for illicit drugs much lower than that for alcohol and tobacco. The sole exception to this is Marijuana which has a much higher prevalence of use, particularly for youth. Among youth marijuana rates are comparable to cigarette use in many states. In fact in some grades, youth marijuana use is higher than cigarette use.

Nebraska's illicit drug use is generally lower than the use rate among the same age peers in the U.S. There are some exceptions, such as marijuana use, which is growing among youth and adults as perceptions of harm continue to fall.

In the current state epidemiological profile illicit drug use consumption data along with mortality and morbidity data is presented along with specific information for different illicit substances.

Drug names and categories can be quite confusing. To provide clarity on some of the commonly abused drugs, Appendix B includes a summary of drug categories, including specific drugs and their effects on the body.

Adult Illicit Drug Consumption

Most drug use information for Nebraska comes from the National Survey on Drug Use and Health (NSDUH). This national survey provides state level estimates for illegal drug use but it does not provide county level estimates. In this section, six types of adult illicit drug use consumption data from NSDUH are shown: 1) Marijuana use 2)any illicit drug use other than Marijuana 3) cocaine use 4) non-medical prescription drug use 5) Methamphetamine Use and 6) Heroin use.

Adult Illicit Drug Consumption: Marijuana Use

As noted in the *consequences of illicit drug use* section of this report, marijuana is common in drug-related crimes, accounting for nearly three-fourths of all adult drug possession arrests in 2013 and three out of five juvenile drug possession arrests, was the most common substance found in drivers who were caught driving under the influence of drugs in every year from 2006 to 2014. In 2014, more than half of all new prison inmates in Nebraska reported using marijuana sometime during the five years prior their incarceration.

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Past month Marijuana Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Marijuana Use in Past Month among Persons 18 and Older	NSDUH	2012/2013	5.4%	74,000	7.4%	Lower	Stable

Current Marijuana Use in Nebraska

In 2012/2013, approximately one in every 20 Nebraska adults (5.4 percent), an estimated 74,000 adults, reported using marijuana during the 30 days preceding the survey.

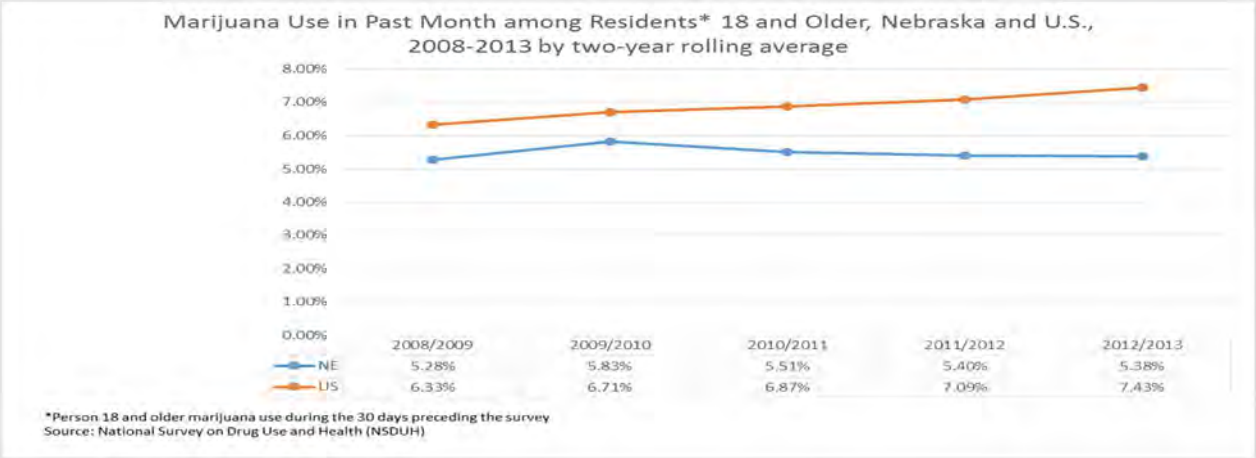
Compared to the Nation

In 2013, adults in Nebraska were lower than adults nationally to currently use marijuana, 5.4 percent and 7.4 percent, respectively.

Trends

Figure 4.1 shows the percentage of Nebraska and U.S. adults who have used Marijuana in the past 30 days between 2008 and 2013. Overall the Nebraska trend is stable while the U.S. trend has been slowly increasing. Starting in the 2011/2012 combined average Nebraska residents reported significantly less use of marijuana compared the national rate.

Figure 4.1

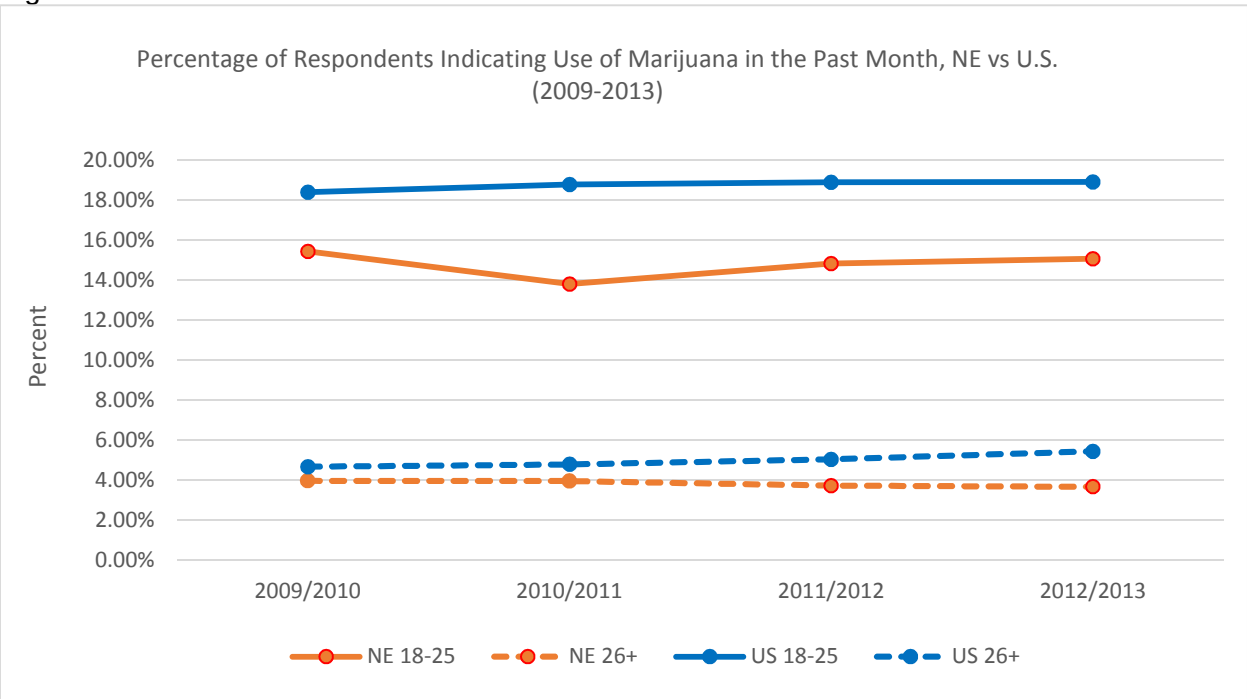


Adult Illicit Drug Consumption: Marijuana Use by Age

Overall, 18-25 year olds are more likely to use Marijuana than those 26 and older (figure 4.2).

- In Nebraska 18-25 year olds are significantly less likely than the U.S. average to use Marijuana in the past month with 15.07 percent of Nebraska residents 18-25 reporting past month use of Marijuana while 18.91 percent of U.S. residents reported past month use of Marijuana.
- For those 26 and older in the U.S. as a whole there is a slight increase in the percent that use Marijuana but for Nebraska the rate is stable. In Nebraska 3.68 percent of adults 26 and older report using Marijuana in the past month while 5.45 percent of U.S. residents as a whole reported using Marijuana in the past month. As a result starting in 2012/13 Nebraska adults aged 26 and older are significantly less likely than adults 26 and older to use Marijuana in the past month.

Figure 4.2



Adult Illicit Drug Consumption: Any Illicit Drug Use (Except Marijuana)

During the combined years of 2012 and 2013, 2.3 percent of all Nebraskans 18-older reported using illicit drugs (including cocaine, heroin, hallucinogens, inhalants, or non-medical use of prescription-type psychotherapeutics (including pain relievers, tranquilizers, sedatives and stimulants including methamphetamine; but excluding over-the-counter-drugs) during the 30 days preceding the survey.

Past month Illicit Drug Use (except Marijuana) Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Illicit Drug Consumption except Marijuana in Past Month among Persons 18 and Older	NSDUH	2012/2013	2.3%	32,000	3.4%	Non-significant	Stable

Current Illicit Drug Use (except Marijuana) in Nebraska

In 2012/13, approximately one in every 43 Nebraska adults (2.3 percent), an estimated 32,000 adults, reported using illicit drugs (except marijuana) during the 30 days preceding the survey.

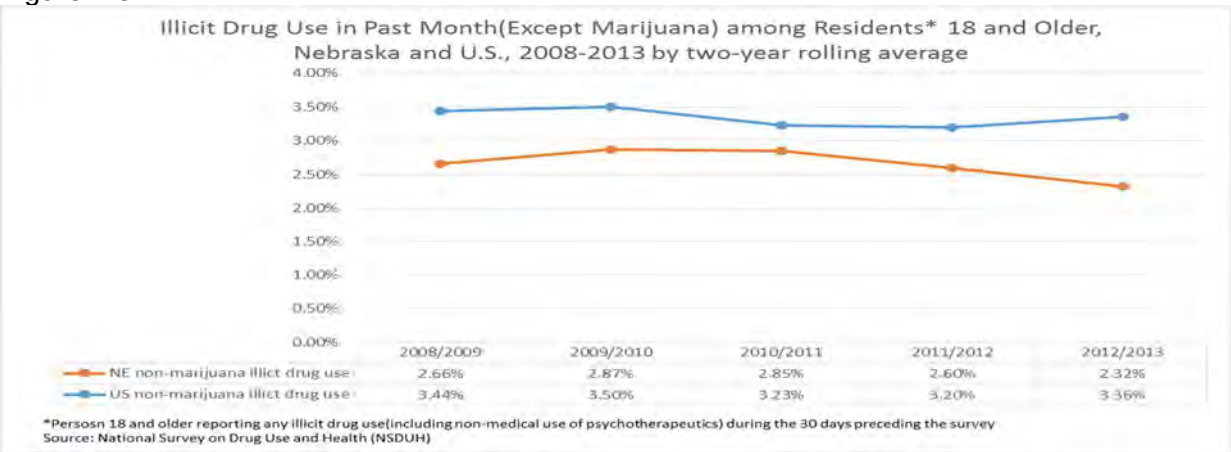
Compared to the Nation

In 2012/13, adults in Nebraska were similar to adults nationally to currently use illicit drugs (except marijuana), 2.3 percent and 3.4 percent, respectively.

Trends

Figure 4.3 shows the percentage of Nebraska and U.S. adults who have used any illicit drug (other than Marijuana) in the past 30 days between 2008 and 2013. Overall, the trends have been stable for illicit drug use for both Nebraska and the U.S.

Figure 4.3

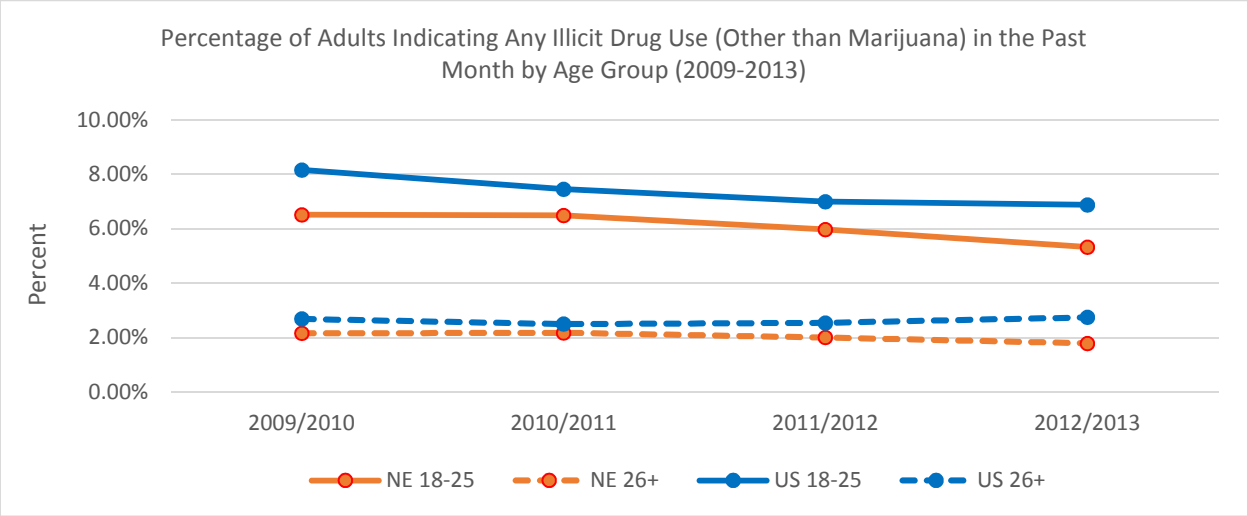


Adult Illicit Drug Consumption: Any Illicit Drug Use (Except Marijuana) by Age

NSDUH allows comparisons for adults for young adults (18-25) and older adults (26 and older). Overall, 18-25 year olds are more likely to use illicit drugs than those 26 and older (figure 4.4).

- In Nebraska 18-25 year olds have seen a slight drop of illicit drug use from 6.5 percent in 2009/10 to 5.3 percent in 2012/13.
- Those 26 and older have remained fairly stable from 2.16 percent in 2009/10 to 1.79 percent in 2012/13.
- In both age groups there is not, however, a significant difference between Nebraska's rate and the U.S. rate as a whole.

Figure 4.4



Adult Illicit Drug Consumption: Cocaine Use Past Year

As noted in the *consequences of illicit drug use* section of this report, cocaine (although not always reported independent of other drugs) appears to be somewhat common in drug-related crimes in Nebraska, is a commonly used drug among newly incarcerated prison inmates (in 2010 one in seven inmates of all new prison inmates in Nebraska reported using cocaine during the 5 years prior their incarceration).

Past Year Cocaine Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Cocaine Use in Past Year among Persons 18 and Older	NSDUH	2012/2013	1.3%	18,000	1.8%	Non-significant	Stable

Past Year Cocaine Use in Nebraska

In 2012/13, approximately one in every 77 Nebraska adults (1.3 percent), an estimated 18,000 adults, reported using cocaine during the past year.

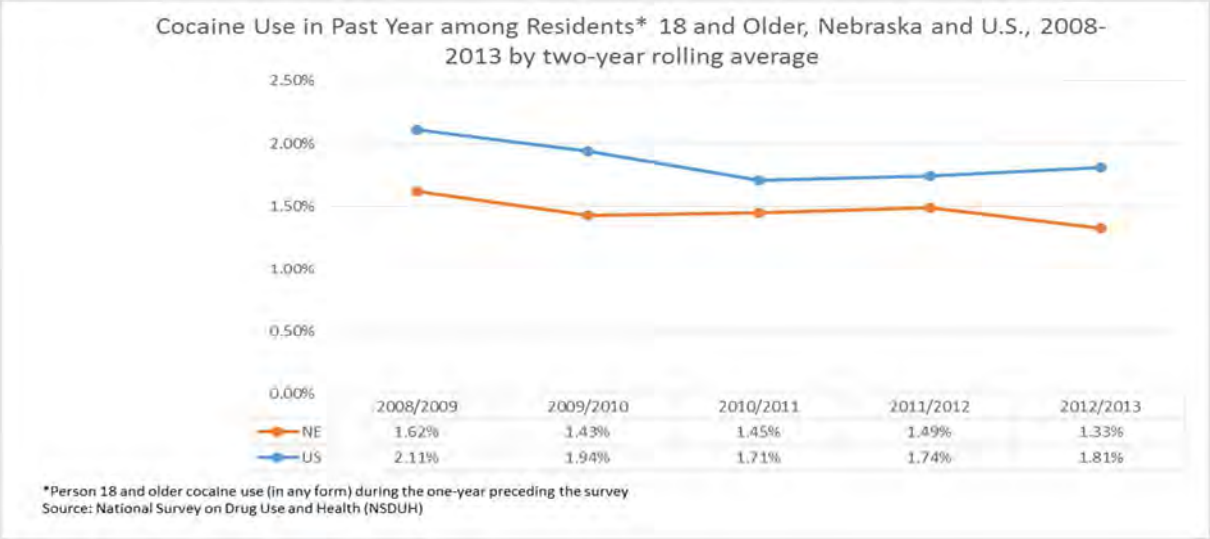
Compared to the Nation

In 2013, adults in Nebraska were similar to adults nationally to use cocaine in the past year, 1.3 percent and 1.8 percent, respectively.

Trends

Figure 4.5 shows the percentage of Nebraska and U.S. adults who have used Cocaine in the past year between 2008 and 2013. Overall both Nebraska and the U.S. rate has seen a slight but non-significant decrease. There is no significant difference between Nebraska's and the U.S. rate for Cocaine use.

Figure 4.5

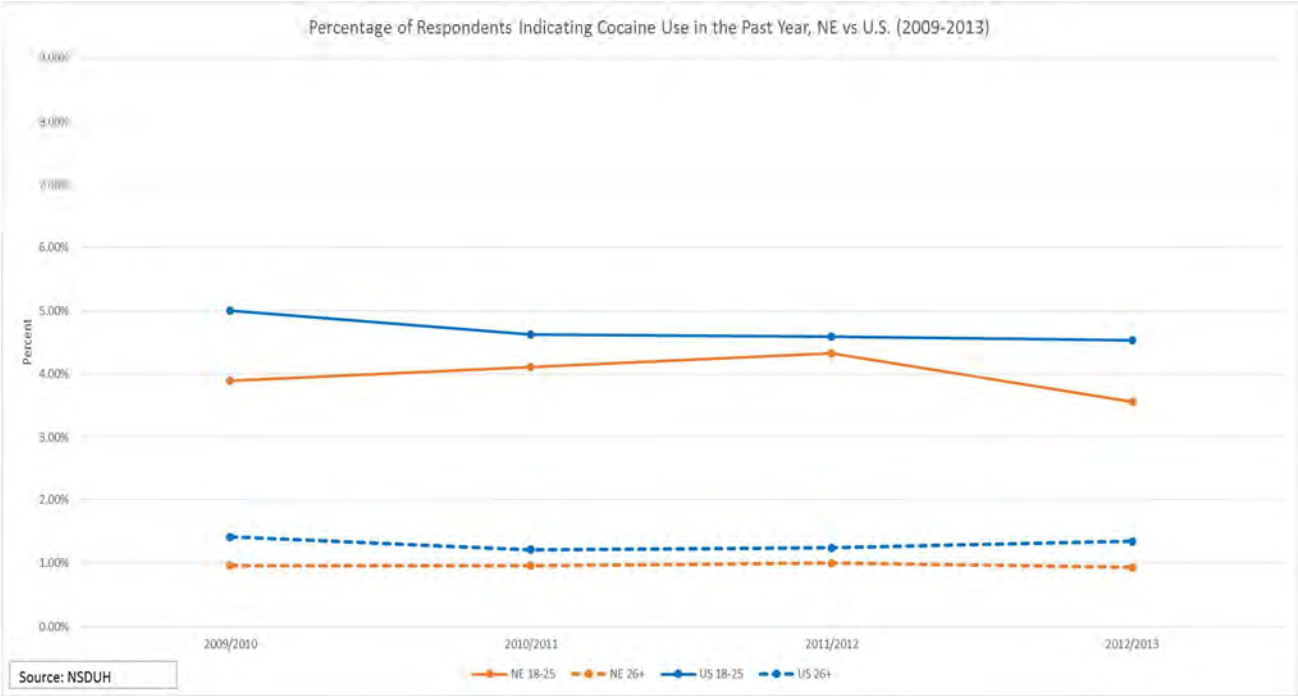


Adult Illicit Drug Consumption: Cocaine Use by Age

Overall, 18-25 year olds are more likely to use Cocaine than those 26 and older.

- In Nebraska, 3.56 percent of 18-25 year olds report using cocaine in the past year compared to 4.53 percent of U.S. residents as a whole for 2012/13 (Figure 4.6).
- For adults 26 and older 0.93 percent of Nebraskan report using cocaine in the past year while 1.34 percent of U.S. adults similarly report using it in the past year. In both age groups there is not, however, a significant difference between Nebraska's rate and the U.S. rate.

Figure 4.6



Adult Illicit Drug Consumption: Past-Year Non-Medical Use of Pain Relievers

Abuse of pain relievers continues to be a problem for Nebraska along with the nation as a whole. As noted in the *consequences of illicit drug use* section of this report, non-medical use of pain relievers appears to be relatively common in drug-related crimes in Nebraska, is a commonly used drug among newly incarcerated prison inmates (in 2014 one in 12 inmates of all new prison inmates in Nebraska reported abusing prescription drugs during the five years prior to their incarceration).

Past Year Non-Medical Use of Pain Relievers Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Non-medical Use of Pain Relievers in Past Year among Persons 18 and Older	NSDUH	2012/2013	3.5%	48,000	4.5%	Non-significant	Stable

Past Year Non-Medical Use of Pain Relievers in Nebraska

In 2012/13, approximately one in every 29 Nebraska adults (3.5 percent), an estimated 48,000 adults, reported using pain relievers for non-medical use during the past year.

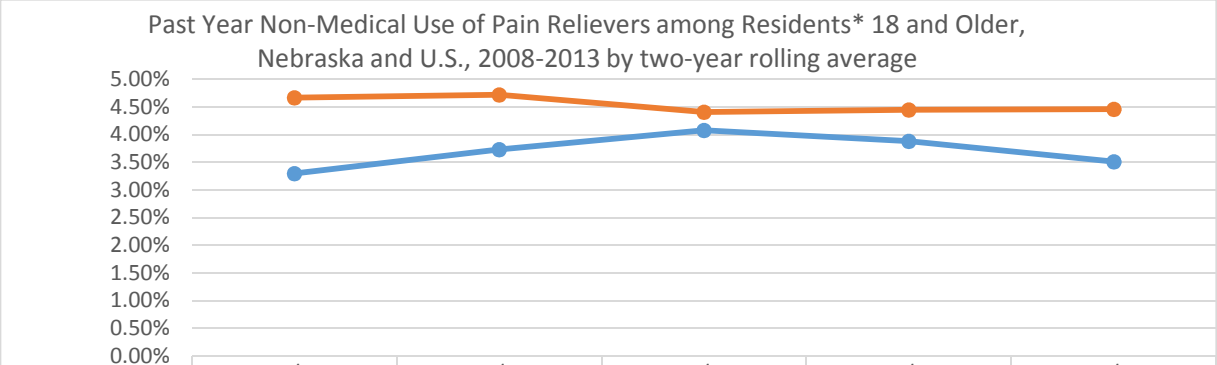
Compared to the Nation

In 2013, adults in Nebraska were similar to adults nationally to use pain relievers for non-medical use in the past year, 3.5 percent and 4.5 percent, respectively.

Trends

Figure 4.7 shows the percentage of Nebraska and U.S. adults who have used Pain-Relievers non-medically in the past year between 2008 and 2013. Nebraska rate had a slight increase from 3.3 percent in 2008/09 to 4.08 percent in 2010/11, then there is a slight decrease to 3.51 percent in 2012/13. The U.S. rate is fairly stable. There is no significant difference between Nebraska's and the U.S. rate for non-medical use of pain relievers.

Figure 4.7



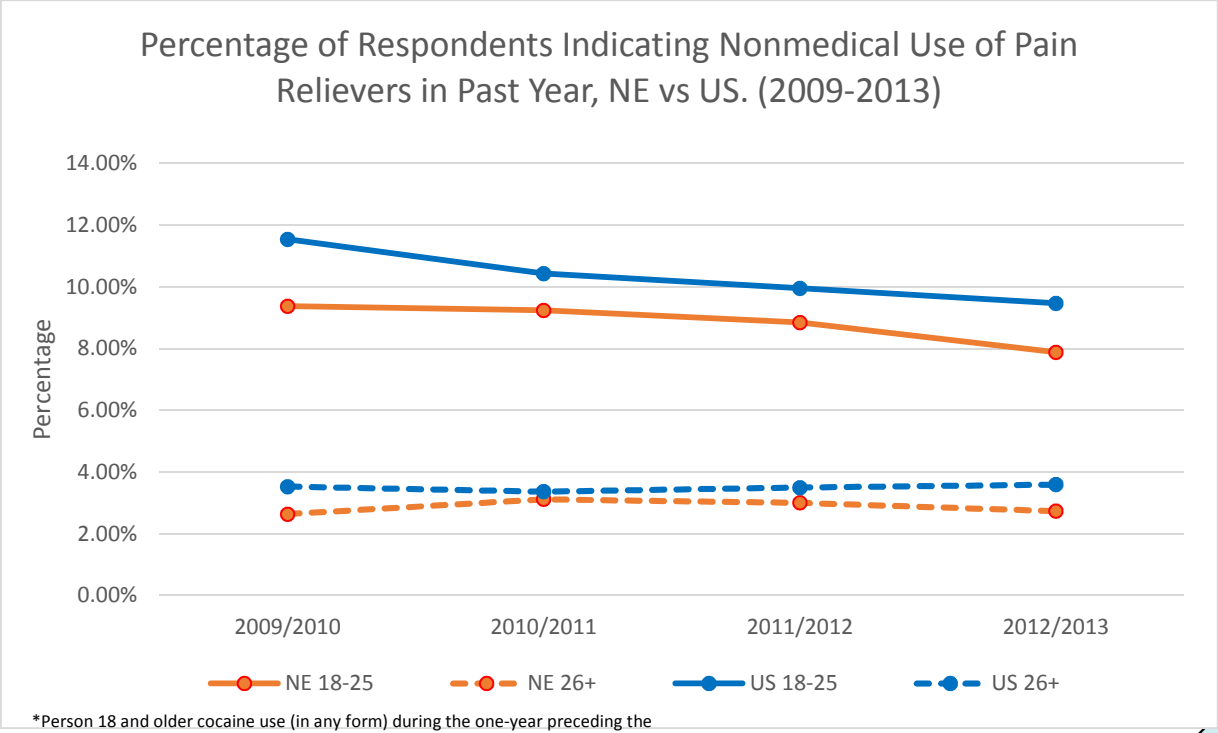
	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
NE 18+	3.30%	3.73%	4.08%	3.88%	3.51%
US 18+	4.67%	4.72%	4.41%	4.45%	4.46%

*Person 18 and older reporting non-medical use of pain releving drugs (excluding over-the-counter-drugs) during the one-year preceding the survey
Source: National Survey on Drug Use and Health (NSDUH)

Similar to other drug consumption 18-25 year olds are more likely to use pain relievers non-medically than those 26 and older.

- In 2012/13, 7.88 percent of Nebraskans 18-25 reported using pain relievers non-medically while 2.74 percent of Nebraskans 26 and older reported using pain relievers non-medically.
- Non-medical pain reliever use is declining, both in Nebraska and nation-wide, for those 18-25 years old while for those 26 and older the rate is stable.
- In both age groups there is not, however, a significant difference between Nebraska's rate and the U.S. rate as a whole (figure 4.8).

Figure 4.8



*Person 18 and older cocaine use (in any form) during the one-year preceding the survey Source: National Survey on Drug Use and Health (NSDUH)

Adult Illicit Drug Consumption: Past-Year Methamphetamine Use

As noted in the *consequences of illicit drug use* section of this report, methamphetamine (although not always reported independent of other drugs) appears to be relatively common in drug-related crimes in Nebraska, and is the second most commonly used drug (to marijuana) among newly incarcerated prison inmates. In 2014, 38.1 percent of all new prison inmates in Nebraska reported using methamphetamine during the five years prior their incarceration. When examining the primary drugs of choice, methamphetamine was the third most commonly reported drug(behind alcohol and marijuana) during substance abuse treatment admissions in 2014 (13.9 percent). (Note: Due to limited data availability, it was necessary to run data in four year rolling averages rather than two-year rolling averages).

Past Year Methamphetamine Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Methamphetamine Use in Past Year among Persons 18 and Older	NSDUH	2010-2013	0.3%	4,000	0.3%	Non-significant	Declining

Past Year Methamphetamine Use in Nebraska

From 2010-2013, approximately one in every 333 Nebraska adults (0.3 percent), an estimated 4,000 adults, reported using methamphetamine during the past year.

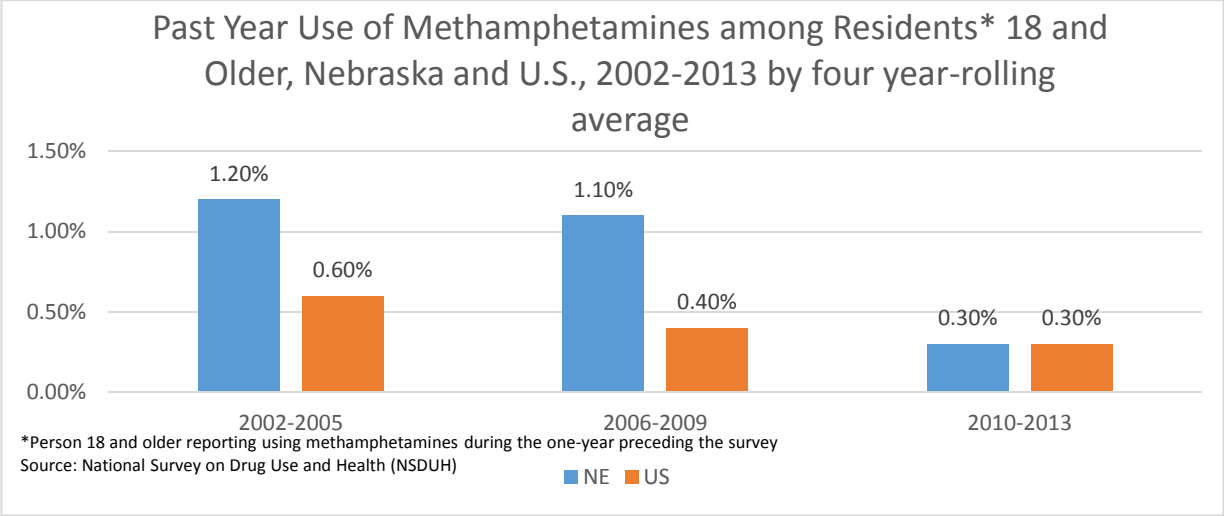
Compared to the Nation

From 2010-2013, adults in Nebraska were similar to adults nationally to use methamphetamine in the past year, 0.3 percent and 0.3 percent, respectively.

Trends

Figure 4.9 shows the percentage of Nebraska and U.S. adults who have used methamphetamine in the past year between 2002 and 2013. Nebraska rate had a significant decrease from 1.2 percent in 2002-2005 to 0.3 percent in 2010-2013. The U.S. rate is has been decreasing, but at a slower rate.

Figure 4.9



Adult Illicit Drug Consumption: Past-Year Methamphetamine Use by Age

Similar to other drug consumption 18-25 year olds are more likely to use methamphetamines than those 26 and older.

- In 2010-2013 1.1 percent of Nebraskan's 18-25 reported using methamphetamines while 0.2 percent of Nebraskans 26 and older reported using methamphetamines.
- In both age groups there is not, however, a significant difference between Nebraska's rate and the U.S. rate as a whole.

Adult/Youth Illicit Drug Consumption: Ever used Heroin

As noted in the *consequences of illicit drug use* section of this report, heroin appears to be relatively rare but still used in drug-related crimes in Nebraska. In 2010, one in 37 new prison inmates in Nebraska reported using heroin during the five years prior their incarceration. (Note: because of limited data it was necessary to run data in four year rolling averages rather than two-year rolling averages and to include all ages, not just 18 and above, in the analysis).

Lifetime Heroin Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Heroin Use Ever among Persons 12 and Older	NSDUH	2010-2013	0.8%	12,000	1.7%	Non-significant	Stable

Lifetime Heroin Use in Nebraska

From 2010-2013, approximately one in every 125 Nebraska residents 12 and older (0.8 percent), an estimated 12,000 residents, reported using heroin sometime in their lifetime.

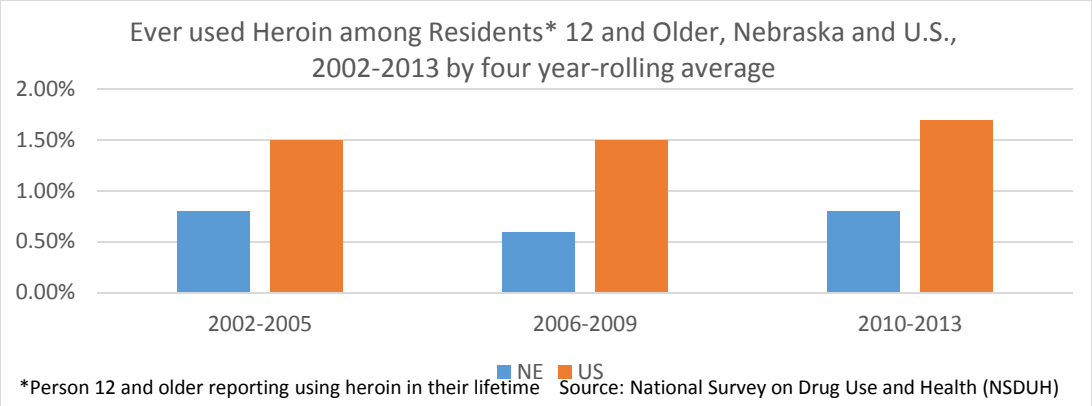
Compared to the Nation

From 2010-2013, residents in Nebraska were similar to residents nationally to use heroin sometime in their lifetime, 0.8 percent and 1.7 percent, respectively. There was no significant difference between Nebraska and the U.S.

Trends

Figure 4.10 shows the percentage of Nebraska and U.S. adults who have ever used heroin between 2002 and 2013. Nebraska rate has remained stable from 0.8 percent in 2002-2005 to 0.8 percent in 2010-2013. The U.S. Rate is has been increasing slightly and is almost twice what the Nebraska rate is.

Figure 4.10



Adult Illicit Drug Consumption: Ever Used Heroin by Age

Due to low numbers it is not possible to break results down by age.

Youth Illicit Drug Use in Nebraska: Overview

Illicit drug consumption data is gathered through the Youth Risk Behavior Survey (YRBS) in Nebraska. The YRBS is conducted every other year in a sample of high schools throughout Nebraska. It measures student's use of several illicit drugs in their lifetime by grade and gender.

Youth Illicit Drug Consumption: Past Month Marijuana Use

The YRBS asked high school students if they have used marijuana in the past 30 days.

Past month Marijuana Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Marijuana Use in Past Month among Youth grades 9-12	YRBS	2013	11.7%	12,000	23.4%	Lower	Stable

Current Marijuana Use in Nebraska

In 2013, approximately one in every nine Nebraska high school students (12 percent), an estimated 12,000 youth, reported using marijuana during the 30 days preceding the survey.

Compared to the Nation

In 2013, youth in Nebraska were lower than youth nationally to currently use marijuana, 11.7 percent and 23.4 percent, respectively.

Trends

In 2013 11.7 percent report using marijuana in the past 30 days compared to 12.7 percent in 2011, but the difference is not significant.

Youth Illicit Drug Consumption: Past Month Marijuana Use by Demographics

Differences by Grade

Overall the rates are very similar by grade except that 9th graders are significantly lower than other grades but then there is a significant increase in 10th grade in current use. Nebraska youth are significantly lower than the U.S. average for all grades.

Differences by Gender

Males are slightly more likely (13.4 percent) to indicate past month use of marijuana then females (9.9 percent) but the difference is not significant.

Youth Illicit Drug Consumption: Early Initial Marijuana Use among Youth

The YRBS asked high school students in addition to current use, if they have used marijuana before the age of 13.

Early Initial Marijuana Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Early initial Marijuana Use among Youth grades 9-12	YRBS	2013	5.5%	5,000	8.6%	Lower	Stable

Early Initial Marijuana Use in Nebraska

In 2013, approximately one in every 18 Nebraska high school students (six percent), an estimated 5,000 youth, reported using marijuana before the age of 13.

Compared to the Nation

In 2013, youth in Nebraska were lower than youth nationally to use marijuana before age 13, 5.5 percent and 8.6 percent, respectively.

Trends

In 2013, 5.5 percent report using marijuana in before age 13 compared to 4.9 percent in 2011, but the difference is not significant.

Youth Illicit Drug Consumption: Early Initial Marijuana Use among Youth by Demographics

Differences by Grade

Overall the rates are very similar by grade with no significant difference. Nebraska youth are significantly lower than the U.S. average for all grades except 10th grade.

Differences by Gender

Males are significantly more likely (7.3 percent) to indicate using marijuana before age 13 then females (3.7 percent).

Youth Illicit Drug Consumption: Lifetime Illicit Drug Use Among Youth

The YRBS asked high school students in 2013 if they have ever used illicit drugs. Marijuana was the most commonly reported drug, with one if four (23.6 percent) indicating they had used it sometime in their lifetime. Second was use of prescription drugs without a doctor's prescription (10.4 percent), followed by inhalants (seven percent), cocaine (3.2 percent), ecstasy (3.2 percent), steroids without a doctor's prescription, (2.3 percent), methamphetamine (two percent) and heroin (1.2 percent).

Table 4.2

Percentage of Students in Grades 9-12 and by Gender Who Have Used Illicit Drugs in their Lifetime, Nebraska (2013)

	Lifetime Use				Gender	
Illicit Drug	**9th**	**10th**	**11th**	**12th**	**Female**	**Male**
Marijuana	10.2	23.5	32.0	28.2	22.7	24.6
Cocaine	1.2	3.7	3.8	3.6	2.0	4.4
Inhalants	6.6	7.3	6.1	7.1	6.6	7.4
Ecstasy	1.4	4.2	3.5	3.3	2.4	4.1
Heroin	0.4	1.7	1.4	0.8	0.9	1.6
Methamphetamines	1.0	2.8	2.0	2.1	1.4	2.6
Steroids*	1.8	1.9	2.7	2.6	1.2	3.3
Prescription drugs*	4.5	8.6	14.1	13.5	9.7	11.1
Injected any illegal drug	1.5	1.8	2.0	2.0	0.8	2.9

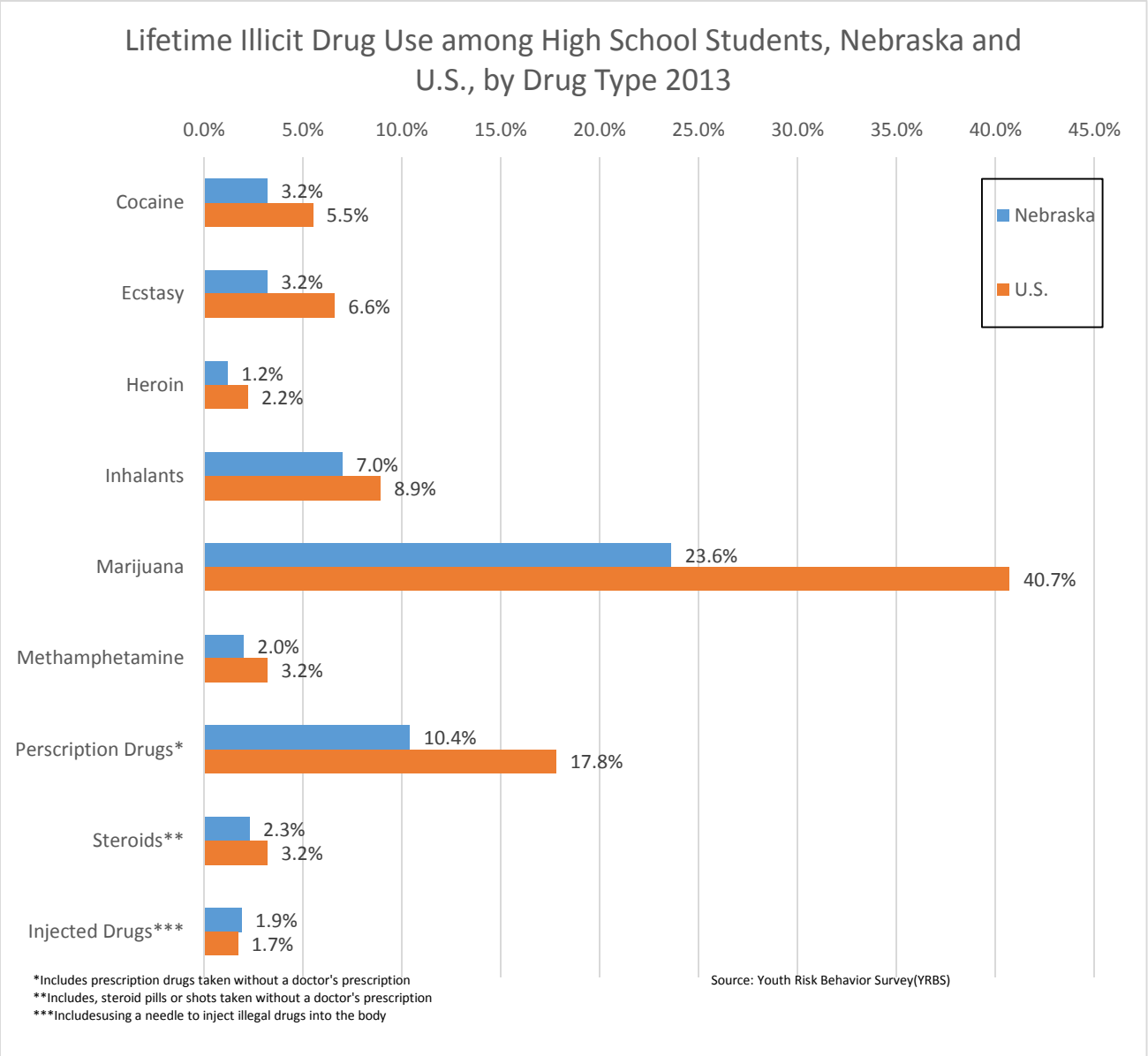
*Without a doctor's prescription

Source: YRBS

Youth Illicit Drug Consumption: Lifetime Illicit Drug Use among Youth by Gender

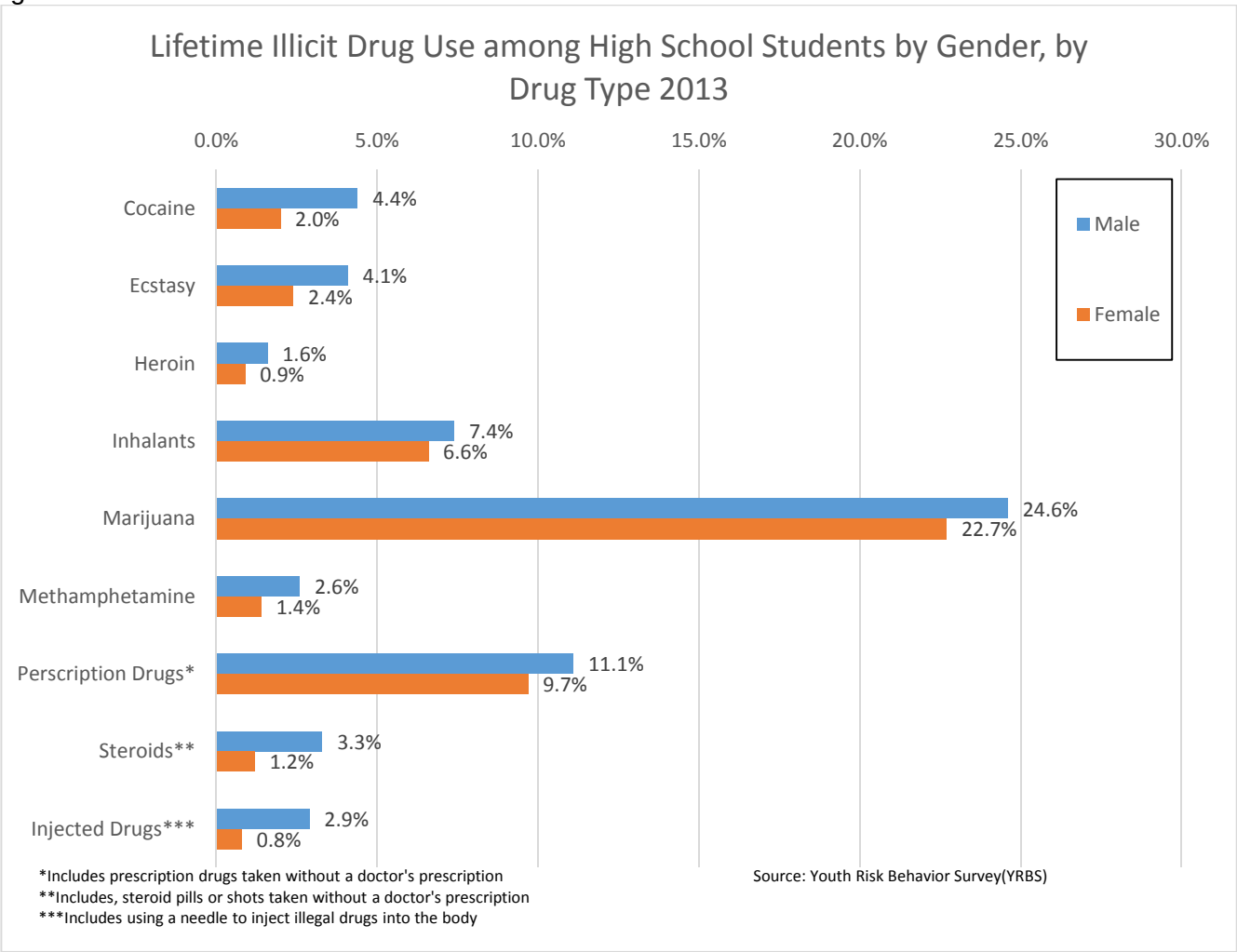
Compared to the nation Nebraska students reported a significantly lower use of all illicit drugs except for steroid use (Figure 4.11). Use of injected drugs (1.9 percent) was also similar to the nation (1.7 percent).

Figure 4.11



In 2013 males reported higher use of illicit drugs for every category, however, in most cases the difference was not significant. Only for cocaine (4.4 percent vs two percent), steroid use (3.3 percent vs 1.2 percent) and injected drugs (2.9 percent vs 0.8 percent) was there a significant difference between males and females for lifetime drug use (Figure 4.12).

Figure 4.12



Youth Illicit Drug Consumption: Were Offered, Sold or Given an Illegal Drug on School Property in Last Year

The YRBS asked high school students if they were offered, sold, or give an illegal drug while on school property over the last 12 months. Overall one in five youth (19.2 percent) reported being offered, sold or given illegal drugs on school property in Nebraska. Overall, the U.S. had a similar rate of youth who were offered, sold, or give an illegal drug while on school property (22.1 percent).

Offered, Sold or Given Illegal Drugs at School Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Were Offered, given or sold illegal drugs on school property among Youth grades 9-12	YRBS	2013	19.2%	19,000	22.1%	Non-significant	Stable

Offered, Sold or Given Illegal Drugs at School in Nebraska

In 2013, approximately one in every five Nebraska high school students (19 percent), an estimated 19,000 youth, reported being offered, sold, or given illegal drugs on school property.

Compared to the Nation

In 2013, youth in Nebraska were similar to youth nationally to be offered, sold, or given illegal drugs on school property, 19.2 percent and 22.1 percent, respectively.

Trends

In 2013, 19.2 percent report offered, sold, or give an illegal drug while on school property compared to 20.3 percent in 2011, but the difference is not significant

Youth Illicit Drug Consumption: Were Offered, Sold, or Given an Illegal Drug on School Property in Last Year by Demographics

Differences by Grade

Overall, the rates are very similar by grade. Ninth grade students has slightly lower rates than older students but the difference was not significant.

Differences by Gender

Males are significantly more likely (21.9 percent) to indicate having been offered, sold, or given an illegal drug on school property then females in 2013 (16.4 percent).

Illicit Drug Consequences: Overview

Illicit drug consumption is associated with a variety of negative consequences that affect the individual, family and society. In this section of the epidemiological profile data related to the consequences of illicit drug use are presented. First drug related mortality will be reviewed. In addition the report will look at drug-related hospitalizations, legal consequences, drug dependence and drug treatment. While these do not provide the whole story of drug use in Nebraska, it does provide insight regarding the toll that illegal drug use puts on the State of Nebraska and its citizens.

Illicit Drug-Related Mortality and Morbidity: Drug Type and Drug Deaths

Each year in Nebraska a large number of the drug-attributable deaths are coded as deaths due to unspecified drugs on the death certificate. As a result, comparing deaths by drug type is less clear. For this report, drug-attributable deaths in Nebraska were reported collectively, and not by specific drug type.

Illicit Drug-Related Mortality and Morbidity: Drug Related Deaths

Similar to alcohol abuse, death due to drug use has multiple dimensions. Drug use can be the direct cause of death (e.g., suicide by drugs) or a contributing factor to death (e.g., contracting hepatitis B through sharing needles). For causes of death in which drugs are not the direct cause of death, but rather contributing factors, drug-attributable fractions (DAFs) can be applied to death certificate data to generate estimates of the number of drug-related deaths. Estimates of the number of drug-related deaths presented in this report were calculated using DAFs provided by the Pacific Institute for Research and Evaluation. However, it should be noted that DAFs are less advanced than alcohol-attributable fractions, and likely under-estimate the actual number of drug-related deaths. As a result, the primary focus of this report will be on deaths that were directly attributable to drug use.

Drug-Related Death Indicator
(Note: see methods section of this report for the death codes used in this report)

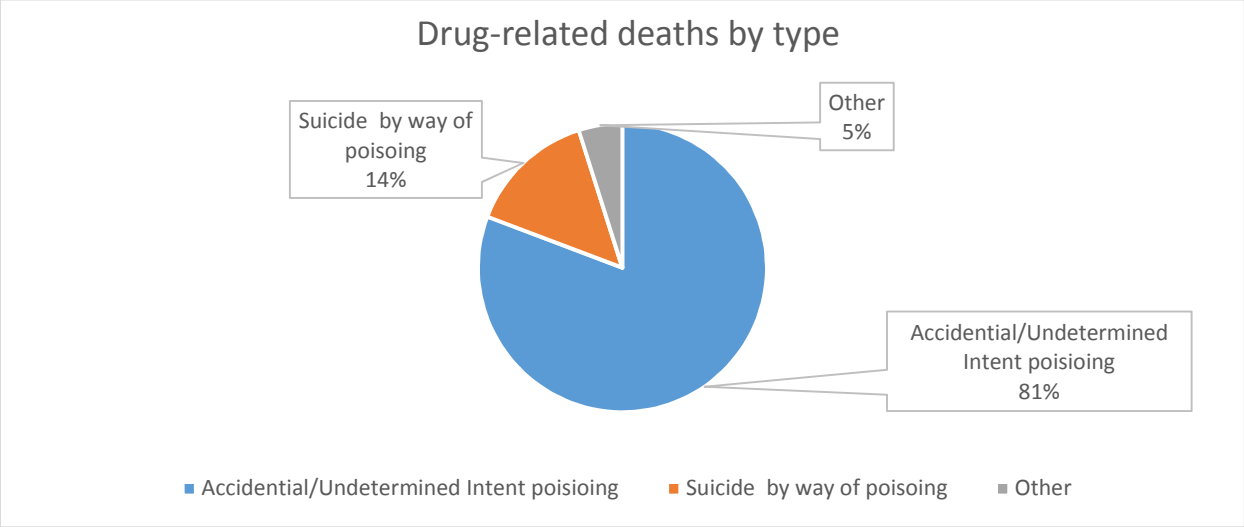
- Drug-attributable deaths per 100,000 population (age-adjusted) represent the number of deaths directly attributable to drug use.

Drug-Related Death Indicator Summary Table

Indicator	Data Source	Year	Nebraska AA Rate*	Number of deaths	Nation AA Rate*	Nebraska vs. Nation	Trend
Drug-attributable deaths	NE Vital Records^	2013	7.0	128	14.4	Lower	Increasing (2005-2013)
*Age-adjusted death rate per 100,000 population (2000 U.S. standard)							
^Nebraska data were obtained from the Nebraska Vital Records, U.S. data were obtained through CDC Wonder (on-line)							

In 2013 there were 128 drug-related deaths in Nebraska for a rate (age-adjusted) of seven deaths per 100,000 population. Between 2009 and 2013 there were 634 deaths in Nebraska of which most (81 percent) came from accidental or undermined intent drug poisoning (Figure 4.13).

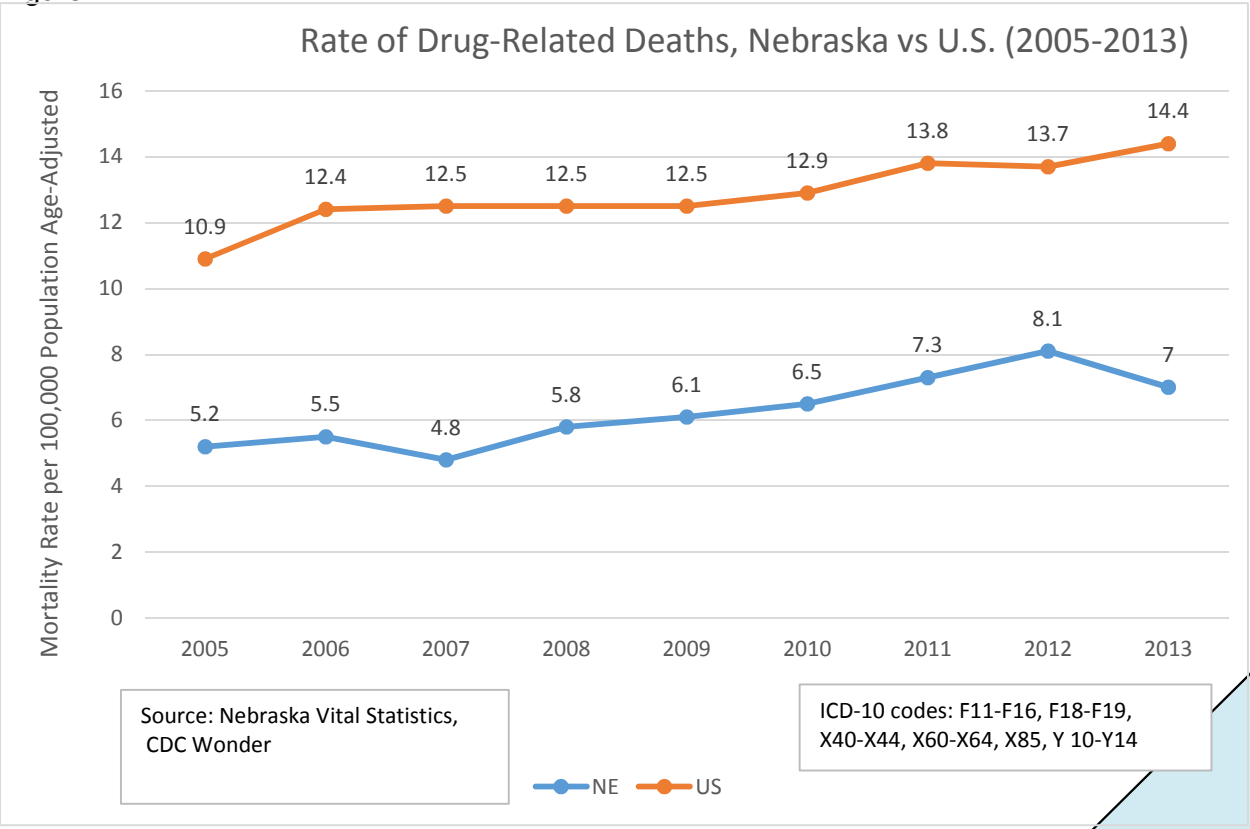
Figure 4.13



Trends

Between 2005 and 2013 the drug-attributable death rate has increased slightly from 5.2 in 2005 to 7.0 in 2013. The U.S. rate as a whole has typically been twice what the Nebraska rate has been. (Figure 4.14).

Figure 4.14

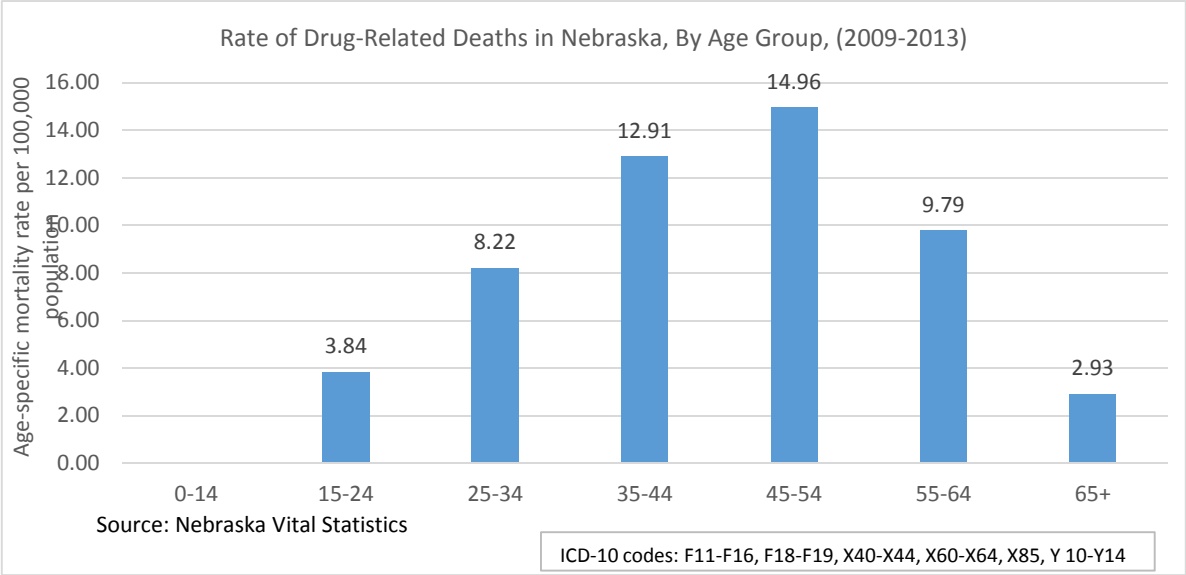


Illicit Drug-Related Mortality and Morbidity: Drug Related Deaths by Demographics

Differences by Age

Figure 4.15 shows the age-specific rate of drug-related deaths in Nebraska by age group from 2009 to 2013. The age-group with the highest rate of drug-related deaths is 45 to 54 year olds followed by 35 to 44 year olds. Nebraskans at the younger and older end of the spectrum tended to have lower rates of drug-related deaths whole those in the middle had the highest rates.

Figure 4.15



Differences by Gender

Between 2009 and 2013 females have a slightly higher age-adjusted mortality rate (7.3 percent) than males (6.7 percent).

Differences by Urban/Rural

Between 2009 and 2013 there was a significant difference between urban and rural counties. Urban large counties had higher age-adjusted mortality rates (7.9 percent) then either urban small (5.7 percent) or rural counties (six percent).

Differences by Race/Ethnicity

Between 2008 and 2013 there were 576 drug-attributable deaths among Whites, 40 among African Americans, 0 deaths among Asians, and 11 deaths among Native Americans. When comparing drug-attributable deaths by ethnicity, 19 deaths occurred among Hispanics compared to 615 among non-Hispanics. Due to the small number of drug-attributable deaths among racial and ethnic minorities in Nebraska during this time period, death rates were not reported.

Illicit Drug-Related Mortality and Morbidity: Drug related hospitalizations

The Nebraska hospital discharge database and the Nebraska trauma registry database are two data sources in Nebraska that contain information on hospital care. For this report, Nebraska hospital discharge data were limited to information on inpatient care received at acute care hospitals in Nebraska while trauma registry data were limited to inpatient care received through seven trauma centers within Nebraska that were reporting data into the Nebraska Trauma Registry (NTR) at the time of the report.

Illicit Drug-Related Mortality and Morbidity: Inpatient Drug-Attributable Hospitalizations

Data Source: Nebraska Hospital Discharge Data

In 2013, there were 10,901 hospitalizations in Nebraska, this includes non-residents who received hospitalizations in Nebraska, in which a drug-attributable condition was listed as either the primary reason for or a contributing factor to the hospitalization (Table 4.3). The number of drug-attributable hospitalizations has doubled since 2004 when there were 5,390. In addition to the 10,901 hospitalizations in which drugs were a direct contributor, it is likely that drug use indirectly contributed to a much larger number of hospitalizations. For example, drug use can contribute to hospitalizations indirectly through altering judgment that may lead to injury or through chronic conditions (such as hepatitis or HIV/AIDS) that were contracted through sharing needles.

Table 4.3

Drug-Attributable Hospitalizations in Nebraska* by Age and Gender, 2013		
	Number	Percent
Total	10,901	
Gender		
Male	5,868	53.8
Female	5,028	46.2
Age		
1-17	808	7.4
18-44	6,610	60.6
45-64	2,812	25.8
65-84	534	4.9
85+	128	1.2
*Includes hospitalizations in which an drug-attributable code was listed as either the primary cause of or a contributing factor to the hospitalization		
Source: Nebraska Hospital Discharge Data		

Inpatient Alcohol-Attributable Hospitalizations by Demographics

Differences by Age

In 2013, nearly nine in 10 inpatient hospitalizations occurred for those between the ages 18-64. Those aged 18-44 had the largest amount with 6,610 hospitalizations occurring for this age group.

Differences by Gender

In 2013, there were slightly more drug-attributable hospitalizations for males then females. There were 5,868 hospitalizations for males and 5,028 hospitalizations for females.

Illicit Drug-Related Mortality and Morbidity: Trauma Center Hospitalizations Data Source: Nebraska Trauma Registry

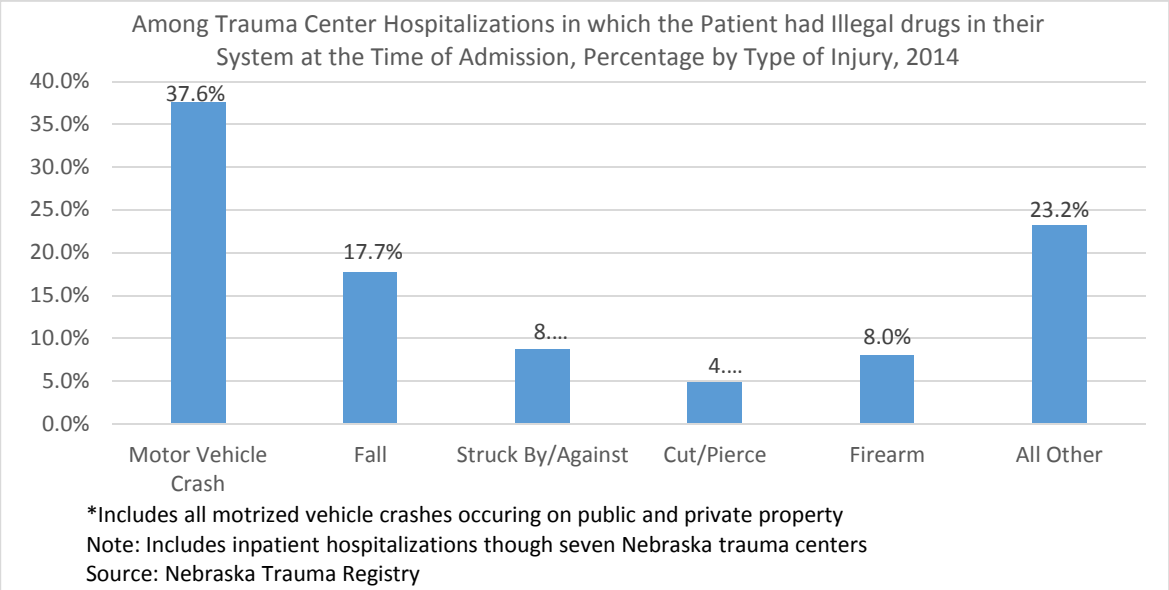
In contrast to hospital discharge data, patients receiving care through Nebraska trauma centers are tested (at the discretion of each center) for alcohol and drugs at the time of admission. As a result, data are available on marijuana, cocaine, and amphetamine/methamphetamine use across the seven participating centers. It should be noted that amphetamines and methamphetamine could not be separated from one another because centers collect and report the information differently. Also, it is possible that some amphetamine use may be prescribed so it would not be considered as recreational use. In addition, due to inconsistencies in reporting test results across centers, other drugs that are commonly prescribed or administered through the emergency department (e.g., opiates, benzodiazepines) were excluded from analysis, even though some patients may have used them non-medically. Finally some cases had multiple drug positive results. All positive results were counted.

Drug Involvement in Trauma Center Hospitalizations

In 2014, the seven participating trauma centers experienced 10,124 inpatient hospitalizations, of which 724 (7.2 percent) were among patients who had marijuana, cocaine, amphetamines, benzodiazepine or methamphetamine in their system at the time of admission. It is possible that there were a larger number of hospitalizations in which patients had these drugs in their system but may not have been tested as a result of failing to show visible signs of impairment at the time of admission.

Among hospitalizations in which the patient had one or more of these drugs in their system at the time of admission, motor vehicle crashes accounted for over one-third of all hospitalizations (37.6 percent) followed by falls (17.7 percent), struck by/against (8.7 percent), and firearms (eight percent) which other causes accounting for 28 percent of hospitalizations (Figure 4.16).

Figure 4.16



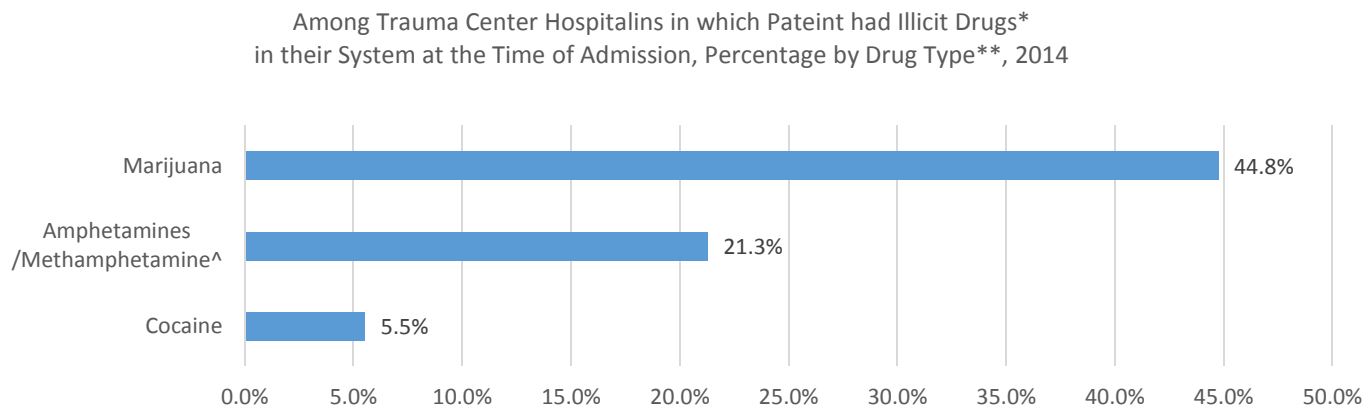
When comparing hospitalizations by demographic subgroup, males were more likely than females to have had these drugs in their system at the time of admission (9.3 percent and 4.2 percent, respectively) while patients 18-24 (18 percent), and 25-34 (16.6 percent) were the most likely age-groups (Table 4.4).

Table 4.4

Demographic	Total # of Hospitalizations	Number and % of all hospitalizations with any illicit drugs	
		Number	**Percent**
Total	10124	724	7.15%
Gender			
Male	5846	544	9.31%
Female	4258	180	4.23%
Age			
<18	1444	37	2.56%
18-24	970	175	18.04%
25-34	1058	176	16.64%
35-44	849	102	12.01%
45-64	2139	200	9.35%
65+	3661	34	0.93%
*Includes only positive test results for marijuana, cocaine, amphetamines and methamphetamine			
Note 1: Amphetamines and methamphetamine could not be separated, amphetamines may include prescription use			
Note 2: Includes inpatient hospitalizations through seven Nebraska trauma centers			
Nebraska trauma centers			
Source: Nebraska Trauma Registry			

Among hospitalizations in which the patient had these drugs in their system at the time of admission, marijuana was the most common, found in 324 of 724 patients (44.8 percent) followed by amphetamines/methamphetamine (154 patients, 21.3 percent) and cocaine (40 patients, 5.5 percent) (Figure 4.16).

Figure 4.16



*Includes only positive test results for marijuana, amphetamines, methamphetamine, and cocaine
**The sum of drug types does not equal 100% because some patients had more than one drugi nt heir system at admission and thus were countied in multiple categories.
^Amphetamines and methamphetamine could not be sepearted due to inconsistences in testing and reporting across trauma centers, it is possible that some amphetamine use wer prescribed
Note: Includes Inpateint hospitalization through seven Nebraska trauma centers
Source: Nebraska Trauma Registry

Illicit Drug Consequences: Illicit Drug-Related Legal Consequences

Drug abuse places a tremendous strain on the legal system within Nebraska as well as the entire United States. For this report, legal consequences of drug use are separated by (1) arrests for possession or sales of drugs, driving under the influence of drugs, and reported property crime, (2) probation and incarceration for drug related offenses, and (3) drug trafficking and enforcement.

Illicit Drug-Related Legal Consequences: Arrests for Drug-Related Crime

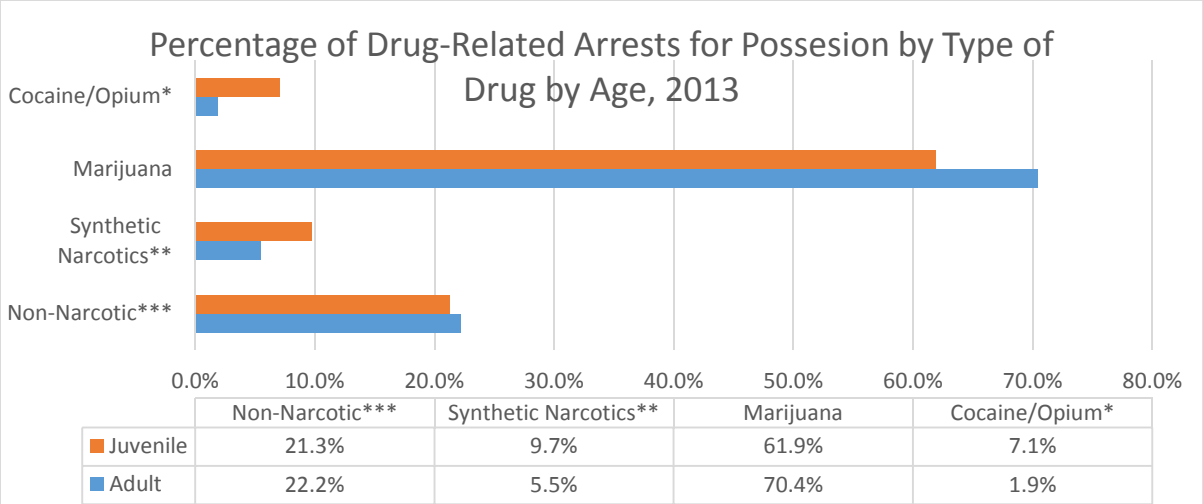
Data Source: Uniform Crime Reports, Nebraska Crime Commission

In 2013, there were 8,369 arrests for possession or sales/manufacturing (hereafter sales) of illicit drugs in Nebraska; of which 1,357 (16.2 percent) occurred among juveniles under 18 and 7,012 (83.8 percent) occurred among adults 18 and older. Possession or sales of drugs accounted for about one in every nine adult arrests (11.3 percent), and one in every eight (12.9 percent) juvenile arrests during 2013.

When separating adult arrests by possession vs. sales of drugs, there were 6,144 (87.6 percent) arrests for drug possession and 868 (12.4 percent) arrests for drug sales in 2013. For juveniles 1,028 (75.8 percent) were for possession and 329 (24.2 percent) were for sales.

When looking at arrests for drug possession by drug type in 2013, marijuana was the most common for adults, accounting for seven in every ten drug possession arrests (70.4 percent) followed by non-narcotic drugs (22.2 percent). It is the same for juveniles with marijuana (61.9 percent) being the most common, followed by non-narcotic drugs (21.3 percent) (Figure 4.17).

Figure 4.17



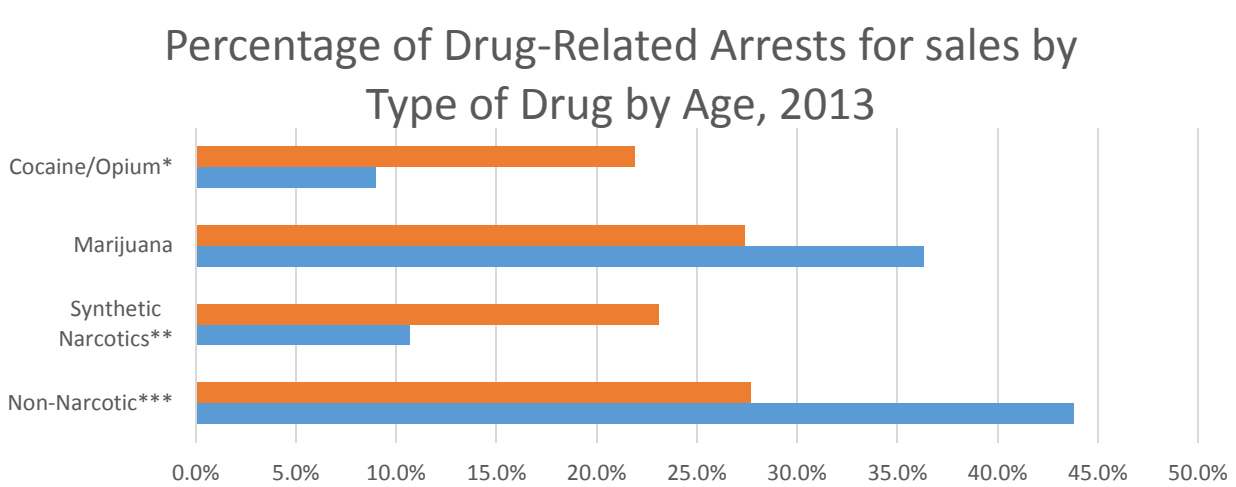
	Non-Narcotic***	Synthetic Narcotics**	Marijuana	Cocaine/Opium*
Juvenile	21.3%	9.7%	61.9%	7.1%
Adult	22.2%	5.5%	70.4%	1.9%

*Cocaine and Opium(morphine,heroin,codeine)
**Synthetic Narcotics which can cause true addiction (demerol,methadones)
***Other dangerous non-narcotic drugs(barbiturates,benzedine,methamphetamine)

Source: Unicorm Crime Reports, Nebraska Crime Comission

When looking at arrests for drug sales by drug type in 2013, non-narcotics was the most common for adults, accounting for nearly half of drug sales arrests (43.8 percent) followed by non-marijuana (36.3 percent). For juveniles the pattern is different. All four categories have similar percentages with marijuana and non-narcotics (27.4 percent and 27.7 percent respectively) slightly above cocaine and syndetic narcotics (23.1 percent and 21.9 percent respectively) (Figure 4.18).

Figure 4.18



	Non-Narcotic***	Synthetic Narcotics**	Marijuana	Cocaine/Opium*
Juvenile	27.7%	23.1%	27.4%	21.9%
Adult	43.8%	10.7%	36.3%	9.0%

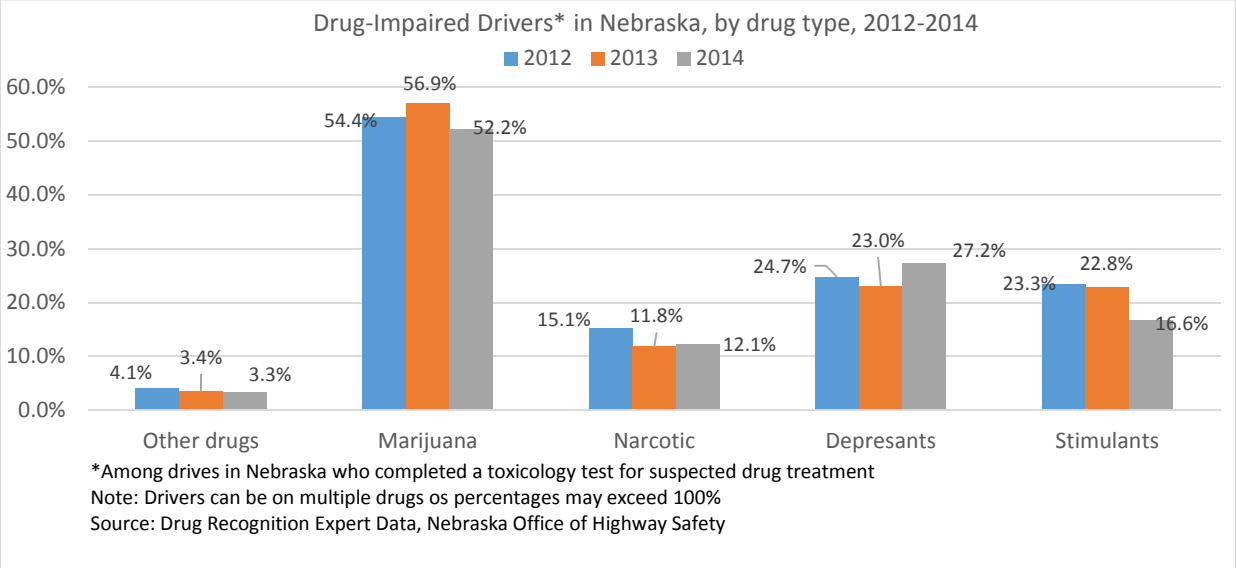
*Cocaine and Opium(morphine,heroin,codeine)
**Synthetic Narcotics which can cause true addiction (demerol,methadones)
***Other dangerous non-narcotic drugs(barbiturates,benzedine,methamphetamine)
Source: Unicorm Crime Reports, Nebraska Crime Comission

Illicit Drug-Related Legal Consequences: Driving Under the Influence of Drugs

Data Source: Drug Recognition Expert Data, Nebraska Office of Highway Safety

As of July 2015, there were 106 law enforcement officers in Nebraska trained as Drug Recognition Experts (DRE). DREs are specifically trained to identify drivers who may be impaired by non-alcoholic substances. The individuals are suspected of drug impaired driving when they have recorded a low BAC, too low to coincide with their physical impairment. Suspected drivers are put through a 12-step evaluation to determine degree of impairment. If the suspect is deemed impaired, the results of the 12-step evaluation provide the information to determine what drug category is causing the impairment. During the 12-step evaluation a toxicology sample is provided (unless refused) to support the DREs opinion.
In 2014, DREs examined 671 persons in Nebraska suspected of non-alcohol drug impaired driving, of which 550 completed a toxicology test. Based on toxicology results, marijuana was the most common substance found in drivers (n=314 drivers, 52.2 percent of completed toxicology tests) followed by Depressants (n=164 drivers, 27.2 percent), Stimulants (n=100 drivers, 16.6 percent), Narcotics (n-73 drivers, 12.1 percent). Other drugs (including hallucinogens, dissociative anesthetics and inhalants accounted for only 3.3 percent of positive tests (n=20). (Figure 4.19)

Figure 4.19

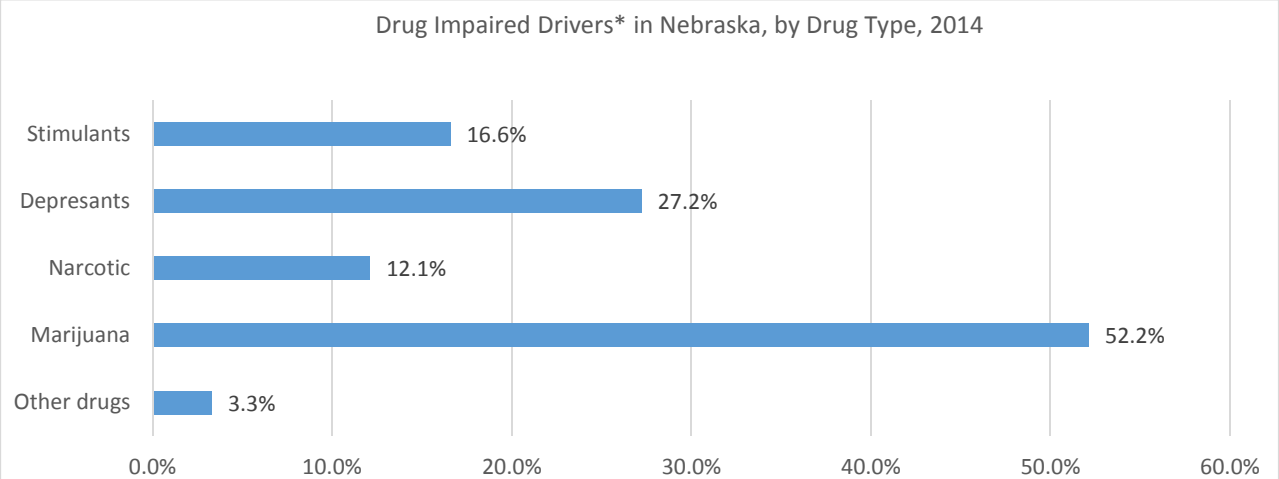


The number of Nebraska drivers examined by DREs has increased slightly from 2012 (595 drivers) to 2014 (671 drivers). The number of drivers completing toxicology tests as a percentage of total drivers examined has also remained relatively stable at approximately 82 percent.

Drug Type Trends

Marijuana was the most prevalent drug detected and has remained fairly stable from 2012 (54.4 percent) to 2014 (52.2 percent). Narcotics and Depressants have remained stable as well. Stimulants decreased from 2012 (23.3 percent) to 2014(16.6 percent) while drivers with other drugs detected in their systems remained relatively stable at about 3-4 percent (Figure 4.20).

Figure 4.20



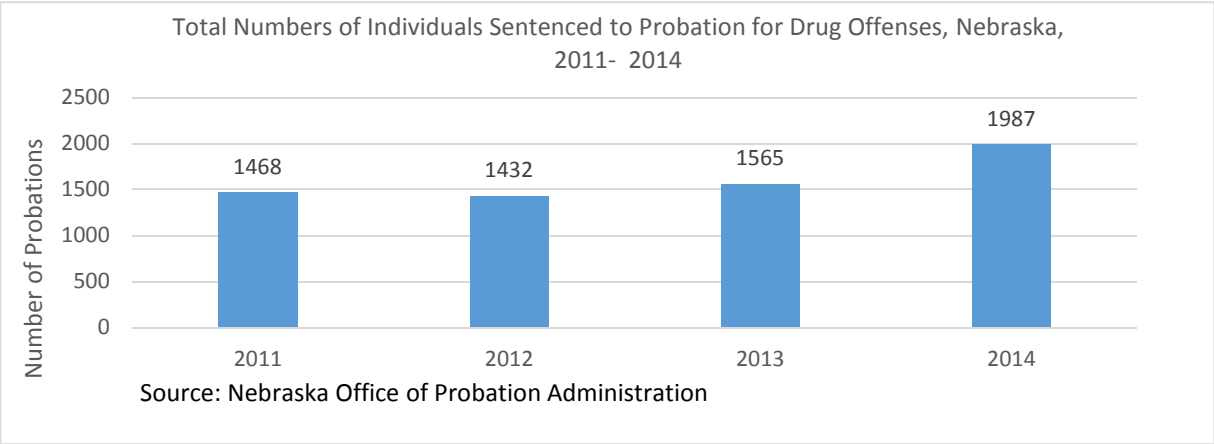
*Among drivers in Nebraska who completed a toxicology test for suspected drug impairment
Stimulants-cocaine, methamphetamines, other stimulants
Depressants-Barbiturates, benzodiazepines, other depressants
Narcotics-morphine, heroin, codeine, methadone, other narcotics
Other Drugs-hallucinogens, dissociative anesthetic, and inhalants
Note: Drivers can be on multiple drugs so percentages may exceed 100%
Source: Drug Recognition Exspert Data, Nebraska Office of Highway Safety

Illicit Drug-Related Legal Consequences: Probation for Drug-Related Crime

Data Source: Nebraska Office of Probation Administration

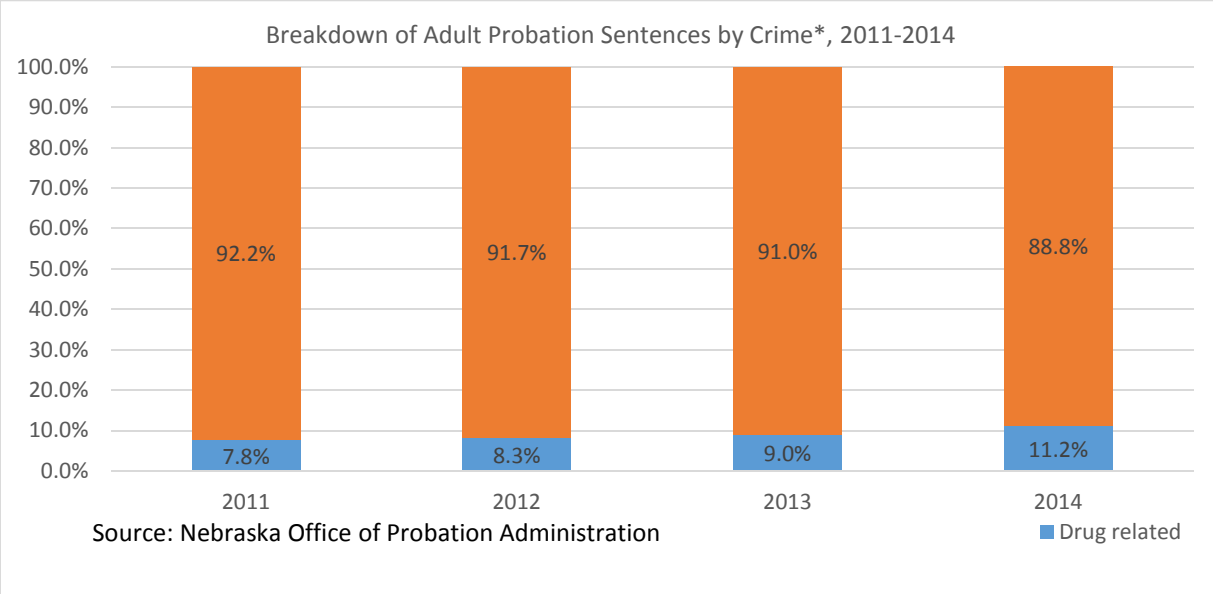
In 2014, there were 1,987 people sentenced to probation for a drug offense in Nebraska. Of all individuals sentenced to probation in Nebraska during 2014, about 1 in every 9 (11.2 percent) were sentenced for a drug offense. Since 2011, the number of adults sentenced to probation for a drug offense has increased rising from 1,468 in 2011 to 1,987 in 2014 (Figure 4.21).

Figure 4.21



In addition the percent of adults sentenced to probation for drug-related offenses has increased. In 2011 7.8 percent of all probations were drug-related but by 2014 that has increased to 11.2 percent (Figure 4.22).

Figure 4.22

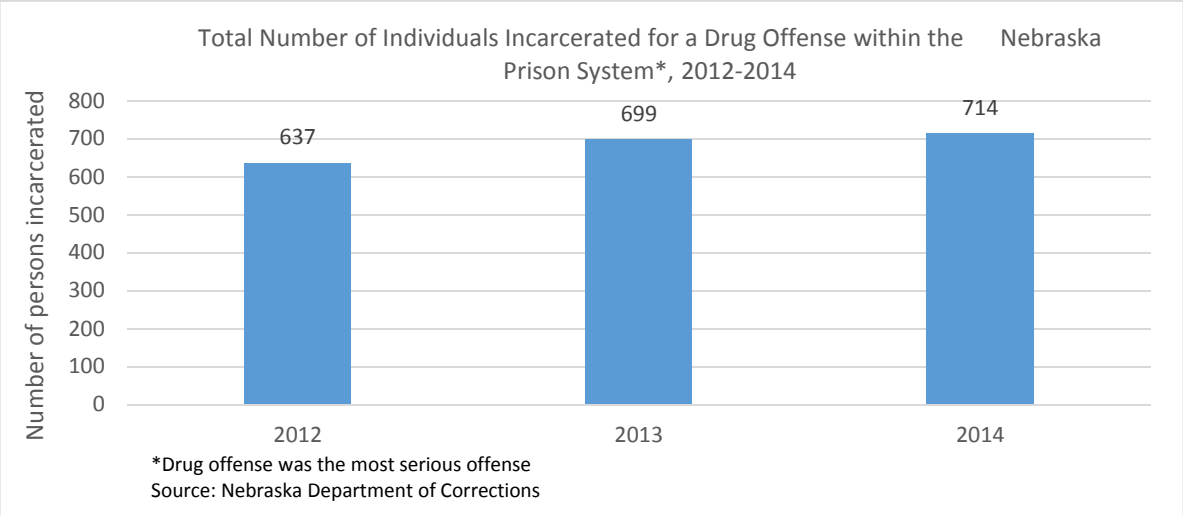


Illicit Drug-Related Legal Consequences: Incarceration for Drug-Related Crime

Data Source: Nebraska Department of Correctional Services

In 2014, there were 714 individuals incarcerated in the Nebraska prison system for a conviction in which a drug offense was the most serious offense committed, which has increased since 2012 in which 637 individuals were incarcerated (Figure 4.23).

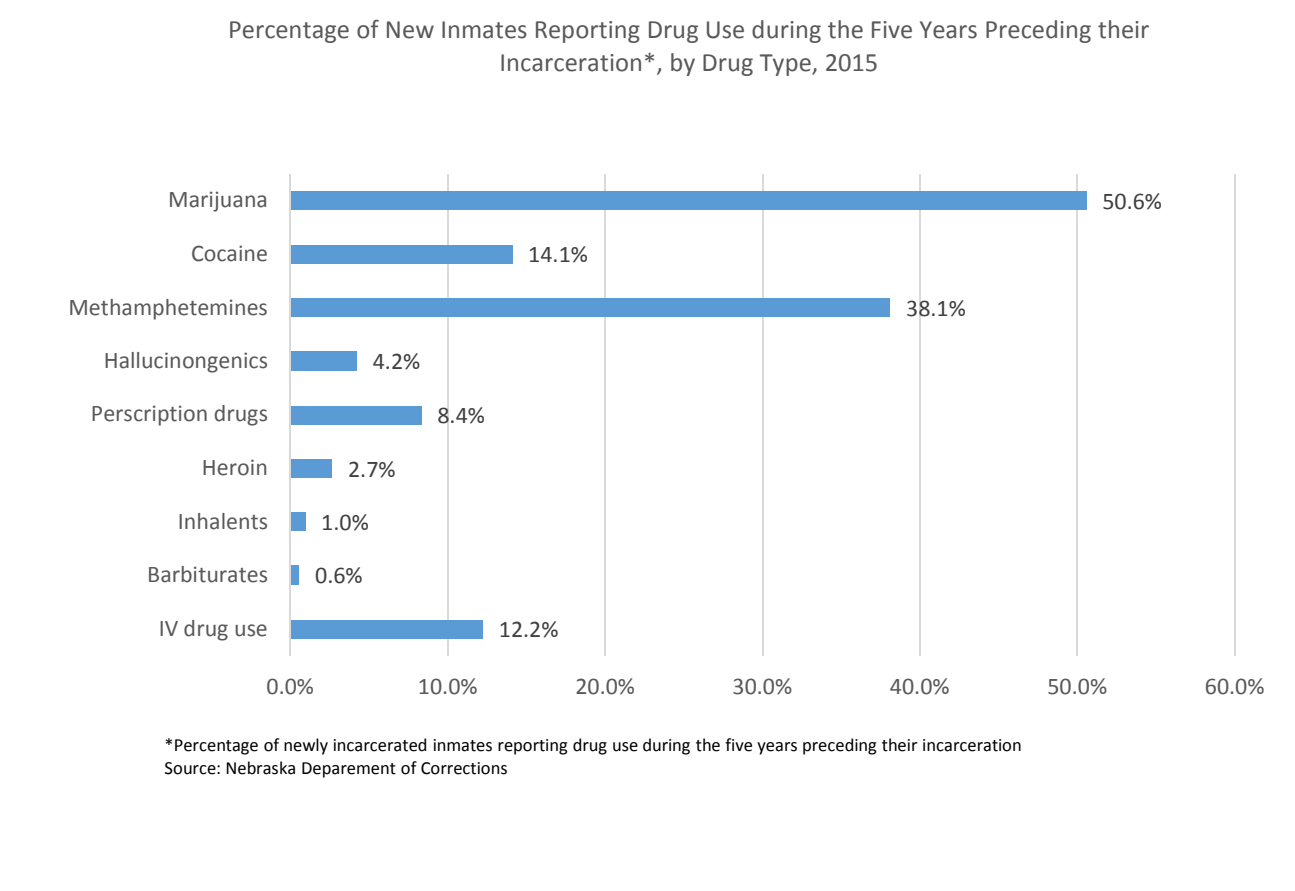
Figure 4.23



When using Fiscal Year 2013 data, which compared differences by gender, there were 576 males incarcerated for drug-related offenses (the 2nd most common reasons for male incarceration) and 103 female's incarcerated for drug-related crimes (the most common reason for female incarceration). Close to one out of every three incarcerations among females were for drug offenses (30 percent) compared to one out of every eight incarcerations among males (12.8 percent). Expenses to maintain the drug offense inmates are estimated at nearly $20 million dollars per year (Fiscal Year 2013).

All newly admitted inmates (regardless of their offense) are asked to report drug use during the 5 years preceding their incarceration. Illicit drug use was very common among inmates prior to their incarceration. In (fiscal year) 2015, marijuana was the most commonly reported drug (reported by 50.6 percent of all new inmates), followed by methamphetamine (38.1 percent), and cocaine (14.1 percent). In addition, 12.2 percent reported IV drug use during the five years preceding their incarceration (Figure 4.24).

Figure 4.24



*Percentage of newly incarcerated inmates reporting drug use during the five years preceding their incarceration
Source: Nebraska Deparement of Corrections

Illicit Drug Dependence Abuse, and Treatment: Illicit Drug Abuse and Dependence

Illicit drug use can lead to drug abuse and/or dependence. The National Survey on Drug and Health (NSDUH) provides national and state estimates of the percent of people who meet the criteria for drug dependence and abuse. NSDUH defines drug abuse or dependence as those individuals 12 and older who meet the DSM-IV definition for drug dependence or abuse (including illicit drugs and prescription drug abuse) during the 12 months preceding the survey.

Drug Dependence and Abuse Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Drug Dependence or Abuse in Past Year among Persons 12 and Older	NSDUH	2012/ 2013	2.7%	41,000	2.7%	Non-significant	Increasing (2007/2008-2012/2013)

Drug Dependence and Abuse in Nebraska

During the combined years of 2012 and 2013, approximately one in every 37 Nebraska residents 12 and older(2.7 percent), an estimated 41,000 Nebraskans, reported drug dependence or abuse during the 12 months preceding the survey as defining by the DSM-IV guidelines.

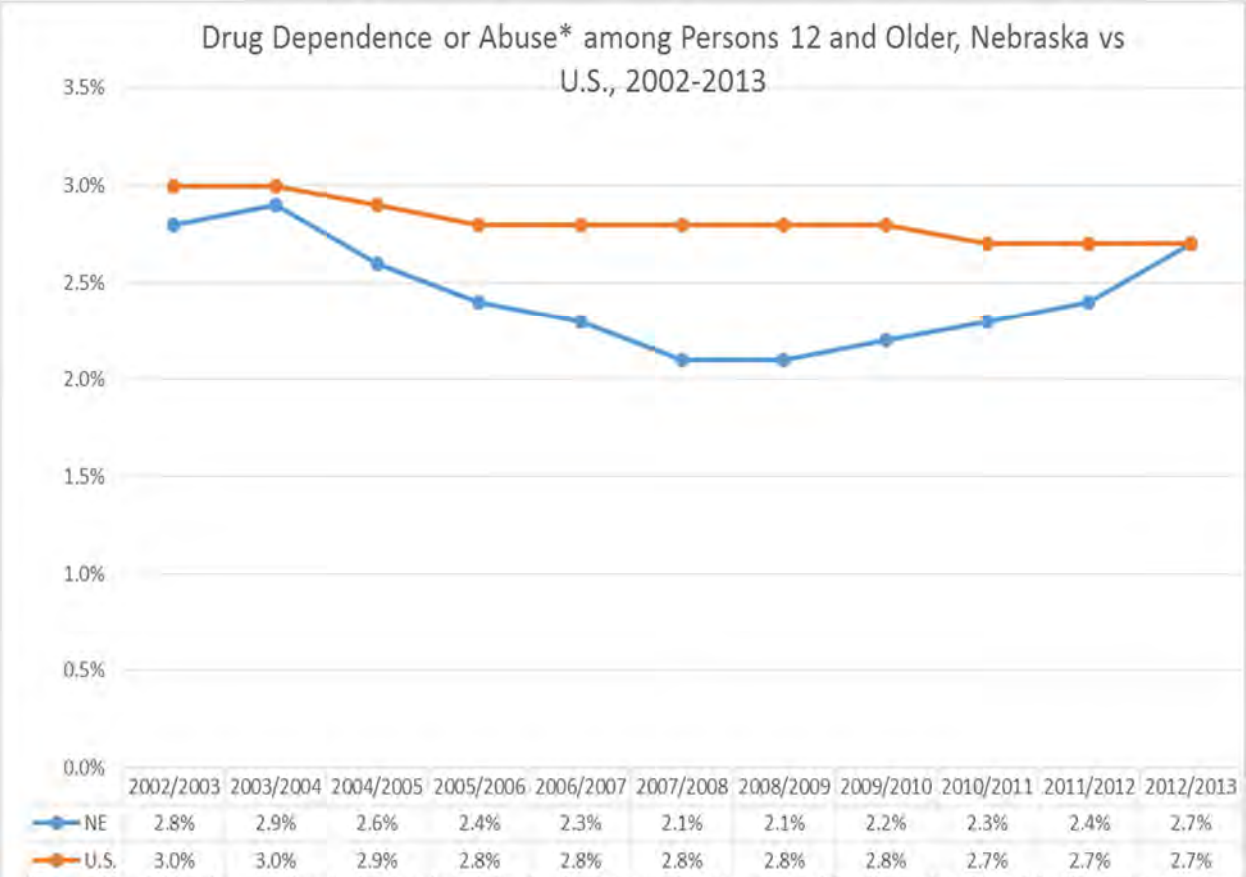
Compared to the Nation

During the combined years of 2012 and 2013, the percentage of Nebraskans 12 and older reporting drug dependence or abuse in Nebraska (2.7 percent) was the same (2.7 percent) as the U.S. overall.

Trends

Figure 4.25 shows the percentage of Nebraska and U.S. residents 12 and older who have reported drug dependence or abuse in the past year between 2002 and 2013. Nebraska's rate dropped from 2003 to 2007 but has then increased from 2007 to 20013. The U.S. rate has slowly dropped during the period of 2002 to 2013.

Figure 4.25



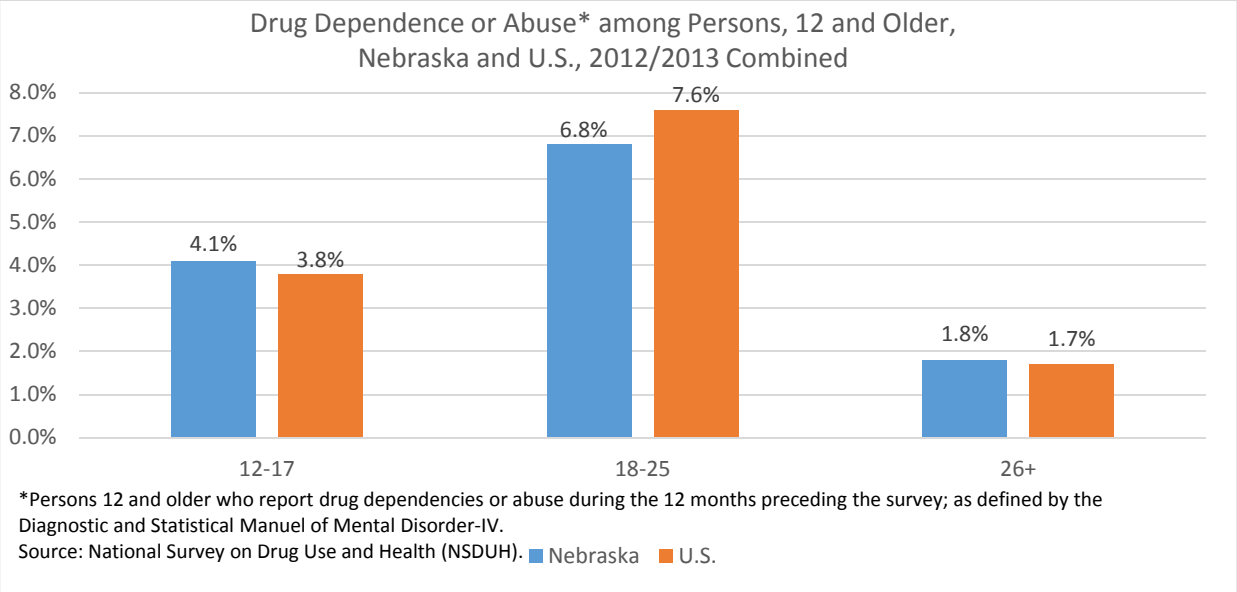
	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
NE	2.8%	2.9%	2.6%	2.4%	2.3%	2.1%	2.1%	2.2%	2.3%	2.4%	2.7%
U.S.	3.0%	3.0%	2.9%	2.8%	2.8%	2.8%	2.8%	2.8%	2.7%	2.7%	2.7%

*Persons 12 and older who report drug depdence or abuse during the 12 months precding the survey, as defined by the 4th edition of the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV).

Illicit Drug Dependence Abuse, and Treatment: Illicit Drug Abuse and Dependence by Age

As shown by figure 4.26 Nebraskans 18-25 have the highest levels of drug dependence or abuse followed by those 12-17 with those age 26 and above having the lowest levels. For each of these groups there is no significant difference between Nebraska and the U.S.

Figure 4.26



Illicit Drug Dependence Abuse, and Treatment: Nebraskans in Need of Treatment but Not Receiving Treatment for Illicit Drug Use

In addition to showing the percent of Nebraskans who are abusing or dependent on drugs NSDUH also provides estimates for the percent who are in need of treatment for illicit drug use, but not receiving it. NSDUH defines Nebraska in need of treatment but not receiving as respondents 12 and older who are classified as needing treatment for illicit drugs but not receiving treatment for an illicit drug problem at a specialty facility.

In Need of Treatment but not Receiving Treatment Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
In Need of Treatment for Illicit Drugs but Not Receiving Treatment in Past Year among Persons 12 and Older	NSDUH	2012/ 2013	2.3%	35,000	2.4%	Non-significant	Increasing (2008/2009-2012/2013)

Nebraskan's in Need of Treatment but Not Receiving Treatment for Illicit Drug Use

During the combined years of 2012 and 2013, approximately one in every 43 Nebraska residents 12 and older (2.3 percent), an estimated 35,000 Nebraskans, reported needing treatment for Illicit drug use but not receiving treatment.

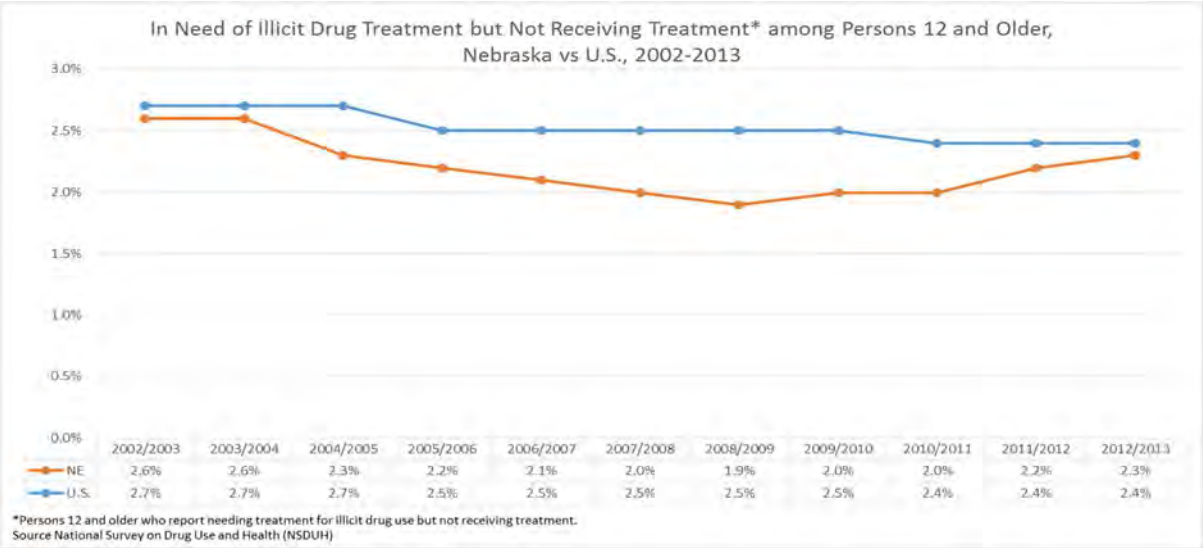
Compared to the Nation

During the combined years of 2012 and 2013, the percentage of Nebraskans 12 and older reporting needing treatment for illicit drug use but not receiving any (2.3 percent) was the nearly the same as the U.S. overall(2.4 percent).

Trends

Figure 4.27 shows the percentage of Nebraska and U.S. residents 12 and older who have reported needing treatment for illicit drug use but not receiving treatment in the past year between 2002 and 2013. Nebraska's rate dropped from 2003 to 2008 but has then increased from 2008 to 20013. The U.S. rate has remained fairly steady during the period of 2002 to 2013.

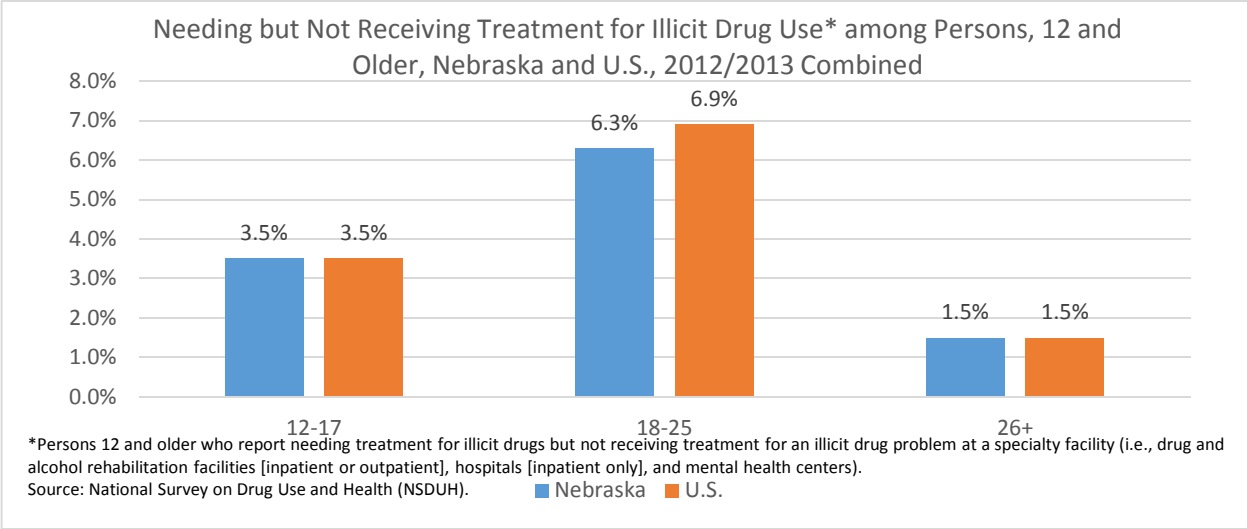
Figure 4.27



Illicit Drug Dependence Abuse, and Treatment: Nebraskans in Need of Treatment but Not Receiving Treatment for Illicit Drug Use by Age

The pattern for needing but not receiving treatment for illicit drugs is similar to those who are abusing or dependent on drugs with 18-25 having the highest rates, 12-17 having lower rates and those 26 and above having the lowest rates (Figure 4.28).

Figure 4.28



Illicit Drug Dependence Abuse, and Treatment: Drug Treatment

Source: Magellan Database, Nebraska Division of Behavioral Health

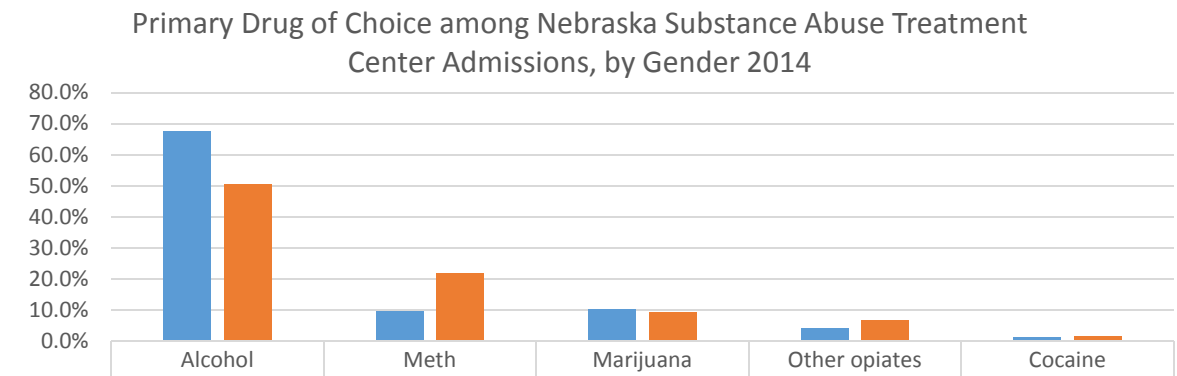
Treatment data presented in this report include services funded through the Nebraska Department of Health and Human Services, Division of Behavioral Health as well as select private treatment services who submit their patient data to the State.

In 2014, there were 21,792 substance abuse treatment admissions among 12,494 individuals. During admission, individuals were asked to report their primary, second, and third drugs of choice.

Drug Involvement in Substance Abuse Treatment Services

- Methamphetamine was listed as the primary drug of choice during one in every eight substance abuse treatment admissions (13.9 percent) during 2014, making it the second most commonly reported primary drug of choice to alcohol. Methamphetamine was followed by marijuana (10.1 percent), other opiate drugs (e.g., morphine, heroin, codeine, methadone; five percent) and cocaine (1.4 percent). (Figure 4.29).
- Methamphetamine admissions (when listed as the primary drug of choice) has increased from 8.4 percent in 2011 to 13.9 percent in 2014 while Cocaine admissions have decreased from 2.9 percent in 2011 to 1.4 percent in 2014 (Figure 4.30).
- In contrast to only examining the primary drug of choice, marijuana was listed as one of the top three drugs of choice during approximately one-third of all treatment admissions (34.8 percent) in 2014, making it second to alcohol (77.4 percent). Marijuana was followed by methamphetamine (24.6 percent), and cocaine (6.4 percent).
- When examining drug of choice by gender, using all 2006 treatment admissions, females were twice as likely to report methamphetamine as their primary drug of choice during admission as males(21.9 percent of females compared to 9.9 percent of males). In contrast, males were more likely to report alcohol as their primary drug of choice (67.8 percent of males compared to 55.6 percent of females).

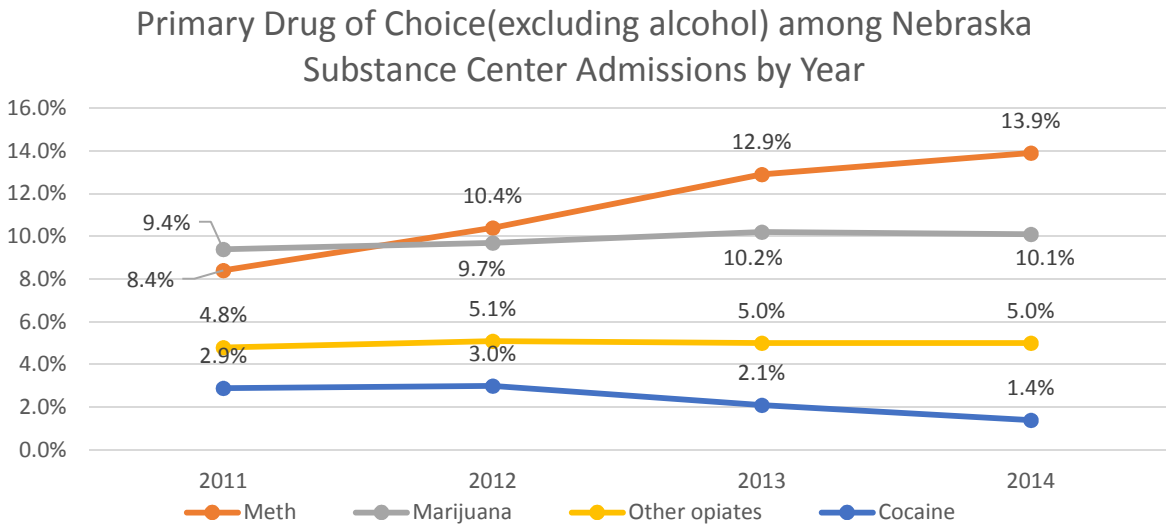
Figure 4.29



	Alcohol	Meth	Marijuana	Other opiates	Cocaine
Male	67.8%	9.9%	10.4%	4.1%	1.2%
Female	50.6%	21.9%	9.4%	6.7%	1.7%

Note: Excludes admissions in which the drug of choice informaiton was not reported
Source: Magellan Database, Nebraska Dviision of Behavioral Health

Figure 4.30



Note: Excludes admissions in which the drug of choice informaiton was not reported
Source: Magellan Database, Nebraska Dviision of Behavioral Health

Treatment Admission Demographics

The following table (table 4.5) provides the demographics for all substance abuse treatment admissions (regardless of their drug of choice) for gender, age and race.

Table 4.5

Demographics of Individuals Admitted for Substance Abuse Treatment in Nebraska, 2014					
	Number	Percent		Number	Percent
Total	12,494	100.0%	Gender		
			Male	8,275	66.2%
Race/Ethnicity*			Female	4,219	33.8%
NH Asian	93	0.7%			
NH Black	1,066	8.5%	Age		
NH Multi-Racial	60	0.5%	<12	2	0.0%
NH Native American/Native Hawaiian	451	3.7%	12-17	201	1.6%
NH White	9,318	74.6%	18-20	903	7.2%
Hispanic**	1,148	9.2%	21-24	1,987	15.9%
Unknown	358	2.9%	25-34	4,095	32.8%
			35-44	2,514	20.1%
Urban Rural			45-54	1,934	15.5%
Large Urban	7,422	60.3%	55-64	764	6.1%
Small Urban	3,424	27.8%	65+	93	0.7%
Rural	1,465	11.9%	Unknown	1	0.0%

*NH indicates Non-Hispanic
**Hispanics can be of any race
Note: Numbers represent individuals, not the number of admissions
Source: Magellan Database, Nebraska Division of Behavioral Health

References

Illicit Drug Use

1. **The Economic Costs of Alcohol and Drug Abuse in the United States - 1992. National Institute on Drug abuse. Retrieved August 2015 from** http://archives.drugabuse.gov/EconomicCosts/Chapter6.html

Section 5:

Mental Health in Nebraska: Mental Health and Suicide in Nebraska

MENTAL HEALTH AND SUICIDE – SUMMARY OF KEY FINDINGS

Mental Health in Nebraska

Depression affects a significant amount of Nebraska Residents

- From 2012 through 2013, one in 15 Nebraska residents (6.6 percent) reported a major depressive episode in the past year.
- In 2013, one in five high school students (19.5 percent) reported they felt sad or hopeless every day for two weeks in a row.

Mental Illness affects a large number of Nebraska Residents

- Nearly one in five (18 percent) adults 18 and older reported having a mental illness in the last year from 2012-2013.
- Nearly one in 24 adults 18 and older (4.2 percent) reported having a serious mental illness in the last year from 2012-2013.

Suicide in Nebraska

Thoughts of suicide occur among a significant number of Nebraska Residents

- Nearly one in 24 adults 18 and older (4.1 percent) reported having serious thoughts of suicide in the last year from 2012-2013.
- In 2013, one in eight of high school students (12.1 percent) reported they had serious thoughts of suicide in the past year.
- In addition, nearly one in 10 high school students (9.8 percent) in 2013 reported making a plan, in the past year, of how they would commit suicide.

Suicide is a significant problem in Nebraska

- In 2013, there were 220 deaths due to suicide making it the 10th highest cause of death.
- In 2013, one in 17 high school students (six percent) reported attempting suicide in the past year.

Demographic Differences

Differences by age

- Residents ages 18-25 were the most likely to report having serious thoughts of suicide from 2012 to 2013. From 2009 to 2013 residents ages 45-54 had the highest age-specific death rate due to suicide.

Differences by gender

- From 2009 to 2013 males have a higher age-adjusted mortality rate from suicide then females.

Differences by urban/rural

- Larger urban counties had lower age-adjusted mortality rates for suicide deaths then more rural counties from 2009 to 2013.

Differences by race/ethnicity

- White residents in Nebraska had the highest age-adjusted mortality rates for suicide deaths then other race and ethnic groups from 2009 to 2013.

Mental Health: Patterns and Concerns

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society.

Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning. Mental disorders contribute to a host of problems that may include disability, pain, or death.

Mental disorders are among the most common causes of disability. The resulting disease burden of mental illness is among the highest of all diseases. There are an estimated 13 million American adults (approximately one in 17) who have a seriously debilitating mental illness. Mental health disorders are the leading cause of disability in the United States and Canada, accounting for 25 percent of all years of life lost to disability and premature mortality. Moreover, suicide is the 11th leading cause of death in the United States, accounting for the deaths of approximately 30,000 Americans each year.

Mental health and physical health are closely connected. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery[1].

The state epidemiological profile will look at mental health in terms of how many Nebraskans report symptoms of depression and how many report mental illness. In addition since suicidal thoughts, and attempts will be reviewed.

Mental Health: Depression and Psychological Distress

Most of the information for adults on mental health and wellness for Nebraska comes from the National Survey on Drug Use and Health (NSDUH). This national survey provides state level estimates for mental health and thoughts of suicide but it does not provide county level estimates. For youth the Youth Risk Behavior Survey collects data on thoughts, or plans for suicide.

Depression and Psychological Distress: Major Depressive Episodes

Data concerning major depressive episodes among adults are available through the National Survey on Drug Use and Health (NSDUH). This measure asks respondents if they have had at least one major depressive episode in the past year. Major Depressive Episode (MDE) is defined as in the 4th edition of the Diagnostic and Statistical Manuel of Mental Disorders (DSM-IV), which specifies a period of at least two weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms.

Major Depressive Episodes Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Adults with major depressive episode in Past Year among Adults 18 and Older	NSDUH	2012/2013	6.6%	90,000	6.8%	Non-significant	Stable

Major Depressive Episodes in Nebraska

During the combined years of 2012 and 2013, approximately one in every 15 Nebraska adults 18 and older (6.6 percent), an estimated 90,000 Nebraskans, reported having a major depressive episode in the past year.

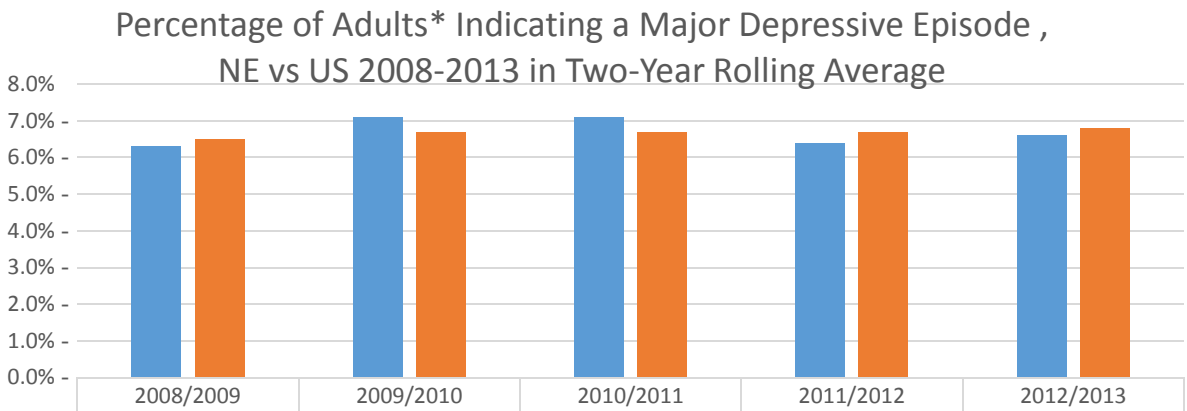
Compared to the Nation

During the combined years of 2012 and 2013, the percentage of Nebraskans 18 and older reporting having a major depressive episode (6.6 percent) was very similar to the U.S. overall (6.8 percent).

Trends

Figure 5.1 shows the percentage of Nebraska and U.S. adults who have experience major depressive episodes from 2008 to 2013. Nebraska rate has remained fairly stable during this time.

Figure 5.1



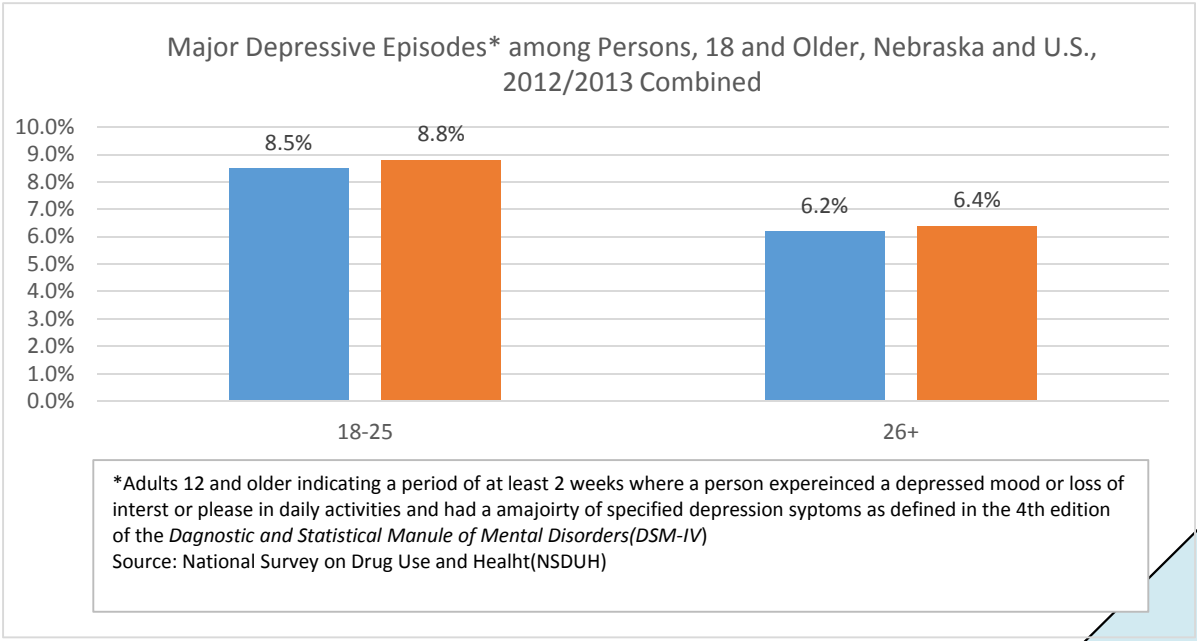
	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
NE	6.3%	7.1%	7.1%	6.4%	6.6%
US	6.5%	6.7%	6.7%	6.7%	6.8%

*Adults 18 and older indicating a period of at least 2 weeks where a person experienced a depressed mood or loss of interest - or please in daily activities and had a majority of specified depression symptoms as defined in the 4th edition of the - *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* -
Source: National Survey on Drug Use and Health (NSDUH) -

Depression and Psychological Distress: Major Depressive Episodes by Age

As shown by figure 5.2 Nebraskans ages 18-25 report a higher percentage with major depressive episodes in the past year than with those at the age of 26 reporting slightly lower percentages but there is no significant difference. For each of these groups there is no significant difference between Nebraska and the U.S.

Figure 5.2



Adult Depression and Psychological Distress: Any Mental Illness

The NSDUH asked respondents a series of questions to determine if a respondent has a diagnosed mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, as assessed by the Mental Health Surveillance Study (MHSS*) Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders--Fourth Edition--Research Version--Axis 1 Disorders* MHSS-SCID), which is based on the 4th edition of the *Diagnostic and Statistical Manuel of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild, mental illness, moderate mental illness, and serious mental illness (SMIU). Any mental illness (AMI) includes individuals in any of the three categories.

Mental Illness Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Adults with Mental Illness Past Year among Adults 18 and Older	NSDUH	2012/2013	18.0%	247,000	18.5%	Non-significant	Stable

Mental Illness in Nebraska

During the combined years of 2012 and 2013, approximately one in every six Nebraska adults 18 and older (18.0 percent), an estimated 247,000 Nebraskans, reported having some form of mental illness in the past year.

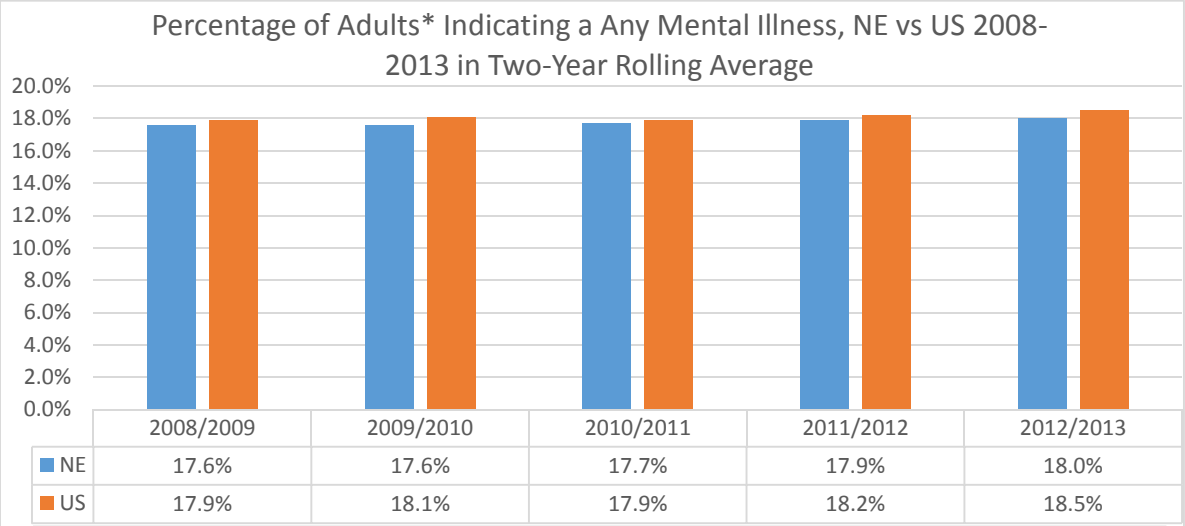
Compared to the Nation

During the combined years of 2012 and 2013, the percentage of Nebraskans 18 and older reporting some form of mental illness (18.0%) was very similar to the U.S. overall (18.5%).

Trends

Figure 5.3 shows the percentage of Nebraska and U.S. adults who have some form of mental illness from 2008 to 2013. Nebraska rate has remained fairly stable during this time.

Figure 5.3



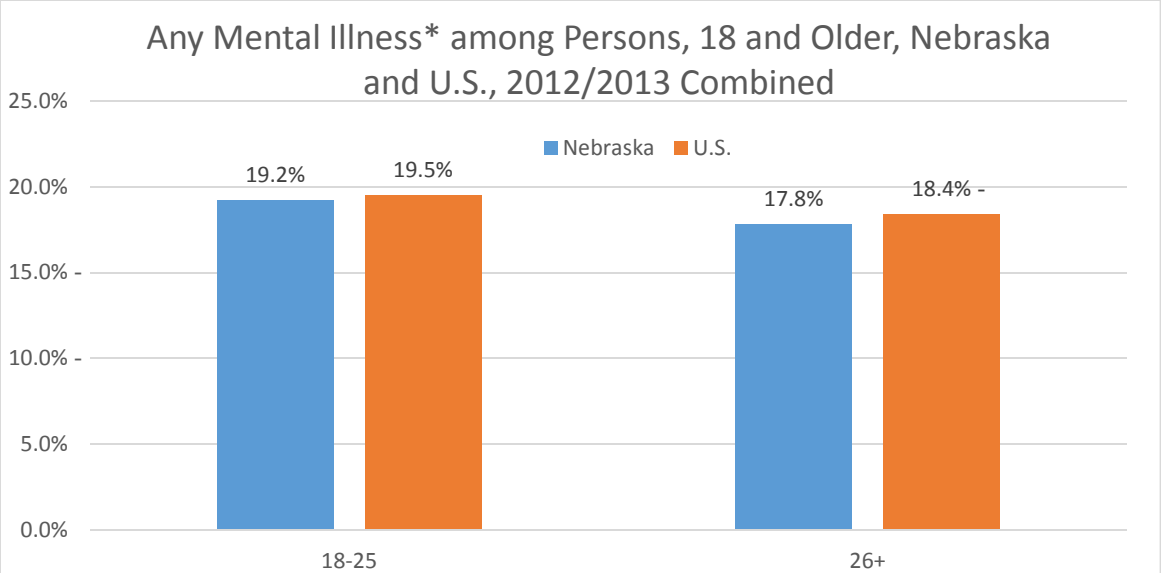
	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
NE	17.6%	17.6%	17.7%	17.9%	18.0%
US	17.9%	18.1%	17.9%	18.2%	18.5%

Adults 18 and older indicating a respondent has a diagnosed mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, assessed by the Mental Health Surveillance Study (MHSS) Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders--Fourth Edition--Research Version--Axis 1 Disorders* MHSS-SCID), which is based on the 4th edition of the *Diagnostic and Statistical Manuel of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild, mental illness, moderate mental illness, and serious mental illness (SMIU). Any mental illness (AMI) includes individuals in any of the three categories,
Source: National Survey on Drug Use and Healht(NSDUH)

Adult Depression and Psychological Distress: Any Mental Illness by Age

As shown by figure 5.4 Nebraskans 18-25 report a higher percentage with a mental illness in the past year with those age 26 reporting slightly lower percentages but there is no significant difference. For each of these groups there is no significant difference between Nebraska and the U.S.

Figure 5.4



Adults 18 and older indicating a respondent has a diagnosed mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, assessed by the Mental Health Surveillance Study (MHSS) Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders--Fourth Edition--Research Version--Axis 1 Disorders* MHSS-SCID), which is based on the 4th edition of the *Diagnostic and Statistical Manuel of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild, mental illness, moderate mental illness, and serious mental illness (SMIU). Any mental illness (AMI) includes individuals in any of the three categories,
Source: National Survey on Drug Use and Healht(NSDUH)

Adult Depression and Psychological Distress: Serious Mental Illness

Of those who indicated they had a mental illness some reported serious mental illness (SMIU). While the percentage is smaller than any mental illness due to the severity of the illness it is important to study those with the most serious forms of mental illness.

Serious Mental Illness Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Adults with Serious Mental Illness Past Year among Adults 18 and Older	NSDUH	2012/2013	4.2%	58,000	4.1%	Non-significant	Stable

Serious Mental Illness in Nebraska

During the combined years of 2012 and 2013, approximately one in every 24 Nebraska adults 18 and older (4.2 percent), an estimated 58,000 Nebraskans, reported having serious mental illness in the past year.

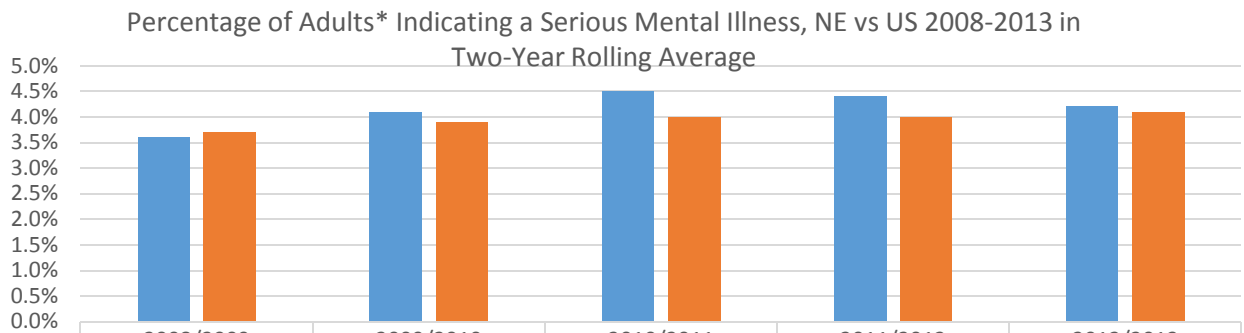
Compared to the Nation

During the combined years of 2012 and 2013, the percentage of Nebraskans 18 and older reporting serious mental illness (4.2 percent) was very similar to the U.S. overall (4.1 percent).

Trends

Figure 5.5 shows the percentage of Nebraska and U.S. adults who have a serious mental illness from 2008 to 2013. Nebraska rate has increased slightly from 3.6 percent in 2008/09 to 4.2 percent in 2012/13, but the difference in not significant.

Figure 5.5



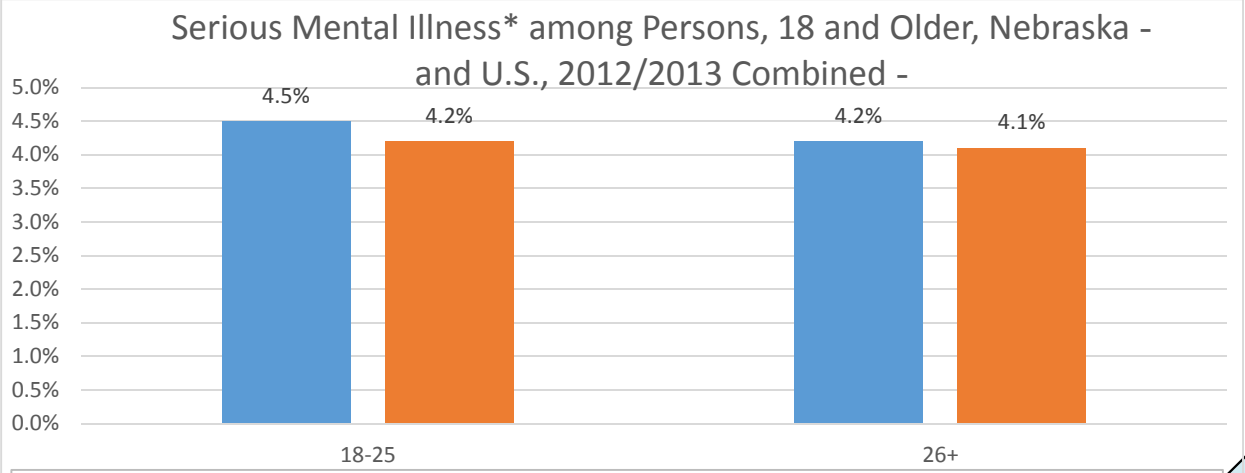
	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
NE	3.6%	4.1%	4.5%	4.4%	4.2%
US	3.7%	3.9%	4.0%	4.0%	4.1%

Adults 18 and older indicating a respondent has a diagnosed mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, assessed by the Mental Health Surveillance Study (MHSS) Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders--Fourth Edition--Research Version--Axis 1 Disorders* MHSS-SCID), which is based on the 4th edition of the *Diagnostic and Statistical Manuel of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild, mental illness, moderate mental illness, and serious mental illness (SMIU).
Source: National Survey on Drug Use and Healht(NSDUH)

Adult Depression and Psychological Distress: Serious Mental Illness by Age

Similar to overall mental illness Nebraskans 18-25 report a higher percentage of serious mental illness in the past year with those age 26 reporting slightly lower percentages but there is no significant difference(Figure 5.6). For each of these groups there is no significant difference between Nebraska and the U.S.

Figure 5.6



Adults 18 and older indicating a respondent has a diagnosed mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, assessed by the Mental Health Surveillance Study (MHSS) Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders--Fourth Edition--Research Version--Axis 1 Disorders* MHSS-SCID), which is based on the 4th edition of the *Diagnostic and Statistical Manuel of Mental Disorders* (DSM-IV). Three categories of mental illness severity are defined based on the level of functional impairment: mild, mental illness, moderate mental illness, and serious mental illness (SMIU).
Source: National Survey on Drug Use and Health(NSDUH)

Youth Depression and Psychological Distress: Youth Sad/Hopeless

The Youth Risk Behavior Survey (YRBS) asked Nebraska youth if they have felt sad or hopeless almost every day for 2 or more weeks in a row so they stopped doing some usual activities during the 12 months before the survey.

Youth Sad/Hopeless Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Youth who reported feeling Sad or Hopeless in Past Year among Youth Grades 9-12	YRBS	2013	19.5%	19,000	29.9%	Lower	Stable

Youth Sad/Hopeless in Nebraska

In 2013, approximately one in every five Nebraska high school youth (19.5 percent), an estimated 19,000 youth, reported feeling sad or hopeless for at least two weeks in a row in the past year.

Compared to the Nation

In 2013, the percentage of Nebraska high school youth reporting feeling sad or hopeless for at least two weeks in a row in the past year (19.5 percent) was significantly lower than the U.S. overall (29.9 percent).

Trends

There was little change from 2011 (21 percent) to 2013 (19.5 percent) in the proportion of Nebraska youth who reported sad or hopeless for at least two weeks in a row in the past year.

Youth Depression and Psychological Distress: Youth Sad/Hopeless by Demographics

Differences by Grade

Overall the rates are very similar by grade. Ninth grade students has slightly lower rates than older students but the difference was not significant.

Differences by Gender

Females are significantly more likely (27.9 percent) to indicate having felt sad or hopeless then males in 2013 (11.5 percent).

Adult Suicide: Serious Thoughts of Suicide

In addition to questions on mental health the NSUDH asked respondents about suicide. The NSDUH asked respondents if they have had serious thoughts of suicide in the past year which helps us to inform about the potential for suicide in Nebraska.

Serious Thoughts of Suicide Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Adults with Serious Thoughts of Suicide in Past Year among Adults 18 and Older	NSDUH	2012/2013	4.1%	56,000	3.9%	Non-significant	Stable

Serious Thoughts of Suicide in Nebraska

During the combined years of 2012 and 2013, approximately one in every 24 Nebraska adults 18 and older (4.1 percent), an estimated 56,000 Nebraskans, reported having serious thoughts of suicide in the past year.

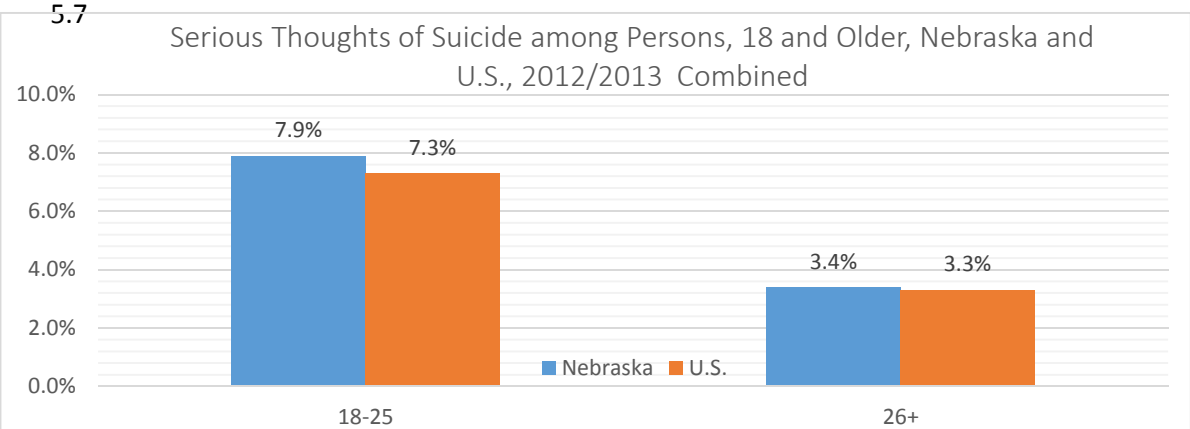
Compared to the Nation

During the combined years of 2012 and 2013, the percentage of Nebraskans 18 and older reporting some form of mental illness (4.1 percent) was very similar to the U.S. overall (3.9 percent).

Trends

Figure 5.7 shows the percentage of Nebraska and U.S. adults who reported having serious thoughts of suicide in the past year from 2008 to 2013. Nebraska rate has remained fairly stable along with the U.S. rate.

Figure 5.7

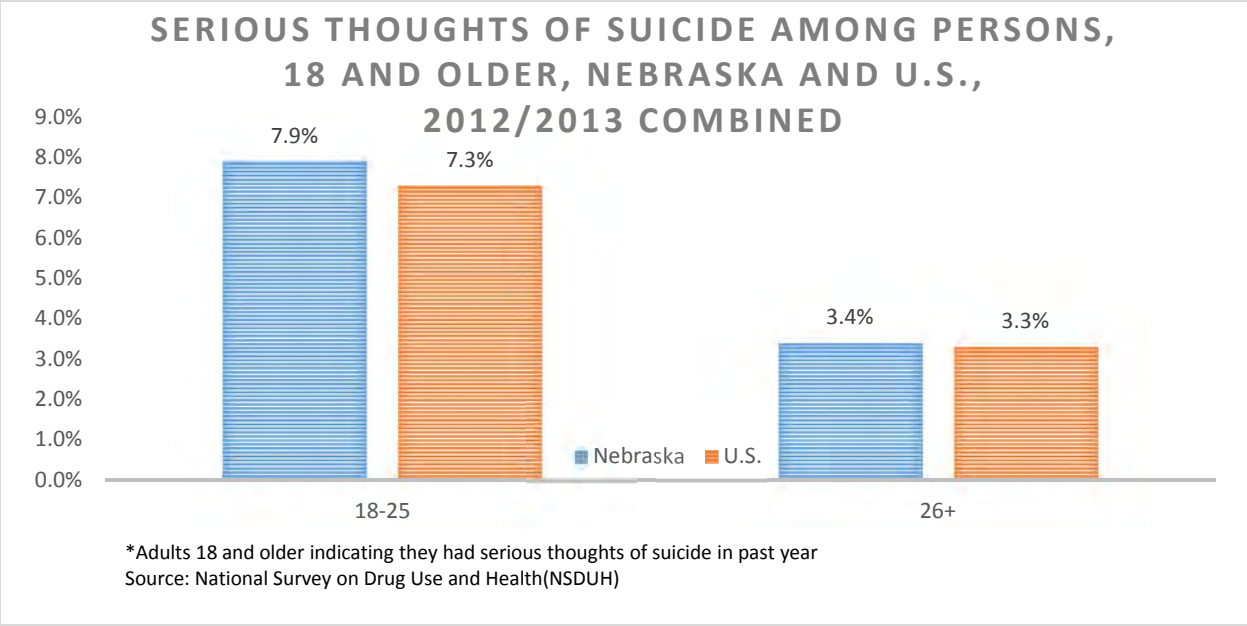


*Adults 18 and older indicating they had serious thoughts of suicdie in past year
Source: National Survey on Drug Use and Healht(NSDUH)

Adult Suicide: Serious Thoughts of Suicide by Age

As shown by figure 5.8 Nebraskans 18 to 25 report a significantly higher percentage who report having serious thoughts of suicide in the past year compared to those age 26 and higher. For each of these groups there is no significant difference between Nebraska and the U.S.

Figure 5.8



Youth Suicide: Seriously Consider Suicide

The Youth Risk Behavior Survey (YRBS) asked Nebraska youth if they have seriously considered attempting suicide in the past year.

Youth Seriously Consider Suicide Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Youth who reported Seriously Considering Attempting Suicide in Past Year among Youth Grades 9-12	YRBS	2013	12.1%	12,000	17.0%	Lower	Stable

Youth Seriously Consider Suicide in Nebraska

In 2013, approximately one in every eight Nebraska high school youth (12.1 percent), an estimated 12,000 youth, reported seriously considering committing suicide in the past year.

Compared to the Nation

In 2013, the percentage of Nebraska high school youth reporting seriously considering suicide in the past year (12.1 percent) was significantly lower than the U.S. overall (17 percent).

Trends

There was little change from 2011 (14.2 percent) to 2013 (12.1 percent) in the proportion of Nebraska youth who reported seriously considering attempting suicide.

Youth Suicide: Serious Thoughts of Suicide by Demographics

Differences by Grade

Overall the rates are very similar by grade. Ninth grade students has slightly lower rates than older students but the difference was not significant.

Differences by Gender

Females are significantly more likely (16.8 percent) to indicate having seriously considered attempting suicide then males in 2013 (7.8 percent).

Youth Suicide: Made Plan to Commit Suicide

The Youth Risk Behavior Survey (YRBS) asked Nebraska youth if made a plan about how they would attempt suicide in the past year.

Youth Who Made a Plan on How They Would Complete Suicide Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Youth who reported making a plan on how to commit Suicide in Past Year among Youth Grades 9-12	YRBS	2013	9.8%	10,000	13.6%	Lower	Stable

Youth Made Plan on How to Commit Suicide in Nebraska

In 2013, approximately one in every 10 Nebraska high school youth (9.8 percent), an estimated 10,000 youth, reported making a plan on how they would complete suicide in the past year.

Compared to the Nation

In 2013, the percentage of Nebraska high school youth reporting making a plan on how they would complete suicide in the past year (9.8 percent) was significantly lower than the U.S. overall (13.6 percent).

Trends

There was little change from 2011 (10.9 percent) to 2013 (9.8 percent) in the proportion of Nebraska youth who reported making a plan about how they would attempt suicide.

Youth Suicide: Made Plan to Commit Suicide by Demographics

Differences by Grade

Overall the rates are very similar by grade. Ninth grade students had a similar rate (7.7 percent) as twelfth graders (9.9 percent)

Differences by Gender

Females are significantly more likely (13.3 percent) to indicate having made a plan about how they would attempt suicide then males in 2013 (6.5 percent).

Youth Suicide: Attempted Suicide

The Youth Risk Behavior Survey (YRBS) asked Nebraska youth if they have attempted suicide in the past year.

Youth Attempted Suicide Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Youth who reported attempting Suicide in Past Year among Youth Grades 9-12	YRBS	2013	6.0%	6,000	8.0%	Lower	Stable

Youth Attempted Suicide in Nebraska

In 2013, approximately one in every 17 Nebraska high school youth (six percent), an estimated 6,000 youth, reported attempting suicide in the past year.

Compared to the Nation

In 2013, the percentage of Nebraska high school youth reporting attempting suicide in the past year (six percent) was significantly lower than the U.S. overall (eight percent).

Trends

There was little significant change from 2011 (7.7 percent) to 2013 (six percent) in the proportion of Nebraska youth who reported attempting suicide.

Youth Suicide: Attempted Suicide by Demographics

Differences by Grade

Overall the ninth grade students are less likely to have attempted suicide. Ninth grade students had lower rate (3.5 percent) then tenth graders (7.5 percent). There was no significant difference between tenth through twelfth graders

Differences by Gender

Similar to other measures of suicide females are significantly more likely (7.6 percent) to indicate having attempted suicide then males in 2013 (4.4 percent)

Youth Suicide: Attempted Suicide that Resulted in Need for Treatment

The Youth Risk Behavior Survey (YRBS) asked Nebraska youth if they have attempted suicide that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse in the past year.

Youth Attempted Suicide that Resulted in Need for Treatment Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Youth who reported attempting Suicide that Resulted in Need for Treatment in Past Year among Youth Grades 9-12	YRBS	2013	1.8%	2,000	2.7%	Non-significant	Stable

Youth Attempted Suicide that Resulted in Need for Treatment in Nebraska

In 2013, approximately one in every 56 Nebraska high school youth (1.8 percent), an estimated 2,000 youth, reported attempting suicide in the past year that resulted in the need for treatment.

Compared to the Nation

In 2013, the percentage of Nebraska high school youth reporting attempting suicide in the past year that resulted in the need for treatment (1.8 percent) was not significantly different than the U.S. overall (2.7 percent).

Trends

There was little significant change from 2011 (2.6 percent) to 2013 (1.8 percent) in the proportion of Nebraska youth who reported attempting suicide that resulted in the need to be treated by a medical professional.

Youth Suicide: Attempted Suicide that Resulted in Need for Treatment by Demographics

Differences by Grade

Overall the rates are very similar by grade. Ninth grade students had a similar rate (1.1 percent) as twelfth graders (2.3 percent)

Differences by Gender

Unlike other measures of suicide females were not significantly different (two percent) to indicate having attempted suicide that resulted in the need to be treated by a medical professional then males were in 2013 (1.7 percent).

Depression and Psychological Distress: Suicide Mortality

In 2013 41,149 Americans committed suicide making it the 10th leading cause of death. Unlike many other leading causes of death, suicide continues to claim more lives each year[2]. Suicide is a major cause of death in Nebraska. In 2013, suicide was attempted with Nephritis and Nephrosis as the 10th leading cause of death among Nebraskans.

Table 5.1 Suicide Mortality Indicator Summary Table

Indicator	Data Source	Year	Nebraska AA Rate*	Number of Deaths	National AA Rate*	Nebraska vs. Nation	Trend
Death due to suicide	Vital Records**	2013	11.6	220	12.6	Lower	Increasing (04-13)
*Age-Adjusted death rate per 100,000 population							
**Nebraska data were obtained from Nebraska vital records. U.S. data were obtained from CDC Wonder (on-line)							

Suicide Mortality in Nebraska

In 2013, suicide killed 220 Nebraska residents with an age-adjusted mortality rate of 11.6 deaths per 100,000 population this is lower than the U.S. rate of 12.6 deaths per 100,000 population.

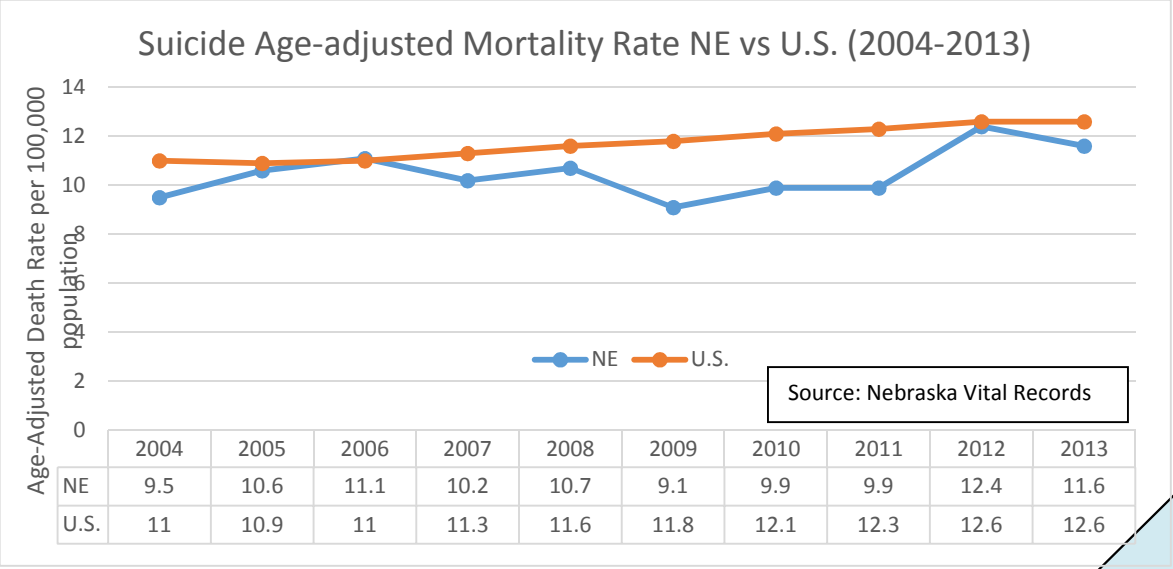
Compared to the Nation

In 2013, Nebraska's age-adjusted mortality rate of 11.6 deaths per 100,000 population is lower than the U.S. rate of 12.6 deaths per 100,000 population.

Trends

Figure 5.9 shows suicide mortality rates for Nebraska and the U.S. as a whole. Nebraska is slightly lower than the national average, however, in 2012 and 2013 it is almost equal to the national average.

Figure 5.9



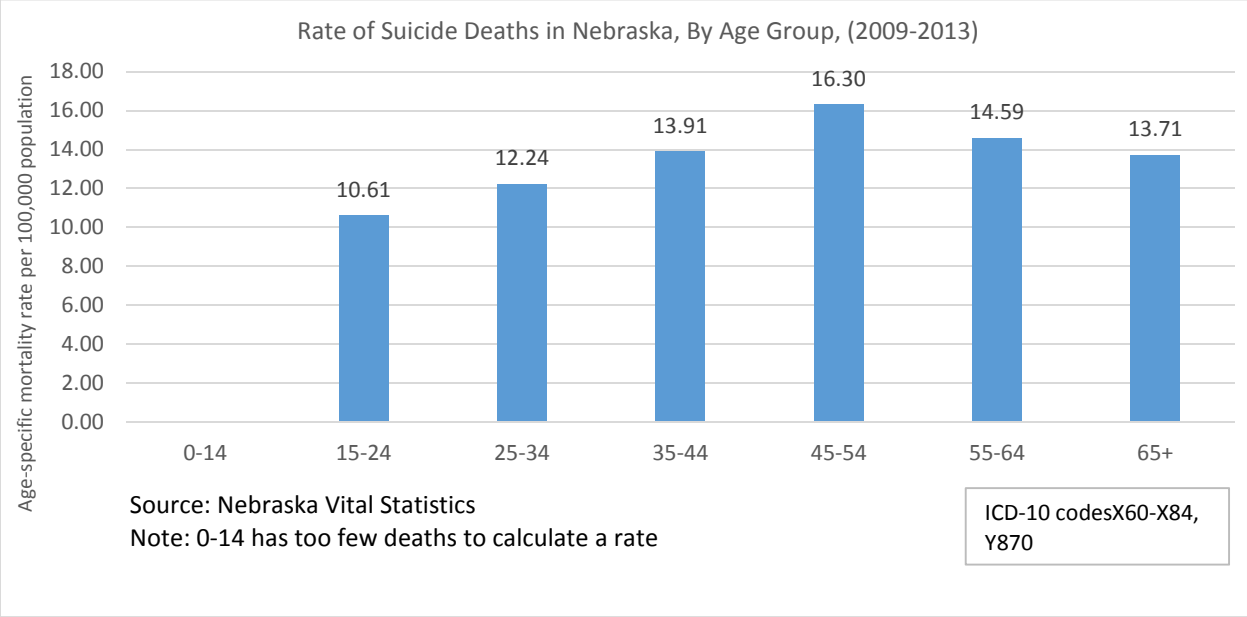
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
NE	9.5	10.6	11.1	10.2	10.7	9.1	9.9	9.9	12.4	11.6
U.S.	11	10.9	11	11.3	11.6	11.8	12.1	12.3	12.6	12.6

Depression and Psychological Distress: Suicides by Demographics

Differences by Age

Figure 5.10 shows the age-specific rate of suicide deaths in Nebraska by age group from 2009 to 2013. The age-group with the highest rate of deaths is 45 to 54 year olds followed by 55 to 64 year olds. Suicide death rates rise with age, reaching the highest rate (16.3 percent) for those 45-54 then decline for older age groups.

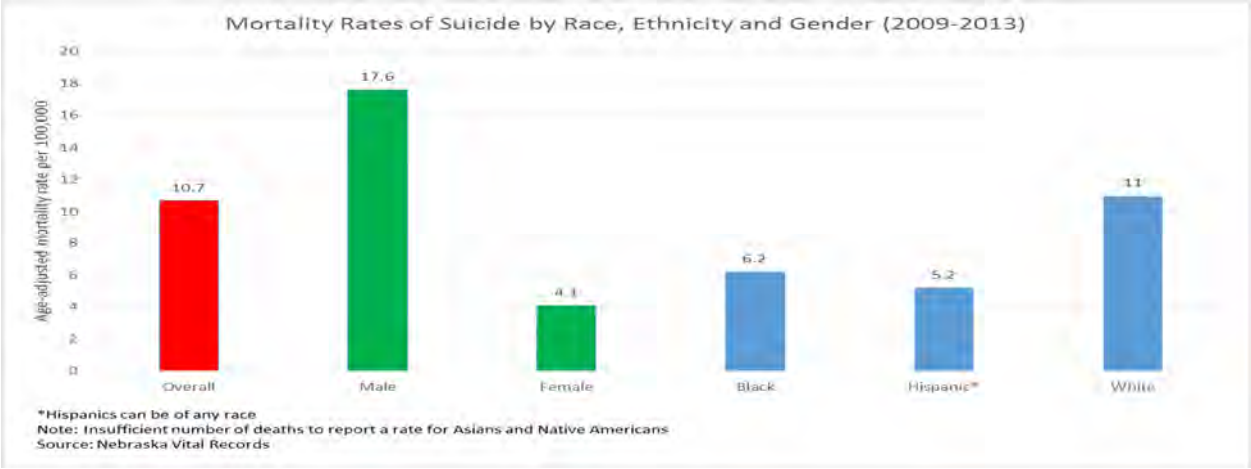
Figure 5.10



Differences by Gender

Figure 5.11 shows the rate of suicides by race, ethnicity, and gender. Males have a much higher suicide rate compared to females with a rate of over four times that of females between 2009 and 2013.

Figure 5.11



Differences by Urban/Rural

Between 2009 and 2013 urban large counties had significantly lower suicide mortality rates than either urban small or rural counties.

Differences by Race/Ethnicity

Whites have the highest rate of suicide among racial/ethnic groups from 2009 to 2013.

References

Mental Health and Suicide

1. 1 Office of Disease Prevention and Health Promotion. HealthPeople2020. Retrieved August 2015 from http://www.healthypeople.gov/2020/topics-objectives/topic/mental-health-and-mental-disorders
2. 1 American Foundation for Suicide Prevention. Understanding Suicide. Retried August 2015 from http://www.afsp.org/understanding-suicide

METHODOLOGY

Data Sources Used in This Report
To gain a comprehensive understanding of substance use and associated consequences in Nebraska, 19 data sources were included in this report. The following is a brief summary of each of the 19 data sources as well as contact information that can be used to gather further information.

Alcohol-Related Motor Vehicle Crash Data/Nebraska Department of Roads
http://www.dor.state.ne.us/nohs
The Highway Safety Office of the Nebraska Department of Roads collects, analyzes, and publishes information about crashes that occur on Nebraska roadways. These data are then made available to the public. For these data, a crash is considered alcohol-related if either driver and/or a non-occupant (such as a pedestrian or pedal-cyclist) had any alcohol in their system at the time of the crash. As a result, these data do not conclude that alcohol contributed to the crash but rather that alcohol was present at the time of the crash.

Alcohol Sales/National Institute for Alcohol Abuse and Alcoholism
http://www.niaaa.nih.gov
For this report, data on alcohol sales for the state of Nebraska were obtained from the National Institute for Alcohol Abuse and Alcoholism (NIAAA). The NIAAA collects and reports data on alcohol sales at the wholesale level annually for all U.S. States and the District of Columbia. Available through this reporting is the total number of gallons of alcoholic beverages sold, the total number of gallons of ethanol (or pure alcohol) sold, and per capita ethanol sales for persons 14 and older. Each of these measures is available for alcoholic beverages overall as well as for beer, wine, and liquor individually.

Nebraska data from the NIAAA reports is obtained from the Nebraska Liquor Control Commission (LCC). Using alcohol tax information, the Nebraska LCC compiles

Behavioral Risk Factor Surveillance System/Division of Public Health/NDHHS
http://www.cdc.gov/brfss

The Behavioral Risk Factor Surveillance System (BRFSS) is a cross-sectional random digit dialed telephone survey of Nebraska adults 18 years of age and older. It is conducted in all 50 states, the District of Columbia, and three U.S. territories. The BRFSS is developed each year by the CDC and administered by the NDHHS. Nebraska began conducting the BRFSS in 1982, and since has conducted the survey on an ongoing annual basis. The Nebraska BRFSS is designed to collect information on the health behaviors of adults related to the major causes of morbidity and mortality in the state. To better reflect the Nebraska adult population, data are weighted by age and gender.

This report contains data on self-reported alcohol use, alcohol-impaired driving, cigarette smoking, and smokeless tobacco use collected between 1989 and 2013. Data on illicit drug use are not collected by the BRFSS.

Cigarette Sales/Nebraska Department of Revenue
http://www.revenue.ne.gov

The Nebraska Department of Revenue collects taxes from the sale of cigarettes at the wholesale level. As a result, information is available on the number of packs of cigarettes sold at the wholesale level each year in Nebraska. To allow for state-to-state and national comparisons, the economic consulting firm of Orzechowski and Walker produces an annual report entitled "*The Tax Burden on Tobacco."* This report, which is funded by the tobacco industry, is the nation's definitive source on tobacco tax information.

Drug Recognition Expert Data/Nebraska Office of Highway Safety
In 1991, the Nebraska Office of Highway Safety began sponsoring the Drug Evaluation and Classification program for Nebraska law enforcement officers. The program provides the necessary training to law enforcement officers to become DREs. The program is federally funded through the Nebraska Office of Highway Safety. DREs are specially trained to identify drivers who may be impaired by non-alcoholic substances. Suspected drivers are put through a 12-step evaluation to determine impairment. If the suspect is impaired, the results of the 12-step evaluation provide the information to determine what drug category is causing the impairment. During the 12-step evaluation a toxicology sample is provided (unless refused) to support the DREs opinion.
When evaluating subjects, DREs look for signs of impairment that may have resulted from any non-alcoholic substance, legal or illegal. As a result, it is possible that a driver may be cited for DUI resulting from prescription drug impairment. Once cited, drivers are sent through the legal system in a similar manner to if they had been cited for DUI resulting from alcohol impairment.

Fatality Analysis Reporting System/National Highway Traffic Safety Administration
http://www-fars.nhtsa.dot.gov
In 1975, the United States Department of Transportation, National Highway Traffic Safety Administration (NHTSA) created the Fatality Analysis Reporting System (FARS) to improve traffic safety. Fatality information derived from FARS includes motor vehicle traffic crashes that result in the death of an occupant of a vehicle or a non-motorist (such as a pedestrian or pedal-cyclist) within 30 days of the crash. FARS contains data on all fatal traffic crashes within the 50 states, the District of Columbia, and Puerto Rico. The Nebraska Department of Roads provides the NHTSA with information on fatal crashes in Nebraska using state data that are coded onto a standard FARS form.

Incarceration and Parole Data/Nebraska Department of Correctional Services
http://www.corrections.state.ne.us

The Nebraska Department of Correctional Services collects data on adult men and women who are incarcerated within the Nebraska prison system, as well as juveniles who are incarcerated as adults.

For these data, incarceration refers to an individual being sentenced to prison for one year or longer and does not count individuals sentenced to jail or held in jail for less than one year. In addition, data on parole are also available. For these data, parole refers to the supervised release of a prisoner before the completion of his or her prison sentence.

Parole should not be confused with probation, which refers to the supervision of criminals who were not sentenced to serve jail or prison time.

For this report, data on incarceration and parole for drug and DUI offenses were reported. Drug offenses consist of illegal drug possession, manufacturing, sales, or the intent to sell drugs illegally. It should be noted that data are only available on the most serious offense committed by each inmate. Other crimes may have been committed during or prior to a drug or DUI offense that may have had an impact on the sentence.

Magellan Substance Abuse Treatment Database/Division of Behavioral Health/NDHHS

The Division of Behavioral Health (DBH) of the DHHS collects data on alcohol and drug treatment admissions from programs funded through the DBH as well as programs not funded through the DBH but who choose to submit their patient data to the state. Data are collected using Magellan Behavioral Health System software with records being reported from Magellan to the DBH each month. This data set contains admissions for individuals receiving only substance abuse treatment as well as for those jointly receiving mental health and substance abuse treatment.

Mortality Data/Nebraska Vital Records/Division of Public Health/NDHHS
Mortality (death) data in Nebraska are collected on a yearly basis from individual death certificates filed with the NDHHS. These data include information on a variety of attributes of the deceased, including age, race/ethnicity, gender, place of residence, and primary and secondary causes of death.

Mortality data used in this report were from years 1999-2010 and were coded using the 10th revision of the International Classification of Disease (ICD-10), the source for coding mortality data by cause of death. For more information on ICD-10, including cause of death codes, visit the National Center for Health Statistics website at http://www.cdc.gov/nchs/about/major/dvs/icd10des.htm

In contrast to many of the traditional causes of death, such as heart disease and cancer, deaths involving substance use are less clear and often require estimation. Some deaths result directly from alcohol and drug use (e.g., alcohol or drug poisoning) and are codeable on the death certificate while others result from causes in which alcohol, tobacco, or drug use are simply contributing factors to the death and subsequently are not codeable on the death certificate.

To better understand the influence of alcohol and tobacco use on mortality, the CDC established methodology to estimate the number of alcohol and tobacco-related deaths. To do this, alcohol and tobacco-attributable fractions were established. These fractions can be applied to certain causes of death (coded on the death certificate) to generate estimates of the number of deaths. Estimates of the number of alcohol-related deaths presented in this report were calculated using the CDC's ARDI software while the number of smoking-related deaths was calculated using fractions obtained from the CDC's SAMMEC methodology.

Estimates for the number of drug-related deaths used in this report were obtained from the Pacific Institute for Research and Evaluation. However, it should be noted that drug-

attributable fractions are less advanced than those for alcohol and tobacco and likely under-estimate the actual number of drug-related deaths. As a result, the primary focus of this report was on deaths that were directly attributable to drug use. Drug-attributable ICD-10 death codes used in this report included: F11-F16, F18-F19, X40-X44; X60-X64, X85; Y10-Y14.

In addition to looking specifically at deaths resulting from alcohol, tobacco, and drug use, data on deaths resulting from suicide, homicide, and chronic liver disease were presented using the following ICD-10 codes:

- Suicide: X60-X84; Y87.0
- Homicide: X85-Y09; Y87.1
- Chronic Liver Disease: K70, K73-74

National Survey on Drug Use and Health/Substance Abuse and Mental Health Services Administration (SAMHSA)
http://www.oas.samhsa.gov/nhsda.htm

Sponsored by SAMHSA, the National Survey on Drug Use and Health (NSDUH) is an annual survey of the civilian, non-institutionalized population of the United States aged 12 years and older. Data is collected from all U.S. states and the District of Columbia through a face-to-face survey at the respondents' place of residence. To increase confidentiality, the survey is administered using computer-assisted interviewing methods, including the use of a portable computer and headphones for self-interviewing.

Due to the limited number of respondents and complexity of analysis, most data is only available for select demographics at the state level, including an overall estimate and estimates for 12-17 year olds, 18-25 year olds, and persons 26 and older. The survey is stratified by these three age categories to allow for representative data on youth, young adults, and adults. In addition to these three age categories, a limited amount of information is available for alcohol use among persons 12-20 (those under the legal drinking age) as well as alcohol, tobacco, and drug use by Nebraska behavioral health region. Estimates for other age groups and regions as well as by gender, race/ethnicity, and other demographics are not available at the state level.

While SAMHSA publications included 95 percent confidence interval bands for Nebraska estimates (both for overall and age-specific estimates), confidence interval bands were not presented for national estimates. As a result, differences were determined to be significant when the confidence interval for Nebraska did not contain the national estimate.

Nebraska Hospital Discharge Data/Division of Public Health/NDHHS

Information on each hospital discharge is reported from acute care hospitals in Nebraska to the Nebraska Hospital Association (NHA). This information is reported by hospitals using the Uniform Billing Form (UB-92) and is transmitted electronically to the Nebraska Hospital Information System (NHIS) at the Nebraska Association of Hospitals and Health Systems (NAHHS). Ultimately the information is acquired by the NDHHS from NHA. For more information on the Nebraska Hospital Association visit http://www.nhanet.org.

Hospital discharge records contain information on the date of admission, date of discharge, patient's age, gender, county of residence, and primary and secondary diagnoses. A total of 10 diagnoses codes can be recorded during each hospitalization, with one listed as the primary diagnosis (or underlying cause) for the hospitalization and nine listed as secondary diagnoses (or contributing factors) to the hospitalization, including E-codes (external causes of injury). Information is not available on the race or ethnicity of the patient.

In contrast to the ICD-10 coding system used for coding and analyzing mortality data, hospital discharge data is coded using the clinical modification of the 9th revision of the international classification of disease (ICD-9-CM). As a result, codes used to define alcohol, tobacco, and drug hospitalization are different than codes used to define death.

There are two types of hospital discharge records available in Nebraska, emergency department and inpatient (hereafter hospitalization). However, this report contains only the information from hospitalizations and not from ER discharges. This decision was made in large part due to the hospitalization database being more complete than the ER database.

For this report, a hospitalization was counted as alcohol or drug-attributable if an alcohol or drug-attributable code was listed in any of the 10 diagnoses codes. While this approach is more comprehensive than looking at just the primary diagnosis, it does not include hospitalizations for which alcohol and drug use are often contributing factors (such as motor vehicle crashes, falls, and other conditions and injuries), but are not alcohol specific.

- Alcohol-attributable hospitalization codes (ICD-9-CM): 291, 303, 305.0, 357.5, 425.5, 535.3, 571.0-571.3, 790.3, E860
- Drug-attributable hospitalization codes (ICD-9-CM): 292, 304, 305.2-305.9, E850-E858, E950.0-E950.5, E962.0, E980.0-E980.5

In contrast to alcohol and drugs, hospitalizations resulting (at least in part) from cigarette smoking are not codeable using the ICD-9-CM coding system. As a result, estimates for smoking-related hospitalizations had to be calculated using the CDC's SAMMEC methodology. It should be noted that smoking-attributable fractions within SAMMEC were established for estimating smoking-related deaths among persons 35 and older and not for estimating smoking-related hospitalizations. As a result, these findings should be viewed with caution as they may incorrectly estimate smoking-related hospitalizations among persons 35 and older and do not estimate smoking-related hospitalizations that may have occurred among persons under 35 years of age. For more information on SAMMEC visit http://apps.nccd.cdc.gov/sammec.

There are three primary limitations of this data. First, the number of records reported annually by acute care hospitals to the NHIS is lower than the number of met records the same hospitals report to the NDHHS, indicating incomplete data. As a result, the available records under represent the actual number of hospitalizations in the state.

The second limitation is that Nebraska residents receiving care outside the state of Nebraska are not included in the database. Since the rate and trend of migration for medical care is unknown, the true number of hospitalizations among Nebraska residents is beyond speculation. Particular caution should be used when comparing hospitalization rates geographically, since residents of some counties may be more likely than residents in other counties to receive their medical care out of state.

The third limitation is that state to state and national comparisons are not available due to differences in how states collect, define, and report hospital discharge data. As a result, national comparison data are not included in this report.

For more information on Nebraska Hospital Discharge Data, contact the Nebraska Office of Health Statistics at (402) 471-1370.

Nebraska Trauma Registry/Division of Public Health/NDHHS

The Nebraska Statewide Trauma System (NSTS) is a network of definitive care facilities that provides a spectrum of care for all injured patients. Divided into four statewide regions, the NSTS strives to include all the components of optimal trauma care, such as prevention, education, communication, access and definitive care, rehabilitation, and research activities. Essential to the development of a trauma care system is the designation of definitive trauma care facilities (or trauma centers).

The Nebraska Trauma Registry (NTR), established in September of 2003, is a database that contains detailed information about each trauma patient in Nebraska. The trauma registry includes several types of data regarding patient demographic information, patient insurance category, injury, pre-hospital activity (emergency medical services), the referring hospital, the receiving hospital, and the rehabilitation center.

Currently, seven leading trauma centers in Nebraska participate in the NTR by submitting data to the NDHHS using National Trauma Registry of the American College of Surgeons (NTRACS) software. Patients receiving care through Nebraska trauma centers are tested at the discretion of each trauma center for alcohol and drugs at the time of admission. Screening for alcohol use includes blood alcohol content (BAC) while screening for drug use covers a variety of drugs commonly used for non-medical purposes. However, due to the selective testing procedures used by hospitals, it is likely that some individuals with alcohol and drugs in their system were not tested as a result of failing to show visible signs of impairment.

Prescription drugs and drugs being administered to patients during their hospital stay are not supposed to be entered as positive in the trauma registry, thus having the data reflect only non-medical drug use. However, it was suspected that some facilities were entering all positive drug screening results into the registry, regardless of whether or not the patient was taking them for medical reasons. As a result, this report contains only drug test results for marijuana, cocaine, and amphetamine/methamphetamine because they are rarely prescribed but commonly used illegally. Amphetamine and methamphetamine could not be separated from one another because centers collect and report this information differently. It is possible that some amphetamine use was prescribed.

Nebraska Young Adult Alcohol Opinion Survey/NDHHS

The Nebraska Young Adult Alcohol Opinion Survey (NYAAOS) is a survey of Nebraska young adults ages 19-25 years old that is conducted by the Nebraska Department of Health and

Human Services. The survey was first administered in 2010, and has since been administered in 2012 and 2013.

The primary purposes of the survey were (1) to enhance understanding of alcohol use, alcohol impaired driving, and attitudes and perceptions related to alcohol among 19 to 25 year old young adults in Nebraska and (2) to provide data to community coalitions in Nebraska working to reduce binge drinking among young adults. This report focuses on state level findings from the survey, including differences by gender, age, urban influencers, student status and survey administration.

The sample for the most recent survey (2013) was generated from a list provided by the Nebraska Department of Motor Vehicles (DMV). The sampling frame included young adults, ages 19 to 25, with Nebraska driver's licenses. A total of 10,003 young adults were included in the sample. The sample was stratified by the six Nebraska behavioral health regions with an approximately equal number of respondents sampled in each region (regional N varied from 1667 to 1668). Before the first mailing, respondent mailing addresses were run through the National Change of Address Registry. This process revealed that 162 respondents were no longer living in Nebraska, so they were removed from the sample. The second full mailing went through the same process and revealed an additional 52 respondents who were no longer living in the state.

The survey asked respondents about lifetime and current alcohol use along with frequency of alcohol use which was used to determine binge drinking frequency. In addition questions were asked about the perception of risk from binge drinking along with social norms regarding alcohol use. Finally there were questions related to the attitudes, perceptions and experiences related to alcohol service and sales along with attitudes and alcohol enforcement and perceptions about providing alcohol to minors.

For more information on the NYAAOS contact the Division of Behavioral Health at (402) 471-7736.

Pregnancy Risk Assessment Monitoring System (PRAMS)/Division of Public Health/NDHHS
http://www.cdc.gov/prams

The PRAMS is a surveillance system sponsored by the CDC and state health departments of participating states. It collects state-specific, population-based survey data on maternal attitudes and behaviors before, during, and after pregnancy. PRAMS samples women who have recently had a live birth. The sample is drawn from the state's birth certificate file and does not include non-resident births. Nebraska PRAMS has a relationship with surrounding states, particularly Iowa and South Dakota, to obtain the birth certificates of Nebraska residents who give birth in their state. Nebraska stratifies its sample by race so that some groups are sampled at a higher rate to ensure adequate data in smaller and/or higher risk populations. Selected women are first contacted by mail and if there is no response to the mailings, the women are contacted by telephone.

Probation Data/Nebraska Office of Probation Administration
http://supremecourt.ne.gov/probation

The Nebraska Supreme Court Office of Probation Administration provides central management of probation services for the state of Nebraska. For this data, probation refers to the supervision of criminals who were sentenced to a term of probation. Probation should not be confused with parole, which refers to the supervised release of a prisoner before the completion of his or her prison sentence.

For this report, information on probation sentences for DUI and drug offenses was obtained directly from the Nebraska Office of Probation Administration. It is possible that persons were placed on probation for alcohol-related crimes other than DUI; however, these were not examined or included in this report. These data represent only persons sentenced or placed on probation, and does not include persons placed into diversion, court probation, or other programs.

Smoking-Related Fires/Nebraska State Fire Marshal's Office
http://www.sfm.ne.gov/statistics/fire/fire.html

The Nebraska State Fire Marshal's Office manages data submitted by Nebraska's fire departments. In turn, all states report their fire data to the U.S. Fire Administration so that national comparisons can be made. Fire departments report on all types for fires; however, this report focuses exclusively on the involvement of cigarette smoking in structure fires, including residential and non-residential structure fires. Information on smoking-related fires presented in this report came directly from the Nebraska State Fire Marshal's website.
It should be noted that reporting by individual fire department is voluntary, and while most report their data, some do not.

Uniform Crime Reporting/Nebraska Crime Commission
http://www.ncc.state.ne.us/index.htm

The Uniform Crime Reporting (UCR) Program is a national data system administered by the Federal Bureau of Investigation (FBI). This system ensures that crime statistics on arrests are collected and reported in a consistent manner across the country and produces a reliable set of crime statistics for use in law enforcement administration, operation, and management.

In Nebraska, law enforcement agencies report arrest data either in the UCR format or the Nebraska Incident-Based Reporting System (NIBRS) format to the Nebraska Crime Commission. Once obtained, NIBRS data is converted to the UCR format to allow for statewide publication and reporting to the FBI. An arrest is counted each time a person is taken into custody or issued a citation or summons. In the case of a juvenile (defined as under the age of 18) an arrest is counted when they are merely warned and released without any further action. While an individual may be charged with multiple crimes at the time of arrest, only one arrest is counted. An arrest is counted for the most serious charge at the time of the arrest.

Youth Risk Behavior Survey/Division of Public Health/NDHHS

The Youth Risk Behavior Survey (YRBS) is part of the National Youth Risk Behavioral Surveillance System that was established by the CDC. The focus of the YRBS is on priority health-risk behaviors (those health-risk behaviors that are established during youth and result in the most significant mortality, morbidity, disability, and social problems during both youth and adulthood).

Nebraska began conducting the YRBS in 1991, and has conducted it every odd calendar year until 2010, when administration on even years began. This surveillance system targets youth enrolled in grades 9-12 attending public schools in Nebraska. Data are collected by having students complete hard copy surveys in Nebraska schools that were selected through a 3-stage cluster sampling design.

Data from the 1991, 1993, 2003, 2005 and 2012 YRBS survey are considered representative of the target population and are subsequently weighted to reflect the 9-12 grade public school student population in Nebraska. Due to an insufficient response rate on the 1995, 1997, 1999, and 2001 surveys, data were not weighted and as a result, are not generalizable to the population (according to the CDC's criteria).

Beyond the standard limitations of self-report surveys, some limitations exist specifically for the YRBS.
 Data is only collected from public school students. Although public school students made up approximately 90 percent of the states 9-12 grade student population in 2011, it is not known how health behaviors differ between public and non-public high school students in Nebraska.
 Data is not collected for high school age youth who have dropped out of school. It is likely that these youth have different health behaviors, especially for substance abuse.
 Even though the Nebraska YRBS has had a response rate above the CDC threshold for generating weighted estimates in recent years, many urban school districts, especially those in the Omaha metropolitan area, do not participate in the YRBS. While the impact that this has on the findings is not known, it is certainly safe to assume that it has some effect and makes interpretation of the findings by race/ethnicity, in particular, difficult to interpret because of the number of minority students in the Omaha metropolitan area. Due to this limitation, racial and ethnic differences from the YRBS were not presented in this report.

To generate estimates for the number of high school students who use alcohol, tobacco, and illicit drugs in the state, we used the entire statewide population ages 12-18 as the denominator.

Age-Adjustment

Age adjustment is a statistical method used to compare risk between populations while controlling for differences in age that may exist between populations. It can be used for comparing two or more populations at one point in time or one population over multiple points in time. Direct age-adjustment, the method used for analysis in this report, consists of applying age specific rates in a population to a standardized age distribution. While age-adjusted rates and percentages are useful for comparing populations, the process modifies

the rate/percentage within the population and subsequently should be viewed a relative index rather than actual measure of risk.

For calculating age-adjusted population based rates (such as death rates) 11 age categories are typically used, ranging from under one to 85 and older. Rates in this report were calculated using the 11 age categories when available. However, in some instances data were only available for a smaller number of age categories, and as a result age-adjusted rates were calculated using the categories available. When analyzing BRFSS survey data, five age categories were used, including 18-24, 25-34, 35-44, 45-64, and 65 and older. All age-adjusted rates presented in this report were calculated using the 2010 U.S. standard population.

Significance Testing

Unless noted, all statements within this report highlighting differences between groups reflect statistically significant differences where $p<0.05$. Differences between rates and percentages were tested for significance by first calculating 95 percent confidence intervals and then examining them for overlap. Groups that had non-overlapping confidence intervals were concluded to be significantly different from one another.

To calculate proper confidence interval bands for weighted estimates obtained from surveys that used complex sampling designs (such as the BRFSS and YRBS), SAS and SAS-callable SUDAAN were used to calculate proper standard errors and subsequently more accurate confidence intervals. Comparing confidence intervals to identify significant differences tends to be more conservative than other statistical tests such as the chi-square test. For example, when comparing binge drinking by gender for Nebraska high school students in 2005, comparing confidence intervals concludes that the gender difference was non-significant (female estimate of 27.3 percent ranged from 24.7 – 29.9 percent while the male estimate of 32.2 percent ranged from 28.5 – 35.8 percent). However, when administering the Rao-Scott chi-square test the difference was determined to be significant (6.56, 1 df, $p=0.0104$).

To compare two age-adjusted rates, 95 percent confidence intervals were calculated for each rate and examined for overlap. Non-overlapping confidence intervals signified a significant difference between the two rates. Significance tests were not administered on any group with a less than 20 events or cases (such as deaths, hospitalizations, arrests, etc.). The formula used to calculate 95 percent confidence interval bands for age-adjusted rates is as follows: $R + (1.96 \times S.E.)$; where $S.E.=R/SQRT(N)$; R=age-adjusted rate and N=number of cases.

Urban and Rural Analysis

Nebraska is a sparsely populated state, with the majority of the population clustered along the eastern edge. For data interpretation purposes, Nebraska's counties were divided into three urban and rural categories. The categories were based on county size within each county and location to other urbanized counties. As a result, these urban/rural categories do not represent conglomerate regions of the state, but rather a mixture of counties throughout the state with similar populations. Urban/rural data are not presented across all data

sources include within this report, as county of residence information was not available within some of the data sources included in this report.

The three categories include:

Urban-large: Core metropolitan counties (Douglas, Sarpy, Lancaster) and Core metropolitan outlying counties (Washington, Saunders, Seward, Cass).

Urban-small: Non-core metropolitan counties (Dakota, Hall), Non-core metropolitan outlying counties (Howard, Hamilton, Merrick, Dixon) and micropolitan counties (Scotts Bluff, Lincoln, Dawson, Buffalo, Adams, Madison, Dodge, Platte, Gage)

Non-urban ("Rural"): Micropolitan outlying counties (Banner, McPherson, Logan, Gosper, Kearney, Clay, Pierce, Stanton), Non-metro/micro with large town counties (Dawes, Box Butte, Cheyenne, Cherry, Keith, Custer, Red Willow, Phelps, Holt, York, Jefferson, Richardson, Nemaha, Otoe, Saline, Butler, Colfax, Cuming, Wayne), and Non-metro/micro with no large towns counties (Sioux, Kimball, Morrill, Sheridan, Garden, Deuel, Grant, Arthur, Perkins, Chase, Dundy, Hooker, Thomas, Hayes, Hitchcock, Frontier, Furnas, Harlan, Keya Paha, Brown, Blaine, Rock, Loup, Boyd, Garfield, Wheeler, Valley, Sherman, Franklin, Greeley, Webster, Nuckolls, Nance, Boone, Antelope, Polk, Fillmore, Thayer, Pawnee, Johnson, Knox, Cedar, Thurston, Burt)

LIST OF ACRONYMS

ARDI – Alcohol-Related Disease Impact

BAC – Blood Alcohol Concentration

BRFSS – Behavioral Risk Factor Surveillance System

CDC – Centers for Disease Control and Prevention

DBH – Division of Behavioral Health

DMV – Department of Motor Vehicles

DRE – Drug Recognition Expert

DUI – Driving Under the Influence

FARS – Fatality Analysis Reporting System

ICD – International Classification of Disease

LCC – Liquor Control Commission

NAHHS – Nebraska Association of Hospitals and Health Systems

NDHHS – Nebraska Department of Health and Human Services

NHTSA – Nebraska Highway Traffic Safety Administration

NIAAA – National Institute for Alcohol Abuse and Alcoholism

NIBRS – Nebraska Incident-Based Reporting System

NRPFSS – Nebraska Risk and Protective Factor Student Survey

NSDUH – National Survey on Drug Use and Health

NSTS – Nebraska Statewide Trauma System

NTR – Nebraska Trauma Registry

NYAAOS – Nebraska Young Adult Alcohol Opinion Survey

PRAMS – Pregnancy Risk Assessment Monitoring System

SAMHSA – Substance Abuse and Mental Health Services Administration

SAMMEC – Smoking Attributable Mortality, Morbidity, and Economic Costs

SEOW – Statewide Epidemiology Outcomes Workgroup

SPF SIG – Strategic Prevention Framework State Incentive Grant

SPF PFS – Strategic Prevention Framework Partnerships For Success

UB-92 – Uniform Billing Form 92

UCR – Uniform Crime Reports

YRBS – Youth Risk Behavior Survey

DATA GAPS

After reviewing the availability of data on substance abuse and associated consequences in Nebraska, the NSAEW began identifying data gaps related to substance abuse within the state. During these discussions, the NSAEW felt that data gaps should be addressed in three key areas, including (1) missing or incomplete data, (2) the availability of data, and (3) the utilization of data. While these discussions will continue to evolve, some of the major data gaps identified by the NSAEW include (in no particular order of importance):

- Under-representation from specific target groups, including but not limited to, rural communities, racial and ethnic minorities, individuals of low socio-economic status, and individuals who are institutionalized (for both crime and mental illness).
- Limited data at the regional, county, and community levels.
- Limited demographic data on self-reported illicit drug use among adults. The National Survey on Drug Use and Health is the only state source containing self-reported data on illicit drug use among adults, and for adults, demographics are limited to two age groups (18-25 and 26 and older).
- Expand the data on substance abuse among college students in Nebraska, attending both two and four year institutions.
- Limited surveillance to identify new and emerging drugs (e.g., Nebraska does not have a state-operated medical examiner data system).
- Inconsistent categories for illicit drug type are used across data systems.
- Incomplete hospital discharge data.
- Inconsistent alcohol and drug testing of patients at Nebraska trauma centers.
- Limited data linkage within the legal and health care systems.
- Low capacities to collect, analyze, and utilize data at the community level.
- Limited data from schools, worksites, health care, and law enforcement regarding substance abuse prevention efforts within their organizations.

Appendix A

State Epidemiological Outcomes Workgroup Membership

The report was prepared by the Division of Behavioral Health and made possible in part by the members of the Nebraska SEOW. Several members provided data from their respective agencies. The current membership of the SEOW as of January 2015 is presented below:

Mindy Anderson-Knott-University of Nebraska-Lincoln
Jeff Armitage-Department of Health and Human Services, Division of Public Health
Matt Avery-Lincoln Public Schools
Debora Barnes-Josiah-Department of Health and Human Services, Division of Public Health
Robert Bussard-Department of Health and Human Services, Division of Behavioral Health
Lynne Brehm-Nebraska Children and Families Foundation
David DeVries-Department of Health and Human Services, Division of Behavioral Health
Renee Faber-Department of Health and Human Services, Division of Behavioral Health
Crystal Fuller-Region VI
Tiffany Gressley-Region III
Ann Koopman-Region IV
Jihyun Ma-Department of Health and Human Services, Division of Public Health
Linda Major-University of Nebraska-Lincoln
Betty Medinger-Nebraska Children & Families Foundation
Kim Meiergerd-University of Nebraska-Lincoln
Faith Mills-Region 1
Sandy Morrissey-Region V
Michael Overton-Nebraska Crime Commission
Nikki Roseberry-Department of Health and Human Services, Division of Behavioral Health
Will Schmeeckle-Schmeeckle Research
Shannon Sell-Region II
Mike Shambaugh-Miller-CenterPointe
Duane Shell-University of Nebraska-Lincoln
Vanessa Urbach-Region VI
Larry Voegele-Ponca Tribe
Jillian Waggoner-Region VI
Lindsey Will-Swanson-University of Nebraska-Lincoln
Fred Zwonechek-Nebraska Office of Highway Safety
Ishmael Torres-University of Nebraska-Kearney

Appendix B-Commonly Abused Drug Categories

Substance **Category and Name**	**Example of *Commercial* and (Street Names)**	**How Drug is Administered**	***Intoxication Effects* / (Potential Health Consequences)**	
Cannabinoids				
Hashish	(boom, chronic, gangster, hah, hash oil, hemp)	swallowed, smoked	*euphoria, slowed thinking and reaction time, confusion, impaired balance and coordination, cough/*(frequent respiratory infections, impaired memory and learning, increased heart rate, anxiety, panic attacks, tolerance, addiction)	
Marijuana	(blunt, dope, ganja, grass, herb, joints, Mary Jane, pot, reefer, sinsemilla, skunk, weed)			
Depressants				
Barbiturates	*Amytal, Nembutal, Seconal, Phenobarbital;* (barbs, reds, red birds, phennies, tooies, yellows, yellow jackets)	injected, swallowed	*sedation, drowsiness/*(depression, unusual excitement, fever, irritability, poor judgment, slurred speech, dizziness, life-threatening withdrawal)	For all Depressants: *reduced anxiety, feeling of well-being, lowered inhibitions, slowed pulse and breathing, lowered blood pressure, poor concentration/*(fatigue, confusion, impaired coordination, memory, judgment; addiction; respiratory depression and arrest; death)
Benzodiazepines (other than flunitrazepam)	*Ativan, Halcion, Librium, Valium, Xanax;* (candy, downers, sleeping pills, tranks)	injected, swallowed	*sedation, drowsiness/*(dizziness)	
Flunitrazepam	*Rohypnal;* (forget-me pill, Mexican Valium, R2 Roche, roofies, roofinol, rope, rophies)	swallowed, snorted	(visual and gastrointestinal disturbances, urinary retention, memory loss for the time under the drug's effects)	
GHB	*gamma-hydroxybutyrate;* (G, Georgia home boy, grievous bodily harm, liquid ecstasy)	swallowed	*drowsiness, nausea/*(vomiting, headache, loss of consciousness, loss of reflexes, seizures, coma, death)	
Methaqualone	*Quaalude, Sopor, Parest;* (ludes, mandrex, quad, quay)	injected, swallowed	*Euphoria/*(depression, poor reflexes, slurred speech, coma)	
Dissociative Anesthetics				
Ketamine	*Ketalar SV;* (cat Valiums, K, Special K, vitamin K)	injected, snorted, smoked	(at high doses - delirium, depression, respiratory depression and arrest)	For all DA: increased heart rate and blood pressure, impaired motor function / (memory loss, numbness, nausea)
PCP and analogs	*phencyclidine;* (angel dust, boat, hog, love boat, peace pill)	injected, swallowed, smoked	*possible decrease in blood pressure and heart rate, panic, aggression, violence/* (loss of appetite, depression)	
Hallucinogens				
LSD	*lysergic acid diethylamide;* (acid, blotter, boomers, cubes, microdot, yellow sunshines)	swallowed, absorbed through mouth tissue	*increased body temp, heart rate, blood pressure; loss of appetite, sleepless-ness, numbness, weakness, tremors, persistent mental disorders (for LSD)*	For all Hallucinogens: *altered states of perception and feeling; nausea persisting perception disorder (flashbacks)*
Mescaline	(buttons, cactus, mesc, peyote)	swallowed, smoked		
Psilocybin	(magic mushroom, purple passion, schrooms)	swallowed	*nervousness, paranoia*	

Substance **Category and Name**	**Example of *Commercial* and (Street Names)**	**How Drug is Administered**	***Intoxication Effects* / (Potential Health Consequences)**	
Opioids (also referred to as Narcotics)				
Opiates				For all Opioids: *pain relief, euphoria, drowsiness*/(nausea, constipation, confusion, sedation, respiratory depression and arrest, tolerance, addiction, unconsciousness, coma, death)
Codeine	*Empirin with Codeine, Fiorinal with Codeine, Robitussin A-C, Tylenol with Codeine;* (Captain Cody, Cody, schoolboy; with glutethimide – doors & flours, loads, pancakes and syrup)	injected, swallowed	*less analgesia, sedation, and respiratory depression than morphine*	
Morphine	*Roxanol, Duramorph;* (M, Miss Emma,monkey, white stuff)	injected, swallowed, smoked		
Heroin	*Diacetylmorphine;* (brown sugar, dope, H, hourse, junk, skag, skunk, smack, white horse)	injected, smoked, snorted	*staggering gait*	
Opium	*laudanum, paregoric;* (big O, black stuff, block, gum, hop)	swallowed, smoked		
Semi-synthetic opioids				
Oxycodone HCL	*Oxycontin®;* (Oxy, O.C., killer)	swallowed, snorted, injected		
Hydrocodone	*Vicodin;* (vike, Watson-387)	swallowed		
Fully-synthetic opioids				
Fentanyl and fentanyl analogs	*Actiq, Duragesic, Sublimaze;* (Apache, China girl, China white, dance fever, friend, goodfella, jackpot, TNT, Tango & Cash)	injected, smoked, snorted		
Methadone	Physeptone; (Meth, Phy)	swallowed, injected	Note: methadone is commonly used for the treatment of heroin addiction	
Stimulants				
Amphetamine	*Biphetamine, Dexedrine* (bennies, black beauties, crosses, hearts, LA turnaround, speed, truck drivers, uppers)	injected, swallowed, smoked, snorted	*rapid breathing*/(tremor, loss of coordination, irritability, anxiousness, restlessness, delirium, panic, paranoia, impulsive behavior, aggressiveness, tolerance, addiction, psychosis)	For all Stimulants: *increased heart rate, blood pressure, metabolism, feelings of exhilaration, energy, increased mental alertness*/(rapid or irregular heart beat; reduced appetite, weight loss, heart failure, nervousness, insomnia)
Cocaine	*Cocaine Hydrochloride;* (blow, bump, C, candy, Charlie, coke, crack, flake, rock, snow, toot)	injected, smoked, snorted	*increased temperature*/(chest pain, respiratory failure, nausea, abdominal pain, strokes, seizures, headaches, malnutrition, panic attacks)	
MDMA	*Methylenedioxy-methamphetamine;* (Adam, clarity, ecstasy, Eve, lover's speed, peace, STP, X, XTC)	swallowed	*mild hallucinogenic effects, increased tactile sensitivity, emphatic feelings*/(impaired memory and learning, hyperthermia, cardiac toxicity, renal failure, liver toxicity)	
Methamphetamine	*Desoxyn;* (chalk, crank, crystal, fire, glass, go fast, ice, meth, speed)	injected, swallowed, smoked, snorted	*aggression, violence, psychotic behavior*/(memory loss, cardiac and neurological damage, impaired memory and learning, tolerance, addiction)	

Substance **Category and Name**	**Example of *Commercial* and (Street Names)**	**How Drug is Administered**	***Intoxication Effects* / (Potential Health Consequences)**
Methylphenidate	*Ritalin;* (JIF, MPH, R-ball, Skippy, the smart drug, vitamin R)	injected, swallowed, snorted	Note: safe and effective for treatment of ADHD
Other Compounds			
Anabolic Steroids	*Anadrol, Oxandrin, Durabolin, Depo-testosterone;* (roids, juice)	injected, swallowed, applied to skin	*no intoxication effects*/(hypertension, blood clotting, cholesterol changes, liver cysts and cancer, kidney cancer, aggression, acne; in adolescents - premature growth stoppage; in males - prostate cancer, reduced sperm production, shrunken testes, breast enlargement; in females - menstrual irregularity, development of beard and other masculine characteristics)
Dextromethorpham (DXM)	*Found in some cough and cold medications*; (Robo, Robotripping, Triple C)	swallowed	*Dissociative effects, distorted visual perceptions to complete dissociative effects*/(for effects at higher doses, see *'dissociative anesthetics')*
Inhalants	*Solvents (paint thinners, gasoline, glues), gases (butane, propane, aerosol propellants, nitrous oxide), nitrites (insoamyl, isobutyl, cyclohexyl);* (laughing gas, poppers, snappers, whippets)	inhaled through nose or mouth	*stimulation, loss of inhibition; headache; nausea or vomiting; slurred speech, loss of motor coordination; wheezing*/(unconsciousness, cramps, weight loss, muscle weakness, depression, memory impairment, damage to cardiovascular and nervous systems, sudden death)

Note: This table does not comprise a complete listing of drugs - it is intended to provide basic information on some of the more commonly abused substances.

Sources: http://www.nida.nih.gov/DrugPages/DrugsofAbuse.html; www.drugstraining.co.uk