

Substance Abuse and Associated Consequences in Nebraska

An Epidemiological Profile



December 2007



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Division of Public Health Nebraska Department of Health and Human Services

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EXECUTIVE SUMMARY

In Nebraska, substance abuse continues to be a problem, placing an enormous strain on the health care system, the criminal justice system, and the substance abuse treatment system. The following is a summary of the key findings for substance abuse and its associated consequences in Nebraska.

Consequences of Substance Abuse in Nebraska

Substance abuse is a major contributor to death and medical care

- In 2004, there were an estimated 392 alcohol-related deaths, an estimated 2,115 smoking-related deaths, and 61 deaths in which drugs were listed as the primary cause of death.
- In 2003, there were 4,948 alcohol-attributable hospitalizations, an estimated 8,517 smoking-related hospitalizations and 2,887 drug-attributable hospitalizations.

Alcohol impaired driving is particularly high and is common in fatal motor vehicle crashes

- High school students in Nebraska were 1.7 times more likely than students nationally to report driving after drinking in the past month (17.3% and 9.9%, 2005) while adults were 1.7 times more likely than adults nationally to report past month alcohol impaired driving (4.2% and 2.5%, 2006).
- In 2006, more than one-third of all fatal motor vehicle crashes in Nebraska involved alcohol (34.1%), killing 86 individuals in 77 alcohol-involved fatal crashes.

Substance abuse places a tremendous strain on the criminal justice system

- In 2006, there were 13,409 arrests for DUI, 12,714 arrests for non-DUI alcohol-related crime, and 10,502 arrests for possession or sales/manufacturing of illicit drugs in Nebraska. These were the top three arrest offenses in 2006 and together accounted for 2 in every 5 arrests (39.4%).
- Of all adults sentenced to probation in Nebraska during 2006, more than half (55.3%) were sentenced for DUI, a substantial increase since 2000 (37.6%), while about 1 in every 17 were sentenced for a drug-related offense (5.9%), a stable trend since 2000 (5.4%).
- There were 20 times the number of incarcerations for drug offenses in 2006 (1,171) than 1980 (60).

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

- In 2006, alcohol was listed as the primary drug of choice during 7 in every 10 substance abuse treatment admissions (70.9%) in Nebraska, followed by methamphetamine (12.5%), marijuana (9.1%), and cocaine (4.7%).

Substance Use in Nebraska

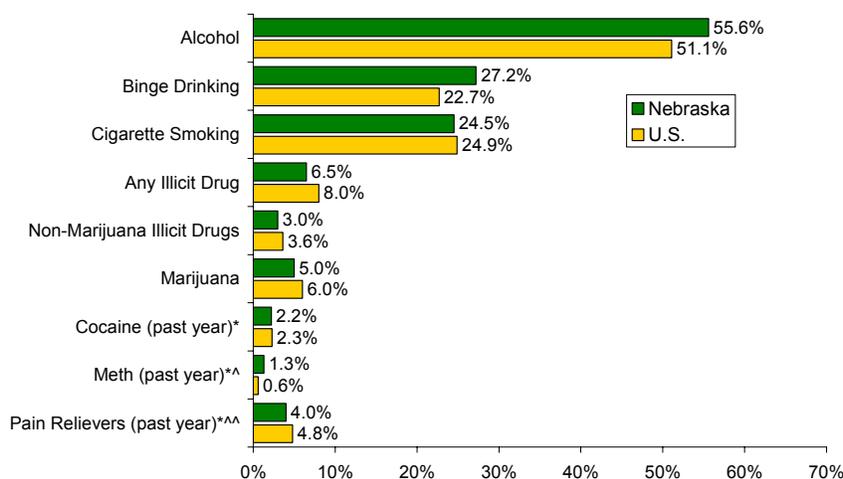
Substance use is common in Nebraska with alcohol being the substance of choice

- In 2005, more than 2 in every 5 Nebraska high school students (42.9%) drank alcohol during the past month, about 1 in every 5 smoked cigarettes (21.8%), and approximately 1 in every 6 used marijuana (17.5%).
- During the combined years of 2004 and 2005, more than half of all persons 12 and older in Nebraska drank alcohol in the past month (55.6%) while more than one-quarter of all persons binge drank (27.2%). In addition, about one-quarter (24.5%) smoked cigarettes and approximately 1 in every 15 used illicit drugs (6.5%).

Compared to the U.S., alcohol use in Nebraska is high while smoking and most drug use is similar

- Binge drinking among Nebraska residents was higher than residents nationally across the three data sources presented in this report that contained information on self-reported binge drinking, (although the difference for high school students was non-significant).
- Cigarette smoking among Nebraska residents was nearly identical to residents nationally while drug use tended to be slightly lower (although the differences were generally non-significant); however, past year methamphetamine use was higher among Nebraska residents 12 and older.

Past Month Substance Use among Persons 12 and Older, Nebraska and U.S., by Substance Type, 2004-2005 Combined



*Past month estimates were unavailable
 ^Estimate represents data from 2002-2004 combined, 04-05 estimate was unavailable
 ^^Includes only non-medical use of prescription pain relievers (excluding over-the-counter drugs)
 Source: National Survey on Drug Use and Health (NSDUH)

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 stable among adults during the same time period.
- Marijuana use among Nebraska high school students increased since the early 1990s; however, more recent estimates of use among all persons 12 and older, between 2002 and 2005, were stable and may have begun to decline (although the decline was non-significant).
- Overall, non-marijuana illicit drug use among all persons 12 and older in Nebraska remained virtually unchanged between 2002 and 2005.

Demographic Differences in Nebraska

Differences by age

- Residents in their late teens and early 20’s were the most likely age group to binge drink as well as use tobacco and illicit drugs. In addition, they were also more likely than other age groups to drive after drinking, to die or be injured in an alcohol-involved crash, to be arrested for alcohol or drug-related offenses, and to be admitted into substance abuse treatment.

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 smokeless tobacco products, to experience legal consequences from alcohol and drug use, and to be admitted into substance abuse treatment.

Differences by urban/rural

- Residents of the most rural Nebraska counties reported the highest percentage for alcohol impaired driving and smokeless tobacco use; however, alcohol use and cigarette smoking were relatively similar across urban/rural counties while differences for illicit drug use were largely unavailable.

Differences by race/ethnicity

- Among Nebraska adults, Native Americans reported the highest percentage for binge drinking and cigarette smoking (although the binge drinking percentage was not significantly higher than Whites) as well as had the highest death rates for chronic liver disease and alcohol-related death overall. 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 represents an on-going threat to public safety and shatters family and individual lives.

In 2000, tobacco use was identified as the leading cause of actual death in the United States, killing an estimated 435,000 Americans.¹ Alcohol consumption ranked as the third leading cause of actual death in 2000, killing an estimated 85,000 Americans, while illicit drug use ranked as the ninth leading cause of actual death, killing an estimated 17,000 Americans.¹

Nebraska's Strategic Prevention Framework State Incentive Grant

In order to better address substance abuse prevention in Nebraska, the Nebraska Department of Health and Human Services (NDHHS) applied for and was awarded a five-year substance abuse prevention grant, entitled the Strategic Prevention Framework State Incentive Grant (SPF SIG), from the Center for Substance Abuse Prevention of the Substance Abuse and Mental Health Services Administration (SAMHSA) in October of 2006. As part of the SPF SIG, the Nebraska Substance Abuse Prevention Program was required to establish an epidemiology workgroup to develop an epidemiological profile of substance abuse in the state.

Purposes of the Report

The primary purpose of this report is to present the epidemiological profile to help facilitate the assessment phase of the Nebraska SPF SIG, which consists of identifying state substance abuse prevention priorities and incorporating them into a statewide strategic plan. Another purpose of this report is to increase awareness of substance abuse among key decision makers that can aid in further prevention planning and garner support for substance abuse prevention beyond the SPF SIG.

This report examines data on alcohol, tobacco, and illicit drug use and associated consequences in Nebraska. In addition, it identifies gaps in existing substance abuse data within Nebraska that will help guide future data collection and analysis.

Nebraska Substance Abuse Epidemiology Workgroup

The Nebraska Substance Abuse Epidemiology Workgroup (NSAEW), formed in March 2007, is a workgroup of administrators, epidemiologists, and key decision makers who collaborate to make decisions regarding the collection and reporting of data related to substance abuse, consequences of substance abuse, and factors that contribute to substance abuse in the State of Nebraska. Work completed by the NSAEW has and will continue to guide decision making around substance abuse prevention in the state, including decisions made by the Nebraska Partners in Prevention (NePiP), the Governor's Advisory Council for substance abuse prevention.

The initial tasks of the NSAEW included creating an epidemiological profile report on substance abuse in Nebraska and establishing a set of criteria to facilitate the selection of the SPF SIG substance abuse prevention priorities. This information will serve as the foundation for the development of the Nebraska substance abuse strategic plan.

At the time of this report the NSAEW consisted of 24 members, with 20 being stakeholders to the Nebraska Substance Abuse Prevention Program and four being Substance Abuse Prevention Program

staff (see Appendix A for a complete list of members). Organizations represented on the NSAEW include:

- Native American Tribal Representatives
- Nebraska Crime Commission
- Nebraska Department of Correctional Services
- Nebraska Department of Education
- Nebraska Local Public Health Departments
- Nebraska Office of Highway Safety
- Nebraska Substance Abuse Regional Prevention Centers
- University of Nebraska-Lincoln
- University of Nebraska Medical Center
- Non-profit
- Divisions/programs within the Nebraska Department of Health and Human Services including maternal and child health, behavioral health, tobacco prevention, epidemiology, and minority health.

The first NSAEW meeting was held on March 20, 2007 in Lincoln Nebraska. Between March and October of 2007, the time during which this report was created, the NSAEW met eight times. As a requirement of the SPF SIG, the NSAEW will remain active throughout the five-years of the grant and will continue to enhance substance abuse data collection, reporting, and utilization within Nebraska.

Steps Completed in Creating this Report

A four-step approach was used to create this report. Each step is briefly described below.

1. Identifying Substance Abuse Data Sources within Nebraska

Prior to the initial NSAEW meeting, staff within the Nebraska Substance Abuse Prevention Program completed an inventory of data sources within Nebraska to determine which sources contained information on substance abuse. The inventory identified 63 sources which were either exclusive to substance abuse or contained some information on substance abuse.

2. Identifying Constructs

Initially, the NSAEW identified data constructs to include in this report. The following constructs were agreed upon by the workgroup during the first couple of meetings:

- Consequence constructs (where available):
 - Mortality
 - Medical care
 - Motor vehicle crashes
 - Legal consequences (arrests, convictions, probation, incarceration, parole)
 - Smoking-related fires
 - Impaired driving
 - Dependence, abuse, and treatment
- Consumption constructs (where available):
 - Lifetime use
 - Early initial use
 - Current use
 - Excessive use
 - Sales
 - Use among pregnant women and women of childbearing age

3. Selecting Indicators

Once the data constructs were selected, NSAEW members spent several meetings reviewing and selecting indicators to include in this report and eventually the prioritization process. The following items were considered when reviewing indicators:

- Data quality
- State level availability
- National comparison
- Trend availability
- Future collection
- Sample size or number of cases for demographic reporting

The workgroup determined that it was particularly important to select indicators that were comparable to the U.S. and had trend data available.

To begin the indicator selection process, the NSAEW identified more than 100 indicators that were available at the state level and were from quality data sources that had future collection planned. To allow all members an equal voice in narrowing the final set of indicators, NSAEW members completed an on-line survey to rate each of the indicators on a five-point rating scale ranging from “not at all important” to “extremely important.” In addition to rating indicators, the survey also asked members to rate the proposed constructs, demographic groups, and specific illicit drugs on their overall importance to the report. The survey was open for two weeks and was completed by 17 of 20 members (excluding staff from the State Substance Abuse Prevention Program).

Through discussion, indicator scores were calculated using four components, including: (1) original indicator score from the survey (which included a combination of the mean score, the percentage reporting that they felt the indicator was extremely important, and the percentage reporting that they felt the indicator was important or extremely important), (2) construct score from the survey, (3) national comparison available, and (4) trend data available. The final indicator score was based on a maximum of 10 points, with half coming from the original indicator score, and one-sixth coming from each of the three additional components.

The NSAEW did not reach a clear consensus on which indicators to include and which to exclude from the report. As a result, the NSAEW chose to include nearly all indicators in this report but focus more on those with higher scores and less on those with lower scores. As a result, to aid in the prioritization process, some indicators were presented in detail (e.g., trends, national comparison, demographic differences) while others were limited to an overall percentage, number of cases, or rate to provide greater context. In all, 19 data sources containing information on Nebraska residents were presented in this report (see Methodology section for further detail).

Due to the number of indicators and data sources included in this report, the NSAEW chose a subset of indicators for the SPF SIG prioritization process. However, the remaining indicators in this report, although not chosen as potential priorities, proved to be valuable in scoring potential priority indicators (particularly for economic/social impact). Further detail on the SPF SIG substance abuse prevention priorities can be found in the Nebraska Substance Abuse Strategic Plan.

4. Choosing Demographics

Early in the developmental process, the NSAEW chose to focus the report on state level data as opposed to the regional or local level data. However, to enhance the value of the report and its usability by various audiences, the NSAEW chose to present findings, where available, by age, gender, urban/rural, and race/ethnicity.

DEMOGRAPHIC OVERVIEW OF NEBRASKA

Nebraska is a large State in land area yet has a sparse population, especially in the central and western regions of the state; presenting unique challenges to substance abuse prevention assessment, planning, and implementation. The following is a brief geographic and demographic overview of the State using information from the U.S. Census Bureau.

Out of the 50 U.S. States, Nebraska is 15th largest in land area, encompassing 76,872 square miles and spanning about 500 miles from east to west and 250 miles from north to south. The State is comprised of 93 counties, ranging in size from 5,960 square miles to 541 square miles.

Nebraska's population estimate for 2006 was 1,768,331, making it 38th largest out of the 50 U.S. States. When examining Nebraska's population regionally, more than half of the population (51.0%) lived in the three largest counties during 2006 (Douglas, Lancaster, and Sarpy), all of which are located on or near the eastern edge of the State. As a result, the remainder of the state is very sparsely populated by national standards.

In 2006, the age of Nebraska residents was similar to the age of residents nationally. The median age for Nebraska residents in 2006 was 36.0 years compared to 36.4 years for persons nationally. In addition, the percentage of residents 18 and older within Nebraska and the U.S. (74.8% and 75.4%, respectively) as well as 65 and older (13.2% and 12.4%, respectively) was similar.

Nebraska's minority population has doubled since 1990, increasing from 7.6 percent in 1990 to 15.2 percent in 2006. However, minorities made up just 15.2 percent of Nebraska's population in 2006, which is less than half of the 33.8 percent nationally. Within Nebraska, Hispanics are the largest racial and ethnic minority group followed by African Americans, Asians, and Native Americans, in that order.

Hispanics are not only the largest racial and ethnic minority group in Nebraska, but are also the fastest growing. Between 1990 and 2006, the Hispanic population in Nebraska increased from 36,969 to 130,230, a 252 percent increase. The Hispanic population within Nebraska is spread throughout the state and located within both rural and urban areas.

Although they are the second largest minority group in the State, African Americans represent the largest minority group in the Omaha Metropolitan area (the State's largest urban area). In 2006, an estimated 72,095 Nebraska residents were African American while an additional 11,359 were African American in combination with another race.

In 2006 there were an estimated 30,600 Asians (including Native Hawaiian and Other Pacific Islanders) in Nebraska with an additional 5,079 being Asian in combination with another race. The majority of Asians in Nebraska reside in the Omaha and Lincoln Metropolitan areas.

Native Americans (including Alaska Natives) are the fourth largest minority group in Nebraska, and tend to reside on reservations, in Omaha or Lincoln, or in northern counties that border out of state reservations. In 2006, an estimated 16,112 Nebraska residents were Native American while an additional 13,023 were Native American in combination with another race.

Economically, residents in Nebraska, compared to residents nationally, had a slightly lower percentage living below the poverty level in 2006 (11.5% and 13.3%, respectively). In addition, 71.3 percent of Nebraska's labor force (consisting of all persons 16 and older) was employed compared to 65.0 percent nationally during 2006.

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 NSAEW 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 as well as a brief summary of some of the statistical methods used to develop it.

The following data sources were included within this report:

- 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
- DUI Conviction Data / Department of Motor Vehicles
- 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
- Minority Over-Sample Behavioral Risk Factor Survey / Division of Public Health / NDHHS
- Mortality Data / Nebraska Vital Records / Division of Public Health / NDHHS
 - Alcohol-Related Disease Impact (ARDI) software / CDC
 - Smoking Attributable Morbidity Mortality and Economic Cost (SAMMEC) / 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
- 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 $p < 0.05$.
- *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 starting on page 111.

ALCOHOL - INTRODUCTION AND BACKGROUND

The consumption of alcohol has been a common part of the American culture for centuries. While not all alcohol use is problematic, alcohol abuse places a substantial burden on the health care system and the economy. In addition, it represents an on-going threat to public safety and shatters family and individual lives. Excessive alcohol consumption is the third leading cause of preventable death in the United States.¹ In 2001, excessive alcohol consumption claimed more than 75,000 lives nationwide and shortened the lives of those who died by an average of 30 years.²

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), slightly more than half of Americans aged 12 or older (about 126 million Americans) drink alcohol while more than one-fifth (about 55 million Americans) binge drink. Binge drinking tends to be most common among young adults in their late teens and early twenties and is more common among males than females.³

Despite advances in addressing problems associated with alcohol consumption, it continues to present a major challenge to public health, in part because population-based public health prevention approaches have been neglected in favor of approaches directed at treating individual-level symptoms.

Costs and Consequences of Alcohol Consumption

Alcohol and drug abuse costs the American economy an estimated \$276 billion per year in lost productivity, health care expenditures, crime, motor vehicle crashes and other conditions. This represents more than \$1,000 for every man, woman, and child in the United States to cover the costs of adverse outcomes of alcohol and drug abuse.⁴

Excessive drinking has consequences for virtually every part of the body. The wide range of alcohol-induced disorders is due (among other factors) to differences in the amount, duration, and patterns of alcohol consumption, as well as differences in genetic vulnerability to particular alcohol-related consequences.⁵ Nevertheless, regular and prolonged use of alcohol is known to result in serious health problems, such as impaired mental functioning, liver disorders, gastrointestinal problems, heart disease and stroke, lung disorders, cancer, skin, muscle, and bone disorders, complications with pregnancy and infant development, and increased risk for other addictions.

A number of additional serious consequences associated with excessive drinking negatively impact overall community health placing a large strain on both the health care and legal systems in the United States. Other negative consequences such as motor vehicle crashes, injury due to falls, domestic violence, sexual assault, child abuse and other crimes (e.g., homicides) can be attributed, in part, to the use of alcohol which can also impair an individual's school performance, ability to function in the workplace, and most relationships.

Youth and Alcohol Consumption

Despite a minimum legal drinking age of 21, alcohol consumption among youth remains a major public health problem that requires significant attention. Nationally, alcohol is the most widely used and abused drug among youth. About three-fourths of high school students nationally have consumed alcohol during their lifetime, more than two-fifths report being current drinkers of alcohol, and about one-fourth binge drink.⁶

Although many aspects of alcohol use by youth correspond with that of adults, the qualitative distinctions between adults and underage alcohol consumption are important.

Consequences of Adolescent Alcohol Consumption

Adolescents who begin drinking face a number of potential health risks. Although the severe and long-term health problems associated with harmful alcohol use are not as common in adolescents as they are in adults, studies show that young people who drink heavily engage in risk-taking behaviors (e.g., unprotected sex) and may put themselves at risk for a range of potential health problems affecting the developing brain, the liver, bone growth and endocrine system.

Excessive alcohol consumption contributes to approximately 4,500 deaths among underage youths in the United State each year (e.g., homicides, motor-vehicle crashes, and suicides), resulting in an average of 60 years of life lost per death.⁷

ALCOHOL – SUMMARY OF KEY FINDINGS

CONSEQUENCES OF ALCOHOL USE IN NEBRASKA

Alcohol use is a major contributor to death and medical care

- Alcohol use killed an estimated 392 Nebraska residents in 2004, and shortened the life of those who died by an average of 28.5 years between 2002 and 2004.
- In 2003, there were 4,948 hospitalizations among Nebraska residents in which an alcohol-attributable condition was listed on the hospitalization record.

Alcohol use is common in motor-vehicle crashes

- More than one-third (34.1%) of all fatal motor vehicle crashes in 2006 involved alcohol, killing 86 individuals in 77 alcohol-involved fatal crashes.
- In 2006, alcohol-related motor vehicle crashes in Nebraska cost an estimated 130.6 million dollars when counting wage and productivity losses, medical expenses, administrative expenses, motor vehicle damage, and employer costs.

Alcohol impaired driving is particularly high in Nebraska

- In 2005, high school students in Nebraska were 1.7 times more likely than high school students nationally to drive after drinking in the past month, 17.3 percent and 9.9 percent, respectively.
- In 2006, adults in Nebraska were also 1.7 times more likely than their national counterparts to report alcohol impaired driving in the past month, 4.2 percent and 2.5 percent, respectively.

Alcohol use places a tremendous strain on the criminal justice system

- In 2006, there were 13,075 arrests for DUI among adults in Nebraska, making it the leading arrest offense among adults in Nebraska, accounting for about 1 in every 6 arrests (17.0%).
- Of all adults sentenced to probation in Nebraska during 2006, more than half (55.3%) were sentenced for DUI, a substantial increase since 2000 (37.6%).
- Incarceration for DUI has increased from less than 50 each year during the 1990s to more than 100 each year since 2000, with 129 individuals being incarcerated for DUI in 2006.
- In 2006, there were an additional 12,714 arrests for non-DUI alcohol-related crime in Nebraska (e.g., public intoxication, minor in possession, purchasing for a minor, selling to a minor), making it the second leading arrest offense category in 2006.

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

- In 2006, alcohol was listed as the primary drug of choice during 7 in every 10 substance abuse treatment admissions (70.9%) in Nebraska, and was listed as one of the top three drugs of choice during 86.0 percent of all admissions.

ALCOHOL USE IN NEBRASKA

Alcohol use is common among youth and adults

- In 2005, more than 2 in every 5 Nebraska high school students (42.9%), and estimated 43,000 students, drank alcohol during the past month.
- In 2006, nearly 3 in every 5 Nebraska adults (58.5%) drank alcohol in the past month, a percentage that has remained relatively unchanged over the past 15-years.

Binge drinking is particularly high

- Binge drinking among Nebraska residents was higher than residents nationally across the three data sources presented in this report that contained information on self-reported binge drinking, (although the difference for high school students was non-significant), suggesting Nebraska residents are more likely than residents nationally to binge drink (Figure 1).

Alcohol use among women of childbearing age is higher than the nation

- In 2006, Nebraska women of childbearing age (18-44 years old) were more likely than their national counterparts to report binge drinking (19.0% and 14.8%, respectively). Furthermore, 57.9 percent of women in Nebraska who delivered a child in 2002 reported drinking during the three-months prior to pregnancy, which was higher than the 47.5 percent of women nationally.

Alcohol is a commonly sold product

- In 2004, 49.2 million gallons of alcoholic beverages were sold at the wholesaler level in Nebraska, containing an estimated 3.2 million gallons of pure (ethanol) alcohol, an average of 2.26 gallons of pure alcohol sold per Nebraska resident 14 and older.

DEMOGRAPHIC DIFFERENCES

Differences by Age

- Residents in their late teens and early 20's were most likely to binge drink (Figure 2), to drive after drinking, to die or be injured in an alcohol-involved crash, to be arrested for DUI or other alcohol offenses, and to receive treatment for substance abuse.

Differences by Gender

- Men were more likely than women to binge drink, to drive after drinking, to die or be injured in an alcohol-involved crash, to die from an alcohol-related death, to be arrested for DUI or other alcohol offenses, and to receive treatment for substance abuse. However, male and female high school students reported a similar percentage for current alcohol use while males had a slightly but not significantly higher percentage for binge drinking.

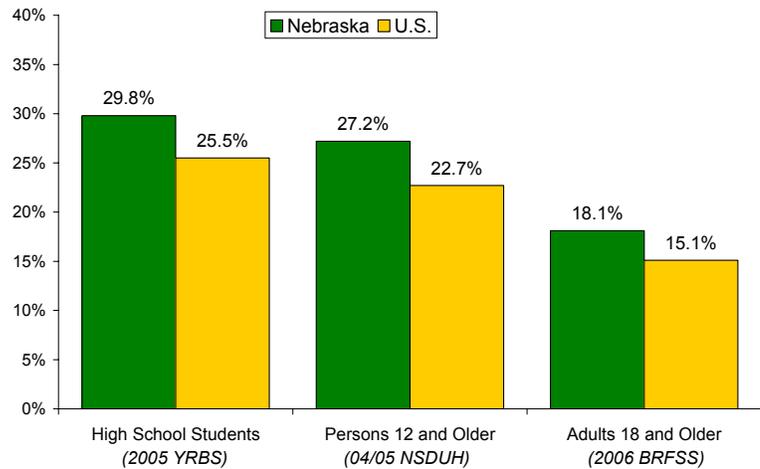
Differences by Urban/Rural

- While current alcohol use and binge drinking were relatively similar across urban/rural counties, residents of rural counties reported the highest percentage for alcohol impaired driving.

Differences by Race/Ethnicity

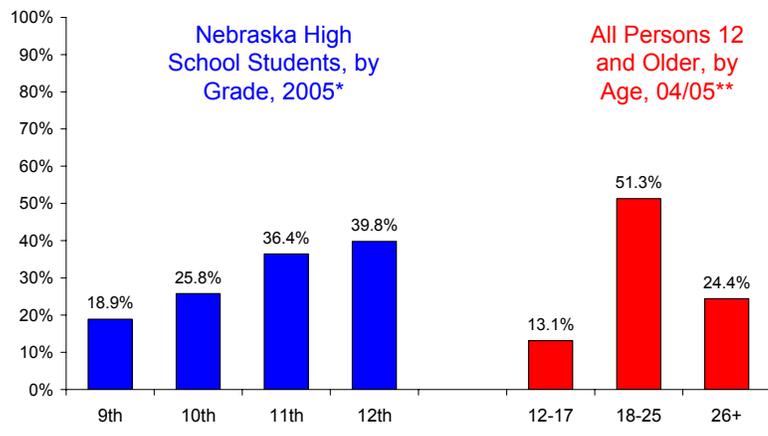
- Native Americans reported the highest percentage for binge drinking among adults, however, due to the small number of survey respondents the percentage was not significantly higher than the percentage for Whites. However, Native Americans were the most likely racial and ethnic group to die from chronic liver disease as well as from alcohol-related death overall.

Figure 1: Binge Drinking among Nebraska Residents compared to Residents Nationally*; according to the YRBS, NSDUH, and BRFSS



*The BRFSS definition consists of five or more drinks for men and four or more drinks for women on one occasion during the past month while the YRBS and NSDUH consist of five or more drinks for both genders.

Figure 2: Binge Drinking among Nebraska Residents, by Age, according to the 2005 YRBS and the 2004/2005 NSDUH



*Students reporting 5+ drinks of alcohol in a row on one or more of the 30 days preceding the survey, Source: 2005 YRBS

**Percentage of persons who report having five or more drinks on at least one occasion during the 30 days preceding the survey, Source: 2004/2005 National Survey on Drug Use and Health

ALCOHOL – CONSEQUENCES OF USE

Alcohol-Related Death

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%) 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 CDC’s Alcohol-Related Disease Impact (ARDI) software.

Alcohol-Related Death Indicators

(Note: see methods section of this report for the death codes used in this report)

- Estimated number of alcohol-related deaths per 100,000 population (age-adjusted)
- Chronic liver disease deaths per 100,000 population (age-adjusted)
- Death due to homicides per 100,000 population (age-adjusted)
- Death due to suicides per 100,000 population (age-adjusted)

Alcohol-Related Death Indicator Summary Table

Indicator	Data Sources	Year	Nebraska AA Rate*	Number Deaths	National AA Rate*	Nebraska vs. Nation	Trend
Alcohol-Related Death Estimate	ARDI [^] / Vital Records	2004	22.0	392	NA ^{**}	NA ^{**}	Stable (99-04)
		2001 ^{**}	20.6	-	26.3	Lower	-
Chronic liver disease death	Vital Records ^{^^}	2004	6.4	116	9.0	Lower	Stable (90-04)
Death due to homicide	Vital Records ^{^^}	2004	2.2	38	5.9	Lower	Stable (90-04)
Death due to suicide	Vital Records ^{^^}	2004	9.5	166	10.9	Non-Significant	Decreased (90-04)

*Age-adjusted death rate per 100,000 population

**National data were only available for 2001

[^]Alcohol-Related Disease Impact software, available at <http://apps.nccd.cdc.gov/ardi/Homepage.aspx>

^{^^}Nebraska data were obtained from the Nebraska vital records, U.S. data were obtained from CDC Wonder (on-line)

Alcohol-Related Death in Nebraska

- In 2004, using the CDC’s ARDI software, an estimated 392 alcohol-related deaths occurred among Nebraska residents for a rate of 22 deaths per 100,000 population (age-adjusted). Of the 392 deaths, 103 (26.3%) were directly attributable to alcohol use while the remaining 289 deaths were based on estimates of alcohol involvement in deaths indirectly related to alcohol use.
- Of the estimated 392 alcohol-related deaths in 2004, an estimated 168 deaths resulted from chronic alcohol consumption (43% of all alcohol-related deaths) while 224 resulted from acute alcohol consumption (57% of all alcohol-related deaths).
- Three causes of death in which alcohol is often a contributing factor include chronic liver disease, homicide, and suicide.
 - In 2004, chronic liver disease killed 116 Nebraska residents. While not all chronic liver disease deaths result from alcohol use, alcohol abuse is the most common cause of liver disease.¹

- In 2004, suicide killed 166 Nebraska residents. National estimates suggest that alcohol is involved in 23 percent of all suicide deaths among persons 15 and older.²
- In 2004, homicide killed 38 Nebraska residents. National estimates suggest that alcohol is involved in 47 percent of all homicide deaths among persons 15 and older.²

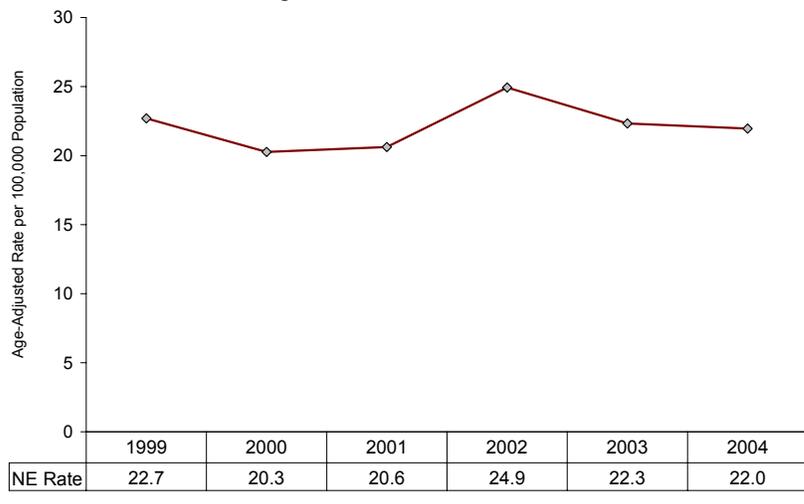
Compared to the Nation

- Based on data from 2001 (the most recent year available for national estimates of alcohol-related death), the age-adjusted death rate among Nebraska residents for alcohol-related death was lower than the rate for residents nationally, 20.6 and 26.3 deaths per 100,000 population, respectively.
- In 2004, residents in Nebraska, compared to residents nationally, had a lower (age-adjusted) death rate (per 100,000 population) for chronic liver disease (6.4 and 9.0, respectively) and homicide (2.2 and 5.9, respectively), while they had a similar rate for suicide (9.5 and 10.9, respectively).

Trends

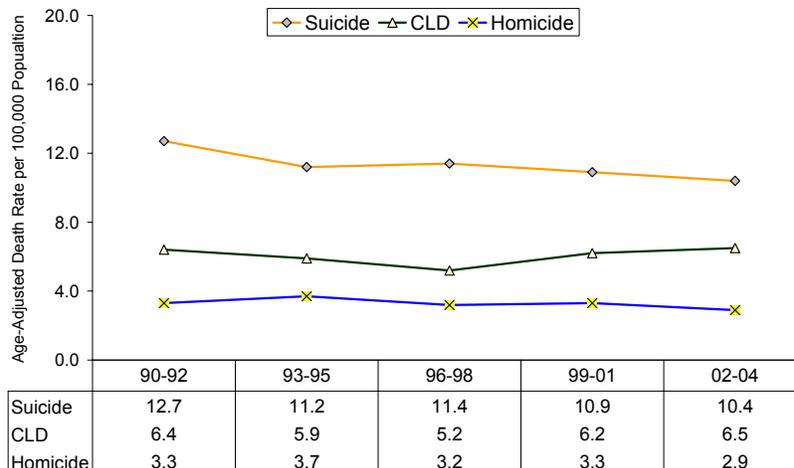
- With the exception of 2002 (in which an estimated 439 alcohol-related deaths occurred, 24.9 deaths per 100,000 population, age-adjusted), the estimated alcohol-related death rate (age-adjusted) among Nebraska residents remained relatively stable, with the number of deaths ranging from a low of 350 in 2000 to a high of 398 in 2003 (Figure 1).
- Trends among Nebraska residents for chronic liver disease and homicide have remained relatively stable over the past 15-year time period while the trend for suicide has declined slightly (Figure 2).

Figure 1: Estimated Alcohol-Related Death Rate (age-adjusted) among Nebraska Residents, 1999-2004



Source: CDC ARDI Software, using data from the Nebraska Vital Records and the BRFSS

Figure 2: Chronic Liver Disease, Suicide, and Homicide Death Rates (age-adjusted) among Nebraska Residents, 1990-2004



Source: Nebraska Vital Records

Demographic Differences in Alcohol-Related Mortality

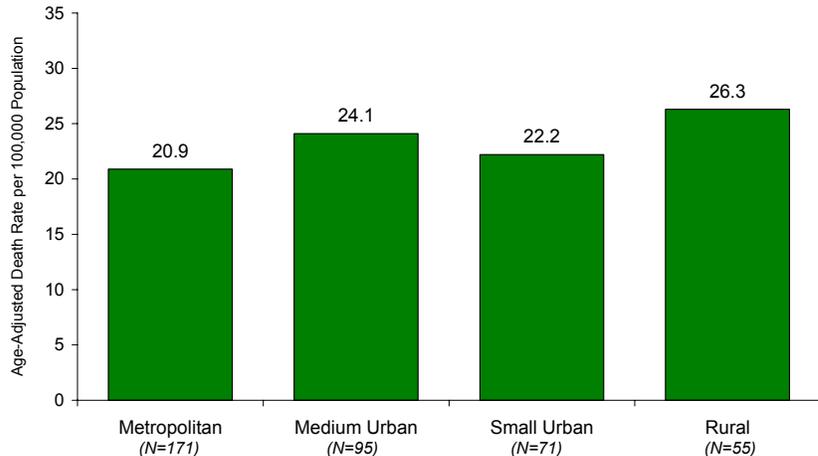
Differences by Gender

- In 2004, males were 2.6 times more likely than females to die from alcohol-related death, estimated (age-adjusted) rates of 32.4 and 12.6 deaths per 100,000 population, respectively.
- In addition to all alcohol-related deaths, deaths in Nebraska due to chronic liver disease, suicide, and homicide were higher for males than females.

Differences by Urban/Rural

- Residents of rural Nebraska counties had the highest estimated (age-adjusted) death rate for alcohol-related death (26.3 deaths per 100,000 population) while residents of metropolitan counties had the lowest rate (20.9 deaths per 100,000 population); however, the differences between the four urban/rural categories were non-significant (Figure 3).

Figure 3: Alcohol-Related Death Rate (age-adjusted) among Nebraska Residents, by Urban/Rural, 2004

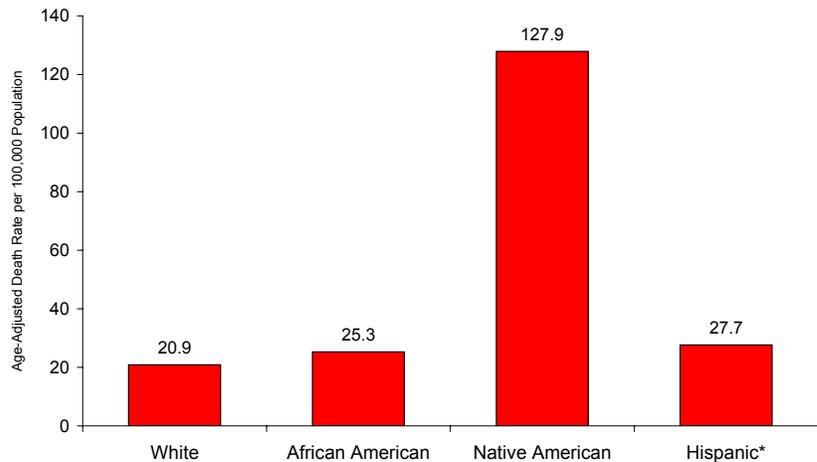


Note: N=Number of Deaths
Source: CDC ARDI Software, using data from the Nebraska Vital Records and the BRFSS

Differences by Race/Ethnicity

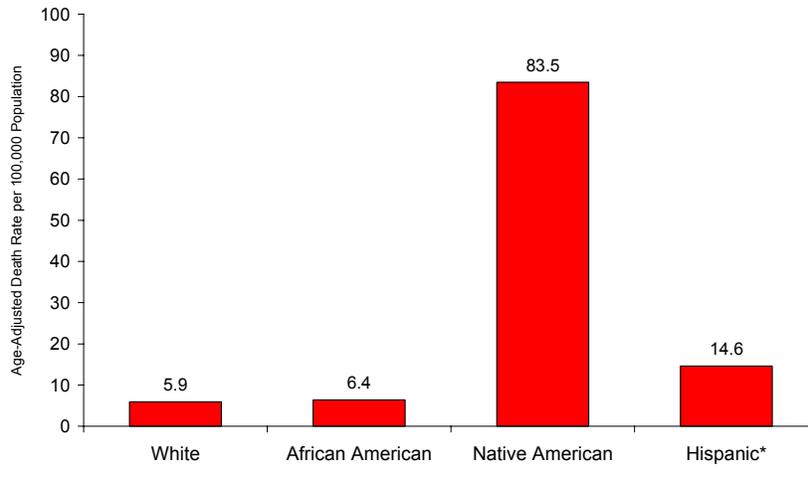
- Native Americans were far more likely than all other racial and ethnic groups to die from alcohol-related death and chronic liver disease. More specifically, the estimated (age-adjusted) death rate for alcohol-related death among Native Americans between 2002 and 2004 was more than six times the White rate (Figure 4) while the (age-adjusted) death rate for chronic liver disease between 1999 and 2004 was more than 14 times the White rate (Figure 5).

Figure 4: Estimated Alcohol-Related Death Rate (age-adjusted) among Nebraska Residents, by Race/Ethnicity, 2002-2004



*Hispanics can be of any race
Note: Insufficient number of deaths to report a rate for Asians
Source: CDC ARDI Software, using data from the Nebraska Vital Records and the BRFSS

Figure 5: Chronic Liver Disease Death Rate (age-adjusted) among Nebraska Residents, by Race/Ethnicity, 1999-2004



*Hispanics can be of any race
 Note: Insufficient number of death to report a rate for Asians
 Source: Nebraska Vital Records

Years of Potential Life Lost due to Alcohol Consumption

There is a tremendous amount of life lost prematurely to alcohol use in Nebraska. One method for measuring premature mortality is through examining the years of life lost prior to age 75, also called years of potential life lost (YPLL). Between 2002 and 2004, Nebraska residents lost an estimated 35,034 years of potential life to alcohol consumption (11.1% of all YPLL in the state), for an average of 28.5 years of life lost per alcohol-related death. Alcohol-related YPLL was intentionally unranked in the following table due to alcohol-related deaths overlapping with deaths from other causes. However, if included alcohol would rank as the fourth leading cause of YPLL in Nebraska. Nevertheless, unintentional injuries, homicide, suicide, and chronic liver disease (causes of death in which alcohol is often a contributing factor) are among the leading causes of YPLL in the state (Table 1).

Rank	Cause of Death	Total Deaths	Total YPLL	Average YPLL Per Death
1	Cancer	10,029	69,487	6.9
2	Unintentional Injuries	2,190	51,199	23.4
3	Heart Disease	11,919	45,845	3.8
-	<i>Alcohol</i>	<i>1,229</i>	<i>35,034</i>	<i>28.5</i>
4	Suicide	542	17,312	31.9
5	Birth Defects	226	11,797	52.2
6	Stroke	3,169	8,320	2.6
7	Homicide	152	6,701	44.1
8	Chronic Lung Disease	2,283	6,568	2.9
9	Diabetes	1,193	6,256	5.2
10	Chronic Liver Disease	345	5,474	15.9

Source: Nebraska Vital Records

Alcohol-Related Hospitalization

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 who were reporting their data into the Nebraska Trauma Registry at the time of the report.

Inpatient Alcohol-Attributable Hospitalizations

Data Source: Nebraska Hospital Discharge Data

In 2003, there were 4,948 hospitalizations among Nebraska residents in which an alcohol-attributable condition was listed as either the primary reason for or a contributing factor to the hospitalization. In addition to the 4,948 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.

Demographic Differences in Alcohol-Attributable Hospitalizations

Differences by Age

- In 2003, alcohol-attributable hospitalizations were most common among residents 35-54 years old (Table 2).

Differences by Gender

- The 2003 alcohol-attributable hospitalization rate in Nebraska was 2.3 times higher among males than females (Table 2).

Table 2: Alcohol-Attributable Hospitalizations in Nebraska*, by Age and Gender, 2003

	<u>Number</u>	<u>Percent</u>	<u>Rate**</u>
Total	4,948	100.0%	268.0
Gender			
Male	3,453	69.8%	409.5
Female	1,495	30.2%	172.4
Age			
<15	18	0.4%	5.0
15-19	213	4.3%	162.3
20-24	261	5.3%	193.8
25-34	618	12.5%	273.2
35-44	1,208	24.4%	486.0
45-54	1,156	23.4%	472.1
55-64	690	13.9%	432.7
65+	784	15.8%	337.8

*Includes hospitalizations in which an alcohol-attributable code was listed as either the primary cause of or a contributing factor to the hospitalization

**Rate per 100,000 population, total and gender rates are age-adjusted, age rates are age-specific

Source: Nebraska Hospital Discharge Data

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 patients' blood alcohol concentration (BAC) at the time of admission.

Alcohol Involvement in Trauma Center Hospitalizations

In 2006, the seven participating trauma centers experienced 5,238 inpatient hospitalizations, of which 653 (12.5%) were among patients who had alcohol in their system at the time of admission. When separating hospitalizations by BAC, 167 hospitalizations (3.2%) had a BAC <0.08 while 486 (9.3%) 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 (17.3% and 6.0%, respectively) while patients 18-24 (28.7%) and 25-34 (26.6%) were the most likely age-groups to have alcohol in their system (Table 3).

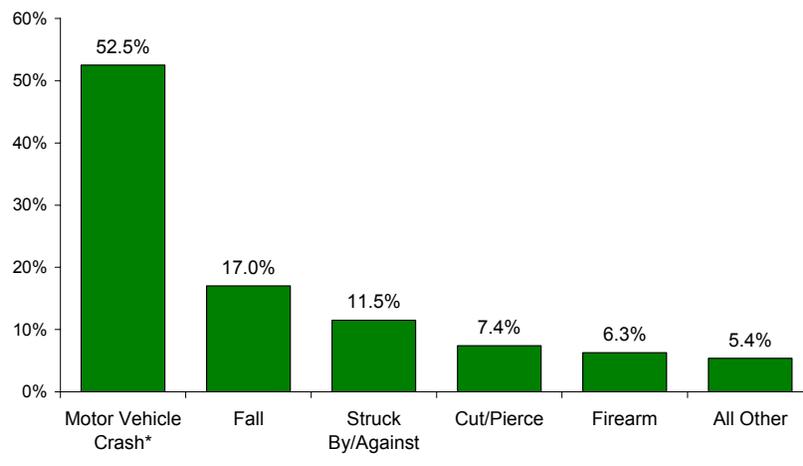
Among hospitalizations in which the patient had alcohol in their system at the time of admission, motor vehicle crashes accounted for more than half of all hospitalizations (52.5%) followed by falls (17.0%) and struck by/against (11.5%), Figure 6.

Table 3: Trauma Center Hospitalizations in which Alcohol was in the Patients System at the Time of Admission*, 2006

Demographic	Total number of hospitalizations	Number and % of all hospitalizations with BAC <.08		Number and % of all hospitalizations with BAC ≥.08		Number and % of all hospitalizations with any alcohol	
		Number	Percent	Number	Percent	Number	Percent
Total	5,238	167	3.2%	486	9.3%	653	12.5%
Gender							
Male	2,992	127	4.2%	391	13.1%	518	17.3%
Female	2,236	40	1.8%	95	4.2%	135	6.0%
Age							
<18	703	12	1.7%	12	1.7%	24	3.4%
18-24	661	47	7.1%	143	21.6%	190	28.7%
25-34	590	43	7.3%	114	19.3%	157	26.6%
35-44	560	27	4.8%	97	17.3%	124	22.1%
45-64	1,090	35	3.2%	103	9.4%	138	12.7%
65+	1,624	3	0.2%	17	1.0%	20	1.2%

*Includes inpatient hospitalizations through seven Nebraska trauma centers
Source: Nebraska Trauma Registry

Figure 6: Among Trauma Center Hospitalizations in which the Patient had Alcohol in their System at the Time of Admission, Percentage by Type of Injury, 2006



*Includes all motorized vehicle crashes occurring on public and private property
Note: Includes inpatient hospitalizations through seven Nebraska trauma centers
Source: Nebraska Trauma Registry

Alcohol-Related Motor Vehicle Crashes

For this report, alcohol-related motor vehicle crashes were categorized in two ways. Fatal alcohol-related crashes are presented first followed by non-fatal alcohol-related crashes resulting in injury. It should also be noted that a national comparison can only be made for fatal alcohol-related crashes; data on non-fatal alcohol-related crashes are not standardized for state and national comparison.

Fatal Alcohol-Related Motor Vehicle Crash Indicator Definitions

- *Alcohol-related motor vehicle fatality rate per 100 million vehicle miles traveled* is the number of individuals killed in alcohol-related crashes per 100 million vehicle miles traveled
- *Percentage of motor vehicle fatalities in which alcohol was involved* is the number of motor vehicle fatalities in which alcohol was involved divided by all motor vehicle fatalities
- *Alcohol-related fatal crash rate per 100 million vehicle miles traveled* is the number of alcohol-related crashes where a fatality occurred per 100 million vehicle miles traveled
- *Percentage of motor vehicle fatal crashes in which alcohol was involved* is the number of fatal motor vehicle crashes divided by all fatal motor vehicle crashes

Fatal Alcohol-Related Motor Vehicle Crash Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Number	Nation	Nebraska vs. Nation	Trend
Alcohol-related motor vehicle fatality rate per 100 million vehicle miles traveled	NE Dept of Roads	2006	0.451 (rate)	86 deaths	NA*	NA*	Decreased (97-06)
	FARS^	2005	0.47 (rate)^^	-	0.56 (rate)^^	Lower	-
Percentage of motor vehicle fatalities in which alcohol was involved	NE Dept of Roads	2006	32.0%	-	NA*	NA*	Stable (97-06)
	FARS^	2005	33%^^	-	39%^^	Lower	-
Alcohol-related fatal crash rate per 100 million vehicle miles traveled	NE Dept of Roads	2006	0.404 (rate)	77 fatal crashes	NA*	NA*	Decreased (97-06)
Percentage of fatal motor vehicle crashes in which alcohol was involved	NE Dept of Roads	2006	34.1%	-	NA*	NA*	Stable (97-06)

*National data were not available

^Fatality Analysis Reporting System (FARS), National Highway Traffic Safety Administration

^^FARS calculates estimated rates and percentages for Nebraska and the nation and they may not match results released by the Nebraska Department of Roads

Fatal Alcohol-Related Motor Vehicle Crashes in Nebraska

- In 2006, there were 226 fatal motor vehicle crashes of which 77 involved alcohol, indicating that slightly more than one-third (34.1%) of all fatal crashes involved alcohol.
- As a result of the 77 fatal alcohol-involved motor vehicle crashes in 2006, 86 individuals were killed, accounting for 32.0 percent, or nearly 1 in every 3 motor vehicle-related fatalities.
- In 2006, there were an estimated 19 billion 62 million miles traveled by automobile in Nebraska for an alcohol-related motor vehicle fatality rate of 0.451 deaths per 100 million miles traveled (or approximately 45 death per 10 billion miles traveled). When examining crashes, an estimated 0.404 fatal alcohol-related crashes occurred per 100 million vehicle miles traveled (or approximately 40 crashes per 10 billion miles traveled).

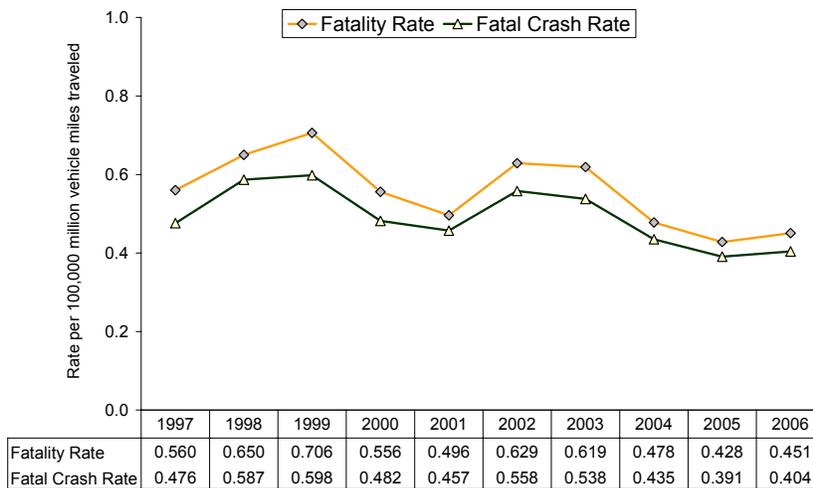
Compared to the Nation

- Based on estimates from the National Highway Traffic Safety Administration, Nebraska's 2005 alcohol-related motor vehicle fatality rate per 100 million vehicle miles traveled was lower than the national rate. In addition, the percentage of motor vehicle fatalities in which alcohol was involved was also lower for Nebraska than for the nation as a whole.

Trends

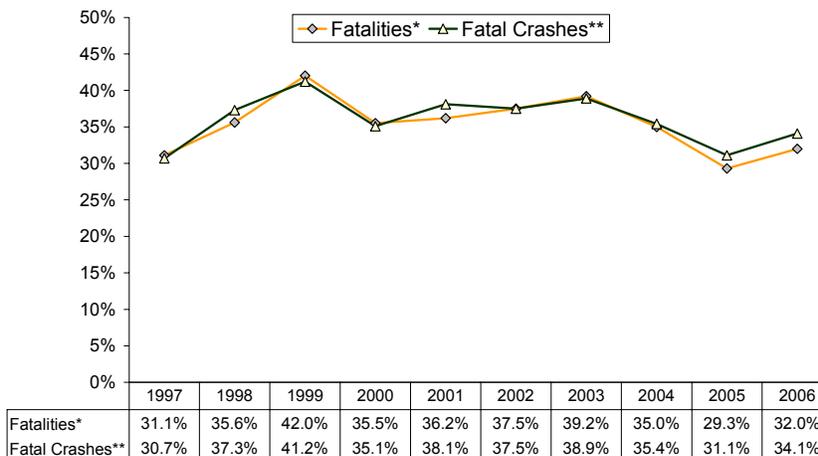
- The alcohol-related motor vehicle fatality and crash rates per 100 million vehicle miles traveled have declined (although inconsistently) since the mid-to-late 1990s (Figure 7). In contrast, the percentage of fatal crashes that involved alcohol and the percentage of motor vehicle related fatalities that involved alcohol have remained relatively stable since the mid-to-late 1990s, aside from a spike in 1999 and a dip in 2005 (Figure 8).

Figure 7: Alcohol-Related Motor Vehicle Fatality and Fatal Crash Rates per 100 Million Vehicle Miles Traveled, Nebraska, 1997-2006



Source: Nebraska Office of Highway Safety

Figure 8: Percentage of Motor Vehicle Fatalities and Fatal Crashes in which Alcohol was Involved, Nebraska, 1997-2006



*Percentage of all motor vehicle fatalities in which alcohol was involved

**Percentage of all fatal motor vehicle crashes in which alcohol was involved

Source: Nebraska Office of Highway Safety

Non-Fatal Alcohol-Related Motor Vehicle Crash Indicator Definitions

Note: For this report, alcohol-related motor vehicle crash injury includes (1) disabling injury, (2) visible, but not disabling injury, and (3) possible injury

- *Alcohol-related motor vehicle injury rate per 100 million vehicle miles traveled* is the number of individuals who sustained non-fatal injuries in alcohol-related crashes per 100 million vehicle miles traveled
- *Percentage of motor vehicle injuries in which alcohol was involved* is the number of individuals in alcohol-related motor vehicle crashes who sustained non-fatal injuries divided by all individuals who sustained motor vehicle crash injuries
- *Alcohol-related motor vehicle injury crash rate per 100 million vehicle miles traveled* is the number of alcohol-related crashes where an injury occurred per 100 million vehicle miles traveled
- *Percentage of motor vehicle injury crashes in which alcohol was involved* is the number of alcohol-related motor vehicle crashes in which an injury occurred divided by all motor vehicle crashes in which an injury occurred
- *Alcohol-related motor vehicle disabling injury crash rate per 100 million vehicle miles traveled* is the number of alcohol-related crashes in which a disabling injury occurred per 100 million vehicle miles traveled
- *Percentage of motor vehicle disabling injury crashes in which alcohol was involved* is the number of alcohol-related motor vehicle crashes in which a disabling injury occurred divided by all motor vehicle crashes in which a disabling injury occurred

Non-Fatal Alcohol-Related Motor Vehicle Crash Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Number	Nation	Nebraska vs. Nation	Trend
Alcohol-related motor vehicle injury rate per 100 million vehicle miles traveled	NE Dept of Roads	2006	7.10	1,354 individuals	NA*	NA*	Decreased (97-06)
Percentage of motor vehicle injuries in which alcohol was involved	NE Dept of Roads	2006	7.3%	-	NA*	NA*	Stable (97-06)
Alcohol-related motor vehicle injury crash rate per 100 million vehicle miles traveled	NE Dept of Roads	2006	4.83	920 crashes	NA*	NA*	Decreased (97-06)
Percentage of motor vehicle injury crashes in which alcohol was involved	NE Dept of Roads	2006	7.4%	-	NA*	NA*	Increased (01-06)
Alcohol-related motor vehicle disabling injury crash rate per 100 million vehicle miles traveled	NE Dept of Roads	2006	1.30	248 crashes	NA*	NA*	Decreased (97-06)
Percentage of motor vehicle disabling injury crashes in which alcohol was involved	NE Dept of Roads	2006	16.3%	-	NA*	NA*	Increased (01-06)

**National data were not available for comparison*

Non-Fatal Alcohol-Related Motor Vehicle Crashes in Nebraska

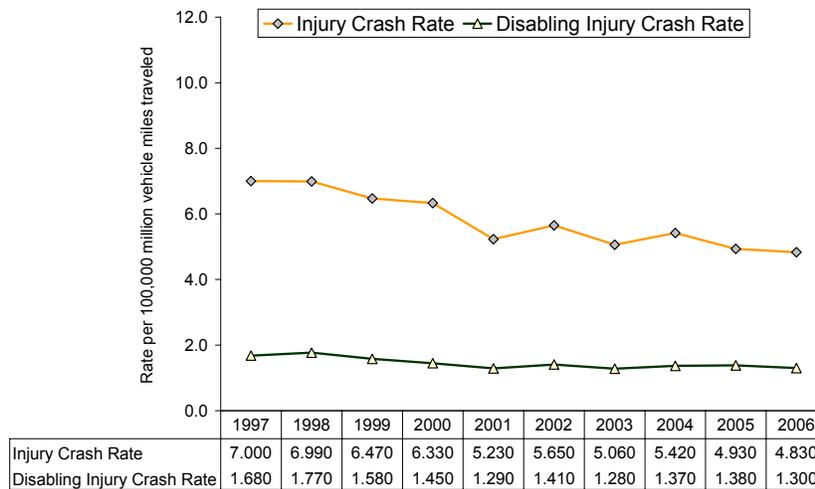
- In 2006, there were 12,471 motor vehicle crashes resulting in injury, of which 920, about 1 in every 14 (7.4%) involved alcohol.
- As a result of the 920 alcohol-involved motor vehicle crashes in 2006, 1,354 individuals were injured, averaging approximately three injuries for every two alcohol-involved crashes.

- When limiting injury crashes to those which caused disabling injuries, 248 alcohol-related motor vehicle crashes resulted in disabling injury, accounting for about 1 in every 6 (16.3%) motor vehicle crashes in which a disabling injury occurred.
- In 2006, there were an estimated 19 billion 62 million miles traveled by automobile in Nebraska for an alcohol-related motor vehicle injury rate of 7.10 injuries per 100 million miles traveled. When examining crashes, an estimated 4.83 alcohol-related injury crashes occurred per 100 million vehicle miles traveled.

Trends

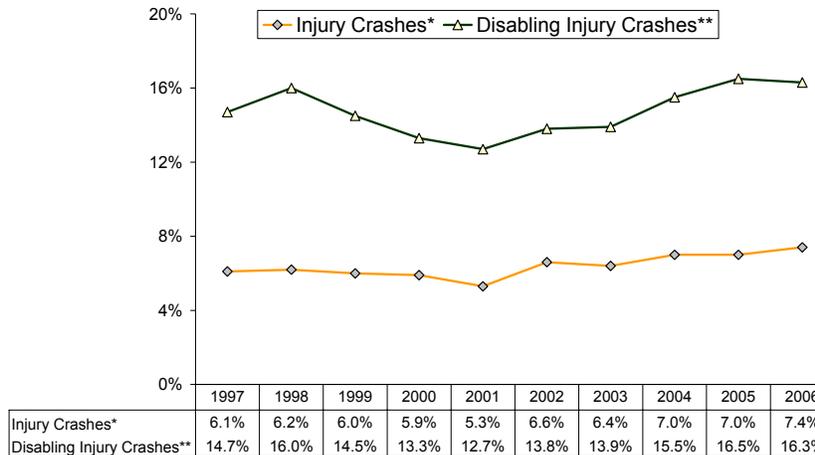
- The alcohol-related motor vehicle injury and injury crash rates per 100 million vehicle miles traveled have declined since the mid-to-late 1990s (Figure 9). However, the percentage of injury crashes that involved alcohol and the percentage of motor vehicle related injuries that involved alcohol have increased since 2001 (Figure 10).

Figure 9: Alcohol-Related Motor Vehicle Injury and Disabling Injury Crash Rates per 100 Million Vehicle Miles Traveled, Nebraska, 1997-2006



Source: Nebraska Office of Highway Safety

Figure 10: Percentage of Motor Vehicle Injury and Disabling Injury Crashes in which Alcohol was Involved, Nebraska, 1997-2006



*Percentage of all motor vehicle injury crashes in which alcohol was involved
 **Percentage of all motor vehicle disabling injury crashes in which alcohol was involved
 Source: Nebraska Office of Highway Safety

Demographic Differences in Alcohol-Related Motor Vehicle Crashes

Differences by Age

- Alcohol-related motor vehicle crash deaths and injuries were most common among those 20-24 years of age followed by those 15-19 and 25-34 years of age, respectively (Table 4). During 2004-2006 combined, those 20-24 years of age accounted for one-fourth (23.5%) of all alcohol-related crash deaths as well as one-fourth of all alcohol-related crash injuries (24.9%). The age-specific crash death rate among those 20-24 (14.5 deaths per 100,000 population) was 1.7 times higher than the next highest age group, 15-19 year olds (8.5 deaths per 100,000 population).

Table 4: Alcohol-Related Auto Crash Deaths and Injuries in Nebraska, by Age and Gender, 2004-2006 Combined

Demographic	Number, %, and rate of all alcohol-related auto crash deaths			Number, %, and rate of all alcohol-related auto crash injuries		
	Number	Percent	Rate*	Number	Percent	Rate*
Total	256	100.0%	5.1	4,289	100.0%	84.0
Gender						
Male	182	71.1%	7.2	2,750	64.1%	106.3
Female	74	28.9%	3.0	1,539	35.9%	61.2
Age						
<15	1	0.4%	0.1	187	4.4%	17.5
15-19	33	12.9%	8.5	719	17.0%	185.9
20-24	60	23.5%	14.5	1,056	24.9%	255.8
25-34	47	18.4%	6.7	890	21.0%	127.3
35-44	44	17.3%	6.1	602	14.2%	83.5
45-54	47	18.4%	6.2	468	11.1%	61.4
55-64	14	5.5%	2.7	197	4.7%	37.4
65+	9	3.5%	1.3	187	2.7%	26.7
Missing Age	1			54		

*Rate per 100,000 population, total and gender rates are age-adjusted, age are age-specific
Source: Nebraska Department of Roads

Differences by Gender

- Males were more likely than females to experience alcohol-related motor vehicle crash death and injury. During 2004-2006 combined, males accounted for 71.7 percent of all alcohol-related crash deaths and 64.1 percent of all alcohol-related crash injuries (Table 4). The (age-adjusted) motor vehicle crash death rate among males was 2.4 time higher than the rate among females, 7.2 and 3.0 deaths per 100,000 population, respectively.

Costs Associated With Alcohol-Related Motor Vehicle Crashes in Nebraska

According to the Nebraska Office of Highway Safety, using cost estimates from the National Safety Council, alcohol-related motor vehicle crashes in Nebraska during 2006 cost an estimated 130.6 million dollars when counting wage and productivity losses, medical expenses, administrative expenses, motor vehicle damage, and employer costs. A breakdown of the costs can be found in Table 5.

Table 5: Estimated Costs for Alcohol-Related Motor Vehicle Crashes in Nebraska, by Type of Crash, 2006

Type of Crash	Number in 2006	Estimated Cost Per Crash*	Total Estimated Cost
Fatal	86	\$1,150,000	\$98,900,000
Disabling Injury	333	\$52,900	\$17,615,700
Property Damage (including minor injury)	1,882	\$7,500	\$14,115,000

All Crashes			\$130,630,700

*Estimated by the National Safety Council, Injury Facts 2005 Edition
Source: Nebraska Office of Highway Safety

Legal Consequences of Alcohol Use

In addition to the lives impacted by alcohol abuse, it places 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, incarceration, and parole 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).

Driving Under the Influence – Legal Consequences

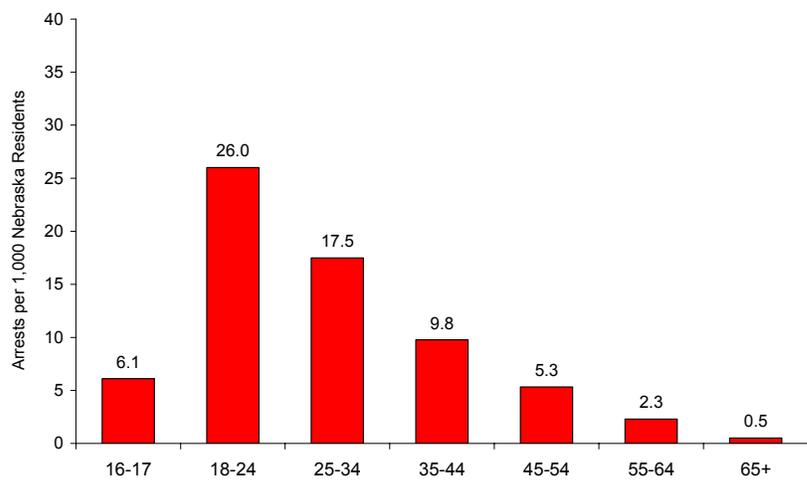
NOTE: DUI may contain legal consequences for driving under the influence of drugs and not alcohol.

Arrests for DUI

Data Source: Uniform Crime Reports, Nebraska Crime Commission

In 2006, there were 13,409 arrests for DUI in Nebraska; of which 334 occurred among juveniles under 18 and 13,075 occurred among adults 18 and older. Among adults in Nebraska, DUI accounted for about 1 in every 6 arrests (17.0%) during 2006. Males accounted for three-fourths of all DUI arrests in 2006 (77.4%) while persons 18-24 had the highest DUI arrest rate by age (Figure 11).

Figure 11: DUI Arrest Rate per 1,000 Nebraska Residents* by Age, 2006



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

Convictions for DUI

Data Source: Nebraska

*Department of Motor Vehicle
Driving Records*

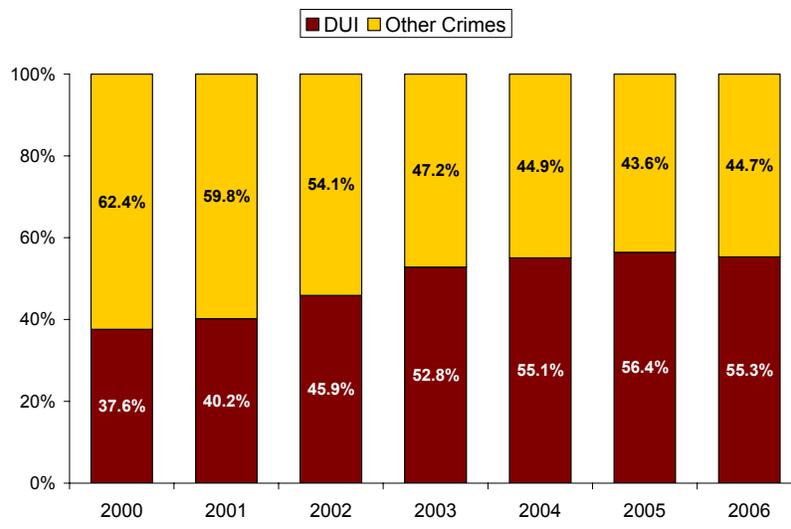
In 2006, there were 11,361 convictions for DUI in Nebraska. When comparing the number of DUI arrests against convictions, 85% of DUI arrests in 2006 resulted in conviction. The percentage of DUI arrests resulting in conviction has increased steadily in Nebraska since the mid-to-late 1990s (1995-1998), in which the percentage ranged between 42 and 51 percent.

Probation for DUI

Data Source: Nebraska Office of Probation Administration

In 2006, there were 8,395 adults sentenced to probation for DUI in Nebraska, 6,800 (81.0%) were sentenced for their first offense, 1,189 (14.2%) were sentenced for their second offense, and 406 (4.8%) were sentenced for their third or higher offense. Of all adults sentenced to probation in Nebraska during 2006, more than half (55.3%) were sentenced for DUI. Since 2000, the number of adults sentenced to probation for DUI (there were 5,902 in 2000) and the proportion of all sentences that were for DUI (37.6% in 2000) have increased quite dramatically (Figure 12).

Figure 12: Breakdown of Adult Probation Sentences by Crime,* 2000-2006



*Represents the percentage of all adult probation sentences that were for DUI compared to other crimes
Source: Nebraska Office of Probation Administration

Incarceration for DUI

Data Source: Nebraska Department of Correctional Services

In 2006, there were 129 individuals incarcerated in the Nebraska prison system for a conviction in which DUI was their most serious offense, accounting for approximately 3 percent of all incarcerations. Although DUI incarcerations make up a relatively small percentage of all incarcerations, the number of individuals incarcerated for DUI has increased dramatically in recent years. Throughout the 1990s, the largest number of DUI incarcerations for any single year was 49, compared to 100 or more each year since 2000.

Parole for DUI

Data Source: Nebraska Department of Correctional Services

Similar to incarcerations, the number of individuals on parole following an incarceration for DUI has also increased in recent years. In 2006, there were 42 individuals on parole for DUI, accounting for 6.3 percent of all parolees.

Arrests for Alcohol-Related Crime (excluding DUI)

In 2006, there were 12,714 arrests for non-DUI alcohol-related crime in Nebraska (e.g., public intoxication, minor in possession, purchasing alcohol for a minor, selling alcohol to a minor). Of the 12,714 arrests for alcohol-related crime, 2,695 occurred among juveniles under 18 (21.2%) while 10,019 occurred among adults 18 and older (78.8%). Alcohol-related crime accounted for about 1 in every 6 arrests (17.0%) among youth (under 18), and about 1 in every 8 arrests among adults (13.0%) during 2006. However, among those 18-24 it accounted for close to one-third of all arrests (29.4%).

Reported Violent Crimes

Although the causal pathway is not completely understood, violence is associated with alcohol³. Drinking on the part of the victim or a perpetrator can increase the risk of assaults and assault-related injuries. Approximately 23 percent of sexual assaults, 30 percent of physical assaults, and 3 percent of robberies are attributable to alcohol³. In 2006, there were 4,925 reported violent crimes in Nebraska, a number that has remained relatively unchanged since 2000.

Alcohol Impaired Driving (self-reported prevalence)

Alcohol Impaired Driving Indicator Definitions

- **Youth Risk Behavior Survey (YRBS):**
 - *Driving after Drinking:* Percentage of students who drove a car or other vehicle one or more times when they had been drinking alcohol during the 30 days preceding the survey
 - *Riding with a Driver who had been Drinking:* Percentage of students who rode in a car or other vehicle driven by someone who had been drinking alcohol during the 30 days preceding the survey
 - *Driving after Drinking or Riding with a Driver who had been Drinking:* Percentage of students who rode in a car or other vehicle driven by someone who had been drinking alcohol or drove a car or other vehicle when they had been drinking alcohol during the 30 days preceding the survey
- **Behavioral Risk Factor Surveillance System (BRFSS):** Percentage of adults 18 and older who report driving after having had perhaps too much to drink during the 30 days preceding the survey.

Alcohol Impaired Driving Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Driving after drinking among high school students	YRBS	2005	17.3%	17,500	9.9%	Higher	Decreased (91-05)
Riding with a driver who had been drinking among high school students	YRBS	2005	35.6%	35,500	28.5%	Higher	Decreased (91-05)
Driving after drinking or riding with a driver who had been drinking among high school students	YRBS	2005	37.4%	38,500	30.8%	Higher	Decreased (91-05)
Alcohol impaired driving among adults	BRFSS	2006	4.2%	53,500	2.5%	Higher	Stable (89-06)

Current Levels of Alcohol Impaired Driving in Nebraska

- **Drinking and driving among Nebraska youth during 2005 (source: YRBS):**
 - Approximately 1 in every 6 Nebraska high school students (17.3%), an estimated 17,500 students, reported driving a car or other vehicle after drinking alcohol during the 30 days preceding the survey.
 - Nearly 2 in every 5 Nebraska high school students (37.4%), an estimated 37,500 students, either drove after drinking or rode with someone who had been drinking during the 30 days preceding the survey.
- In 2006, approximately 1 in every 24 Nebraska adults (4.2%), an estimated 53,500 adults, reported alcohol impaired driving during the 30 days preceding the survey. (source: BRFSS)

Compared to the Nation

The YRBS and BRFSS suggest that youth and adults in Nebraska are more likely than their counterparts nationally to drive after drinking alcohol.

- **Nebraska youth compared to youth nationally during 2005 (source: YRBS):**
 - High school students in Nebraska were 1.7 times more likely than high school students nationally to drive after drinking, 17.3 percent and 9.9 percent, respectively.
 - When comparing the percentage that either drove after drinking or rode with a drinking driver, the percentage among Nebraska high school students (37.4%) was higher than the percentage for high school students nationally (30.8%).

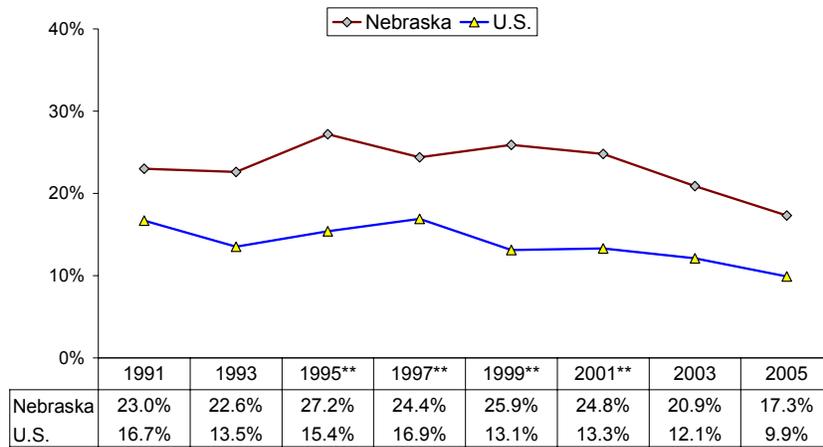
- In 2006, adults in Nebraska were more likely than adults nationally to have engaged in alcohol impaired driving, 4.2 percent and 2.5 percent, respectively. (source: BRFSS)

Trends

Since the early 1990s, trends for alcohol impaired driving among Nebraska residents appear to have declined among youth and remained stable among adults.

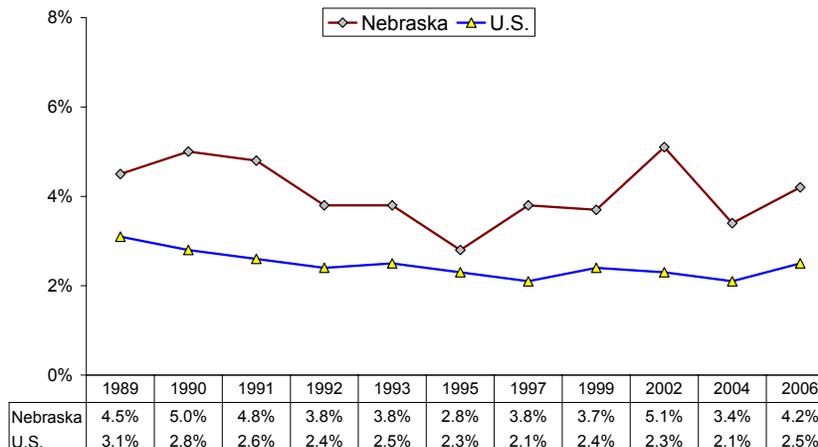
- Positively, the percentage of Nebraska high school students reporting drinking and driving as well as the percentage reporting either drinking after driving or riding with someone who had been drinking have declined since the early 1990s (Figure 13). (source: YRBS)
- Between 1989 and 2006, alcohol impaired driving among Nebraska adults remained relatively unchanged, typically between 3.5 – 5.0 percent, with a low of 2.8 percent in 1995 and a high of 5.1 percent in 2002 (Figure 14). (source: BRFSS)

Figure 13: Alcohol Impaired Driving* among High School Students, Nebraska and U.S., 1991-2005



*Students who drove a car or other vehicle when drinking alcohol during the 30 days preceding the survey
 **Due to a low response rate, Nebraska data were not weighted to represent all students statewide
 Source: Youth Risk Behavior Survey

Figure 14: Alcohol Impaired Driving among Adults, Nebraska and U.S., 1989-2006



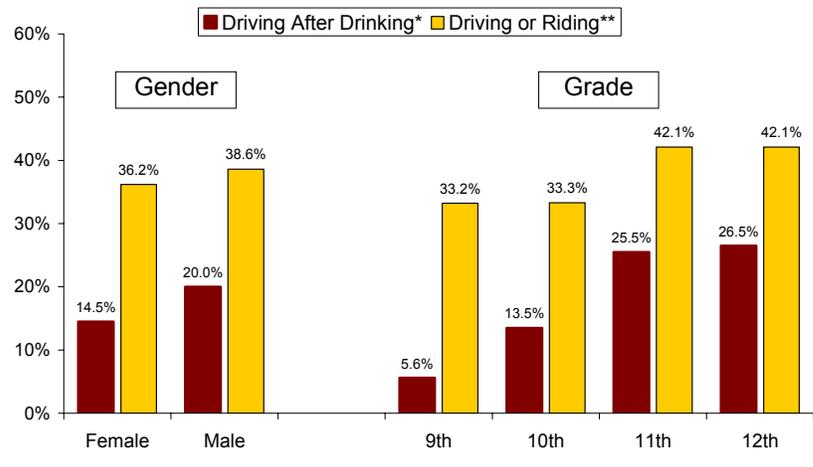
*Percentage of adults 18 and older who report driving after having had perhaps too much to drink during the 30 days preceding the survey
 Source: Behavioral Risk Factor Surveillance System (BRFSS)

Demographic Differences in Alcohol Impaired Driving

Differences by Age

- As grade level increased, the percentage of high school students who drove after drinking increased until 11th grade when the percentage leveled off, while the percentage that either drove after drinking or rode with a driver who had been drinking was similar among 9th and 10th grade students (33%) and similar among 11th and 12th grade students (42%), Figure 15.
- As age increased alcohol impaired driving decreased from 7.2 percent of 18-24 year olds to 0.3 percent of those 65 and older (Figure 16).

Figure 15: Alcohol Impaired Driving and Riding among Nebraska High School Students, by Gender and Grade, 2005

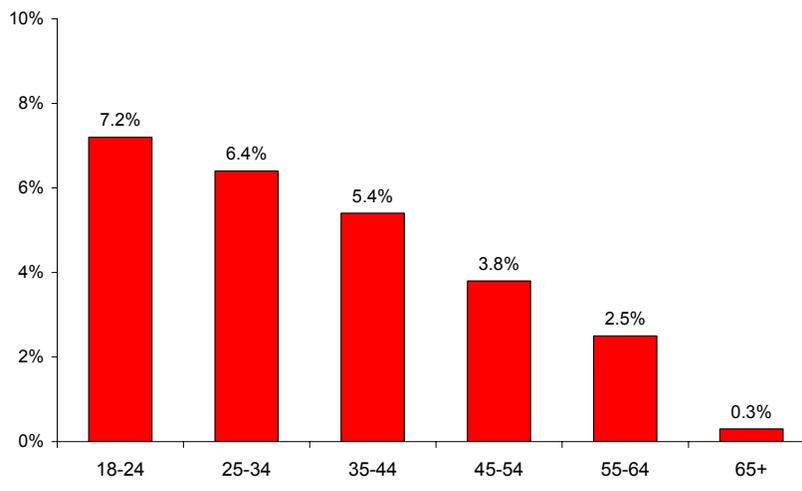


*Students who drove a car or other vehicle when drinking alcohol during the 30 days preceding the survey
 **Students who drove after drinking or rode with a driver who had been drinking (30 days preceding survey)
 Source: Nebraska Youth Risk Behavior Survey

Differences by Gender

- Among Nebraska high school students in 2005, males were more likely than females to drive after drinking (20.0% and 14.5%, respectively); however, the percentage driving after drinking or riding with a driver who had been drinking was similar for males (38.6%) and females (36.2%), Figure 15.
- Men were nearly three times as likely as women to engage in alcohol impaired driving, 6.3 percent and 2.2 percent, respectively.

Figure 16: Alcohol Impaired Driving among Nebraska Adults* by Age, 2006



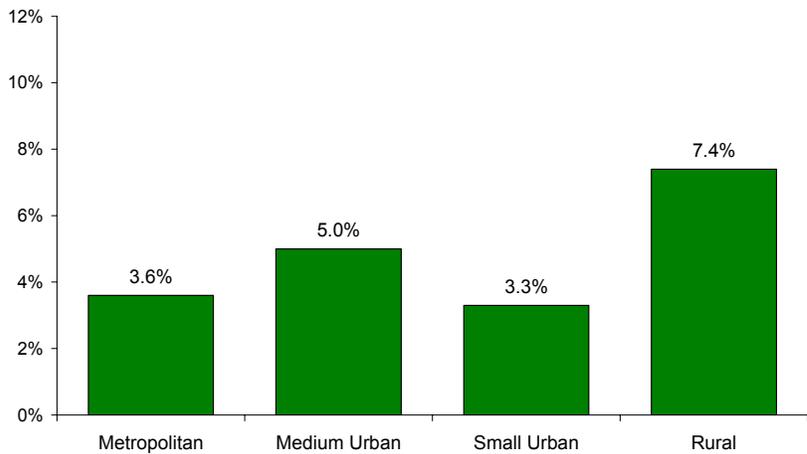
*Percentage of adults 18 and older who report driving after having had perhaps too much to drink during the 30 days preceding the survey.

Source: Behavioral Risk Factor Surveillance System (BRFSS)

Differences by Urban/Rural

- Beyond differences in age (using age-adjustment), residents of rural Nebraska counties appear most likely to engage in alcohol impaired driving. Approximately 1 in every 14 adults living within rural counties (7.2%) engaged in alcohol impaired driving followed by 5.0 percent from medium urban counties (a non-significant difference), 3.6 percent in metropolitan counties, and 3.3 percent in small urban counties (Figure 17).

Figure 17: Alcohol Impaired Driving (age-adjusted) among Nebraska Adults* by Urban/Rural, 2006

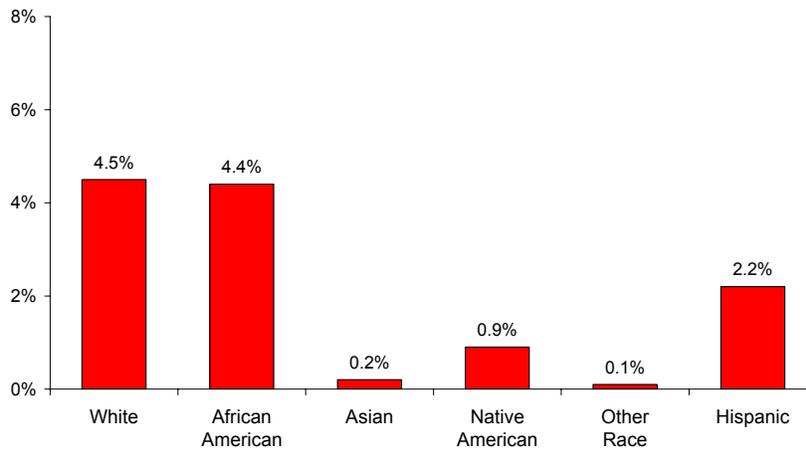


*Percentage of adults 18 and older who report driving after having had perhaps too much to drink during the 30 days preceding the survey.
Source: Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Differences by Race/Ethnicity

- When examining differences in alcohol impaired driving by race/ethnicity during the combined years of 2004-2006, beyond differences in age (using age-adjustment), Whites (4.5%) had a similar percentage to African Americans (4.4%), a slightly higher, although not significantly higher, percentage than Hispanics (2.2%), and a higher percentage than Asians (0.2%), Native Americans (0.9%), and individuals of other non-Hispanic races (0.1%), Figure 18. It should be noted that due to a small number of responses from some racial and ethnic groups, and the relatively low prevalence of alcohol impaired driving, estimates and comparisons should be viewed with caution.

Figure 18: Alcohol Impaired Driving (age-adjusted) among Nebraska Adults* by Race/Ethnicity, 2002, 2004, & 2006 combined



*Percentage of adults 18 and older who report driving after having had perhaps too much to drink during the 30 days preceding the survey.
Note: Racial categories include non-Hispanics, Hispanics can be of any race
Source: Nebraska BRFSS and Minority Oversample BRFSS Combined

Alcohol Dependence, Abuse, and Treatment

Alcohol Dependence and Abuse

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

Alcohol Dependence and Abuse Indicator Definitions

- *Alcohol Dependence or Abuse in Past Year among Persons 12 and Older* is the percentage of persons 12 and older who met the definition of alcohol dependence or abuse from the DSM-IV during 12 months preceding the survey
- *Alcohol Dependence in Past Year among Persons 12 and Older* is the percentage of persons 12 and older who met the definition of alcohol dependence from the DSM-IV during the 12 months preceding the survey.

Alcohol Dependence and Abuse Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Number Persons	Nation	Nebraska vs. Nation	Trend
Alcohol Dependence or Abuse in Past Year among Persons 12 and Older	NSDUH	2004/2005	9.5%	136,000	7.7%	Higher	Stable (02-05)
Alcohol Dependence in Past Year among Persons 12 and Older	NSDUH	2004/2005	3.7%	53,000	3.4%	Non-Significant	Stable (02-05)

Alcohol Dependence and Abuse in Nebraska

- During the combined years of 2004 and 2005, about 1 in every 10 Nebraska residents 12 and older (9.5%) reported alcohol dependence or abuse during the 12 months preceding the survey while 1 in every 27 reported alcohol dependence specifically (3.4%), as defined by the DSM-IV guidelines.

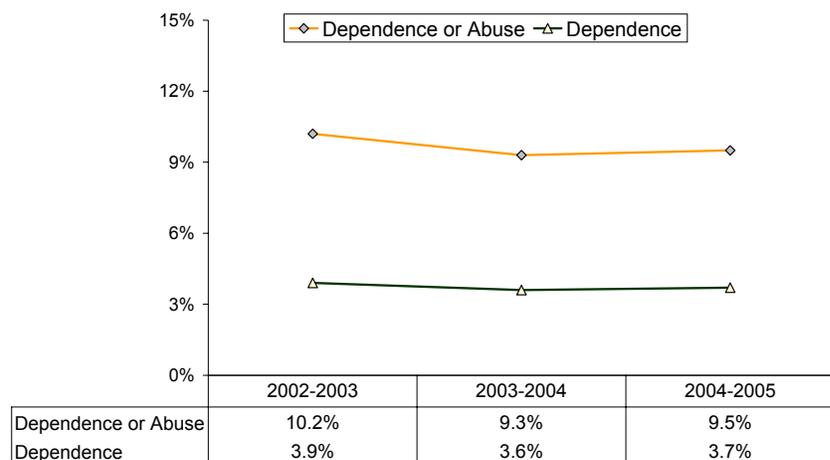
Compared to the Nation

- During the combined years of 2004 and 2005, persons 12 and older in Nebraska were more likely than persons 12 and older nationally to report alcohol dependence or abuse during the 12 months preceding the survey (9.5% and 7.7%, respectively), while the percentage reporting alcohol dependence was similar between Nebraska and the nation (3.7% and 3.4%, respectively).

Trends

- Between 2002/2003 and 2004/2005, the percentage of Nebraska residents 12 and older reporting alcohol dependence or abuse remained relatively unchanged from 10.2 percent to 9.5 percent (Figure 19).
- The percentage of Nebraska residents 12 and older reporting alcohol dependence specifically also remained unchanged between 2002 and 2005.

Figure 19: Alcohol Dependence or Abuse* among Persons 12 and Older in Nebraska, 2002-2005

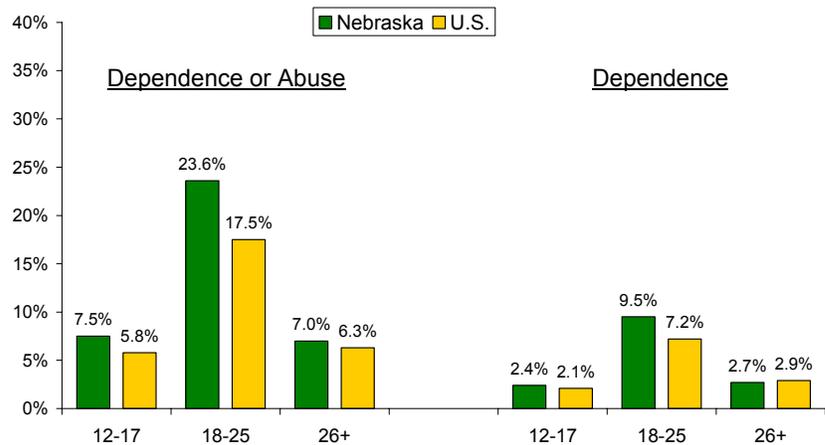


*Persons 12 and older who report alcohol dependence or abuse during the 12 months preceding the survey; as defined by the 4th edition of the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV). Source: National Survey on Drug Use and Health (NSDUH)

Differences by Age

- During the combined years of 2004 and 2005, persons 18-24 years old in Nebraska (23.6%) were more likely than those 12-17 (7.5%) and 25 and older (7.0%) to report past year alcohol dependence or abuse. When examining differences in alcohol dependence or abuse by age compared to the nation, the greatest disparity occurred among those 18-24, where Nebraska residents reported 23.6 percent compared to 17.5 percent nationally (Figure 20).

Figure 20: Alcohol Dependence or Abuse* among Persons 12 and Older, Nebraska and U.S., by Age, 2004-2005 Combined



*Persons 12 and older who report alcohol dependence or abuse during the 12 months preceding the survey; as defined by the 4th edition of the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV). 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 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 2006, there were 25,083 substance abuse treatment admissions among 9,734 individuals. During admission, individuals were asked to report their primary, second, and third drugs of choice, of which drug of choice data were reported during 22,718 admissions among 8,551 individuals. The following information is based on data from those who reported drug of choice on their admission form.

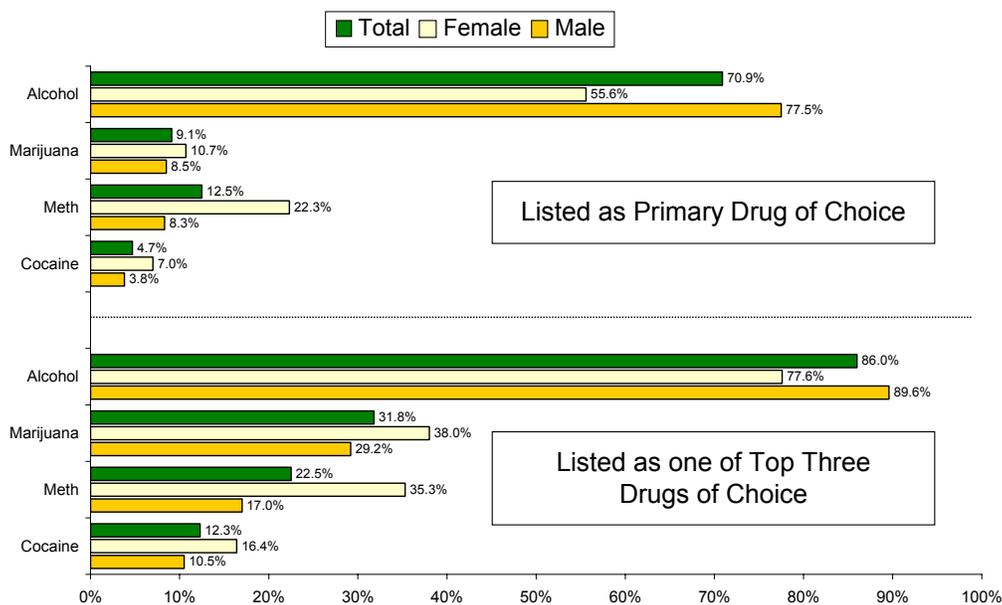
Alcohol Involvement in Substance Abuse Treatment Services

- In 2006, alcohol was listed as the primary drug of choice during 7 in every 10 substance abuse treatment admissions (70.9%) in Nebraska, and was listed as one of the top three drugs of choice during 86.0 percent of all admissions (Figure 21). Alcohol was followed by methamphetamine (primary drug of choice during 12.5% of admissions) and marijuana (primary drug of choice during 9.1% of admissions).
- When examining drug of choice among individuals (as opposed to all admissions), alcohol was listed as the primary drug of choice (using data from the individuals first admission) by 3 in every 4 individuals admitted for treatment services in Nebraska (73.4%) and as one of the top three drugs of choice by 86.5 percent of individuals.
- Using all 2006 treatment admissions, males in Nebraska were more likely than females in Nebraska to report alcohol as their primary drug of choice (77.5% and 55.6%, respectively) as well as to report alcohol as one of their top three drugs of choice (89.6% and 77.6%, respectively), Figure 21.

Treatment Admission Demographics

- Table 6 provides the demographics for all substance abuse treatment admissions (regardless of their drug of choice) for gender, age, race, and urban/rural.

Figure 21: Drugs of Choice among Nebraska Substance Abuse Treatment Admissions, 2006



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

Table 6: Demographics of Individuals Admitted for Substance Abuse Treatment in Nebraska, 2006

	Number	Percent		Number	Percent
Total	9,734	100.0%	Gender		
			Male	6,386	65.6%
			Female	3,348	34.4%
Race/Ethnicity			Age		
White	7,854	80.7%	<18	467	4.9%
Black	692	7.1%	18-24	3,050	31.7%
Asian	72	0.7%	25-34	2,515	26.1%
N. American	330	3.4%	35-44	1,972	20.5%
Hispanic*	914	9.4%	45-54	1,204	12.5%
Urban/Rural			55-64	325	3.4%
Metropolitan	5,588	58.5%	65+	86	0.9%
Med Urban	1,951	20.4%			
Small Urban	1,425	14.9%			
Rural	589	6.2%			

*Hispanic can be of any race

Note: Numbers represent individuals, not the number of admissions

Source: Magellan Database, Nebraska Division of Behavioral Health

ALCOHOL – USE

Current Alcohol Use

Current alcohol use refers to the self-reported consumption of alcohol during the past month, or 30 days preceding the survey.

Current Alcohol Use Indicator Definitions

- **Source YRBS:** Percentage of students in grades 9-12 who report having at least one drink of alcohol on one or more of the 30 days preceding the survey
- **Source NSDUH:** Percentage of persons 12 and older who report having at least one alcoholic beverage during the 30 days preceding the survey
- **Source BRFSS:** Percentage of adults 18 and older who report having at least one alcoholic beverage during the 30 days preceding the survey

Current Alcohol Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Current Alcohol Use among High School Students	YRBS	2005	42.9%	43,000	43.3%	Non-Significant	Decreased (91-05)
Current Alcohol Use among Persons 12 and Older	NSDUH	2004/2005	55.6%	799,000	51.1%	Higher	Stable (02-05)
Current Alcohol Use among Adults 18 and Older	BRFSS	2006	58.5%	748,000	52.4%	Higher	Stable (89-06)

Current Alcohol Use in Nebraska

Alcohol use is common among both youth and adults in Nebraska.

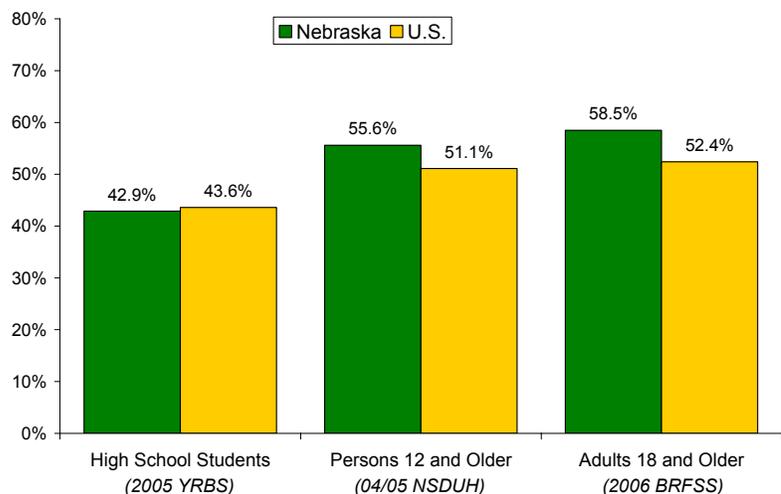
- In 2005, approximately 2 in every 5 Nebraska high school students (42.9%), an estimated 43,000 students, reported drinking alcohol during the 30 days preceding the survey. (source: YRBS)
- During 2004 and 2005 combined, more than half of Nebraska residents 12 and older (55.6%) reported drinking alcohol during the 30 days preceding the survey. (source: NSDUH)
- In 2006, approximately 3 in every 5 Nebraska adults (58.5%), an estimated 748,000 adults, reported drinking alcohol during the 30 days preceding the survey. (source: BRFSS)

Compared to the Nation

Current alcohol use among Nebraska youth appears similar to youth nationally while use among Nebraska adults appears higher than adults nationally.

- In 2005, current alcohol use among Nebraska high school students (42.9%) was similar to high school students nationally (43.6%), Figure 1. (source: YRBS)
- During the combined years of 2004 and 2005, persons 12 and older in Nebraska were more likely than persons 12 and older nationally to have

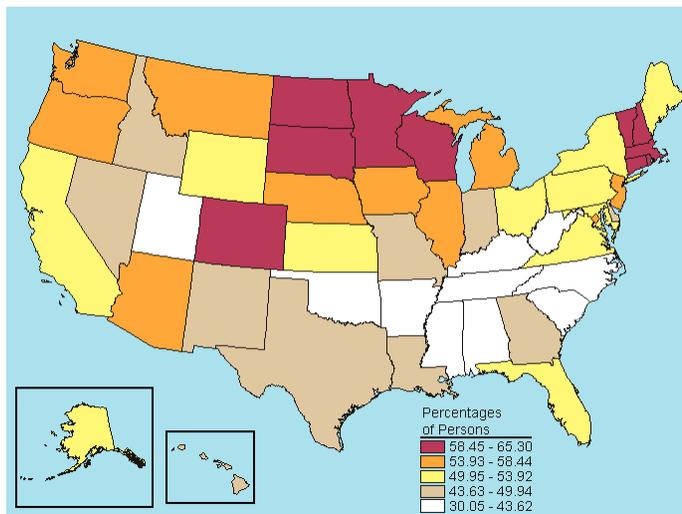
Figure 1: Current Alcohol Use* among Nebraska Residents compared to Residents Nationally; according to the YRBS, NSDUH, and BRFSS



*Alcohol use during the 30 days preceding the survey

currently used alcohol, 55.6 percent and 51.1 percent, respectively (Figure 1). However, when examining differences by age within the NSDUH, residents 12-17 and 26 and older reported similar percentages to the nation while residents 18-25 (71.3%) reported a higher percentage than residents nationally (60.7%). Map 1 compares current alcohol use by state during 2004 and 2005 combined. (source: NSDUH)

Map 1: Alcohol Use in Past Month among Persons 12 and Older, by State, 2004 and 2005 Combined



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

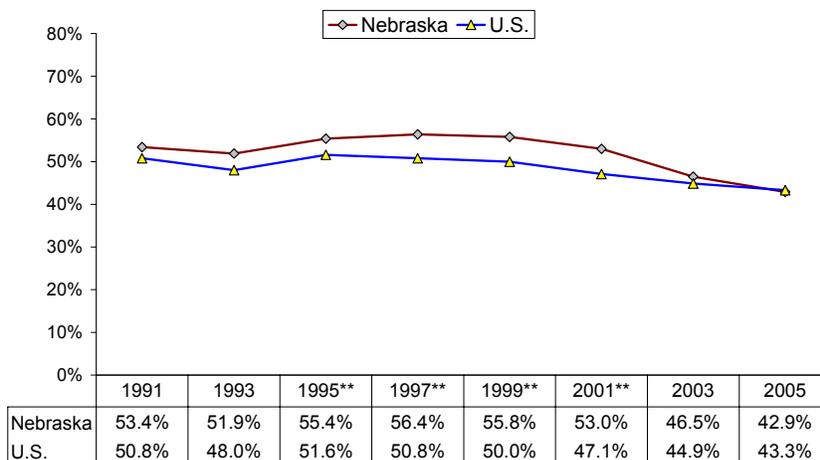
- In 2006, adults in Nebraska were more likely than adults nationally to currently use alcohol, 58.5 percent and 52.4 percent, respectively, a 6.1 percentage point difference (Figure 1). (source: BRFSS)

Trends

Trends for current alcohol use were somewhat inconsistent between the three data sources, appearing to have declined among youth and remained stable, if not increased slightly, among adults.

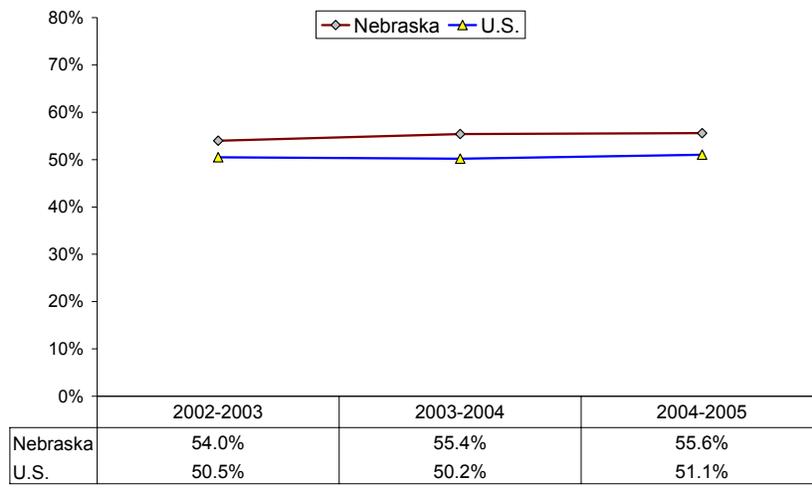
- Current alcohol use among Nebraska high school students declined since the early 1990s (Figure 2). During 1991 (53.4%) and 1993 (51.9%), the percentage was slightly greater than half of all students compared to 46.5 percent in 2003 and 42.9 percent in 2005. (source: YRBS)
- Since 2002, current alcohol use among Nebraska residents 12 and older has remained virtually unchanged from 54.0 percent in 2002/2003 to 55.6 percent in 2004/2005 (Figure 3). However, although the changes were non-significant, those 12-17 declined slightly from 2002/2003 (22.2%) to 2004/2005 (18.6%) while during the same time periods the percentage increased slightly among those 18-25 (from 68.4% to 71.3%) and 26 and older (from 55.8% to 57.6%). (source: NSDUH)
- Between 1989 and 2002, current alcohol use generally fell between 50 and 55 percent compared to a range of 57 and 60 percent between 2003 and 2006 (Figure 4). (source: BRFSS)

Figure 2: Current Alcohol Use* among High School Students, Nebraska and U.S., 1991-2005



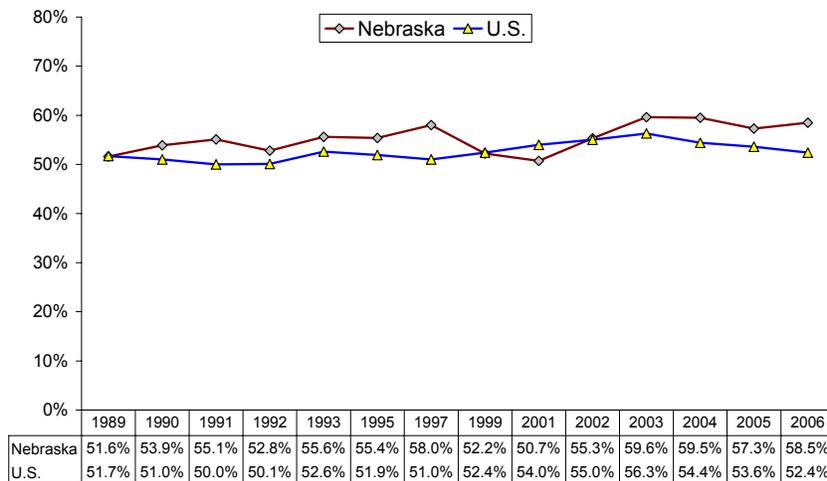
*Students in grades 9-12 reporting at least one drink of alcohol during the 30 days preceding the survey
 **Due to a low response rate, Nebraska data were not weighted to represent all students statewide
 Source: Youth Risk Behavior Survey (YRBS)

Figure 3: Current Alcohol Use* among Residents 12 and Older, Nebraska and U.S., 2002-2005



*Persons 12 and older reporting at least one alcoholic beverage during the 30 days preceding the survey
Source: National Survey on Drug Use and Health (NSDUH)

Figure 4: Current Alcohol Use among Adults, Nebraska and U.S., 1989-2006



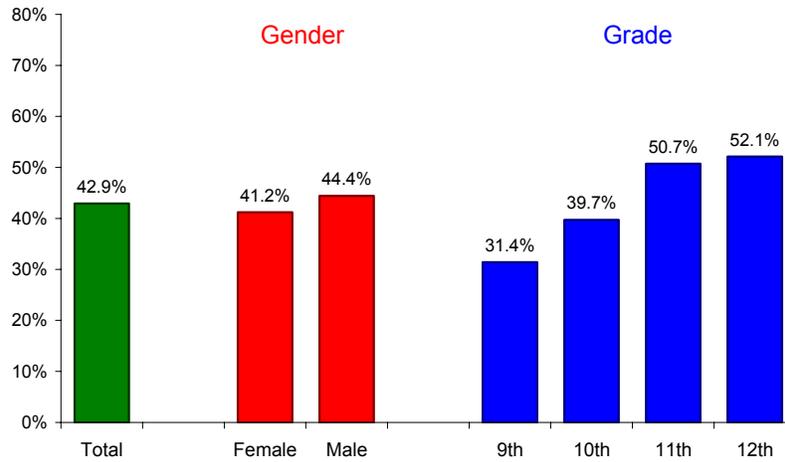
*Adults 18 and older reporting at least one alcoholic beverage during the 30 days preceding the survey
Source: Behavioral Risk Factor Surveillance System (BRFSS)

Demographic Differences in Current Alcohol Use

Differences by Age

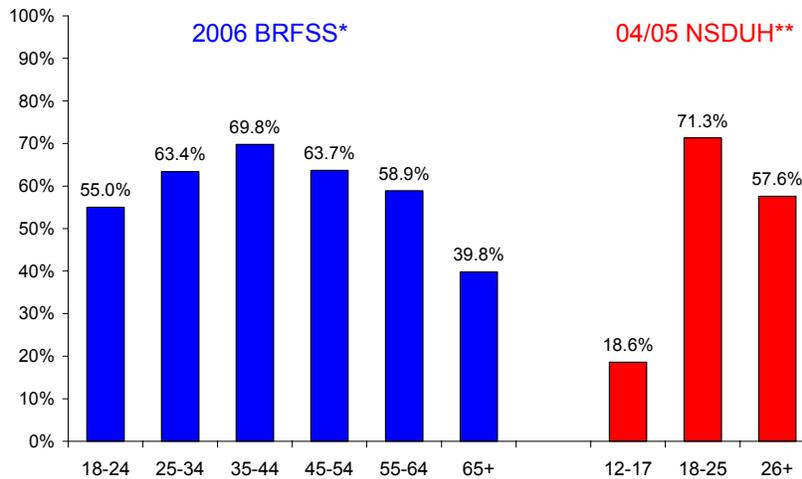
- In 2005, as grade level increased, current alcohol use among high school students increased from 31.4 percent in 9th grade to 52.1 percent in 12th grade (Figure 5). (source: YRBS)
- According to the 2006 BRFSS, adults 25-54 years of age were the most likely to report current alcohol use, with adults 35-44 reporting the highest percentage at 69.8 percent (Figure 6). However, trends in current alcohol use since the early 1990s declined among adults 18-24, changed inconsistently among adults 25-34, and increased among adults 35 and older.
- According to the 2004/2005 NSDUH, current alcohol use was substantially higher among residents 18-25 (71.3%) when compared to residents 26 and older (57.6%) and 12-17 (18.6%), Figure 6. However, unlike the BRFSS, trends among residents 18-25 years of age increased (although non-significantly) between 2002/2003 and 2004/2005.

Figure 5: Current Alcohol Use* among Nebraska High School Students, by Gender and Grade, 2005



*Students who reported having at least one drink of alcohol during the 30 days preceding the survey
Source: Nebraska Youth Risk Behavior Survey (YRBS)

Figure 6: Current Alcohol Use among Nebraska Residents, by Age, according to the 2006 BRFSS and the 2004/2005 NSDUH



*Adults 18 and older who report having at least one alcoholic beverage during the 30 days preceding the survey
**Persons 12 and older who report having at least one alcoholic beverage during the 30 days preceding the survey

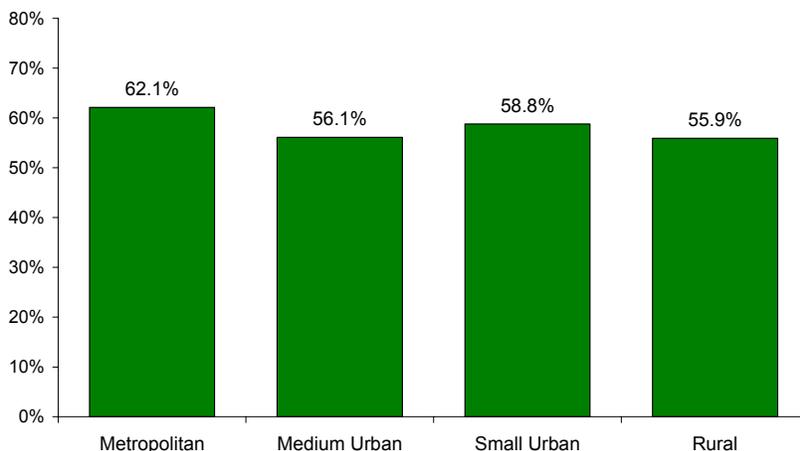
Differences by Gender

- Among Nebraska high school students in 2005, male and female students reported a similar percentage for current alcohol use (44.4% and 41.2%), Figure 5. (source: YRBS)
- In 2006, men were more likely than women to have currently used alcohol, 66.2 percent and 51.2 percent, respectively.

Differences by Urban/Rural

- Beyond differences in age (using age-adjustment) during 2006, adults living within metropolitan counties had the highest percentage for current alcohol use at 62.1 percent (Figure 7). However, this percentage was only significantly higher than the percentage among those living within medium urban counties (56.1%). Medium urban counties (56.1%), small urban counties (58.8%), and rural counties (55.9%) all reported similar percentages.

Figure 7: Current Alcohol Use (age-adjusted) among Nebraska Adults* by Urban/Rural, 2006

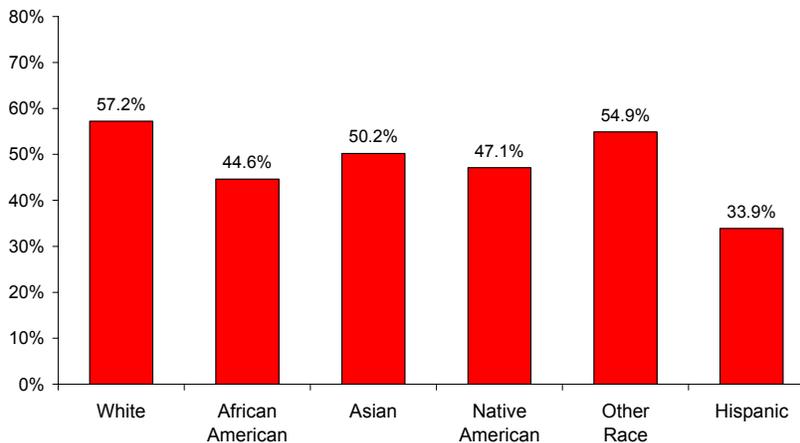


*Percentage of adults 18 and older who report having at least one alcoholic beverage during the 30 days preceding the survey
 Source: Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Differences by Race/Ethnicity

- YRBS data did not provide a sufficient number of cases for analysis by race/ethnicity.
- When examining differences in current alcohol use by race/ethnicity during the combined years of 2004-2006, Whites had the highest percentage (57.2%), which was significantly higher than the percentage for African Americans (44.6%) and Hispanics (33.9%). Hispanics had the lowest percentage for all racial and ethnic groups at 33.9 percent. Figure 8 provides a breakdown of current alcohol use among Nebraska adults by race/ethnicity.

Figure 8: Current Alcohol Use (age-adjusted) among Nebraska Adults* by Race/Ethnicity, 2004-2006 combined



*Percentage of adults 18 and older who report having five or more drinks on at least one occasion during the 30 days preceding the survey
 Note: Racial categories include non-Hispanics, Hispanics can be of any race
 Source: Nebraska BRFSS and Minority Oversample BRFSS Combined

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, traditionally defined as the consumption of five or more drinks during one occasion on self-report surveys. However, due to expanded knowledge of the health effects of alcohol by gender, social science research recently began using a binge drinking definition of five or more drinks for men and four or more drinks for women during one occasion¹.

Binge Drinking Indicator Definitions

- **Source YRBS:** Percentage of students in grades 9-12 who report having five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey
- **Source NSDUH:** Percentage of persons 12 and older who report having five or more drinks on at least one occasion during the 30 days preceding the survey
- **Source BRFSS:** Percentage of adults 18 and older who report having five or more drinks for men/four or more drinks for women on at least one occasion during the 30 days preceding the survey. Note: prior to 2006 the definition consisted of five or more drinks among both genders

Binge Drinking Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Binge Drinking among High School Students	YRBS	2005	29.8%	30,000	25.5%	Non-Sig	Decreased (91-05)
Binge Drinking among Persons 12 and Older	NSDUH	2004/2005	27.2%	391,000	22.7%	Higher	Stable (02-05)
Binge Drinking among Adults 18 and Older	BRFSS	2006	18.1%	231,000	15.1%	Higher	Stable (89-06)

Current Levels of Binge Drinking in Nebraska

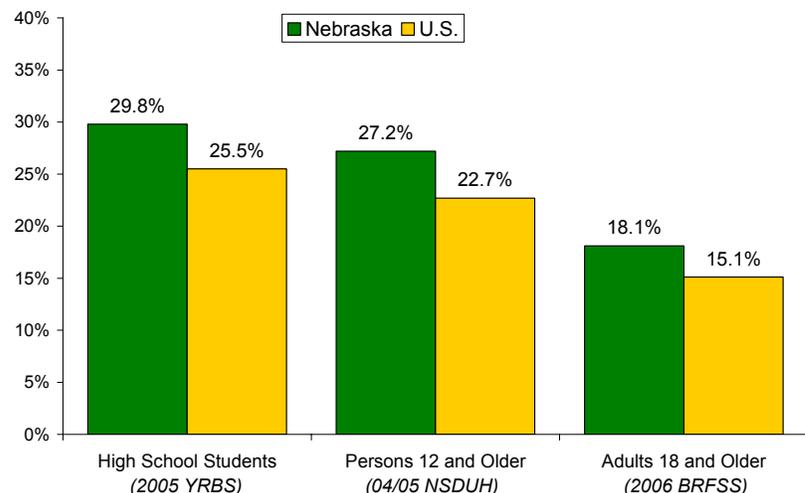
Although estimates of use vary slightly across the three surveys, all suggest that binge drinking is highly prevalent among Nebraska youth and adults.

- In 2005, approximately 3 in every 10 Nebraska high school students (29.8%), an estimated 30,000 students, reported binge drinking during the 30 days preceding the survey. (source: YRBS)
- During the combined years of 2004 and 2005, more than one-fourth of Nebraska residents 12 and older (27.2%), an estimated 391,000 residents, reported binge drinking during the 30 days preceding the survey. (source: NSDUH)
- In 2006, nearly 1 in every 5 Nebraska adults (18.1%), an estimated 231,000 adults, reported binge drinking during the 30 days preceding the survey. (source: BRFSS)

Compared to the Nation

Across the three data sources, the self-reported percentage for binge drinking was higher for Nebraska residents than residents nationally (although the difference for high school

Figure 9: Binge Drinking among Nebraska Residents compared to Residents Nationally*; according to the YRBS, NSDUH, and BRFSS

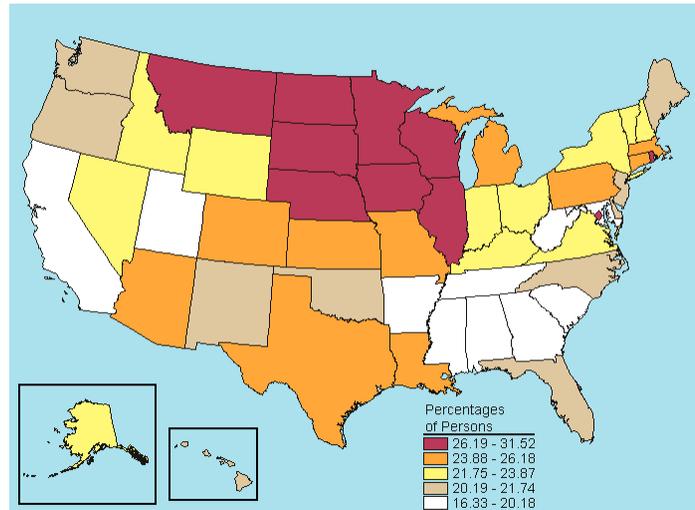


*The BRFSS definition consists of five or more drinks for men and four or more drinks for women while the YRBS and NSDUH consist of five or more drinks for both genders.

students was non-significant within the YRBS), suggesting adults in Nebraska are more likely than adults nationally to binge drink while youth may be more likely than their national counterparts.

- In 2005, high school students in Nebraska (29.8%) had a higher percentage than high school students nationally (25.5%) for binge drinking, although non-significant (Figure 9). (source: YRBS)
- During the combined years of 2004 and 2005, persons 12 and older in Nebraska (27.2%) were more likely than persons 12 and older nationally (22.7%) to binge drink (Figure 9). When examining differences by age, residents 12-17, 18-25, and 26 and older all reported higher percentages than their national counterparts for binge drinking. However, the greatest difference occurred among those 18-25 years old (51.3% Nebraska, 41.5% nationally). Map 2 compares binge drinking by state during 2004 and 2005 combined (source: NSDUH)
- In 2006, adults in Nebraska were more likely than adults nationally to binge drink, 18.1 percent and 15.1 percent, respectively, a 3.0 percentage point difference (Figure 9). (source: BRFSS)

Map 2: Binge Drinking in Past Month among Persons 12 and Older, by State, 2004 and 2005 Combined



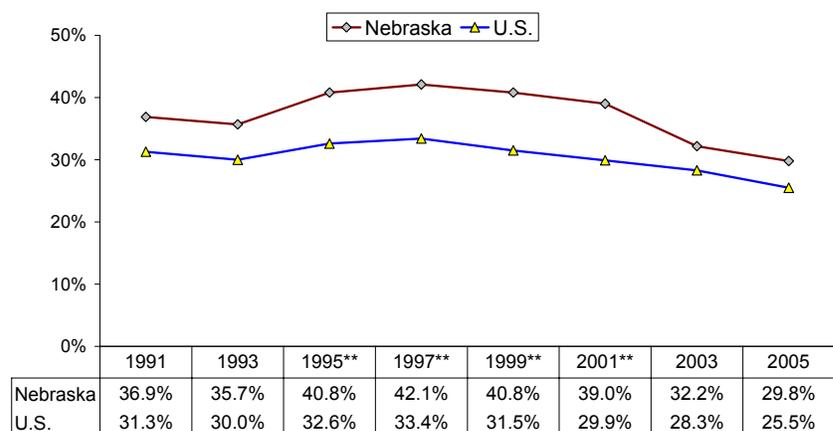
Source: Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health (NSDUH), <www.oas.samhsa.gov/nhsda.htm>

Trends

Trends for binge drinking were inconsistent between the three data sources, appearing to have declined among youth and remained stable among adults.

- Binge drinking among Nebraska high school students declined since the early 1990s (Figure 10). During 1991 (36.9%) and 1993 (35.7%) the percentage was slightly greater than one-third of all students compared to 32.2 percent in 2003 and 29.8 percent in 2005. (source: YRBS)
- Binge drinking among Nebraska residents 12 and older remained virtually unchanged from 26.3 percent during 2002/2003 to 27.2 percent during 2004/2005 (Figure 11). (source: NSDUH)
- Between 1989 and 2006 (when adjusting the 2006 percentage to reflect the traditional five drink definition), binge drinking among Nebraska adults remained virtually unchanged, fluctuating slightly, although inconsistently, from year-to-year (Figure 12). (source: BRFSS)

Figure 10: Binge Drinking* among High School Students, Nebraska and U.S., 1991-2005

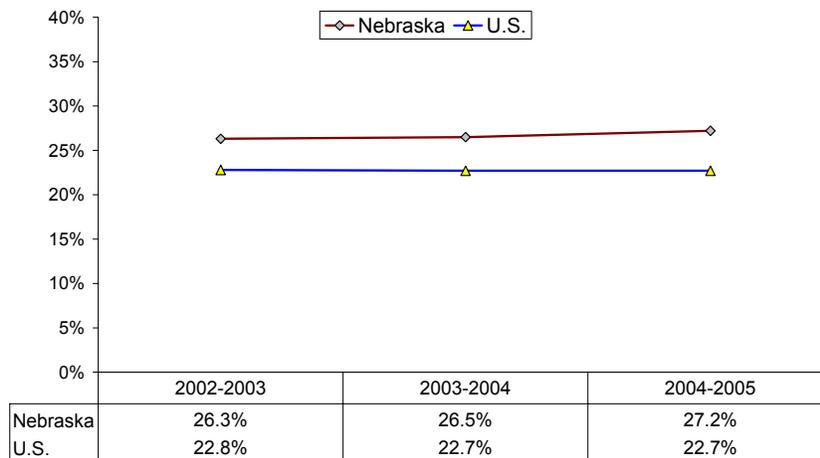


*Students in grades 9-12 who report having five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey

**Due to a low response rate, Nebraska data were not weighted to represent all students statewide

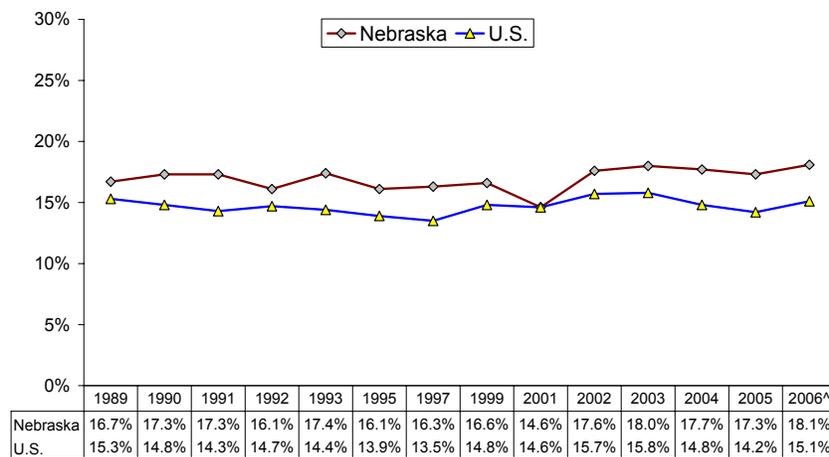
Source: Youth Risk Behavior Survey (YRBS)

Figure 11: Binge Drinking* among Persons 12 and Older, Nebraska and U.S., 2002-2005



*Persons 12 and older who report having five or more drinks on at least one occasion during the 30 days preceding the survey
 Source: National Survey on Drug Use and Health (NSDUH)

Figure 12: Binge Drinking among Adults*, Nebraska and U.S., 1989-2006



*Percentage of adults 18 and older who reported having five or more drinks for men and women (four or more drinks for women in 2006) on at least one occasion during the 30 days preceding the survey
[^]Binge drinking definition changed for women in 2006 to include four or more drinks during one occasion
 Source: Behavioral Risk Factor Surveillance System (BRFSS)

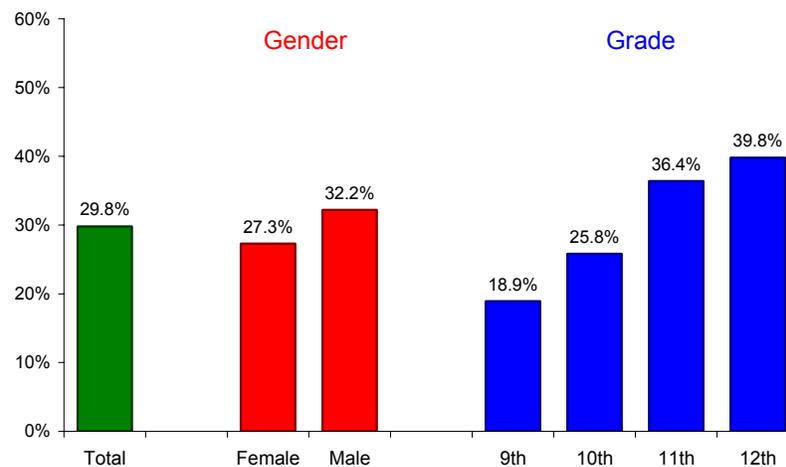
Demographic Differences in Binge Drinking among Nebraska Residents

Differences by Age

- In 2005, as grade level increased binge drinking increased from 18.9 percent in 9th grade to 39.8 percent in 12th grade (Figure 13). (source: YRBS)
- According to the 2006 BRFSS, Nebraska adults 18-44 were the most likely to binge drink, with little difference between those 18-24 (27.5%), 25-34 (26.3%), and 35-44 (24.9%), Figure 14.
- While the overall trend for binge drinking has remained relatively stable since the early 1990s, trends within certain age groups have changed. When comparing trends by age, binge drinking among adults 18-24 declined steadily (although non-significantly) from 2003 (38.6%) to 2006 (27.5%), remained stable since the early 1990s among adults 25-34, and increased steadily among adults 35-44 from 2001 (15.7%) to 2006 (24.9%). (source: BRFSS)

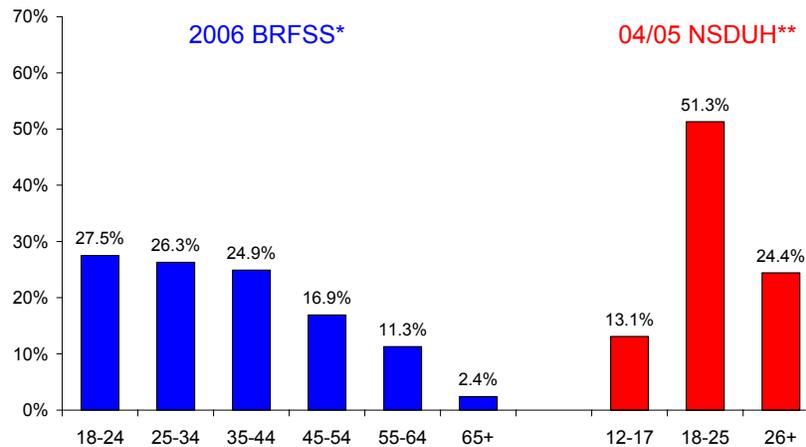
- According to the 2004/2005 NSDUH, more than half of Nebraska residents 18-25 years of age binge drank (51.3%); double the percentage for adults 26 and older (24.4%) and nearly four times the percentage for youth 12-17 (13.1%), Figure 14. However, unlike the BRFSS which suggests a recent decrease in binge drinking among those 18-24 in Nebraska, trends from the NSDUH suggest that binge drinking has remained stable among those 18-25, with percentages increasing slightly, although non-significantly, from 49.8 percent in 2002/2003 to 51.3 percent in 2004/2005. (source: NSDUH)

Figure 13: Binge Drinking* among Nebraska High School Students, by Gender and Grade, 2005



*Students reporting 5+ drinks of alcohol in a row on one or more of the 30 days preceding the survey
Source: 2005 Nebraska Youth Risk Behavior Survey (YRBS)

Figure 14: Binge Drinking among Nebraska Residents, by Age, according to the 2006 BRFSS and the 2004/2005 NSDUH



*Percentage of adults 18 and older who report having five or more drinks for men/four or more drinks for women on at least one occasion during the 30 days preceding the survey

**Percentage of persons who report having five or more drinks on at least one occasion during the 30 days preceding the survey

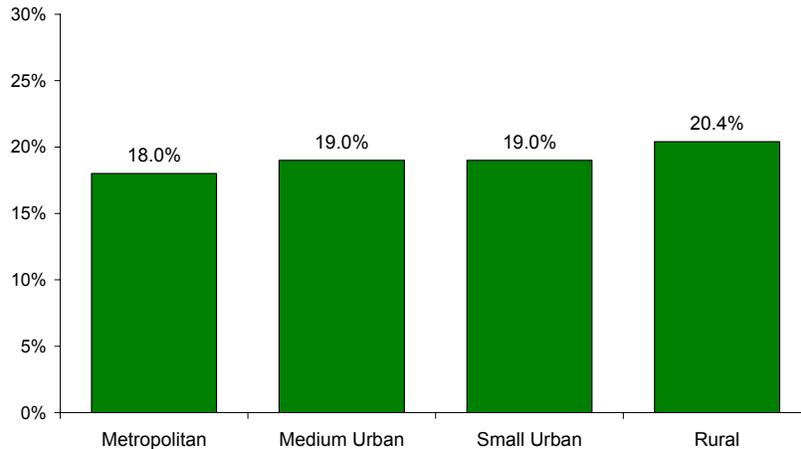
Differences by Gender

- Although non-significant, male students in 2005, compared to female students, had a higher percentage for binge drinking (32.2% and 27.3%, respectively), Figure 13. (source: YRBS)
- In 2006, men were twice as likely as women to binge drink, 24.3 percent and 12.3 percent, respectively. (source: BRFSS)

Differences by Urban/Rural

- Beyond differences in age (using age-adjustment), there was little variation in binge drinking between the four urban/rural categories used in this report (Figure 15). In 2006, adults living within metropolitan counties had the lowest percentage for binge drinking (18.0%) while those in rural counties had the highest percentage (20.4%); however, these differences were non-significant.

Figure 15: Binge Drinking (age-adjusted) among Nebraska Adults* by Urban/Rural, 2006

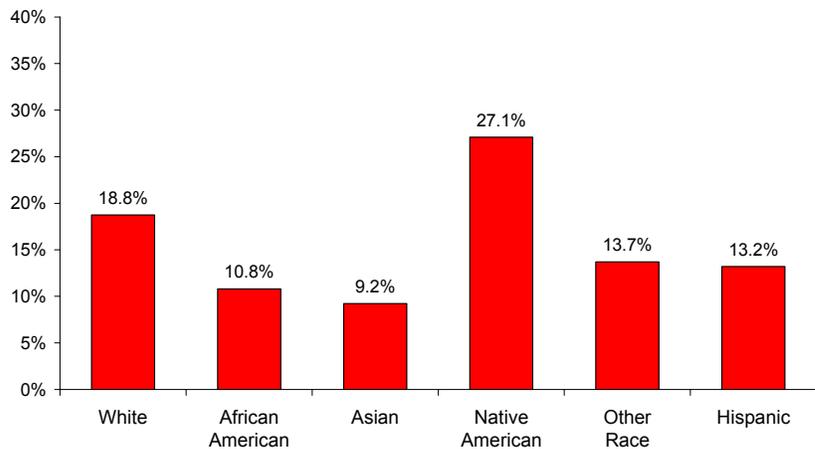


*Percentage of adults 18 and older who report having five or more drinks for men/four or more drinks for women on at least one occasion during the 30 days preceding the survey
Source: Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Differences by Race/Ethnicity

- YRBS data did not provide a sufficient number of cases for analysis by race/ethnicity.
- When examining differences in binge drinking by race/ethnicity during the combined years of 2004-2006, beyond difference in age (using age-adjustment), Native Americans reported the highest percentage (27.1%); however, it was not significantly higher than the percentage for Whites (18.8%), the second highest group. In contrast, Whites (18.8%) were more likely than African Americans (10.8%) to binge drink, and had a higher percentage (although not significantly higher) than Asians (9.2%), Hispanics (13.2%), and individuals of other non-Hispanic races (13.7%). Figure 16 provides a breakdown of binge drinking among Nebraska adults by race/ethnicity.

Figure 16: Binge Drinking (age-adjusted) among Nebraska Adults* by Race/Ethnicity, 2004-2006 combined



*Percentage of adults 18 and older who report having five or more drinks on at least one occasion during the 30 days preceding the survey
Note: Racial categories include non-Hispanics, Hispanics can be of any race
Source: Nebraska BRFSS and Minority Oversample BRFSS Combined

Heavy Drinking

Heavy drinking refers to the self-reported consumption of more than 60 drinks 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 Definition

- **Source BRFSS:** Percentage of men, 18 and older, who report drinking more than 60 alcoholic drinks (an average of more than two drinks per day) during the 30 days preceding the survey and the percentage of women, 18 and older, who report drinking more than 30 alcoholic drinks (an average of more than one drink per day) during the 30 days preceding the survey. Note that this indicator was calculated through 'indexing' to include average drinks and binge drinking episodes.

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	2006	4.5%	56,000	5.9%	Lower	Decreased (02-06)

Current Levels of Heavy Drinking in Nebraska

- In 2006, approximately 1 in every 22 Nebraska adults (4.5%), an estimated 56,000 adults, reported heavy drinking during the 30 days preceding the survey.

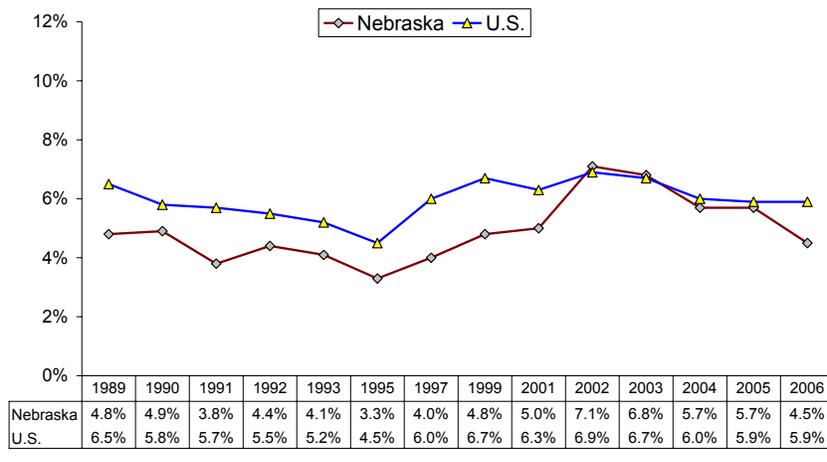
Compared to the Nation

- In 2006, adults in Nebraska had a lower percentage than adults nationally for heavy drinking, 4.5 percent and 5.9 percent, respectively. However, between 2002 and 2005, the percentage for Nebraska adults was nearly identical to adults nationally.

Trends

- The 2006 percentage for heavy drinking among Nebraska adults is similar to the percentage for Nebraska adults throughout the 1990s (Figure 17). However, since 2002 heavy drinking among Nebraska adults has steadily declined from 7.1 percent in 2002 to 4.5 percent in 2006.

Figure 17: Heavy Drinking among Adults, Nebraska and U.S., 1989-2006



*Percentage of men, 18 and older, who report drinking more than 60 alcoholic drinks (an average of more than two drinks per day) and the percentage of women, 18 and older, who report drinking more than 30 alcoholic drinks (an average of more than one drink per day) during the 30 days preceding the survey
Source: Behavioral Risk Factor Surveillance System (BRFSS)

Alcohol Sales

Alcohol sales data in Nebraska are collected at the wholesaler level. As a result, estimates are based on the number of gallons of alcohol sold, not necessarily the number of gallons consumed. Estimates are available by beverage type as well as by the total volume of alcoholic beverages sold and the volume of pure (ethanol) alcohol sold.

Alcohol Sales Indicator Definitions

- Per capita (ethanol) alcohol sales (in gallons) at the wholesaler level among residents 14 and older.

Alcohol Sales Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Total Gallons	Nation	Nebraska vs. Nation	Trend
Per capita (ethanol) alcohol sales (in gallons) among resident 14 and older	NIAAA	2004	2.26	3,203,000	2.23	Non-Significant	Stable (90-04)

*National Institute on Alcohol Abuse and Alcoholism (NIAAA), Alcohol Epidemiologic Data System

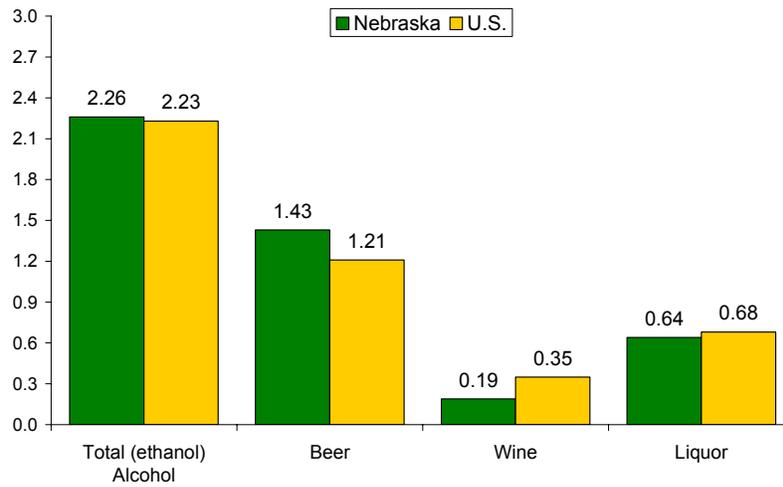
Current Alcohol Sales in Nebraska

- In 2004, an estimated 2.26 gallons of (ethanol) alcohol were sold at the wholesaler level per Nebraska resident 14 and older.
- An estimated 49,189,000 gallons of alcoholic beverages were sold at the wholesaler level in Nebraska during 2004, containing an estimated 3,203,000 gallons of pure (ethanol) alcohol. When breaking down the number of gallons of (ethanol) alcohol sold by beverage type, beer accounted for approximately two-thirds of the (ethanol) alcohol sold (63.0%; 2,018,000 gallons) followed by liquor (28.4%; 910,000 gallons) and wine (8.6%; 275,000 gallons).

Compared to the Nation

- In 2004, per capita (ethanol) alcohol sales among residents 14 and older was similar for Nebraska and the nation, 2.26 and 2.23 gallons per resident, respectively (Figure 18). However, when comparing per capita sales by beverage type, residents in Nebraska had higher sales for beer, lower sales for wine, and similar sales for liquor.

Figure 18: 2004 Per Capita (Ethanol) Alcohol Sales (in gallons) among Residents 14 and older; Nebraska and U.S.; by Beverage Type

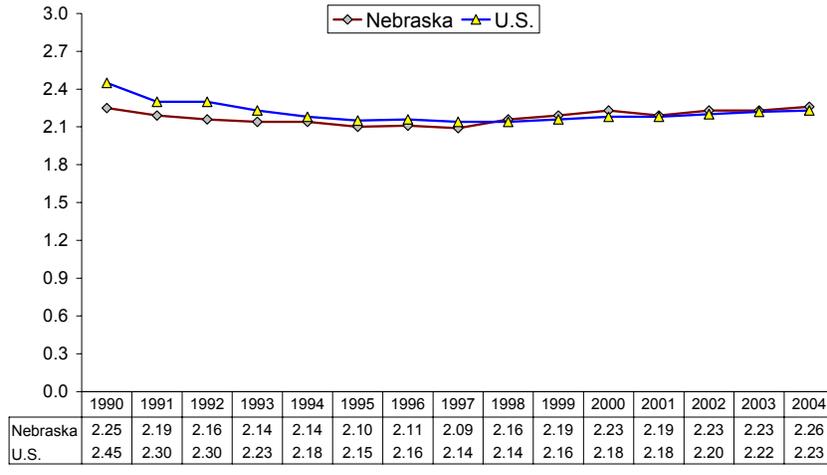


*Represents sales at the wholesaler level, not the consumer level.
Source: National Institute on Alcohol Abuse and Alcoholism (NIAAA)

Trends

- Over the 15-year time period from 1990 to 2004, per capita (ethanol) alcohol sales among residents 14 and older have changed very little (Figure 19). Compared to the mid-1990s, the rate increased slightly; however, the rate for 2004 remained virtually unchanged since 2000.

Figure 19: Per Capita (Ethanol) Alcohol Sales (in gallons) among Residents 14 and older; Nebraska and U.S.; 1990-2004



*Represents sales at the wholesaler level, not the consumer level.
 Source: National Institute on Alcohol Abuse and Alcoholism (NIAAA)

Early Initial Alcohol Use among Youth

Early initial alcohol use refers to the use of alcohol before 13 years of age.

Early Initial Alcohol Use Indicator Definition

- Source YRBS: Percentage of students in grades 9-12 who report drinking alcohol for the first time, other than a few sips, before age 13.

Early Initial Alcohol Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Early Initial Alcohol Use among H.S. Students	YRBS	2005	23.9%	23,994	25.6%	Non-Significant	Decreased (91-05)

Early Initial Alcohol Use among Nebraska Youth

- In 2005, approximately 1 in every 4 Nebraska high school students (23.9%), an estimated 24,000 students, reported drinking alcohol for the first time before age 13.

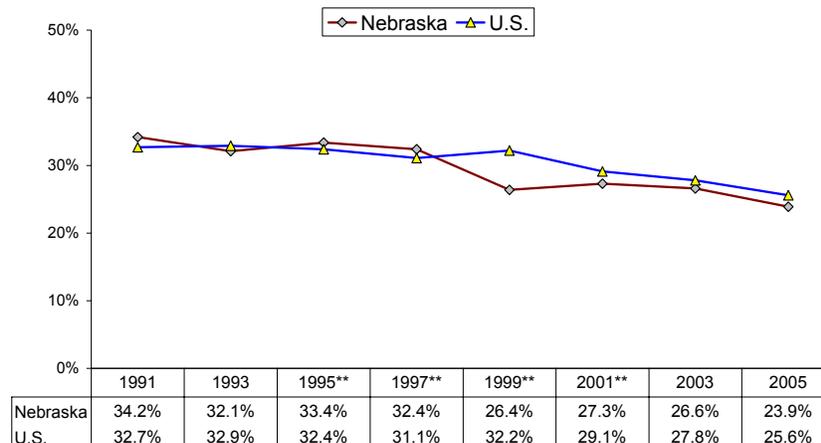
Early Initial Alcohol Use Compared to the Nation

- In 2005, high school students in Nebraska, compared to high school students nationally, had a similar percentage for early initial alcohol use, 23.9 percent and 25.6 percent, respectively.

Trends in Early Initial Alcohol Use among Nebraska Youth

- Early initial alcohol use among Nebraska high school students has declined since the early 1990s (Figure 20). During 1991 (34.2%) and 1993 (32.1%) the percentage was slightly greater than one-third of all students compared to 26.6 percent in 2003 and 23.9 percent in 2005.

Figure 20: Early Initial Alcohol Use* among High School Students, Nebraska and U.S., 1991-2005



*Students in grades 9-12 who report drinking alcohol for the first time before age 13.

**Due to a low response rate, Nebraska data were not weighted to represent all students statewide

Source: Youth Risk Behavior Survey (YRBS)

Lifetime Alcohol Use among Youth

Lifetime Alcohol Use Indicator Definition

- **YRBS:** Percentage of students in grades 9-12 who report drinking at least one drink of alcohol on one or more days during their life

Lifetime Alcohol Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Lifetime Alcohol Use among High School Students	YRBS	2005	73.2%	73,000	74.3%	Non-Significant	Decreased

Lifetime Alcohol Use among Nebraska Youth

- In 2005, approximately 3 in every 4 Nebraska high school students (73.2%), an estimated 73,000 students, reported drinking one or more drinks of alcohol during their lifetime.

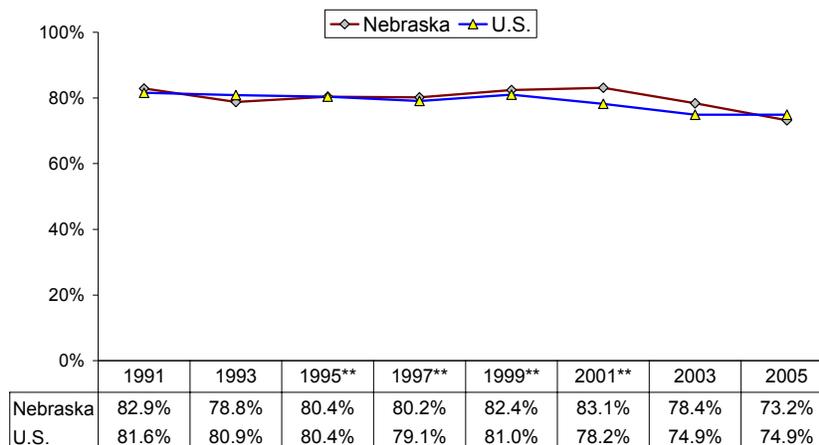
Lifetime Alcohol Use Compared to the Nation

- In 2005, high school students in Nebraska, compared to high school students nationally, had a similar percentage for lifetime alcohol use, 73.2 percent and 74.4 percent, respectively.

Trends in Lifetime Alcohol Use among Nebraska Youth

- Lifetime alcohol use among Nebraska high school students declined between 2003 and 2005, 78.4 percent and 73.2 percent, respectively (Figure 21). However, the percentages from 1993 (78.8%) and 2003 (78.4%) were nearly identical.

Figure 21: Lifetime Alcohol Use* among High School Students, Nebraska and U.S., 1991-2005



*Students in grades 9-12 who report drinking at least one drink of alcohol during their life

**Due to a low response rate, Nebraska data were not weighted to represent all students statewide

Source: Youth Risk Behavior Survey (YRBS)

High-Risk Population: Alcohol Use among Pregnant Women & Women of Child-Bearing Age

Binge Drinking among Women of Childbearing Age

Binge Drinking among Women of Childbearing Age Indicator Definition

- **BRFSS:** Percentage of women 18-44 who report having four or more drinks on at least one occasion during the 30 days preceding the survey. Note: prior to 2006 the definition consisted of five or more drinks on one occasion.

Binge Drinking among Women of Childbearing Age Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Binge Drinking among women 18-44	BRFSS	2006	19.0%	59,000	14.8%	Higher	Stable (89-06)

Binge Drinking among women of childbearing age

- In 2006, nearly 1 in every 5 Nebraska women in their childbearing years (19.0%), or those between 18 and 44 years of age, reported binge drinking during the 30 days preceding the survey. This suggests that an estimated 60,000 women of childbearing age recently binge drank in 2006.

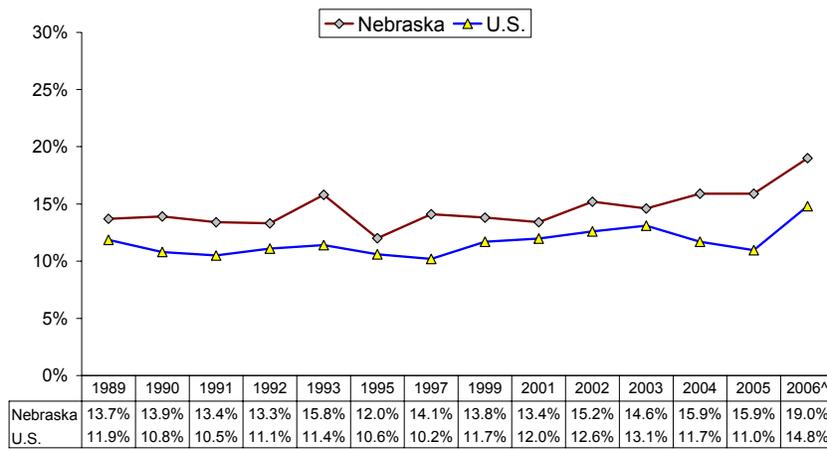
Compared to the Nation

- Women of childbearing age in Nebraska were more likely than their national counterparts to binge drink, 19.0 percent and 14.8 percent, respectively, a 4.2 percentage point difference.

Trends

- Between 1989 and 2006 (after adjusting the 2006 binge drinking percentage to reflect the traditional five drink definition for trend interpretation), binge drinking among Nebraska women of childbearing age remained virtually unchanged, fluctuating slightly, although inconsistently, from year-to-year (Figure 22).

Figure 22: Binge Drinking among Women of Childbearing Age (18-44 years old)*, Nebraska and U.S., 1989-2006



*Percentage of women, 18-44, who reported having four or more drinks on at least one occasion during the 30 days preceding the survey (defined as five or more drinks prior to 2006)

[^]Binge drinking definition changed for women in 2006 to include four or more drinks during one occasion
Source: Behavioral Risk Factor Surveillance System (BRFSS)

Alcohol Use among Pregnant Women

Alcohol Use and Pregnancy Indicator Definitions

The following two indicators are collected from women following their pregnancy using the Pregnancy Risk Assessment Monitoring System (PRAMS) survey (usually surveyed 3-6 months after delivery).

- Alcohol use during the three-months before pregnancy
- Alcohol use during the last three-months of pregnancy

Alcohol and Pregnancy Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Nation*	Nebraska vs. Nation	Trend
Alcohol use among pregnant women during the three-months before pregnancy	PRAMS	2002	57.9%	47.5%	Higher	Stable (00-02)
Alcohol use among pregnant women during the last three-months of pregnancy	PRAMS	2002	4.3%	5.6%	Non-Significant	Stable (00-02)

*National average from 27 states who participated in the 2002 PRAMS survey

Alcohol Use among pregnant women

- In 2002, nearly 3 in every 5 pregnant women in Nebraska (57.9%) reported drinking during the three-months before pregnancy while about 1 in every 23 (4.3%) reported drinking during the last three-months of pregnancy.

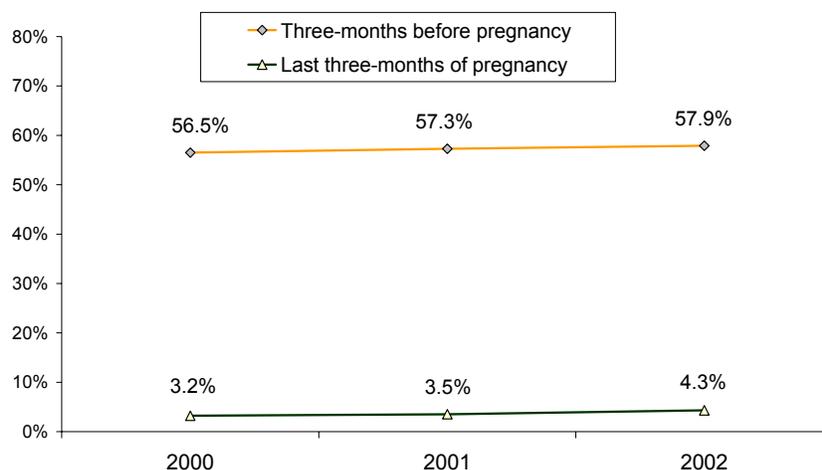
Compared to the Nation

- In 2002, pregnant women in Nebraska were more likely than pregnant women nationally to drink during the three-months before pregnancy, 57.9 percent and 47.5 percent, a difference of greater than 10 percentage points.
- When comparing alcohol consumption during the last three-months of pregnancy in 2002, pregnant women in Nebraska (4.3%) reported a similar percentage to pregnant women nationally (5.6%).

Trends

- Alcohol consumption among pregnant women in Nebraska during both the three-months before pregnancy and the last three-months of pregnancy remained relatively stable between 2000 and 2002 (Figure 23).

Figure 23: Alcohol Use among Pregnant Women in Nebraska*, 2000-2002



*Includes the self-reported consumption of any alcohol during the time periods specified
Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

TOBACCO - INTRODUCTION AND BACKGROUND

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 438,000 deaths (or nearly 1 of every 5 deaths) each year in the United States.¹

The health effects of cigarette smoking are well documented. Smoking cigarettes harms nearly every organ of the body, reduces the overall health of smokers and causes many diseases, including:

- **Cancer:** Cancer is the second leading cause of death in the United States and was one of the first diseases linked to cigarette smoking. Smoking accounts for about 90 percent of lung cancer deaths in women and almost 80 percent of lung cancer deaths in men. In addition, smoking causes cancers of the bladder, oral cavity, pharynx, larynx (voice box), esophagus, cervix, kidney, lung, pancreas, and stomach, and causes acute myeloid leukemia.
- **Cardiovascular Disease (Heart Disease, Stroke, and other Diseases of the Circulatory System):** Smoking contributes to coronary heart disease, the leading cause of death in the United States. Cigarette smokers are 2–4 times more likely to develop coronary heart disease than nonsmokers and more than 10 times as likely as nonsmokers to develop peripheral vascular disease.
- **Respiratory Disease and Other Effects:** About 90 percent of all deaths from chronic obstructive lung diseases are attributable to cigarette smoking. Cigarette smoking has many adverse reproductive and early childhood effects, including an increased risk for infertility, preterm delivery, stillbirth, low birth weight, and sudden infant death syndrome (SIDS).²

Environmental tobacco smoke (ETS) continues to threaten the health of nonsmokers. Between 38,000 to 67,500 people die each year from exposure to ETS, and even brief exposure can be dangerous.³ Concentrations of many carcinogenic chemicals are higher in ETS than in the smoke inhaled by smokers, including formaldehyde, benzene, vinyl chloride, arsenic, ammonia, and hydrogen cyanide. However, millions continue to be exposed to ETS, including children, thereby increasing their risk for SIDS, acute respiratory infections, ear problems, delayed lung growth, and increased asthma severity.

Costs and Consequences of Tobacco Use

In addition to the health consequences of tobacco use, the U.S. Department of Health and Human Services assesses the nationwide costs of tobacco use at more than \$50 billion each year in medical expenses alone. Added to those costs are the loss of income caused by illness and premature death and other indirect costs incurred by both the patient and family members. Indirect costs of smoking to society, such as lost productivity from increased absenteeism and productive years of lives lost is enormous. The Congressional Office of Technology Assessment estimated that yearly indirect costs from smoking-attributable illness and death totaled \$47.2 billion.⁴ Even though smokers die younger than the average American over the course of their lives, current and former smokers generate an estimated \$501 billion in excess health care costs.

Estimates for Nebraska from the Centers for Disease Control and Prevention (CDC) reveal that medical costs associated with tobacco use total \$537 million annually, with lost productivity of \$499 million for a combined total of over one billion dollars for the state.⁵

More than 126 million nonsmoking Americans continue to be exposed to ETS in homes, vehicles, workplaces, and public places, increasing their risk of heart disease by 25-30 percent and their lung cancer risk by 20-30 percent.⁶ Each year in the United States, ETS is responsible for an estimated

35,000 deaths from heart disease in non-smokers who live with smokers, about 3,400 lung cancer deaths in non-smoking adults, 150,000 – 300,000 new cases of lung infections (bronchitis and pneumonia) in children less than 18 months old, increases in the number and sensitivity of asthma attacks in about 200,000 to one million children who have asthma, and more than 75,000 middle ear infections in children.⁷

Youth and Tobacco Use

Every day, approximately 4,000 American youth aged 12-17 try their first cigarette; 54 percent of high school students admit to having ever tried cigarette smoking. Although the percentage of high school students who smoke has declined in recent years, rates remain high: 23 percent of high school students reported current cigarette use and 14 percent reported current cigar use (2005). Eight percent of high school students admit to recently using smokeless tobacco.⁸ Tobacco use by Nebraska youth is similar to youth nationally.

Consequences of Adolescent Tobacco Use

If current patterns of smoking behavior continue, an estimated 6.4 million of today's children can be expected to die prematurely from a smoking-related disease. Cigarette smoking by young people leads to immediate and serious health problems including respiratory and nonrespiratory effects, addiction to nicotine, and the associated risk of other drug use. Risk for cancers, cardiovascular diseases and respiratory problems rise as the individual continues to smoke with subsequent heart disease, stroke, and chronic lung disease, cancers of the lung, mouth, pharynx, esophagus, and bladder.

TOBACCO – SUMMARY OF KEY FINDINGS

CONSEQUENCES OF TOBACCO USE IN NEBRASKA

Cigarette smoking is a major contributor to death and medical care

- Smoking killed an estimated 2,115 Nebraska residents in 2004, accounting for about 1 in every 7 deaths (14.4%).
- In 2003, an estimated 8,517 smoking-related hospitalizations occurred among Nebraska residents.

Cigarette smoking causes fires

- In 2005, there were at least 54 structure fires in Nebraska that were determined to have resulted from cigarette smoking, killing three people and costing an estimated \$601,470 in property and content loss.

TOBACCO USE IN NEBRASKA

Tobacco use is common among youth and adults

- In 2005, nearly 3 in every 10 Nebraska high school students (28.0%), used tobacco (cigarettes, cigars, or smokeless tobacco) during the past month, while 28.9 percent of all persons 12 and older reported past month tobacco use.

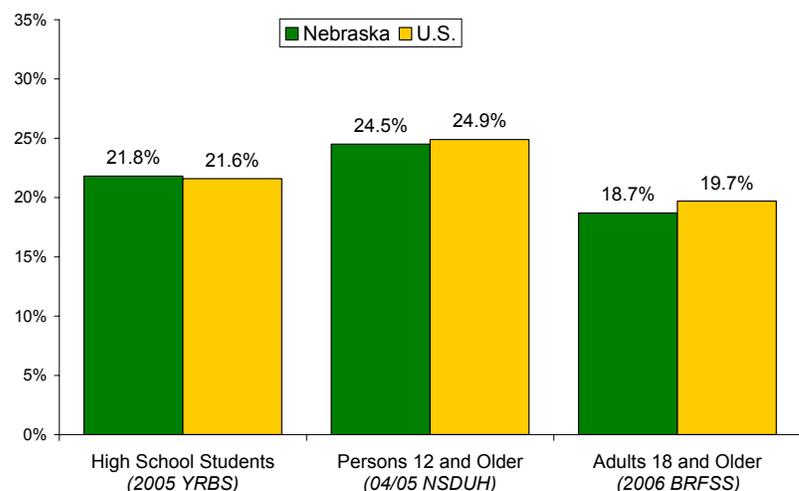
Cigarette smoking is the most common form of tobacco use

- In 2005, more than 1 in every 5 Nebraska high school students smoked cigarettes during the past month (21.8%) while nearly 1 in every 5 adults (18.7%) reported smoking in 2006 (Figure 1).
- Cigarette smoking among Nebraska residents was similar to residents nationally across the three data sources presented in this report that contain information on self-reported cigarette smoking (Figure 1).
- Since the early 1990s, cigarette smoking appears to have declined among high school students and remained relatively stable among adults.
- Nebraska women who delivered a child in 2002 were more likely than their national counterparts to report smoking during the three-months prior to pregnancy (27.4% and 23.2%, respectively), but were equally likely to smoke during the last three months and immediately following their pregnancy.

Cigarettes are a commonly sold product in Nebraska

- In 2006, 104.7 million packs of cigarettes were sold at the wholesaler level in Nebraska, for an average of 59.5 packs sold per Nebraska resident.

Figure 1: Current Cigarette Smoking* among Nebraska Residents compared to Residents Nationally; according to the YRBS, NSDUH, and BRFSS



*The BRFSS asks respondents to report if they currently use cigarettes while the YRBS and NSDUH ask about past month cigarette smoking.

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

- In 2005, nearly 1 in every 11 Nebraska high school students used smokeless tobacco during the past month (8.7%) while about 1 in every 22 adults (4.5%) reported past month use in 2004.
- Smokeless tobacco use among residents in Nebraska was similar to residents nationally.
- Since the early 1990s, smokeless tobacco use appears to have declined among high school students and remained relatively stable among adults.

DEMOGRAPHIC DIFFERENCES

Differences by age

- Residents in their late teens (Figure 2) and early 20s were the most likely to use tobacco products; although, as a result of the long latency period for health consequences from cigarette smoking, residents 65 and older were the most likely to die or be hospitalized as a result of cigarette smoking.

Differences by gender

- Males and females in Nebraska reported similar percentages for current cigarette smoking, among youth and adults; however, men were more likely than women to die or be hospitalized from cigarette smoking.
- Unlike cigarette smoking, males in Nebraska, compared to females, had a much higher percentage for smokeless tobacco use.

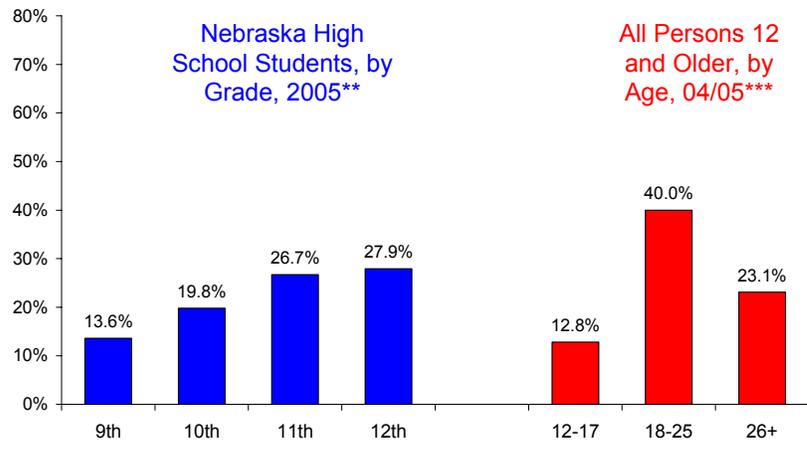
Differences by urban/rural

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

Differences by race/ethnicity

- Native American adults reported the highest percentage for current cigarette smoking at 62.0% (age-adjusted) compared to African Americans and Whites at 26 percent (the next highest groups), Figure 3. However, Whites and Native Americans reported the highest percentages for smokeless tobacco use.

Figure 2: Current Cigarette Smoking* among Nebraska Residents, by Age, according to the 2005 YRBS and the 2004/2005 NSDUH

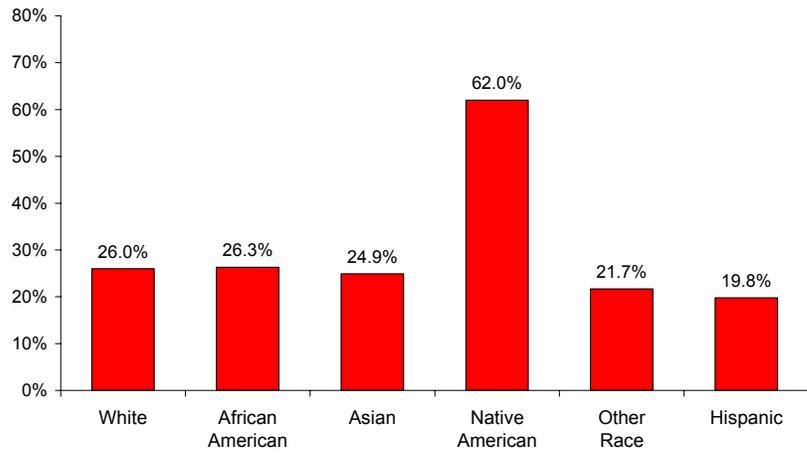


*Self-reported cigarette smoking during the 30 days preceding the survey

**Source: 2005 Youth Risk Behavior Survey

***Source: 2004/2005 National Survey on Drug Use and Health

Figure 3: Current Cigarette Smoking (age-adjusted) among Nebraska Adults* by Race/Ethnicity, 2004-2006 combined



*Adults 18 and older who report smoking 100+ cigarettes in their life and now smoke everyday or some days

Note: Racial categories include non-Hispanics, Hispanics can be of any race

Source: Nebraska BRFSS and Minority Oversample BRFSS Combined

TOBACCO – CONSEQUENCES OF USE

Smoking-Related Death

Each year cigarette smoking contributes to a large number of chronic disease deaths, including deaths due to cancer, cardiovascular disease, and respiratory disease. Since smoking is not coded as a direct cause of death on death certificates, the CDC developed smoking-attributable fractions (SAFs) that can be applied to death certificate data to generate estimates of the number of smoking-related deaths. Estimates of the number of smoking-related deaths presented in this report were calculated using SAFs from the CDC’s Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) software.

Smoking-Related Death Indicator

(Note: see methods section of this report for further detail on smoking-related death)

- Smoking-related deaths per 100,000 population (age-adjusted) represent the estimated number of deaths due to cigarette smoking. This estimate includes deaths resulting from conditions in which maternal smoking is a significant risk factor as well as deaths among persons 35 and older resulting from conditions in which smoking is often a contributing factor (e.g., cancer, heart disease). However, this estimate does not include deaths from secondhand smoke.

Smoking-Related Death Indicator Summary Table

Indicator	Data Sources	Year	Nebraska AA Rate	Number Deaths	National AA Rate	Nebraska vs. Nation	Trend
Smoking-related death estimate	NE Vital Records	2004	110.4*	2,115	NA**	NA**	Declined (99-04)
	SAMMEC^	2001	240.7^^	-	272.5^^	Lower	-

*Age-adjusted death rate per 100,000 population (2000 U.S. standard)

**National data were only available for 2001

^SAMMEC data on-line, available at <http://apps.nccd.cdc.gov/sammecc/>

^^Age-adjusted death rate per 100,000 population (2000 U.S. standard) among persons 35 and older

Smoking-Related Death in Nebraska

- In 2004, there were an estimated 2,115 smoking-related deaths in Nebraska for a rate (age-adjusted) of 110.4 deaths per 100,000 population.

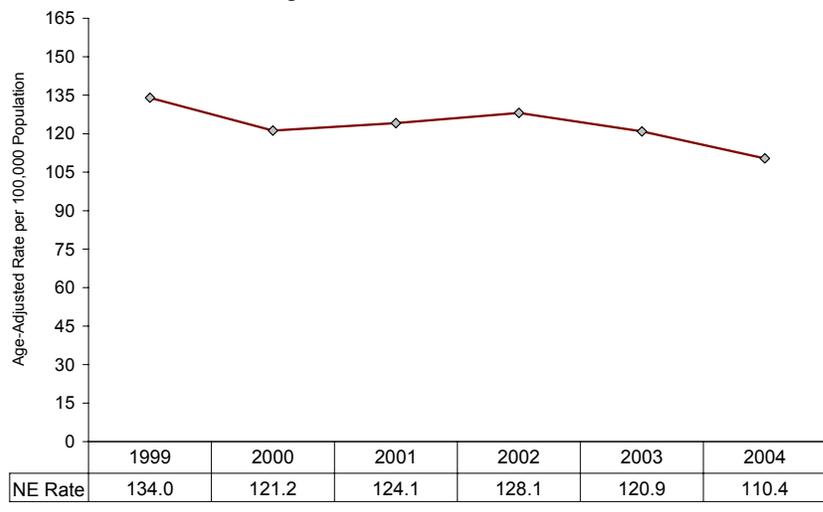
Compared to the Nation

- Based on data from 2001 (the most recent year available for national estimates), the age-adjusted smoking-related death rate among Nebraska residents 35 and older was lower than the rate for residents 35 and older nationally, 240.7 and 272.5 deaths per 100,000 population, respectively.

Trends

- Between 1999 and 2004, the smoking-related death rate per 100,000 population (age-

Figure 1: Estimated Smoking-Related Death Rate (age-adjusted) among Nebraska Residents, 1999-2004



Source: Nebraska Vital Records, using CDC SAMMEC methodology

adjusted) among Nebraska residents declined from 1999 (134.0) to 2000 (121.2), remained relatively stable between 2000 and 2003 (ranging between 120.9 and 128.1), and declined from 2003 (120.9) to 2004 (110.4) (Figure 1).

Demographic Differences in Smoking-Related Death

Differences by Age

- Between 2002 and 2004, smoking-related death rates in Nebraska increased dramatically as age increased, with residents 65 and older being 47 times more likely than residents 35-44 to die from a smoking-related death (Figure 2).

Differences by Gender

- Males, compared to females in Nebraska were 2.7 times more likely to die from a smoking-related death between 2002 and 2004, 190.8 and 71.8 deaths per 100,000 population, respectively.

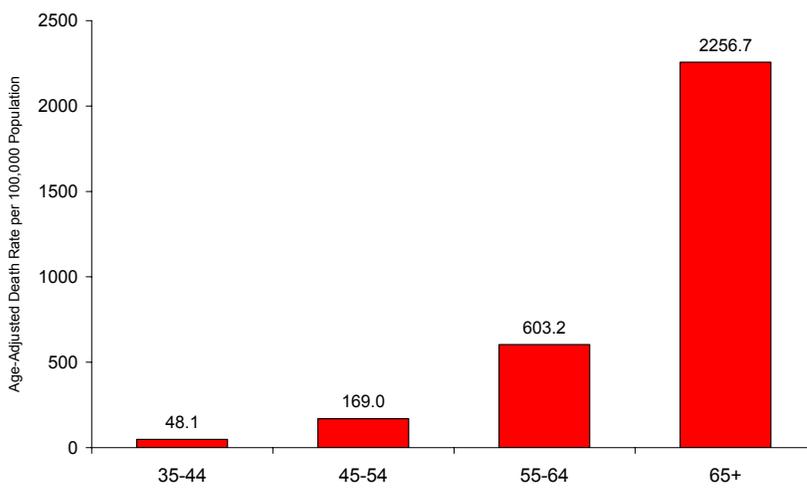
Differences by Urban/Rural

- Between 2002 and 2004, residents of metropolitan counties had the highest (age-adjusted) smoking-related death rate (127.0 deaths per 100,000 population), which was slightly higher than the rate for medium urban (117.3), small urban (114.2), and rural (117.6) counties (Figure 3).

Differences by Race/Ethnicity

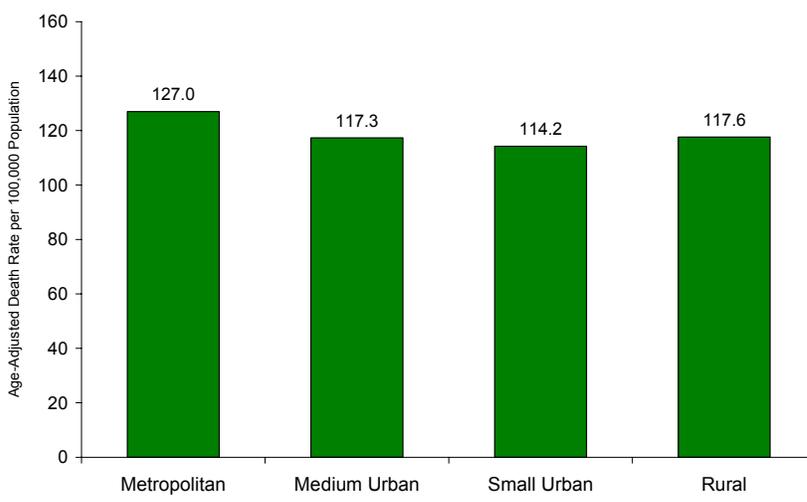
- Between 2002 and 2004, Native Americans (168.9) and African Americans (161.2) had the highest rate (age-adjusted) for smoking-related death, with the African American rate being significantly higher than the rate for Whites (119.7). In contrast, Whites had a higher rate than Hispanics (57.6) for smoking-related death (Figure 4).

Figure 2: Estimated Smoking-Related Death Rates* among Nebraska Residents, by Age, 2002-2004



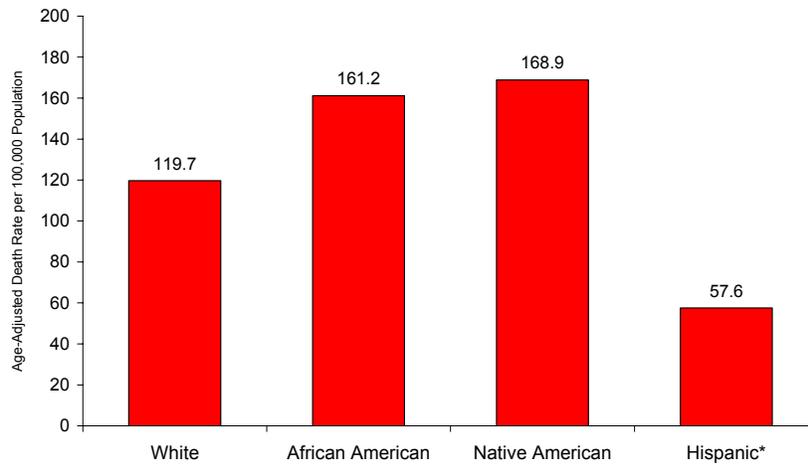
*Excludes infant deaths due to maternal smoking
Source: Nebraska Vital Records, using CDC SAMMEC methodology

Figure 3: Estimated Smoking-Related Death Rate (age-adjusted) among Nebraska Residents, by Urban/Rural, 2002-2004



*Age-adjusted death rates per 100,000 population
Source: Nebraska Vital Records, using CDC SAMMEC methodology

Figure 4: Estimated Smoking-Related Death Rate (age-adjusted) among Nebraska Residents, by Race/Ethnicity, 2002-2004



*Hispanics can be of any race
 Note: Insufficient number of deaths to report a rate for Asians
 Source: Nebraska Vital Records, using CDC SAMMEC methodology

Years of Potential Life Lost due to Smoking

In Nebraska, there is a tremendous amount of life lost prematurely that is directly attributable to cigarette smoking. One method for measuring premature mortality is through examining the years of life lost prior to age 75, also called years of potential life lost (or YPLL). Between 2002 and 2004, Nebraska residents lost 38,770 years of potential life due to cigarette smoking (12.3% of all YPLL in the state), for an average of 5.7 years of potential life lost per smoking-related death. Smoking-related YPLL was intentionally unranked in the following table due to smoking-related deaths overlapping with deaths from other causes, in particular cancer and heart disease. However, if it were included it would rank as the fourth leading cause of YPLL in Nebraska (Table 1).

Table 1: Leading Causes of Years of Potential Life Lost (Before Age 75) in Nebraska, 2002-2004 Combined

Rank	Cause of Death	Total Deaths	Total YPLL	Average YPLL Per Death
1	Cancer	10,029	69,487	6.9
2	Unintentional Injuries	2,190	51,199	23.4
3	Heart Disease	11,919	45,845	3.8
-	<i>Cigarette Smoking</i>	<i>6,843</i>	<i>38,770</i>	<i>5.7</i>
4	Suicide	542	17,312	31.9
5	Birth Defects	226	11,797	52.2
6	Stroke	3,169	8,320	2.6
7	Homicide	152	6,701	44.1
8	Chronic Lung Disease	2,283	6,568	2.9
9	Diabetes	1,193	6,256	5.2
10	Chronic Liver Disease	345	5,474	15.9

Source: Nebraska Vital Records

Smoking-Related Hospitalization

The Nebraska hospital discharge database contains information on medical care received at inpatient hospitals in Nebraska. For this report, hospital discharge data were limited to inpatient care, with estimates of the number of smoking-related hospitalizations among residents 35 and older being calculated using SAFs from the CDC's Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) software.

Smoking-Related Hospitalizations

Data Source: Nebraska Hospital Discharge Data

In 2003, there were an estimated 8,517 hospitalizations among Nebraska residents due to cigarette smoking, for a rate (age-adjusted) of 468.8 hospitalizations per 100,000 population.

Demographic Differences in Smoking-Related Hospitalizations

Differences by Age

- As age increased, smoking-related hospitalization rates increased, with residents 65 and older being 16 times more likely than residents 35 and older to have had a smoking-related hospitalization (Table 2).

Differences by Gender

- In 2003, men were 2.2 times more likely than women to have had a smoking-related hospitalization (676.4 and 308.2 hospitalizations per 100,000 population, respectively), Table 2, with the gender disparity being greatest among those 65 and older (Figure 5).

Table 2: Tobacco-Related Hospitalizations in Nebraska*, by Age and Gender, 2003

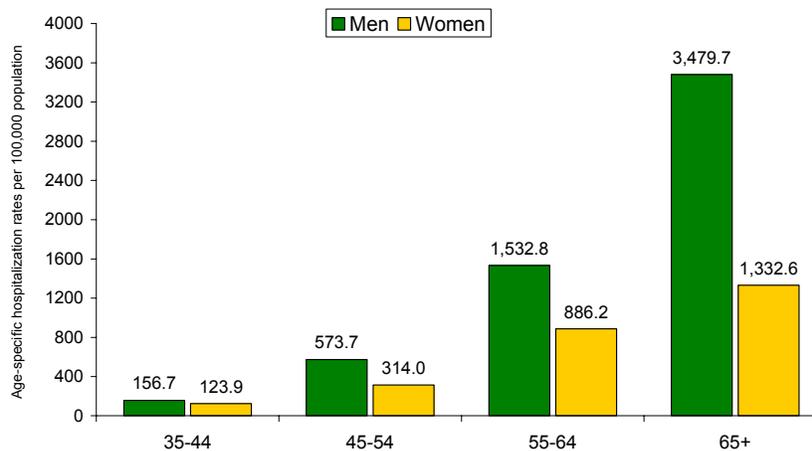
	Number	Percent	Rate**
Total	8,517	100.0%	468.8
Gender			
Male	5,452	64.0%	676.4
Female	3,065	36.0%	308.2
Age			
35-44	349	4.1%	140.4
45-54	1,086	12.8%	443.4
55-64	1,920	22.5%	1,204.0
65+	5,162	60.6%	2,224.4

*Estimates of smoking-related hospitalizations among Nebraska residents, calculated using SAMMEC smoking-attributable mortality fractions for persons 35+

**Rate per 100,000 population, total and gender rates are age-adjusted, age rates are age-specific

Source: Nebraska Hospital Discharge Data

Figure 5: Smoking-Related Hospitalization Rates* among Nebraska Residents 35 and Older, by Age and Gender, 2003



*Estimates of smoking-related hospitalization rates, calculated using SAMMEC smoking-attributable mortality fractions

Source: National Vital Records

Fires Resulting from Cigarette Smoking

In addition to smoking contributing to health consequences among individuals who smoke and those who are exposed to secondhand smoke, cigarettes also contribute to a large number of fires each year in Nebraska. Smoking-related fires result in death and injury as well as place a burden city services and the economy.

Smoking-Related Fires in Nebraska

Data Source: Nebraska State Fire Marshal's Office

In 2005, there were 1,782 structure fires in Nebraska, of which 54 (3.0%) were determined to have resulted from cigarette smoking. In addition, there were 333 structure fires during 2005 in which the cause of the fire was unknown, suggesting that there may have been additional smoking-related fires.

As a result of the 54 smoking-related fires in 2005, three civilians died while one received a non-fatal injury. The cost of the 54 smoking-related fires, including property and content loss, was estimated at \$601,470 in 2005.

TOBACCO – USE

Current Tobacco Use

Current Tobacco Use Indicator Definitions

- **Source YRBS:** Percentage of students in grades 9-12 who report smoking cigarettes or cigars or using smokeless tobacco products (chewing tobacco, snuff, or dip) on one or more of the 30 days preceding the survey.
- **Source NSDUH:** Percentage of persons 12 and older who report smoking part of all of a cigarette or cigar or using pipe tobacco or smokeless tobacco (chewing tobacco or snuff) on one or more of the 30 days preceding the survey

Current Tobacco Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Current Tobacco Use among High School Students	YRBS	2005	28.0%	28,000	28.4%	Non-Significant	Stable (03-05)*
Current Tobacco Use among Persons 12 and Older	NSDUH	2004/2005	28.9%	415,000	29.3%	Non-Significant	Stable (02-04)

*Based on two points in time, note that questions on cigar use were not asked before 1999, leaving only two years of weighted data (2003 and 2005) for trend analysis

Current Tobacco Use in Nebraska

Tobacco use is common among youth and adults in Nebraska.

- In 2005, nearly 3 in every 10 Nebraska high school students (28.0%), an estimated 28,000 students, reported using tobacco during the 30 days preceding the survey. (source: YRBS)
- During the combined years of 2004 and 2005, about 3 in every 10 Nebraska residents 12 and older (28.9%) reported using tobacco during the 30 days preceding the survey. (source: NSDUH)

Compared to the Nation

Tobacco use among Nebraska residents is similar to residents nationally.

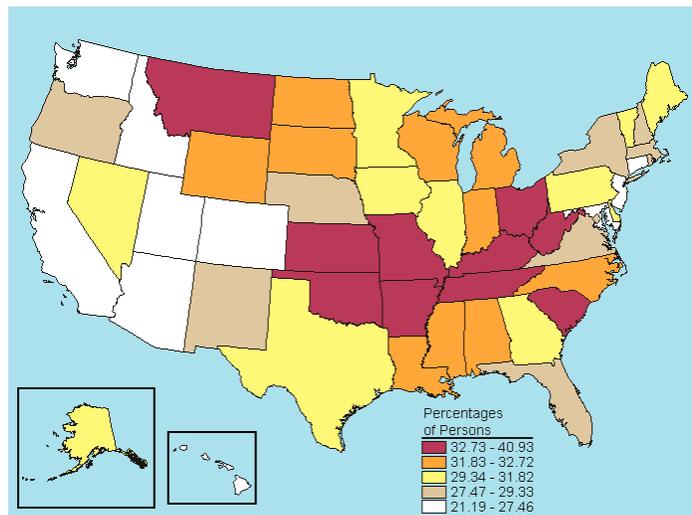
- In 2005, current tobacco use among Nebraska high school students (28.0%) was similar to high school students nationally (28.4%). (source: YRBS)
- During the combined years of 2004 and 2005, persons 12 and older in Nebraska were equally likely to use tobacco, 28.9 percent and 29.3 percent, respectively (Figure 1). Map 1 compares current tobacco use by state during 2004 and 2005 combined. (source: NSDUH)

Trends

Since 2002, trends for current tobacco use have remained relatively stable.

- Current tobacco use among

Map 1: Tobacco Use in Past Month among Persons 12 and Older, by State, 2004 and 2005 Combined

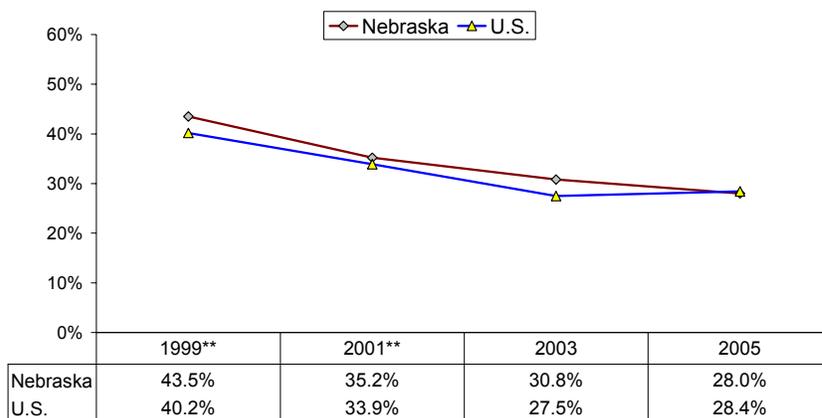


Source: Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health (NSDUH), <www.oas.samhsa.gov/nhsda.htm>

Nebraska high school students in 2005 (28.0%) was slightly lower, although not significantly lower than the percentage in 2003 (30.8%). However, it appears that tobacco use may have declined quite dramatically since 1999, although data from 1999 and 2001 were not weighted to represent all students, making interpretation unclear (Figure 1). (source: YRBS)

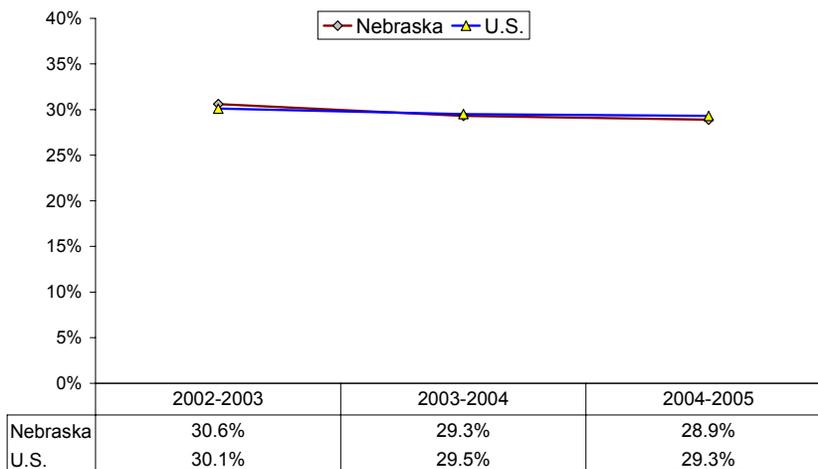
- Since 2002, current tobacco use among Nebraska residents 12 and older changed little from 2002/2003 (30.6%) to 2004/2005 (28.9%), Figure 2. (source: NSDUH)

Figure 1: Current Tobacco Use* among High School Students, Nebraska and U.S., 1999-2005



*Students in grades 9-12 reporting smoking cigarettes or cigars or using smokeless tobacco products (chewing tobacco, snuff, or dip) during the 30 days preceding the survey
 **Due to a low response rate, Nebraska data were not weighted to represent all students statewide
 Note: Question on cigar use were not asked prior to 1999
 Source: Youth Risk Behavior Survey (YRBS)

Figure 2: Current Tobacco Use* among Persons 12 and Older, Nebraska and U.S., 2002-2005



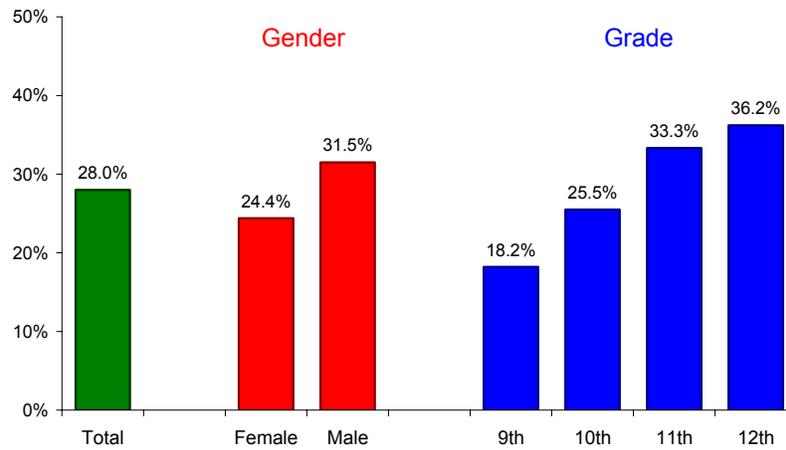
*Persons 12 and older reporting smoking cigarettes, cigars, or pipe tobacco or using smokeless tobacco (chewing tobacco or snuff) during the 30 days preceding the survey
 Source: National Survey on Drug Use and Health (NSDUH)

Demographic Differences in Current Tobacco Use

Differences by Age

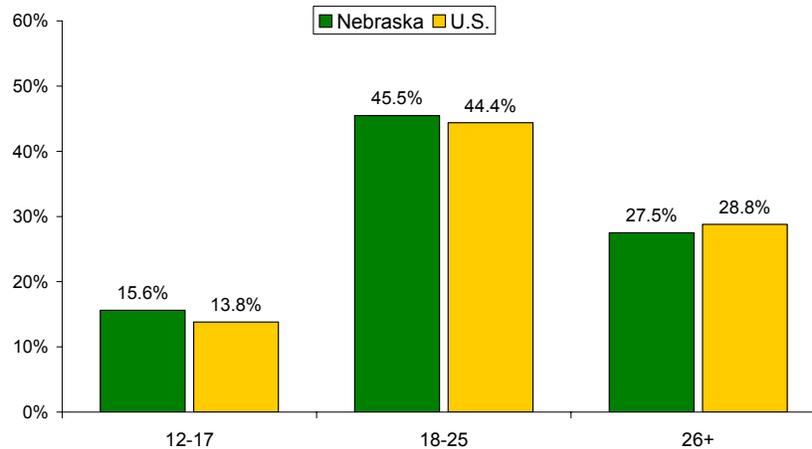
- In 2005, as grade level increased, current tobacco use among high school students increased from 18.2 percent in 9th grade to 36.2 percent in 12th grade (Figure 3). (source: YRBS)
- According to the 2004/2005 NSDUH, current tobacco use was higher among residents 18-25 (45.5%) when compared to residents 26 and older (27.5%) and 12-17 (15.6%), Figure 4.

Figure 3: Current Tobacco Use* among Nebraska High School Students, by Gender and Grade, 2005



*Students in grades 9-12 reporting smoking cigarettes or cigars or using smokeless tobacco products (chewing tobacco, snuff, or dip) during the 30 days preceding the survey
Source: Nebraska Youth Risk Behavior Survey (YRBS)

Figure 4: Current Tobacco Use* among Persons 12 and Older, Nebraska and U.S., by Age, 2004-2005 Combined



*Persons 12 and older reporting smoking cigarettes, cigars, or pipe tobacco or using smokeless tobacco (chewing tobacco or snuff) during the 30 days preceding the survey
Source: National Survey on Drug Use and Health (NSDUH)

Differences by Gender

- In 2005, male students reported a higher percentage than female students for current tobacco use, 31.5 percent and 24.4 percent, respectively (Figure 3). (source: YRBS)
- Differences by gender among persons 12 and older from the NSDUH were unavailable.

Differences by Urban/Rural and Race/Ethnicity

- Differences by urban/rural and race/ethnicity were unavailable for this indicator.

Current Cigarette Smoking

Current Cigarette Smoking Indicator Definitions

- **Source YRBS:** Percentage of students in grades 9-12 who report smoking cigarettes on one or more of the 30 days preceding the survey.
- **Source NSDUH:** Percentage of persons 12 and older who report smoking part of all of a cigarette on one or more of the 30 days preceding the survey
- **Source BRFSS:** Percentage of adults 18 and older who report having smoked at least 100 cigarettes during their lifetime and currently smoke everyday or on some days

Current Cigarette Smoking Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Current Cigarette Smoking among High School Students	YRBS	2005	21.8%	22,000	23.0%	Non-Significant	Decreased (91-05)
Current Cigarette Smoking among Persons 12 and Older	NSDUH	2004/2005	24.5%	352,000	24.9%	Non-Significant	Stable (02-04)
Current Cigarette Smoking among Adults 18 and Older	BRFSS	2006	18.7%	239,000	19.7%	Non-Significant	Stable (89-06)

Current Cigarette Smoking in Nebraska

Cigarette smoking is common among both youth and adults in Nebraska.

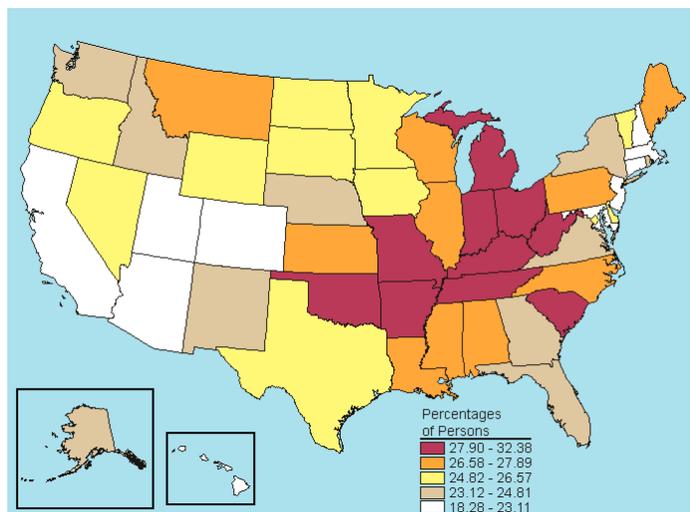
- In 2005, roughly 1 in every 5 Nebraska high school students (21.8%), an estimated 22,000 students, reported smoking cigarettes during the 30 days preceding the survey. (*source: YRBS*)
- During the combined years of 2004 and 2005, 1 in every 4 Nebraska residents 12 and older (24.5%) reported smoking cigarettes during the 30 days preceding the survey. (*source: NSDUH*)
- In 2006, nearly 1 in every 5 Nebraska adults (18.7%), an estimated 239,000 adults, reported that they currently smoke cigarettes (either everyday or on some days). (*source: BRFSS*)

Compared to the Nation

Current cigarette smoking among Nebraska youth and adults is similar to youth and adults nationally.

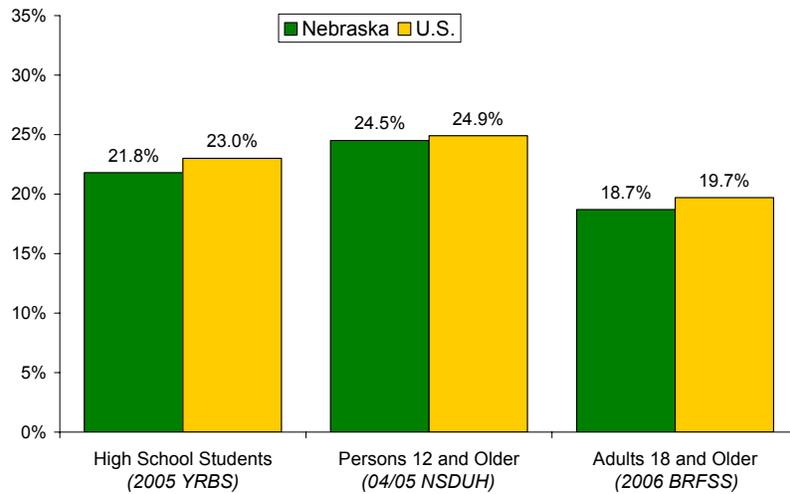
- In 2005, current cigarette smoking among Nebraska high school students (21.8%) was similar to high school students nationally (23.0%), Figure 5. (*source: YRBS*)
- During the combined years of 2004 and 2005, persons 12 and older in Nebraska were equally likely to persons 12 and older nationally to smoke cigarettes, 24.5 percent and 24.9 percent, respectively (Figure 5). Map 2 compares current cigarette smoking by state during 2004 and 2005 combined. (*source: NSDUH*)
- In 2006, adults in Nebraska reported a similar percentage to adults nationally for current cigarette smoking (18.7% and 19.7%, respectively), Figure 5. (*source: BRFSS*)

Map 2: Cigarette Smoking in Past Month among Persons 12 and Older, by State, 2004 and 2005 Combined



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

Figure 5: Current Cigarette Smoking* among Nebraska Residents compared to Residents Nationally; according to the YRBS, NSDUH, and BRFSS



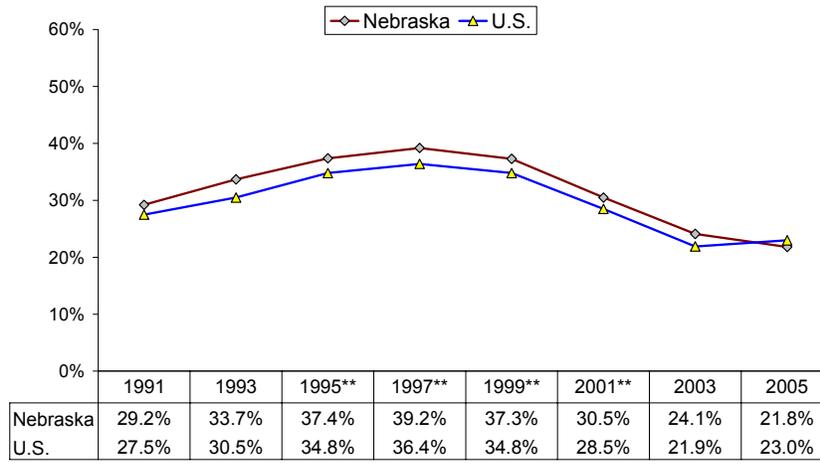
*The BRFSS asks respondents to report if they currently use cigarettes while the YRBS and NSDUH ask about past month cigarette smoking.

Trends

Trends for current cigarette smoking appear to have declined among youth and remained relatively stable among adults.

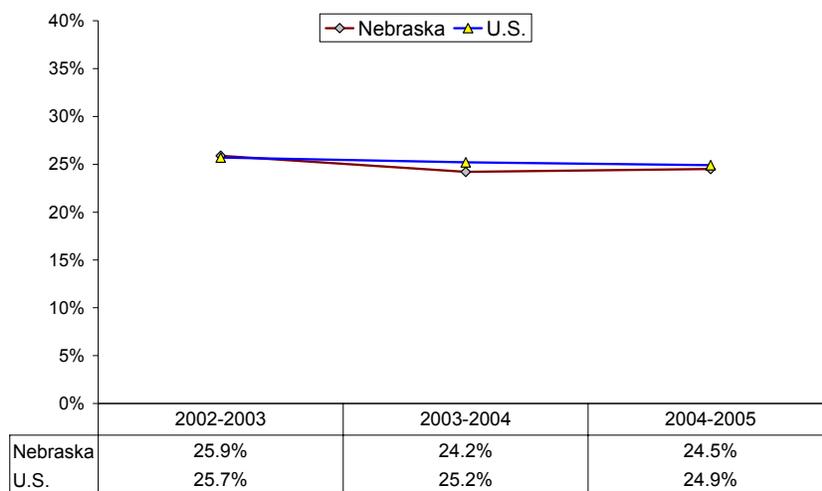
- Current cigarette smoking among Nebraska high school students declined since the early 1990s (Figure 6). During 1991 (29.2%) and 1993 (33.7%), the percentage was around one-third of all students compared to 24.1 percent in 2003 and 21.8 percent in 2005. (source: YRBS)
- Since 2002, current smoking among Nebraska residents 12 and older changed little from 2002/2003 (25.9%) to 2004/2005 (24.5%), Figure 7. (source: NSDUH)
- Among Nebraska adults 18 and older, the 2006 percentage for current cigarette smoking (18.7%) was lower than the 2005 percentage (21.3%); however, prior to 2006, the percentage since the early 1990s was relatively stable (Figure 8). (source: BRFSS)

Figure 6: Current Cigarette Smoking* among High School Students, Nebraska and U.S., 1991-2005



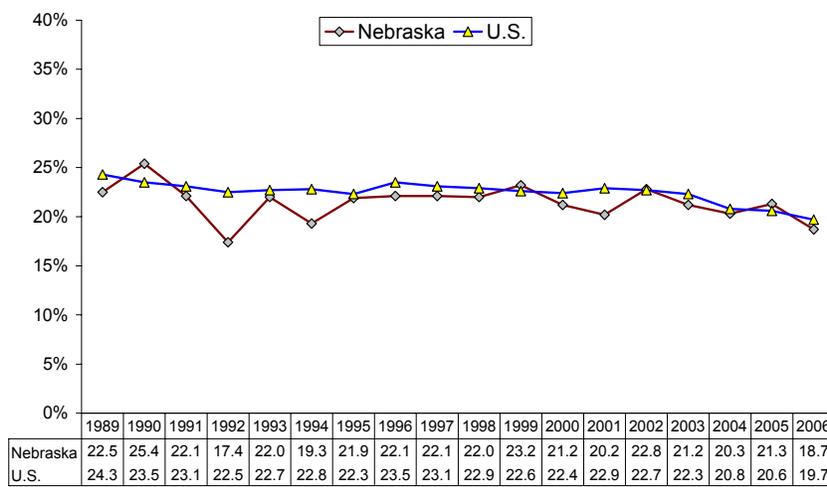
*Students in grades 9-12 reporting smoking cigarettes during the 30 days preceding the survey
 **Due to a low response rate, Nebraska data were not weighted to represent all students statewide
 Source: Youth Risk Behavior Survey (YRBS)

Figure 7: Current Cigarette Smoking* among Persons 12 and Older, Nebraska and U.S., 2002-2005



*Persons 12 and older reporting cigarette smoking during the 30 days preceding the survey
Source: National Survey on Drug Use and Health (NSDUH)

Figure 8: Current Cigarette Smoking among Adults, Nebraska and U.S., 1989-2006



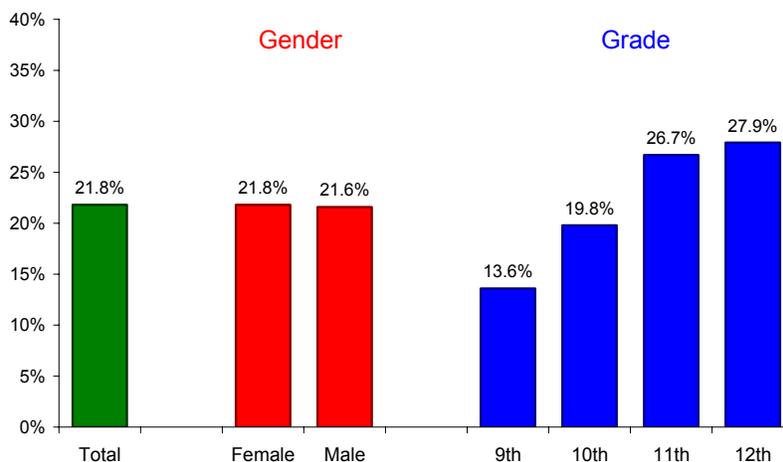
*Adults 18 and older who report smoking 100+ cigarettes in their life and now smoke everyday or some days
Source: Behavioral Risk Factor Surveillance System (BRFSS)

Demographic Differences in Current Cigarette Smoking

Differences by Age

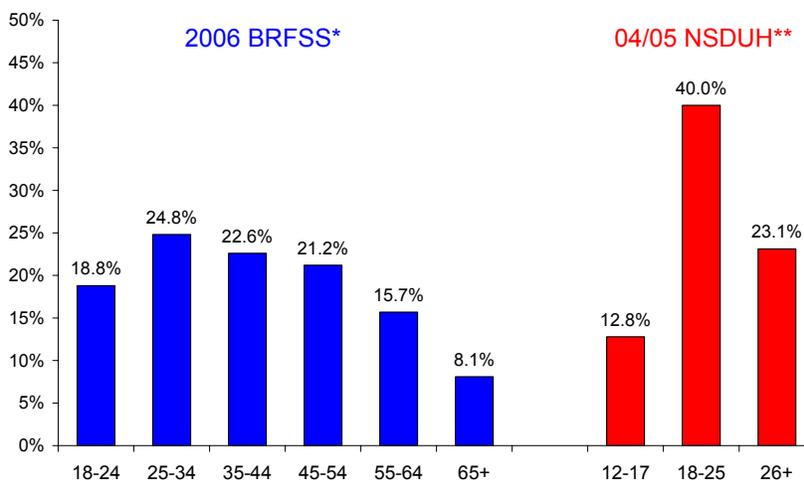
- In 2005, as grade level increased, current smoking among high school students increased from 13.6 percent in 9th grade to 27.9 percent in 12th grade (Figure 9). (*source: YRBS*)
- According to the 2006 BRFSS, adults 25-34 years of age were the most likely to report current cigarette smoking (Figure 10). However, while trends among 25-54 years old have remained relatively stable in recent years, trends among 18-24 year olds have changed inconsistently, with the 2006 percentage (18.8%) being substantially lower than other recent years.
- According to the 2004/2005 NSDUH, current cigarette smoking was higher among residents 18-25 (40.0%) when compared to residents 26 and older (23.1%) and 12-17 (12.8%), Figure 10.

Figure 9: Current Cigarette Smoking* among Nebraska High School Students, by Gender and Grade, 2005



*Students who reported cigarette smoking during the 30 days preceding the survey
Source: Nebraska Youth Risk Behavior Survey (YRBS)

Figure 10: Current Cigarette Smoking among Nebraska Residents, by Age, according to the 2006 BRFSS and the 2004/2005 NSDUH



*Adults 18 and older who report smoking 100+ cigarettes in their life and now smoke everyday or some days
**Persons 12 and older reporting cigarette smoking during the 30 days preceding the survey

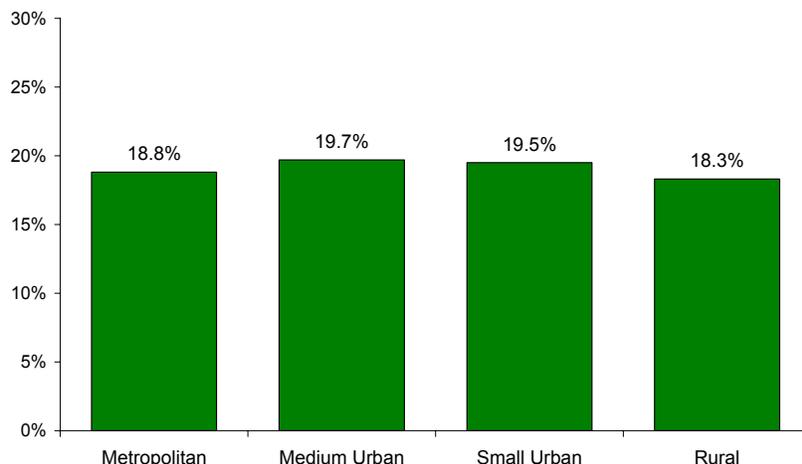
Differences by Gender

- Male and female high school students reported a similar percentage for current cigarette smoking in 2005 (21.6% and 21.8%), Figure 9. (source: YRBS)
- In 2006, although non-significant, men had a slightly higher percentage than women for current cigarette smoking, 19.6 percent and 17.8 percent, respectively. (source: BRFSS)

Differences by Urban/Rural

- In 2006, beyond differences in age (using age-adjustment), current cigarette smoking among Nebraska adults varied little between the four urban/rural categories presented within this report (Figure 11).

Figure 11: Current Cigarette Smoking (age-adjusted) among Nebraska Adults* by Urban/Rural, 2006

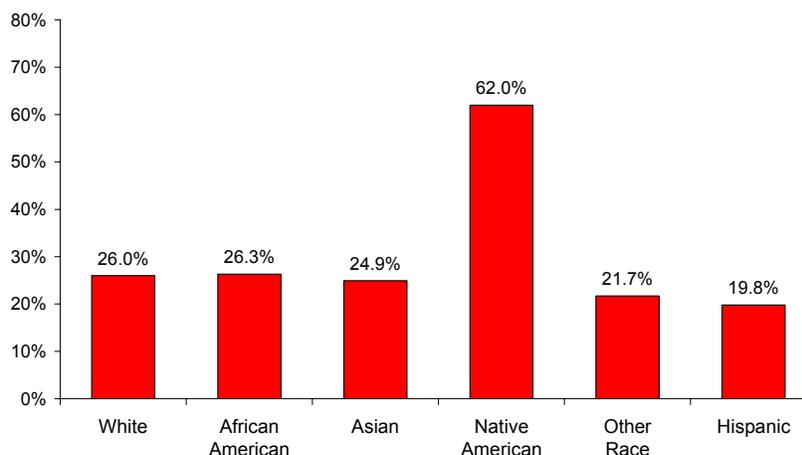


*Adults 18 and older who report smoking 100+ cigarettes in their life and now smoke everyday or some days
Source: Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Differences by Race/Ethnicity

- YRBS data did not provide a sufficient number of cases for analysis by race/ethnicity.
- When examining differences in current cigarette smoking by race/ethnicity during the combined years of 2004-2006, beyond difference in age (using age-adjustment), Native American adults reported the highest percentage (62.0%), making them more likely than adults of all other racial and ethnic groups to smoke cigarettes. Whites (26.0%), African Americans (26.3%), and Asians (24.9%) reported similar percentages, which were higher, although not significantly higher than the percentage for Hispanic adults (19.8%). Figure 12 provides a breakdown of current cigarette smoking among Nebraska adults by race/ethnicity.

Figure 12: Current Cigarette Smoking (age-adjusted) among Nebraska Adults* by Race/Ethnicity, 2004-2006 combined



*Adults 18 and older who report smoking 100+ cigarettes in their life and now smoke everyday or some days
Note: Racial categories include non-Hispanics, Hispanics can be of any race
Source: Nebraska BRFSS and Minority Oversample BRFSS Combined

Cigarette Sales

Cigarette sales data in Nebraska are collected at the wholesaler level. As a result, estimates are based on the number of packs of cigarettes sold to retailers, not necessarily the number of packs purchased and smoked by individuals.

Cigarette Sales Indicator Definitions

- Per capita sales (in packs) at the wholesaler level among all residents.

Cigarette Sales Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Total Packs	Nation	Nebraska vs. Nation	Trend
Per capita cigarette sales (in packs) among all residents	The Tax Burden on Tobacco*	2006	59.5	104.7 million	71.0	Lower	Decreased (97-06)

*The Tax Burden on Tobacco, Volume 41, 2006, prepared by Orzechowski and Walker, Arlington, VA.

Current Cigarette Sales in Nebraska

- In 2006, 104.7 million packs of cigarettes were sold in Nebraska at the wholesaler level, for an average of 59.5 packs of cigarettes sold per Nebraska resident.

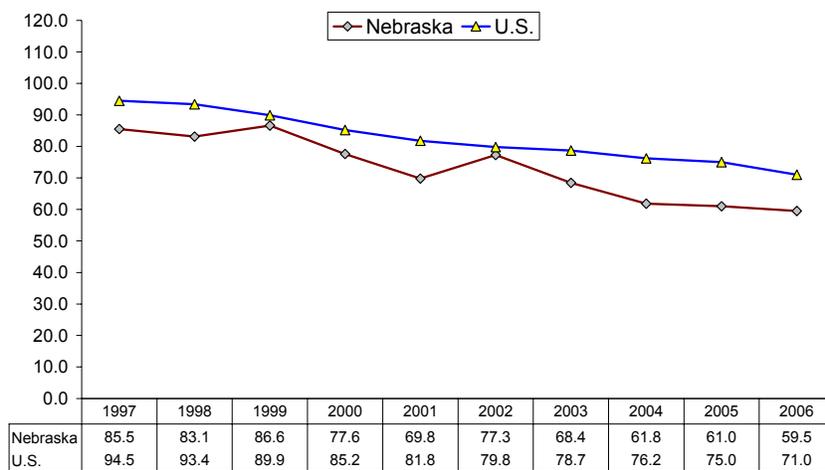
Compared to the Nation

- In 2006, per capita cigarette sales (in packs) among Nebraska residents (59.5 packs per person) was lower than residents nationally (71.0 packs per person).

Trends

- Over the 10-year time period from 1997 to 2006, per capita cigarette sales (in packs) among Nebraska residents declined from more than 80 packs per person in the late 1990s to 59.5 packs per person in 2006 (Figure 13).

Figure 13: Per Capita Cigarette Sales (in packs)*; Nebraska and U.S.; 1997-2006



*Per capita sales among persons of all ages at the wholesaler (not retailer) level.
Source: The Tax Burden on Tobacco, Volume 41, 2006, prepared by Orzechowski and Walker, Arlington, VA

Early Initial Cigarette Smoking among Youth

Early initial cigarette smoking refers to the smoking before 13 years of age.

Early Initial Cigarette Smoking Indicator Definition

- Source YRBS: Percentage of students in grades 9-12 who report smoking a whole cigarette for the first time before age 13.

Early Initial Cigarette Smoking Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Early Initial Cigarette Smoking among High School Students	YRBS	2005	16.5%	17,000	16.0%	Non-Significant	Decreased (91-05)

Early Initial Cigarette Smoking among Nebraska Youth

- In 2005, approximately 1 in every 6 Nebraska high school students (16.5%), an estimated 17,000 students, reported smoking a whole cigarette for the first time before age 13.

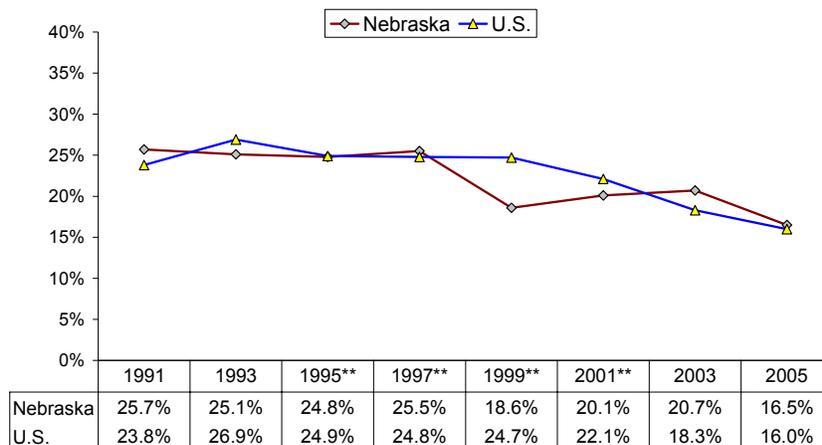
Early Initial Cigarette Smoking Compared to the Nation

- In 2005, high school students in Nebraska, compared to high school students nationally, had a similar percentage for early initial cigarette smoking, 16.5 percent and 16.0 percent, respectively.

Trends in Early Initial Cigarette Smoking among Nebraska Youth

- Early initial cigarette smoking among Nebraska high school students has decreased since the early 1990s (Figure 14). More recently, the percentage declined from 2003 (20.7%) to 2005 (16.5%).

Figure 14: Early Initial Cigarette Smoking* among High School Students, Nebraska and U.S., 1991-2005



*Students in grades 9-12 who report smoking a cigarette for the first time before age 13.

**Due to a low response rate, Nebraska data were not weighted to represent all students statewide
Source: Youth Risk Behavior Survey (YRBS)

Lifetime Cigarette Smoking among Youth

Lifetime Cigarette Smoking Indicator Definition

- **YRBS:** Percentage of students in grades 9-12 who report having every tried cigarette smoking, even one or two puffs, during their lifetime

Lifetime Cigarette Smoking Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Lifetime Cigarette Smoking among High School Students	YRBS	2005	53.4%	54,000	54.3%	Non-Significant	Decreased (91-05)

Lifetime Cigarette Smoking among Nebraska Youth

- In 2005, slightly more than half of Nebraska high school students (53.4%), an estimated 54,000 students, reported trying cigarette smoking during their lifetime.

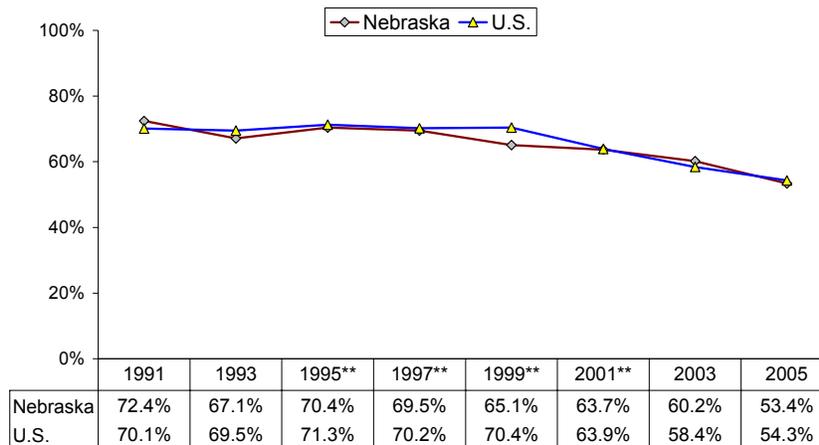
Lifetime Cigarette Smoking Compared to the Nation

- In 2005, high school students in Nebraska, compared to high school students nationally, had a similar percentage for lifetime cigarette smoking, 53.4 percent and 54.3 percent, respectively.

Trends in Lifetime Cigarette Smoking among Nebraska Youth

- Lifetime cigarette smoking among Nebraska high school students declined since the early 1990s (Figure 15). During 1991 (72.4%) and 1993 (67.1%), the percentage was more than two-thirds of all students compared to 60.2 percent in 2003 and 53.4 percent in 2005.

Figure 15: Lifetime Cigarette Smoking* among High School Students, Nebraska and U.S., 1991-2005



*Students in grades 9-12 who report having tried cigarette smoking (even one or two puffs) during their life

**Due to a low response rate, Nebraska data were not weighted to represent all students statewide

Source: Youth Risk Behavior Survey (YRBS)

High-Risk Population: Cigarette Smoking among Pregnant Women & Women of Child-Bearing Age

Cigarette Smoking among Women of Childbearing Age

Smoking among Women of Childbearing Age Indicator Definition

- **BRFSS:** Percentage of women 18-44 who report having smoked at least 100 cigarettes during their lifetime and currently smoke everyday or on some days.

Smoking among Women of Childbearing Age Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Cigarette Smoking among women 18-44	BRFSS	2006	21.9%	68,000	20.6%	Non-Significant	Stable (89-06)

Smoking among women of childbearing age

- In 2006, about 1 in every 5 Nebraska women in their childbearing years (21.9%), or those between 18 and 44 years of age reported cigarette smoking everyday or on some days. This suggests that an estimated 68,000 women of childbearing age smoked cigarettes in 2006.

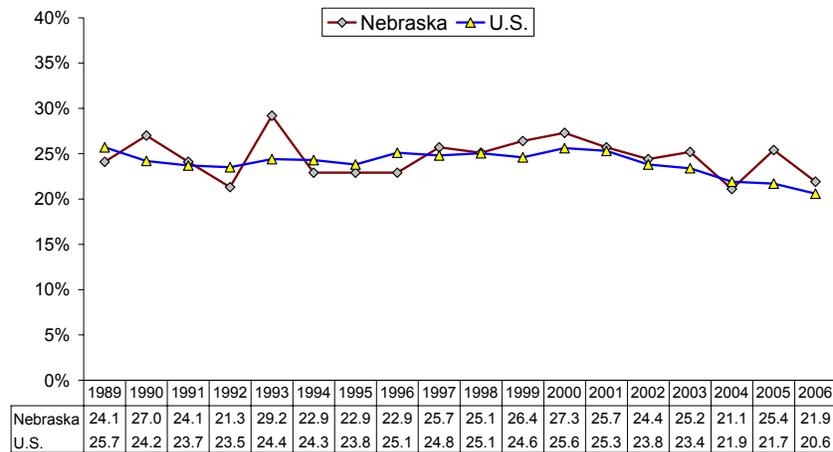
Compared to the Nation

- Women of childbearing age in Nebraska reported a similar percentage to women nationally for current smoking, 21.9 percent and 20.6 percent, respectively.

Trends

- Between 1989 and 2006, current smoking among Nebraska women of childbearing age fluxuated inconsistently from year-to-year, suggesting little overall change during this time period (Figure 16).

Figure 16: Cigarette Smoking among Women of Childbearing Age (18-44 years old)*, Nebraska and U.S., 1989-2006



*Percentage of women, 18-44, who report having smoked 100 or more cigarettes in their life and now smoke everyday or on some days

Source: Behavioral Risk Factor Surveillance System (BRFSS)

Cigarette Smoking among Pregnant Women

Smoking and Pregnancy Indicator Definitions

The following three indicators are collected from women following their pregnancy using the Pregnancy Risk Assessment Monitoring System (PRAMS) survey.

- Cigarette smoking during the three-months before pregnancy
- Cigarette smoking during the last three-months of pregnancy
- Cigarette smoking after pregnancy (generally reported three to six months after pregnancy)

Smoking and Pregnancy Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Nation*	Nebraska vs. Nation	Trend
Cigarette smoking during the three-months before pregnancy	PRAMS	2002	27.4%	23.2%	Higher	Stable (00-02)
Cigarette smoking during the last three-months of pregnancy	PRAMS	2002	14.4%	13.1%	Non-Significant	Stable (00-02)
Cigarette smoking after pregnancy	PRAMS	2002	19.8%	18.2%	Non-Significant	Stable (00-02)

*National average from 27 states who participated in the 2002 PRAMS survey

Smoking among pregnant women

- In 2002, more than one-fourth of pregnant women in Nebraska (27.4%) reported smoking during the three-months before pregnancy, 1 in every 7 (14.4%) reported smoking during the last three-months of pregnancy, and 1 in every 5 (19.8%) reported smoking after pregnancy.

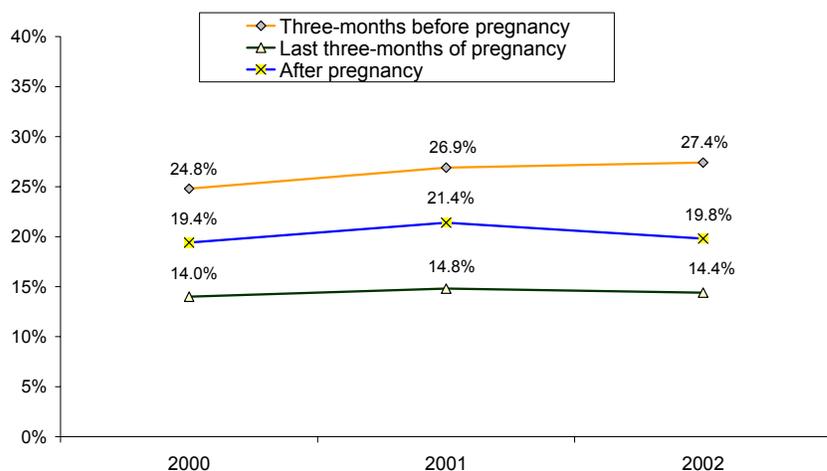
Compared to the Nation

- In 2002, pregnant women in Nebraska were more likely than pregnant women nationally to smoke cigarettes during the three-months before pregnancy (27.4% and 23.2%, respectively) and were equally likely to have smoked during the last three-months of pregnancy and after pregnancy.

Trends

- Cigarette smoking among pregnant women in Nebraska during the three-months before pregnancy increased slightly (although non-significantly) between 2000 and 2002, and remained stable for smoking during the last three-months of pregnancy and smoking after pregnancy (Figure 17).

Figure 17: Cigarette Smoking among Pregnant Women in Nebraska*, 2000-2002



*Includes self-reported smoking during the time periods specified
Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Current Smokeless Tobacco Use

Current Smokeless Tobacco Use Indicator Definitions

- **Source YRBS:** Percentage of students in grades 9-12 who report smokeless tobacco use (e.g., chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen) on one or more of the 30 days preceding the survey.
- **Source BRFSS:** Percentage of adults 18 and older who report having used smokeless tobacco products (e.g., chewing tobacco or snuff) during their lifetime and currently use them everyday or on some days

Current Smokeless Tobacco Use Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Current Smokeless Tobacco Use among High School Students	YRBS	2005	8.7%	8,700	8.0%	Non-Significant	Decreased (91-05)
Current Smokeless Tobacco Use among Adults 18 and Older	BRFSS	2004*	4.5%	58,000	3.7%^	Non-Significant^	Stable (90-06)

*2004 was the most recent year available, questions were not asked on the 2005 or 2006 survey

^National average from 13 states/territories who asked questions on smokeless tobacco use in 2004

Current Smokeless Tobacco Use Smoking in Nebraska

Although it is less common than cigarette smoking, smokeless tobacco use is relatively common among youth and adults (particularly young adults) in Nebraska.

- In 2005, nearly 1 in every 11 Nebraska high school students (8.7%), an estimated 8,700 students, reported using smokeless tobacco during the 30 days preceding the survey. (source: YRBS)
- In 2004, about 1 in every 22 Nebraska adults (4.5%), an estimated 58,000 adults, reported that they use smokeless tobacco products (either everyday or on some days). (source: BRFSS)

Compared to the Nation

Current smokeless tobacco use among Nebraska youth and adults was similar to youth and adults nationally.

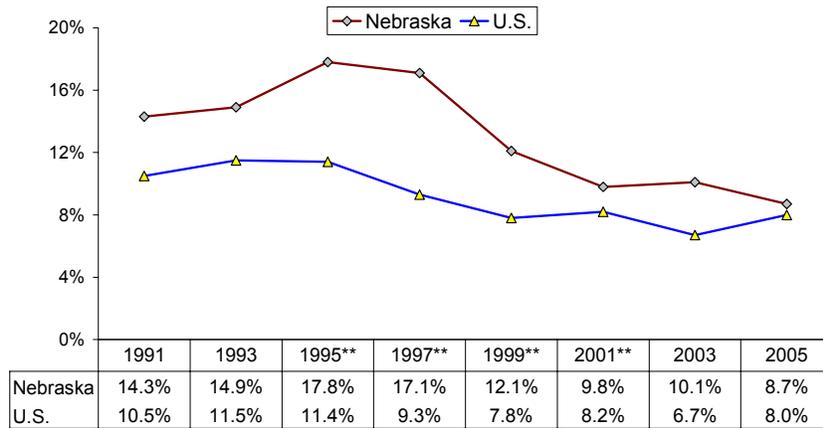
- In 2005, current smokeless tobacco use among Nebraska high school students (8.7%) was similar to high school students nationally (8.0%). (source: YRBS)
- In 2004, adults in Nebraska reported a similar percentage to adults nationally for current smokeless tobacco use, 4.5 percent and 3.7 percent, respectively. (source: BRFSS)

Trends

Trends for current smokeless tobacco use appear to have declined among youth and remained relatively stable among adults.

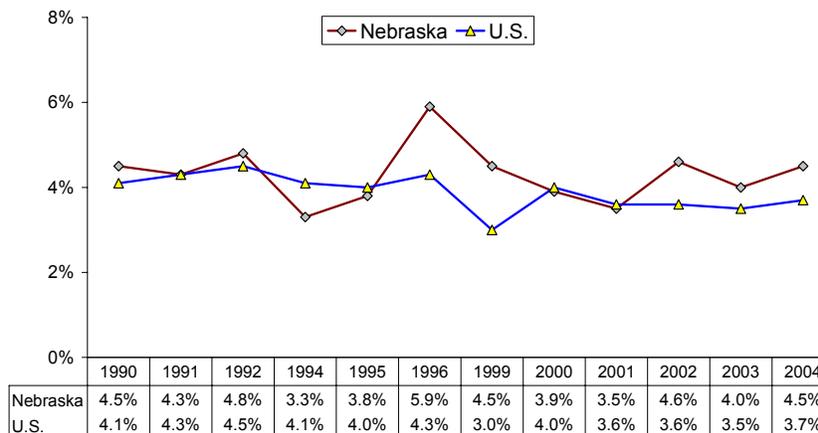
- Current smokeless tobacco use among Nebraska high school students declined since the early 1990s (Figure 18). During 1991 (14.3%) and 1993 (14.9%), the percentage suggested approximately 1 in every 7 students used smokeless tobacco compared to 1 in every 10 in 2003 (10.1%) and about 1 in every 11 in 2005 (8.7%). (source: YRBS)
- Since 1990, smokeless tobacco use among Nebraska adults changed inconsistently, ranging from a low of 3.3 percent in 1994 to a high of 5.9 percent in 1996, with estimates during most years falling between 3.5 and 4.5 percent (Figure 19). (source: BRFSS)

Figure 18: Current Smokeless Tobacco Use* among High School Students, Nebraska and U.S., 1991-2005



*Students in grades 9-12 who report smokeless tobacco use (e.g., chewing tobacco, snuff, or dip) on one or more of the 30 days preceding the survey
 **Due to a low response rate, Nebraska data were not weighted to represent all students statewide
 Source: Youth Risk Behavior Survey (YRBS)

Figure 19: Current Smokeless Tobacco Use among Adults*, Nebraska and U.S., 1990-2006



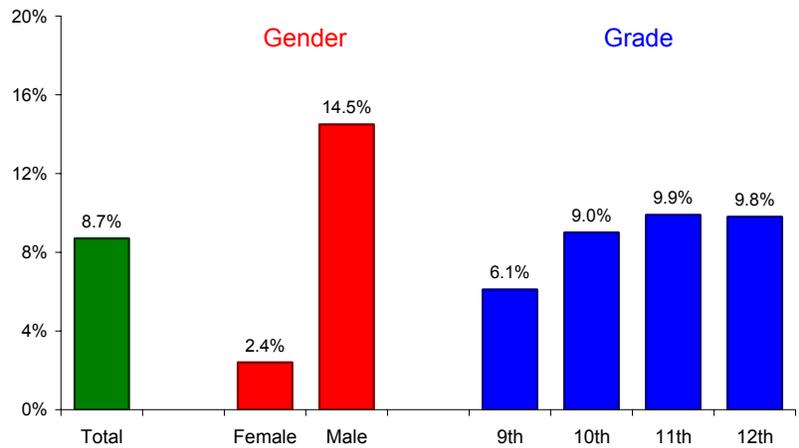
*Adults 18 and older who report using smokeless tobacco products (e.g. chewing tobacco or snuff) everyday or on some days
 **National estimates based on only those states who asked the optional smokeless tobacco use questions
 Source: Behavioral Risk Factor Surveillance System (BRFSS)

Demographic Differences in Current Smokeless Tobacco Use

Differences by Age

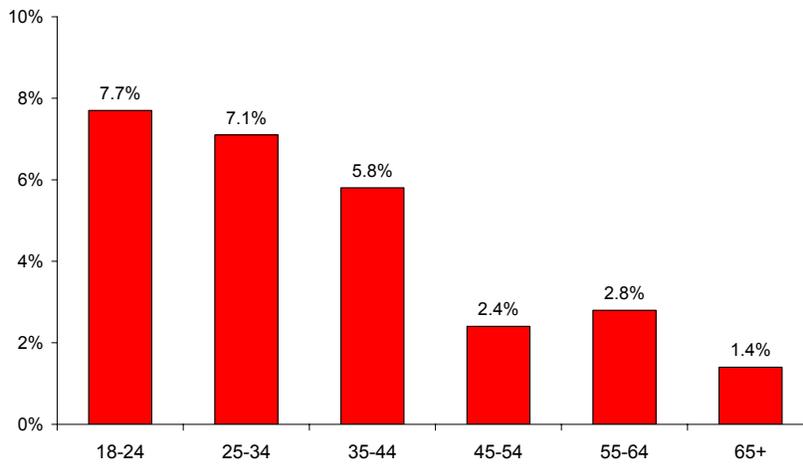
- In 2005, 9th grade students (6.1%) reported a lower, although not significantly lower, percentage than 10th (9.0%), 11th (9.9%), and 12th (9.8%) grade students for current smokeless tobacco use (Figure 20). (source: YRBS)
- According to the 2004 BRFSS, as age increased current smokeless tobacco use decreased (Figure 21). Adults 18-34 were the most likely to report current smokeless tobacco use (both above 7%), followed by those 35-44 (5.8%) and 45 and older (all under 3%).

Figure 20: Current Smokeless Tobacco Use* among Nebraska High School Students, by Gender and Grade, 2005



*Students in grades 9-12 who report smokeless tobacco use (e.g., chewing tobacco, snuff, or dip) on one or more of the 30 days preceding the survey
 Source: 2005 Nebraska Youth Risk Behavior Survey (YRBS)

Figure 21: Current Smokeless Tobacco Use among Nebraska Adults* by Age, 2004



*Adults 18 and older who report using smokeless tobacco products (e.g. chewing tobacco or snuff) everyday or on some days
 Source: Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

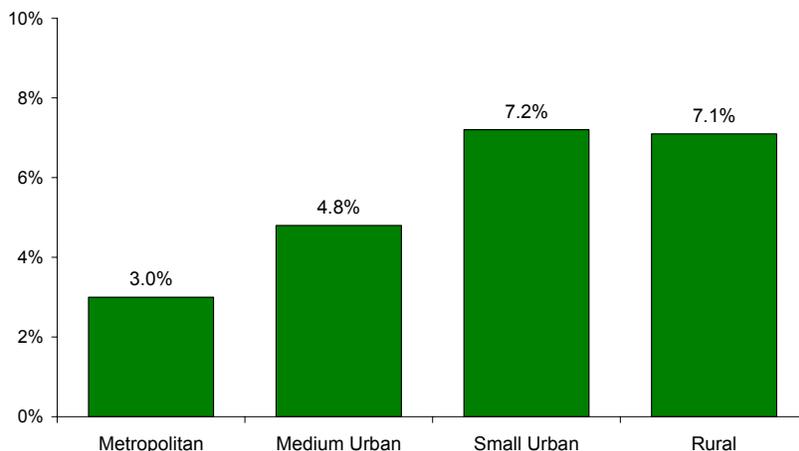
Differences by Gender

- Among Nebraska high school students in 2005, male students were six times more likely than female students to report current smokeless tobacco use (14.5% and 2.4%, respectively), Figure 20. (source: YRBS)
- In 2006, Nebraska men 22 times more likely than Nebraska women to report current smokeless tobacco use (8.8% and 0.4%, respectively). (source: BRFSS)

Differences by Urban/Rural

- In 2004, beyond differences in age (using age-adjustment), current smokeless tobacco use among Nebraska adults was more common in rural Nebraska, with small urban and rural counties above seven percent compared to metropolitan counties at 3.0 percent (Figure 22).

Figure 22: Current Smokeless Tobacco Use (age-adjusted) among Nebraska Adults* by Urban/Rural, 2004

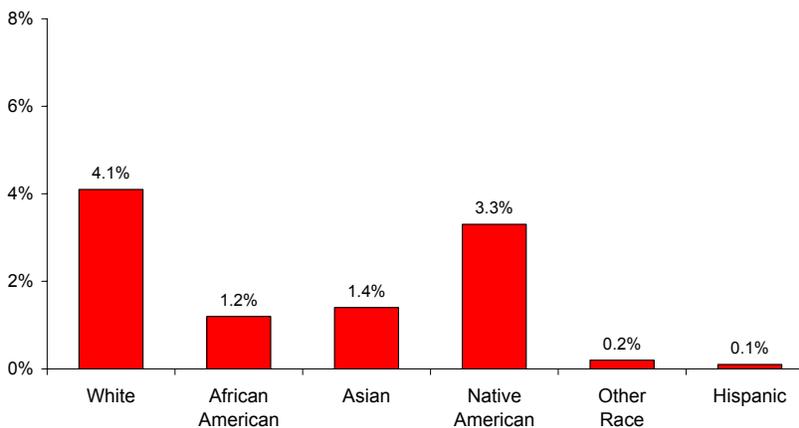


*Adults 18 and older who report using smokeless tobacco products (e.g. chewing tobacco or snuff) everyday or on some days
 Source: Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Differences by Race/Ethnicity

- YRBS data did not provide a sufficient number of cases for analysis by race/ethnicity.
- When examining differences in current smokeless tobacco use by race/ethnicity during the combined years of 2002-2003, beyond differences in age (using age-adjustment), White adults reported the highest percentage (4.1%) followed closely by Native American adults (3.3%). White adults were more likely than African American (1.2%) and Hispanics (0.1%) adults to have currently used smokeless tobacco and had a higher percentage, although not significantly higher, than Asian adults (1.4%), Figure 23.

Figure 23: Current Smokeless Tobacco Use (age-adjusted) among Nebraska Adults* by Race/Ethnicity, 2002-2003 combined**



*Adults 18 and older who report using smokeless tobacco products everyday or on some days
 **On the minority oversample survey, smokeless tobacco questions were only asked in 2002 and 2003
 Note 1: Racial categories include non-Hispanics, Hispanics can be of any race
 Note 2: Sample size for Asian (n=188), Native American (n=167), and Other Race (n=139) was small
 Source: Nebraska BRFSS and Minority Oversample BRFSS Combined

ILLICIT DRUGS - INTRODUCTION AND BACKGROUND

Drug misuse represents a major social, legal, and public health challenge in the United States. Although the Drug Enforcement Administration (DEA) estimates that about 95 percent of Americans do *not* abuse drugs, drug abuse drives some of America's most costly social problems and places a substantial burden on the already strapped health care system. In 2000, there were more than 600,000 hospital emergency department drug episodes in the U.S.¹

The connection between drugs, crime, and violence is well documented. According to the 1999 Arrestee Drug Abuse Monitoring (ADAM) study, more than half of those arrested for violent crimes tested positive for drugs at the time of their arrest. It is nearly impossible for anyone to claim that drug abuse is a victimless crime when examining drug users' propensity for violence against law enforcement, family members, coworkers, and even the random public. Drug abuse is linked with serious social problems such as homicides, family violence, the spread of AIDS, chronic mental illness, homelessness and a wide range of other problems (e.g., robbery, lost productivity, traffic fatalities, etc.).

Although commonly abused drugs differ in many important respects, including their legal status and effects on the human body, they nonetheless share common characteristics: they are all psychoactive substances with the potential for creating dependency and they can cause very significant public health problems and widespread social harms.

Costs and Consequences of Drug Abuse

Drugs are far more addictive than alcohol with about 10 percent of drinkers becoming alcoholics, compared to 75 percent of regular illicit drug users becoming addicted. The health-related costs per person is more than twice as high for drugs as it is for alcohol (\$1,742 vs. \$798).¹ The 2005 National Survey on Drug Use and Health (NSDUH) estimated that 19.7 million Americans aged 12 or older were current illicit drug users (8.1 percent of the population aged 12 years or older). In 2002, The Lewin Group prepared current estimates of the societal cost of drug abuse for The Office of National Drug Control Policy (ONDCP). Among the results:

- The economic cost of drug abuse in 2002 was estimated at \$180.9 billion. This figure represents both the use of resources to address health and crime consequences in addition to the loss of potential productivity from disability, death, and withdrawal from the workforce.
- Health-related costs were projected to total \$16 billion with \$6.0 billion of that attributed to community-based specialty treatment.
- Lost productivity accounted for the largest component of cost, at \$128.6 billion. The greatest share of productivity loss came from criminal activities, including incarceration and habitual crime.
- The final major proportion of costs are associated with the criminal justice system and crime victim costs at a figure of \$36.4 billion. This amount includes expenses for administration of the social welfare system, state and federal corrections, state and local police protection, and federal supply reduction initiatives.

Youth and Drug Abuse

The 2005 NSDUH states that most drug use initiates (56.1 percent) were younger than age 18 when they first used. Among youths aged 12 to 17, there were 1.3 million (4.9 percent) who needed treatment for an illicit drug use problem in 2005.

The likelihood that a teenager will be exposed to drugs and alcohol is very high. The recently revealed (August 16, 2007) results of the National Survey of American Attitudes on Substance Abuse XII conducted by The National Center on Addiction and Substance Abuse at Columbia University (CASA) disclosed that:

[“Eleven million high schools students (80 percent) and five million middle school student (44 percent) attend drug-infested schools, meaning that they have personally witnessed illegal drug use, dealing, possession, students drunk/high on school grounds...”].²

The CASA survey determined that the proportion of students who attend schools where drugs are present has increased by 39 percent since 2002 for high school students and 63 percent for middle school students. The upshot is that students attending drug-infested schools are more likely to use drugs at a rate 16 times higher than drug-free school students.

Consequences of Adolescent Drug Abuse

Developmentally speaking, teens do not fully comprehend the risks inherent in drug experimentation. Drugs change the way the brain functions, specifically the areas that control decision-making and emotions, so teen growth and development can be affected by drug use resulting in teens' having difficulty establishing their identity, developing relationship skills, gaining emotional stability, and preparing for independent and productive futures. Substance abuse can affect memory and learning, which harm a teen's performance in school.³ They may begin using drugs to have a good time without considering the connection to potential addiction. In reality, teen drug addiction results in health problems, behavioral problems, alienation of family, loss of friendships, and a loss of interest in sports, academics, and hobbies. Most teens will not see a problem with their behavior or their drug use - they believe that drugs simply make them feel good and are a way to relieve the stress of school, problems at home, conflicts with peers, and provide an escape from other personal challenges.⁴

Teen risk-taking behaviors with substance abuse can have serious consequences. Drug and alcohol abuse represents the leading cause of teen death and injury related auto accidents, suicides, violence, and drowning. Substance abuse increases the risk of pregnancy and sexually transmitted diseases (STDs), including HIV, and negatively impacts mental health.

Even casual use of some of the extremely potent drugs produced today (such as heroin or cocaine), can cause severe medical problems such as overdose or brain damage.⁵ In short, teen drug abuse impacts the teen's emotional, spiritual, and physical health, oftentimes permanently.

Drug Classification

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.

ILLCIT DRUGS – SUMMARY OF KEY FINDINGS

CONSEQUENCES OF ILLICIT DRUG USE IN NEBRASKA

Drug use is a contributor to death and medical care

- Drug use was directly responsible for killing 61 Nebraska residents in 2004, and shortened the life of those who died by an average of 33.3 years between 2002 and 2004.
- In 2003, there were 2,887 hospitalizations among Nebraska residents in which a drug-attributable condition was listed on the hospitalization record.

Drug use places a tremendous strain on the criminal justice system

- In 2006, there were 10,502 arrests for possession or sales/manufacturing of illicit drugs in Nebraska, making it the third most common arrest offense, accounting for 1 in every 9 arrests (11.3%). However, possession accounted for the majority of these arrests (9,386 arrests, 89.4%).
- During the combined years of 2004/2005, law enforcement drug recognition experts (DREs) examined 18,003 drivers for impairment by non-alcoholic substances.
- In 2006, there were 895 adults sentenced to probation for a drug offense in Nebraska, accounting for about 1 in every 17 adults sentenced to probation (5.9%).
- Incarceration for drug offenses has increased 20-fold over the past 25 years, from 60 incarcerations in 1980 to 488 in 1990, to 812 in 2000, to 1,171 in 2006.

Treatment admissions for drug use are common

- In 2006, there were 6,493 substance abuse treatment admissions in Nebraska in which a non-alcoholic drug was listed at the primary drug of choice, accounting for 3 in 10 admissions (28.6%).

ILLCIT DRUG USE IN NEBRASKA

Drug use is common among youth and adults

- In 2005, more than one-third of Nebraska high school students (36.5%), an estimated 37,000 students, reported using illicit drugs during their lifetime.
- During the combined years of 2004 and 2005, about 1 in every 15 Nebraska residents 12 and older (6.5%) reported using illicit drugs in the past month.

Marijuana use is the most common illicit drug

- In 2005, about 1 in 6 Nebraska high school students (17.5%) reported past month marijuana use, while 1 in 11 (9.1%) persons 12 and older reported past year use in 2004/2005 (Figure 1).
- According to the DEA, marijuana is the most prevalent illicit drug in Nebraska. In Nebraska, marijuana is common in drug-related crimes, accounting for three-fourths of all drug possession arrests in 2006, was the most common substance found in drivers who were caught driving under the influence of drugs in 2004/2005, and in 2006 more than half of all new prison inmates in Nebraska reported using marijuana during the five years prior to their incarceration.

Cocaine use remains a commonly used illicit drug

- In 2005, about 1 in every 30 Nebraska high school students (3.3%) reported using cocaine in the past month, an increase from the less than 2.0 percent in the early 1990s.
- During the combined years of 2004 and 2005, about 1 in every 45 (2.2%) persons 12 and older reported past year cocaine use, a similar percentage to all persons nationally (2.3%), Figure 1.
- According to the DEA, cocaine is available at both the wholesale and retail level in Nebraska, with crack cocaine being more of a problem in the large urban centers of the state. In Nebraska, cocaine appears to be relatively common in drug-related crimes, is a commonly used drug among newly incarcerated prison inmates (in 2006 one-fourth of all new prison inmates in Nebraska reported using cocaine during the five years prior their incarceration), and was the third most commonly reported illicit drug during substance abuse treatment admissions in 2006.

Methamphetamine use is high in NE

- In 2005, about 1 in every 17 Nebraska high school students (5.8%) reported using methamphetamine (meth) during their lifetime (5.8%), Figure 2.
- During 2002-2004 combined, about 1 in every 77 (1.3%) persons 12 and older reported past year meth use, a percentage that was higher than the nation (0.6%), Figure 1.
- According to the DEA, meth is the greatest drug threat to the state. In Nebraska, meth appears to be relatively common in drug-related crimes in Nebraska, is the second most commonly used drug (to marijuana) among newly incarcerated prison inmates (in 2006, two-fifths 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 was the most commonly reported illicit drug during substance abuse treatment admissions in 2006.

Prescription drug use is growing

- During the combined years of 2004 and 2005, about 1 in every 25 (4.0%) persons 12 and older reported non-medical use of pain relievers during the past year.
- According to the DEA, OxyContin®, hydrocodone, and codeine-based cough syrups continue to be a problem in Nebraska. They also suggest that "pharming" parties are becoming popular among high school students nationally, where controlled pharmaceuticals are traded and abused.

DEMOGRAPHIC DIFFERENCES

Differences by age

- Residents in their late teens and early 20's were most likely to use drugs, to be hospitalized for drug use, to be arrested for drug use, and to receive treatment for substance abuse.

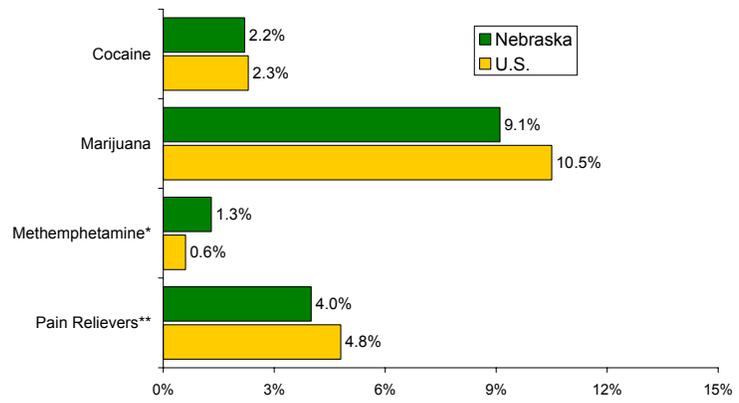
Differences by gender

- Among Nebraska high school students, drug use varied little by gender, with male students tending to have slightly higher percentages than female students; however, the difference were largely non-significant. Although drug-attributable death and hospitalization rates were similar for males and females in Nebraska, males were more likely to experience legal consequences for drug-related crimes as well as to be admitted into substance abuse treatment.

Differences by urban/rural and race/ethnicity

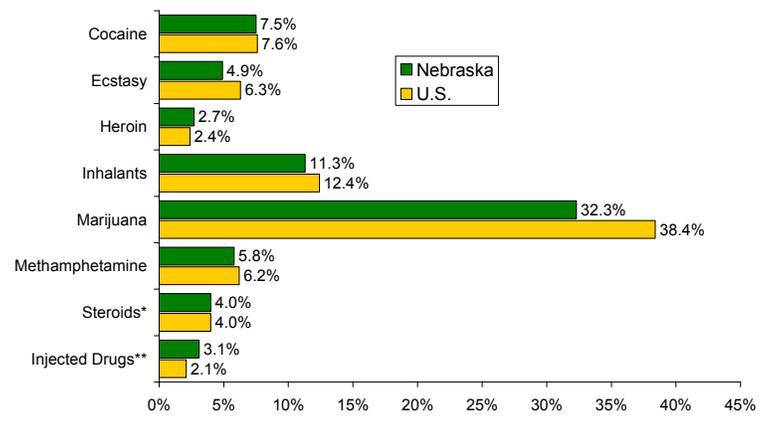
- These findings were largely unavailable for this report.

Figure 1: Past Year Drug Use among Persons 12 and Older, Nebraska and U.S., by Substance Type, 2004-2005 Combined



*Estimate represents data from 2002-2004 combined, 04-05 estimate was unavailable
 **Includes only non-medical use of prescription pain relievers (excluding over-the-counter drugs)
 Source: National Survey on Drug Use and Health (NSDUH)

Figure 2: Lifetime Illicit Drug Use among High School Students, Nebraska and U.S., by Drug Type, 2005



*Includes steroid pills or shots taken without a doctor's prescription
 **Includes using a needle to inject illegal drugs into the body
 Source: Youth Risk Behavior Survey (YRBS)

ILLICIT DRUGS – CONSEQUENCES OF USE

Drug-Related Death

Similar to alcohol, 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.¹ 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 Sources	Year	Nebraska AA Rate*	Number Deaths	National AA Rate*	Nebraska vs. Nation	Trend
Drug-attributable deaths	NE Vital Records [^]	2004	3.6	61	10.1	Lower	Stable (01-04)

*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)

Drug-Related Death in Nebraska

- In 2004, there were 61 drug-attributable deaths in Nebraska for a rate (age-adjusted) of 3.6 deaths per 100,000 population. In addition to the 61 drug-attributable deaths in 2004, 10 additional deaths were estimated to have been drug-related (due to estimates of drug involvement in deaths resulting from tuberculosis, hepatitis B, hepatitis C, AIDS, and homicide).
- When looking at both the primary cause of death and contributing factors to death, drug-attributable death codes were listed on 65 Nebraska death certificates in 2004.

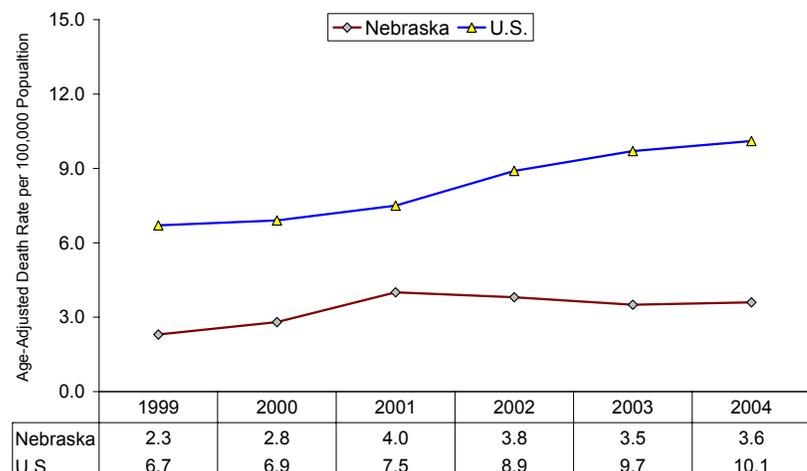
Compared to the Nation

- In 2004, the drug-attributable death rate (age-adjusted) among Nebraska residents was about one-third the rate for residents nationally, 3.6 and 10.1 deaths per 100,000 population, respectively.

Trends

- Between 1999 and 2004, the drug-attributable death rate per 100,000 population (age-adjusted) among Nebraska residents increased from 2.3 in 1999 to 4.0 in 2001, before remaining stable from 2001 to 2004 (Figure 1).

Figure 1: Drug-Attributable Death Rates (age-adjusted), Nebraska and U.S., 1999-2004



Sources: Nebraska Vital Records; CDC Wonder

Drug-Related Death by Drug Type

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.

Demographic Differences in Drug-Related Death

Differences by Age

- Between 1999 and 2004, Nebraska residents 35-49 years of age had the highest drug-attributable death rate (7.3 deaths per 100,000 population) followed by those 20-34 years of age and 50-64 years of age (both with a rate of 3.9), Figure 2.

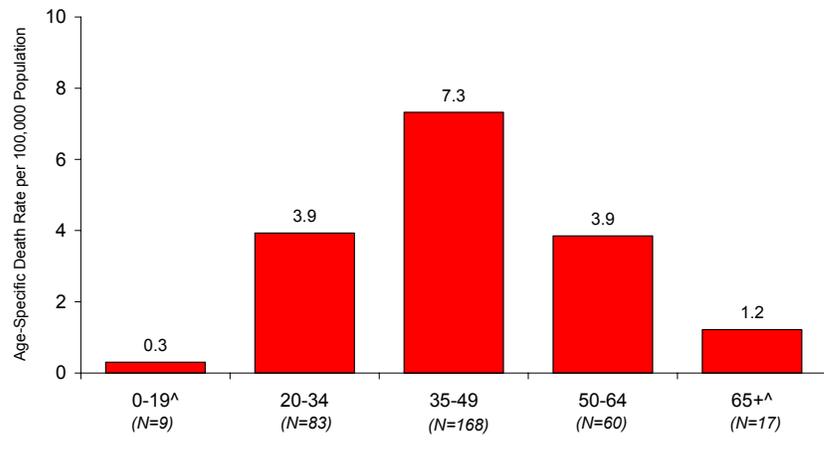
Differences by Gender

- Males, compared to females in Nebraska had a slightly higher (although not significantly higher) age-adjusted rate for drug-attributable death between 1999 and 2004, 3.8 and 2.9 deaths per 100,000 population, respectively.

Differences by Urban/Rural

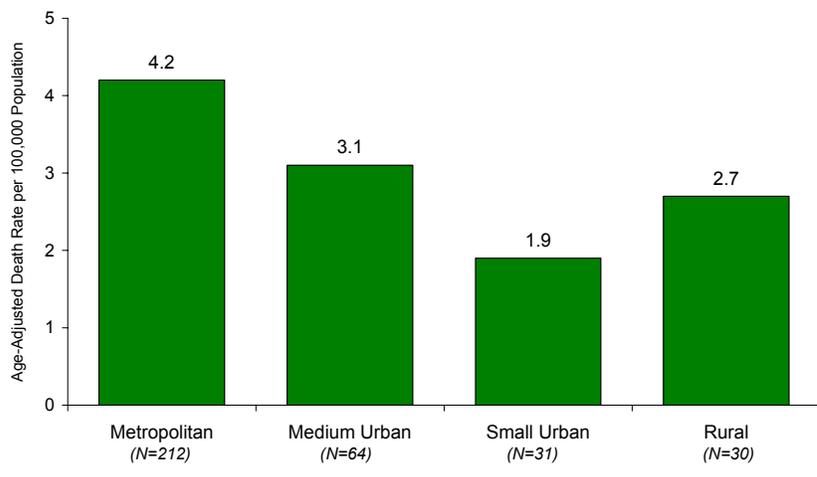
- Between 2002 and 2004, residents of metropolitan counties had the highest (age-adjusted) drug-attributable death rate (4.2 deaths per 100,000 population), which was higher than the rate for small urban counties (1.9), and higher but not significantly higher than the rate within medium urban (3.1) and rural counties (2.7), Figure 3.

Figure 2: Drug-Attributable Death Rates* among Nebraska Residents, by Age, 1999-2004 Combined



*Age-specific death rates per 100,000 population
[^]Rates are unstable due to a small number of deaths
 Note: N=Number of Deaths
 Source: Nebraska Vital Records

Figure 3: Drug-Attributable Death Rate (age-adjusted) among Nebraska Residents, by Urban/Rural, 1999-2004 Combined



Note: N=Number of Deaths
 Source: Nebraska Vital Records

Differences by Race/Ethnicity

- Between 1999 and 2004 there were 305 drug-attributable deaths among Whites, 23 among African Americans, one death among an Asian, and eight deaths among Native Americans. When comparing drug-attributable deaths by ethnicity, nine deaths occurred among Hispanics compared to 328 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.

Years of Potential Life Lost due to Drug Use

In Nebraska, there is a tremendous amount of life lost prematurely that is directly attributable to drug use. One method for measuring premature mortality is through examining the years of life lost prior to age 75, also called years of potential life lost (or YPLL). Between 2002 and 2004, Nebraska residents lost 6,160 years of potential life due to drug use, for an average of 33.3 years of potential life lost per drug-attributable death, and accounted for about two percent of all YPLL in the state during this time period. Drug-attributable YPLL was intentionally unranked in the following table due to drug-attributable deaths overlapping with deaths from other causes, in particular unintentional injuries and suicide. However, if it were included it would rank as the ninth leading cause of YPLL in Nebraska (Table 1).

Rank	Cause of Death	Total Deaths	Total YPLL	Average YPLL Per Death
1	Cancer	10,029	69,487	6.9
2	Unintentional Injuries	2,190	51,199	23.4
3	Heart Disease	11,919	45,845	3.8
4	Suicide	542	17,312	31.9
5	Birth Defects	226	11,797	52.2
6	Stroke	3,169	8,320	2.6
7	Homicide	152	6,701	44.1
8	Chronic Lung Disease	2,283	6,568	2.9
9	Diabetes	1,193	6,256	5.2
-	<i>Drug Use</i>	<i>185</i>	<i>6,160</i>	<i>33.3</i>
10	Chronic Liver Disease	345	5,474	15.9

Source: Nebraska Vital Records

Drug-Related Hospitalization

The Nebraska hospital discharge database and the Nebraska trauma registry 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 who were reporting data into the Nebraska Trauma Registry at the time of this report.

Drug-Attributable Hospitalizations

Data Source: Nebraska Hospital Discharge Data

Drug-Attributable Hospitalizations

In 2003, there were 2,887 hospitalizations among Nebraska residents in which a drug-attributable condition was listed as either the primary reason for or a contributing factor to the hospitalization. In addition to the 2,887 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.

Demographic Differences in Drug-Attributable Hospitalizations

Differences by Age

- Drug-attributable hospitalization rates were highest among residents 15-19 years of age followed by those 20-24 years of age (Table 2).

Differences by Gender

- Drug-attributable hospitalizations rates were slightly higher for females than males (Table 2).

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 and not 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 many have used them non-medically.

Drug Involvement in Trauma Center Hospitalizations

In 2006, the seven participating trauma centers experienced 5,238 inpatient hospitalizations, of which 249 (4.8%) were among patients who had marijuana, cocaine, amphetamines, or methamphetamine in their system at the time of admission (Table 3). It is possible that there were a larger number of

Table 2: Drug-Attributable Hospitalizations in Nebraska*, by Age and Gender, 2003

	<u>Number</u>	<u>Percent</u>	<u>Rate**</u>
Total	2,887	100.0%	165.4
Gender			
Male	1,354	46.9%	157.5
Female	1,533	53.1%	173.6
Age			
<15	62	2.1%	17.2
15-19	411	14.2%	313.3
20-24	390	13.5%	289.6
25-34	567	19.6%	250.7
35-44	579	20.1%	233.0
45-54	372	12.9%	151.9
55-64	146	5.1%	91.6
65+	360	12.5%	155.1

*Includes hospitalizations in which a drug-attributable code was listed as either the primary cause or a contributing factor to the hospitalization

**Rate per 100,000 population, total and gender rates are age-adjusted, age rates are age-specific

Source: Nebraska Hospital Discharge Data

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.

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 (6.2% and 2.8%, respectively) while patients 18-24 (11.0%), 25-34 (11.0%), and 35-44 (9.1%) were the most likely age-groups (Table 3).

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 half of all hospitalizations (55.4%) followed by struck by/against (12.9%), firearm (10.4%), cut/pierce (9.6%), and falls (7.6%).

Among hospitalizations in which the patient had these drugs in their system at the time of admission, marijuana were the most common, found 175 of 249 patients (70.3%) followed by amphetamines/ methamphetamine (69 patients, 27.7%) and cocaine (47 patients, 18.9%).

Table 3: Trauma Center Hospitalizations in which Illicit Drugs* were in the Patients System at the Time of Admission, 2006

Demographic	Total number of hospitalizations	Number and % of all hospitalizations with any illicit drugs	
		Number	Percent
Total	5,238	249	4.8%
Gender			
Male	2,992	186	6.2%
Female	2,236	63	2.8%
Age			
<18	703	16	2.3%
18-24	661	73	11.0%
25-34	590	65	11.0%
35-44	560	51	9.1%
45-64	1,090	43	3.9%
65+	1,624	1	0.1%

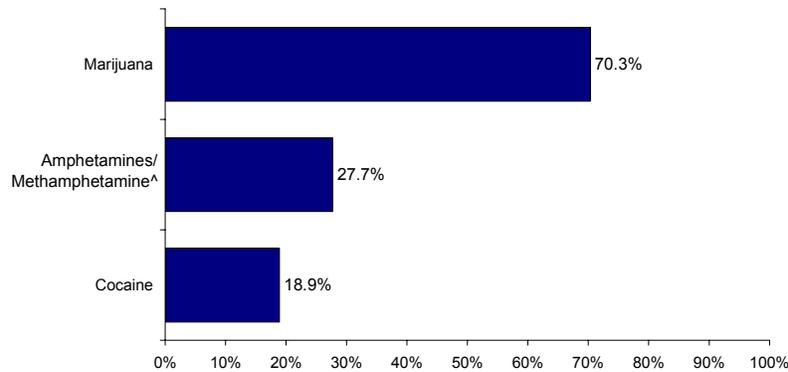
*Includes only positive test results for marijuana, cocaine, amphetamines, and methamphetamine

Note 1: Amphetamines and methamphetamine could not be separated, amphetamines may include prescription use

Note 2: Includes inpatient hospitalizations through seven Nebraska trauma centers

Source: Nebraska Trauma Registry

Figure 4: Among Trauma Center Hospitalizations in which the Patient had Illicit Drugs* in their System at the Time of Admission, Percentage by Drug Type, 2006**



*Includes only positive test results for marijuana, cocaine, amphetamines, and methamphetamine
 **The sum of drug types does not equal 100% because some patients had more than one drug in their system at admission and thus were counted in multiple categories (N=249 patients)
 ^Amphetamines and methamphetamine could not be separated due to inconsistencies in testing and reporting across trauma centers, it is possible that some amphetamine use was prescribed
 Note: Includes inpatient hospitalizations through seven Nebraska trauma centers
 Source: Nebraska Trauma Registry

Legal Consequences of Drug Use

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, incarceration, and parole for drug related offenses, and (3) drug trafficking and enforcement.

Arrests for Drug-Related Crime

Arrests for Possession or Sales/Manufacturing of Drugs

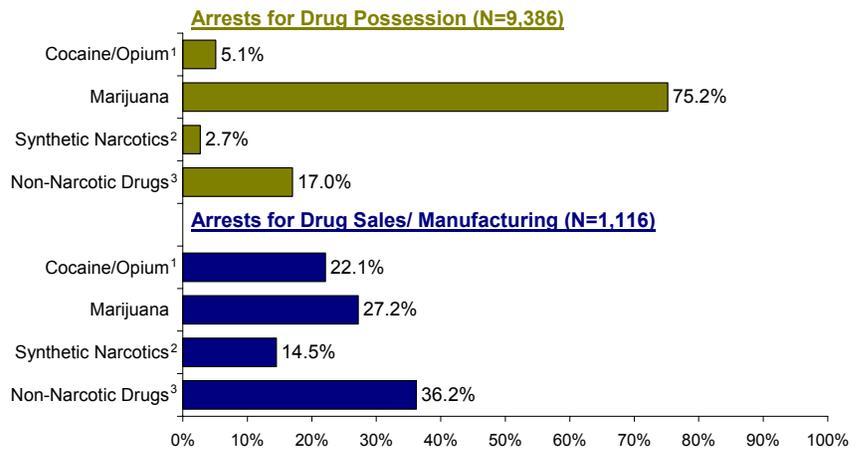
Data Source: Uniform Crime Reports, Nebraska Crime Commission

In 2006, there were 10,502 arrests for possession or sales/manufacturing (hereafter sales) of illicit drugs in Nebraska; of which 1,136 (10.8%) occurred among juveniles under 18 and 9,366 (89.2%) occurred among adults 18 and older. Possession or sales of drugs accounted for about 1 in every 9 arrests (11.3%) during 2006.

When separating arrests by possession vs. sales of drugs, there were 9,386 arrests for drug possession and 1,116 arrests for drug sales in 2006. Of the 9,386 arrests for drug possession, 1,074 (11.4%) occurred among juveniles while 8,312 (88.6%) occurred among adults. In contrast, of the 1,116 arrests for drug sales, 62 (5.6%) occurred among juveniles while 1,054 (94.4%) occurred among adults.

When looking at arrests for drug possession by drug type, marijuana was the most common, accounting for 3 in every 4 drug possession arrests (75.2%) followed by non-narcotic drugs (17.0%), Figure 5. In contrast, when looking at arrests for drug sales, non-narcotic drugs accounted for about one-third of all arrests (36.2%), followed by marijuana (27.2%), cocaine/opium (22.1%), and synthetic narcotics (14.5%), Figure 5.

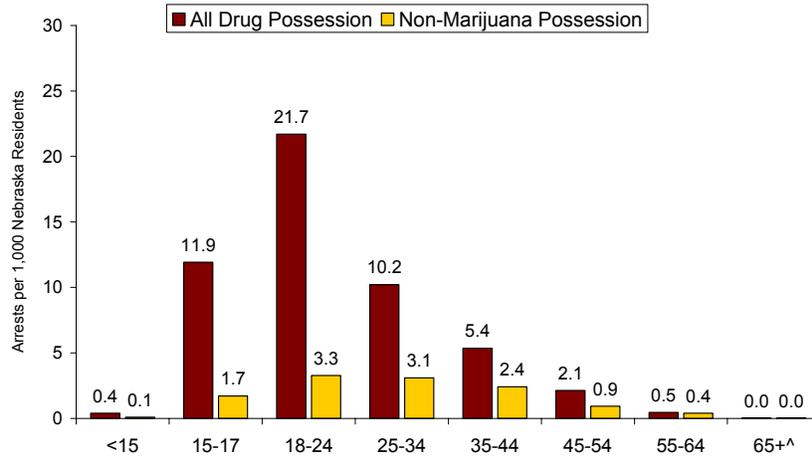
Figure 5: Percentage of Drug-Related Arrests in Nebraska (Juvenile and Adult), by Type of Offense and Type of Drug, 2006



1. Cocaine and Opium (morphine, heroin, codeine)
 2. Synthetic narcotics which can cause true addiction (demerol, methadones)
 3. Other dangerous non-narcotic drugs (barbiturates, benzedrine, methamphetamine)
- Source: Uniform Crime Reports, Nebraska Crime Commission

When comparing drug-related arrests demographically (juveniles and adults combined), males accounted for approximately 8 in every 10 arrests for drug possession (78.5%) as well as 8 in every 10 arrests for drug sales (78.0%). By age, 18-24 year olds had the highest drug possession arrest rate (21.7 arrests per 1,000 Nebraska residents) followed by 15-17 year olds (11.9) and 25-34 year olds (10.2), Figure 6. However, when looking at drug possession arrest rates when excluding arrests for marijuana, 18-24 year olds had the highest arrest rate (3.3 arrests per 1,000 Nebraska arrests) but were followed closely by 25-34 year olds (3.1), 35-44 year olds (2.4) and 15-17 year olds (1.7), Figure 6.

Figure 6: Drug Possession Arrest Rates per 1,000 Nebraska Residents*, by Age and Type of Possession, 2006



*Includes both juvenile and adult arrests, includes some non-resident arrests
 ^Some arrests occurred, although the rate was less than 0.05 arrests per 1,000 residents
 Source: Nebraska Crime Commission

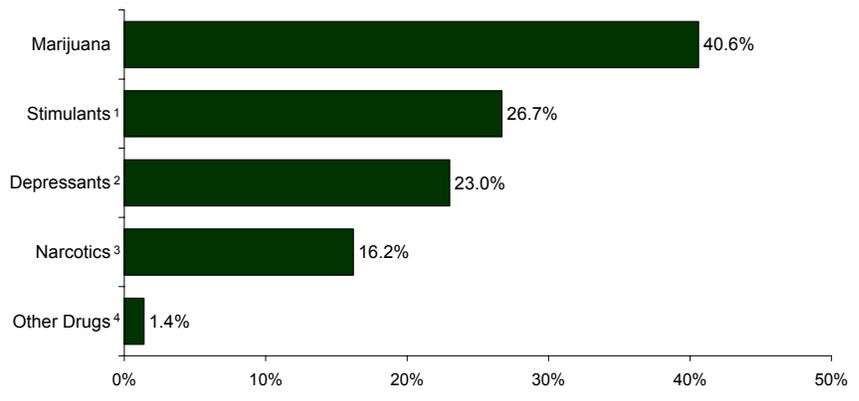
Arrests for Driving Under the Influence of Drugs

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

As of August 2007 there were 110 law enforcement officers in Nebraska trained as drug recognition experts (DREs). DREs are specifically 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.

During the combined years of 2004 and 2005, DREs examined 18,003 persons in Nebraska suspected of non-alcohol drug impaired driving, of which 13,334 completed a toxicology test. Based on toxicology results, marijuana was the most common substance found in drivers (n=5,415 drivers, 40.6% of completed toxicology tests) followed by stimulants (including cocaine, methamphetamine, and other stimulants, n=3,559, 26.7%), depressants (including barbiturates, benzodiazepines, and other depressants, n=3,070, 23.0%), and narcotics (morphine, heroin, codeine, methadone, and other narcotics n=2,160, 16.2%), Figure 7.

Figure 7: Among Drivers in Nebraska who Completed a Toxicology Test for Suspected Drug Impairment (N=13,334), Percentage with Drugs in their System, by Drug Type, 2004-2005 combined



1. Cocaine, methamphetamine, other stimulants
 2. Barbiturates, benzodiazepines, other depressants
 3. Morphine, heroin, codeine, methadone, other narcotics
 4. Hallucinogens, dissociative anesthetics (including PCP), and inhalants
 Source: Drug Recognition Expert Data, Nebraska Office of Highway Safety

Reported Property Crime

Data Source: Uniform Crime Reports, Nebraska Crime Commission

Drug-related property crimes, including burglary, larceny, and motor vehicle theft, are often committed in order to obtain money to purchase drugs.² Drug-attribution rates for property crime range from approximately seven percent for motor vehicle theft to 30 percent for burglary and larceny.² In 2006, there were 57,538 reported violent crimes in Nebraska, a slight decline from the more than 60,000 reported each year between 1997 and 2004.

Probation, Incarceration, and Parole for Drug-Related Crime

Probation for Drug-Related Crimes

Data Source: Nebraska Office of Probation Administration

In 2006, there were 895 adults sentenced to probation for a drug offense in Nebraska; 593 for a felony drug offense (65.8%) and 308 for a misdemeanor drug offense (34.2%), note that a small number were sentences for both felony and misdemeanor offenses. Of all adults sentenced to probation in Nebraska during 2006, about 1 in every 17 (5.9%) were sentenced for a drug offense. Since 2000, the number of adults sentenced to probation for a drug offense increased slightly from 2000 (N=843) to 2002 (N=1,001) before declining slightly between 2002 (1,001) and 2006 (N=895).

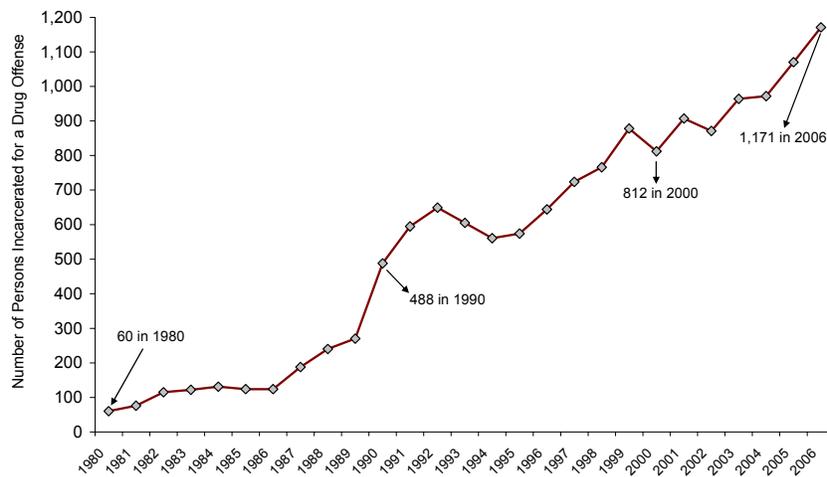
Incarceration for Drug-Related Crimes

Data Source: Nebraska Department of Correctional Services

In 2006, there were 1,171 individuals incarcerated in the Nebraska prison system for a conviction in which a drug offense was the most serious offense committed, accounting for approximately one-quarter (26.2%) of all incarcerations. However, when comparing differences by gender, close to half of incarcerations among females were for drug offenses (45.6%) compared to one-quarter among males (24.1%).

The number of individuals incarcerated for a drug offense has increased dramatically in recent years. Between 1980 and 1988 there were fewer than 200 individuals incarcerated for a drug offense each year, compared to between 500-700 during the mid-1990s and more than 1,000 during 2005 and 2006 (Figure 8).

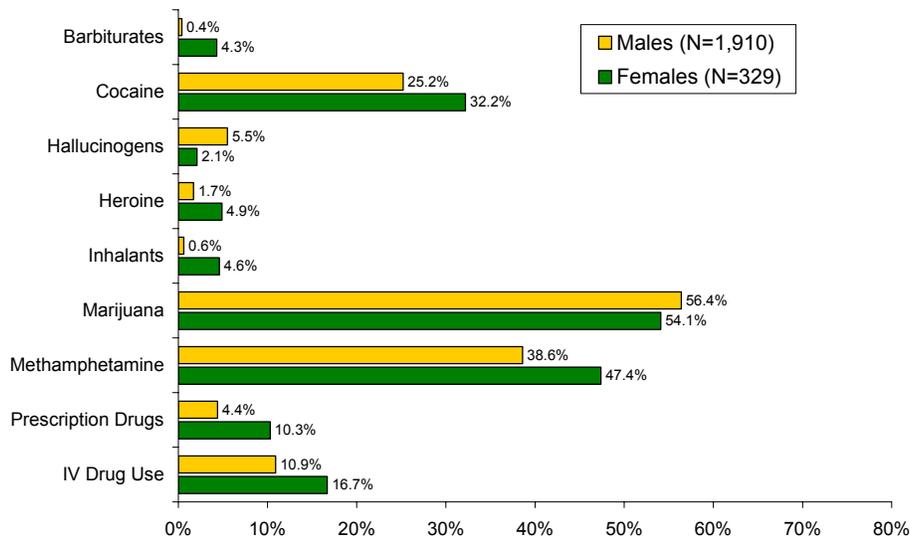
Figure 8: Total Number of Individuals Incarcerated for a Drug Offense within the Nebraska Prison System*, 1980-2006



*Drug offense was the most serious offense
Sources: Nebraska Department of Corrections

All newly admitted inmates (regardless of their offense) are asked to report drug use during the five years preceding their incarceration. Illicit drug use was very common among inmates prior to their incarceration, particularly females. In 2006, marijuana was the most commonly reported drug (reported by 56.1% of all new inmates), followed by methamphetamine (39.9%), and cocaine (26.3%). In addition, 11.8 percent reported IV drug use during the five years preceding their incarceration. Figure 9 provides information by drug type for males and females.

Figure 9: Percentage of New Inmates Reporting Drug Use during the Five Years Preceding their Incarceration*, by Drug Type, 2006



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

Parole for Drug-Related Crimes

Data Source: Nebraska Department of Correctional Services

In 2006, there were 249 individuals on parole following an incarceration for a drug offense, accounting for nearly 2 in every 5 parolees (37.6%).

Drug Trafficking and Enforcement in Nebraska³

According to the U.S. Drug Enforcement Administration (DEA), Interstate 80 serves as a major smuggling route for drug trafficking organizations by providing easy west to east access across the state. Mexican drug trafficking organizations are responsible for a large portion of the illicit drug supply within the state, including marijuana, cocaine, and methamphetamine, among other illicit drugs. Due to the rapid increase in Hispanic workers within Nebraska, both legal and illegal, over the last 10 years, drug trafficking organizations with ties to Mexico can more easily blend into the community, making enforcement more difficult. During 2004, highway interdictions in Nebraska led to seizures including approximately 130 kilograms of cocaine, 430 pounds of marijuana, four pounds of crystal methamphetamine, and over \$3.7 million dollars.

Drug Dependence, Abuse, and Treatment

Drug Dependence and Abuse

Source: National Survey on Drug Use and Health

Drug Dependence and Abuse Indicator Definitions

- *Drug Dependence or Abuse in Past Year among Persons 12 and Older* is the percentage of persons 12 and older who met 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 in Past Year among Persons 12 and Older* is the percentage of persons 12 and older who met the DSM-IV definition for drug dependence (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	Number Persons	Nation	Nebraska vs. Nation	Trend
Drug Dependence or Abuse in Past Year among Persons 12 and Older	NSDUH	2004/2005	2.6%	37,000	2.9%	Non-Significant	Stable (02-05)
Drug Dependence in Past Year among Persons 12 and Older	NSDUH	2004/2005	1.9%	27,000	2.0%	Non-Significant	Stable (02-05)

Drug Dependence and Abuse in Nebraska

- During the combined years of 2004 and 2005, about 1 in every 39 Nebraska residents 12 and older (2.6%) reported drug dependence or abuse during the 12 months preceding the survey while 1 in every 53 reported drug dependence specifically (1.9%), as defined by the DSM-IV guidelines.

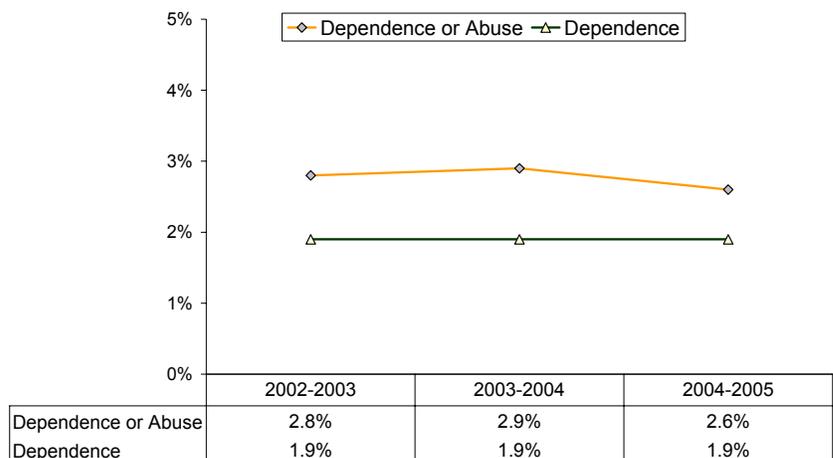
Compared to the Nation

- During the combined years of 2004 and 2005, the percentage of persons 12 and older reporting drug dependence or abuse in Nebraska (2.6%) was similar to the nation (2.9%), as was the percentage specifically reporting drug dependence (1.9% in Nebraska compared to 2.0% nationally).

Trends

- The percentage of Nebraska residents 12 and older reporting drug dependence or abuse as well as the percentage report drug dependence specifically remained stable since 2002 (Figure 10).

Figure 10: Drug Dependence or Abuse* among Persons 12 and Older in Nebraska, 2002-2005

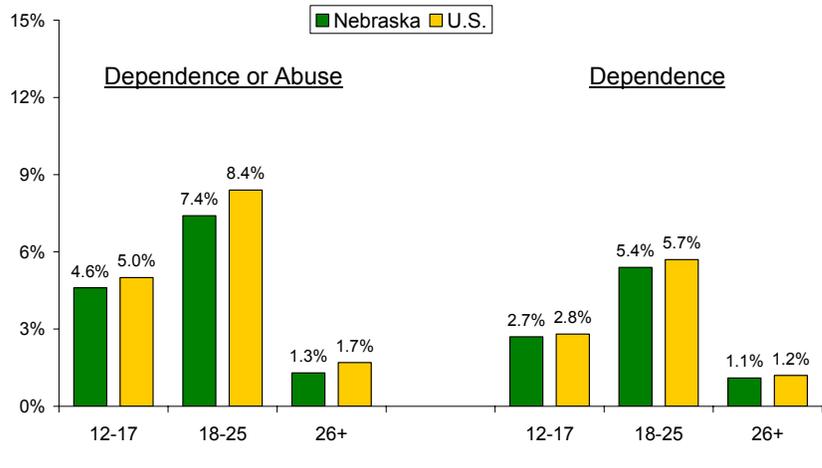


*Persons 12 and older who report drug dependence or abuse during the 12 months preceding the survey; as defined by the 4th edition of the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV).
Source: National Survey on Drug Use and Health (NSDUH)

Differences by Age

- During the combined years of 2004 and 2005, persons 18-24 years old in Nebraska had the highest percentage for drug dependence or abuse (7.4%), when compared with those 12-17 (4.6%) and 26 and older (1.3%). When examining differences in drug dependence or abuse by age compared to the nation, the percentage for Nebraska residents was slightly lower (although not significantly lower) within the three age groups (Figure 11).

Figure 11: Drug Dependence or Abuse* among Persons 12 and Older, Nebraska and U.S., by Age, 2004-2005 Combined



*Persons 12 and older who report drug dependence or abuse during the 12 months preceding the survey; as defined by the 4th edition of the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV). Source: National Survey on Drug Use and Health (NSDUH)

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 2006, there were 25,083 substance abuse treatment admissions among 9,734 individuals. During admission, individuals were asked to report their primary, second, and third drugs of choice, of which drug of choice data were reported during 22,718 admissions among 8,551 individuals. The following information is based on data from those who reported drug of choice on their admission form.

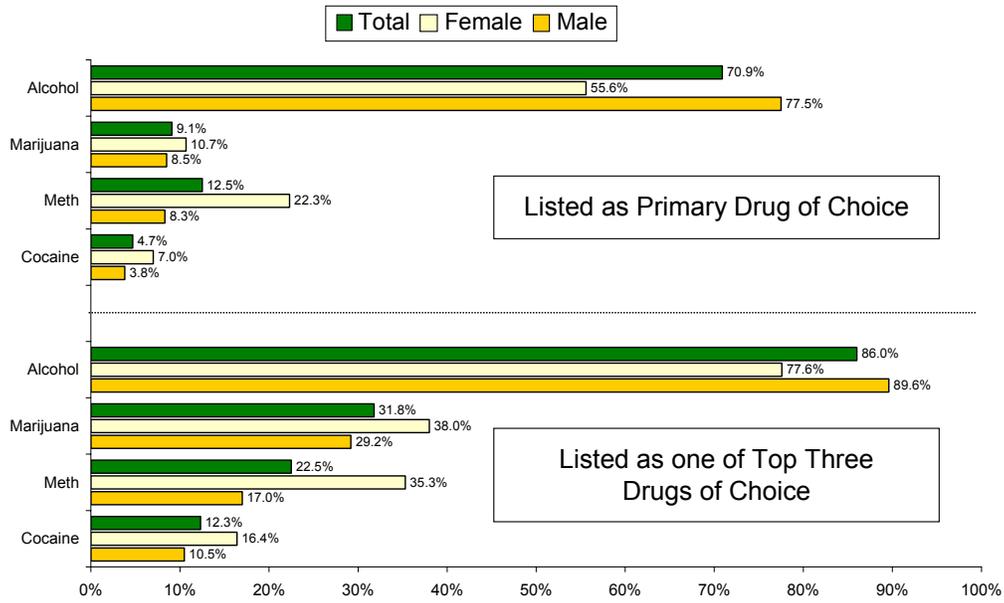
Drug Involvement in Substance Abuse Treatment Services

- In 2006, alcohol was listed as the primary drug of choice during 7 in every 10 substance abuse treatment admissions (70.9%) in Nebraska, and was listed as one of the top three drugs of choice during 86.0 percent of all admissions (Figure 12).
- Methamphetamine was listed as the primary drug of choice during 1 in every 8 substance abuse treatment admissions (12.5%) during 2006, making it the second most commonly reported primary drug of choice to alcohol. Methamphetamine was followed by marijuana (9.1%), cocaine (4.7%), and narcotic drugs (e.g., morphine, heroin, codeine, methadone; 1.5%).
- 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 (31.8%) in 2006, making it second to alcohol (86.0%). Marijuana was followed by methamphetamine (22.5%), and cocaine (12.3%).
- When examining drug of choice by gender, using all 2006 treatment admissions, females were 2.7 times more likely than males to report methamphetamine as their primary drug of choice during admission (22.3% of females compared to 8.3% of males). In contrast, males were more likely to report alcohol as their primary drug of choice (77.5% of males compared to 55.6% of females).

Treatment Admission Demographics

- Table 4 provides the demographics for all substance abuse treatment admissions (regardless of their drug of choice) for gender, age, race, and urban/rural.

Figure 12: Drugs of Choice among Nebraska Substance Abuse Treatment Admissions, 2006



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

Table 4: Demographics of Individuals Admitted for Substance Abuse Treatment in Nebraska, 2006

	<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>
Total	9,734	100.0%	Gender		
			Male	6,386	65.6%
Race/Ethnicity			Female	3,348	34.4%
White	7,854	80.7%	Age		
Black	692	7.1%	<18	467	4.9%
Asian	72	0.7%	18-24	3,050	31.7%
N. American	330	3.4%	25-34	2,515	26.1%
Hispanic*	914	9.4%	35-44	1,972	20.5%
Urban/Rural			45-54	1,204	12.5%
Metropolitan	5,588	58.5%	55-64	325	3.4%
Med Urban	1,951	20.4%	65+	86	0.9%
Small Urban	1,425	14.9%			
Rural	589	6.2%			

*Hispanic can be of any race

Note: Numbers represent individuals, not the number of admissions
 Source: Magellan Database, Nebraska Division of Behavioral Health

ILLICIT DRUGS - USE

Illicit Drug Use Overall

Illicit Drug in Past Month among Persons 12 and Older

Source: National Survey on Drug Use and Health

Indicator Definitions

- *Illicit Drug Use in Past Month among Persons 12 and Older* is the percentage of persons 12 and older who report having used marijuana, 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
- *Illicit Drug Use Other than Marijuana in Past Month among Persons 12 and Older* is the percentage of persons 12 and older who report having used 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

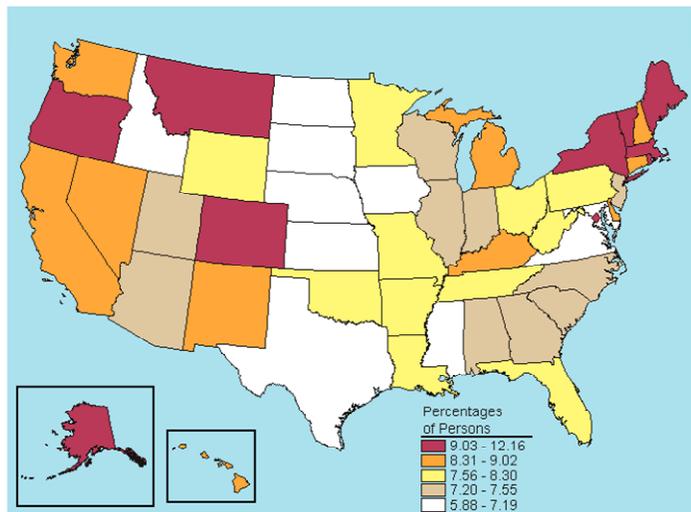
Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Illicit Drug Use in Past Month among Persons 12 and Older	NSDUH	2004/2005	6.5%	93,000	8.0%	Non-Significant	Stable (02-04)
Illicit Drug Use Other than Marijuana in Past Month among Persons 12 and Older	NSDUH	2004/2005	3.0%	43,000	3.6%	Non-Significant	Stable (02-04)

Illicit Drug Use in Past Month in Nebraska

- During the combined years of 2004 and 2005, about 1 in every 15 Nebraska residents 12 and older (6.5%) reported using illicit drugs during the 30 days preceding the survey while about 1 in every 33 (3.0%) reported using illicit drugs other than marijuana during the 30 days preceding the survey.

Map 1: Illicit Drug Use in Past Month among Persons 12 and Older, by State, 2004 and 2005 Combined

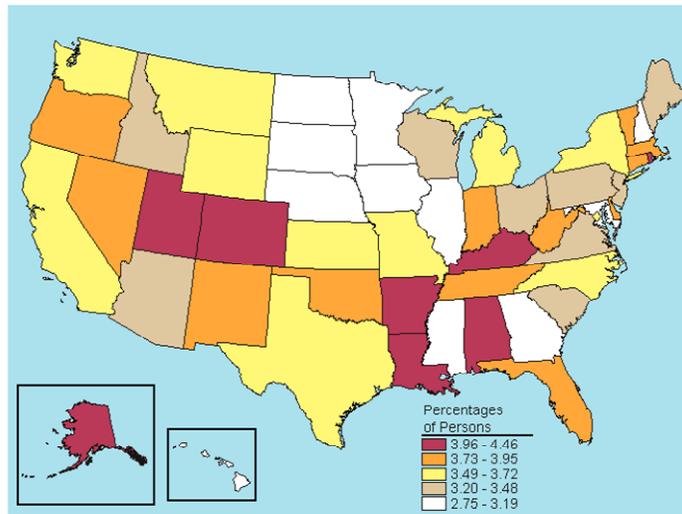


Source: Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health (NSDUH), <www.oas.samhsa.gov/nhsda.htm>

Compared to the Nation

- During the combined years of 2004 and 2005, the percentages for illicit drug use in the past month and illicit drug use other than marijuana in the past month were lower among Nebraska residents 12 and older compared to residents 12 and older nationally; however, the differences were non-significant. Maps 1 and 2 compare past month illicit drug use by state during 2004 and 2005 combined, and suggest that estimates for Nebraska fall below most states nationally.

Map 2: Illicit Drug Use Other than Marijuana in Past Month among Persons 12 and Older, by State, 2004 and 2005 Combined

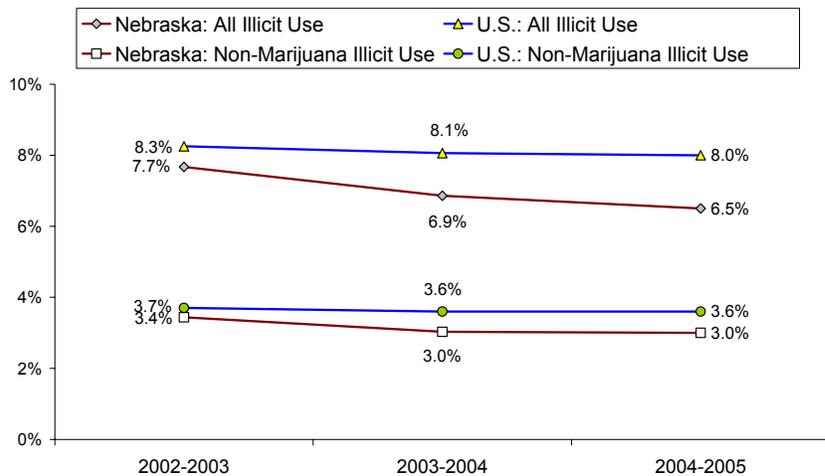


Source: Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health (NSDUH), <www.oas.samhsa.gov/nhsda.htm>

Trends

- The percentage of Nebraska residents 12 and older reporting illicit drug use in the past month declined slightly (although non-significantly) between 2002/2003 and 2004/2005 while the percentage for illicit drug use other than marijuana in the past month remained stable (Figure 1).

Figure 1: Illicit Drug Use in Past Month* among Residents 12 and Older, Nebraska and U.S., 2002-2005 by two-year rolling average

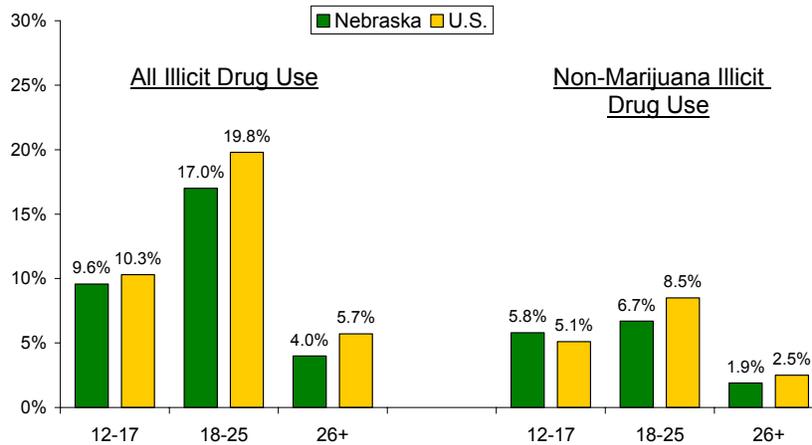


*Persons 12 and older reporting any illicit drug use (including nonmedical use of psychotherapeutics) during the 30 days preceding the survey
Source: National Survey on Drug Use and Health (NSDUH)

Differences by Age

- During the combined years of 2004 and 2005, persons 18-24 years old in Nebraska had the highest percentage for illicit drug use in the past month (17.0%), when compared with those 12-17 (9.6%) and 26 and older (4.0%). However, when examining differences in illicit drug use other than marijuana in the past month, the percentages were similar among those 12-17 (5.8%) and 18-25 (6.7%), and both higher than the percentage among those 26 and older (1.9%). Compared to the nation, percentages among Nebraska residents were slightly lower than percentages among residents nationally across all ages (except 12-17 year old non-marijuana drug use); although, none of the differences were significant (Figure 2).

Figure 2: Illicit Drug Use in Past Month* among Persons 12 and Older, Nebraska and U.S., by Age, 2004-2005 Combined



*Persons 12 and older reporting any illicit drug use (including nonmedical use of psychotherapeutics) during the 30 days preceding the survey
 Source: National Survey on Drug Use and Health (NSDUH)

Lifetime Illicit Drug Use among High School Students

Source: Youth Risk Behavior Survey

Indicator Definitions

- *Lifetime Illicit Drug Use among High School Students* is the percentage of students in grades 9-12 who report having used marijuana, cocaine, inhalants, heroin, methamphetamines, ecstasy, steroids or injected illegal drugs one or more times during their life
- *Lifetime Illicit Drug Use Other than Marijuana among High School Students* is the percentage of students in grades 9-12 who report having used cocaine, inhalants, heroin, methamphetamines, ecstasy, steroids or injected illegal drugs one or more times during their life

Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Lifetime Illicit Drug Use among High School Students	YRBS	2005	36.5%	37,000	43.4%	Lower	NA*
Lifetime Illicit Drug Use Other than Marijuana among High School Students	YRBS	2005	18.1%	18,000	20.3%	Non-Significant	NA*

*Weighted data were only available for two points in time, 2003 and 2005

Lifetime Illicit Drug Use among High School Students in Nebraska

- In 2005, more than one-third of Nebraska high school students (36.5%), an estimated 37,000 students, reported using illicit drugs during their lifetime (including marijuana, cocaine, inhalants, heroin, meth, ecstasy, steroids, or injected illegal drugs), while close to 1 in every 5 (18.1%) used an illicit drug other than marijuana during their lifetime, approximately 18,000 students.

Compared to the Nation

- In 2005, high school students in Nebraska were less likely than high school students nationally to have used an illicit drug during their lifetime (36.5% and 43.4%, respectively) while high school students in Nebraska and the nation reported a similar percentage for lifetime illicit drug use other than marijuana (18.1% and 20.3%, respectively).

Trends

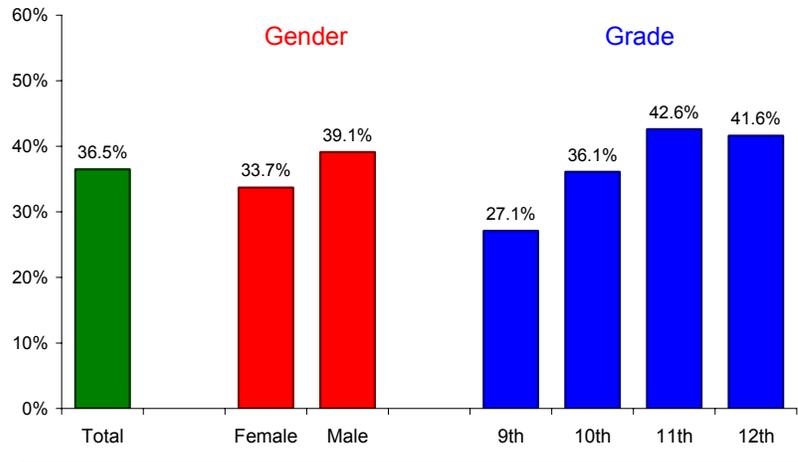
- Nebraska high school students in 2005 reported similar percentages to those reported in 2003 for lifetime illicit drug use (36.5% and 38.4%, respectively) as well as lifetime illicit drug use other than marijuana (18.1% and 18.2%, respectively). It should be noted that estimates for this indicator are not available prior to 2003 due to differences in survey questions.

Demographic Differences in Lifetime Illicit Drug Use

Differences by Age

- In 2005, as grade level increased the percentage of high school students reporting lifetime illicit drug use increased until 11th grade where it leveled off and was similar to the percentage for 12th grade students (Figure 3). In contrast, the percentage reporting lifetime illicit drug use other than marijuana was similar across all grades 9th through 12th (Figure 4).

Figure 3: Lifetime Illicit Drug Use* among Nebraska High School Students, by Gender and Grade, 2005

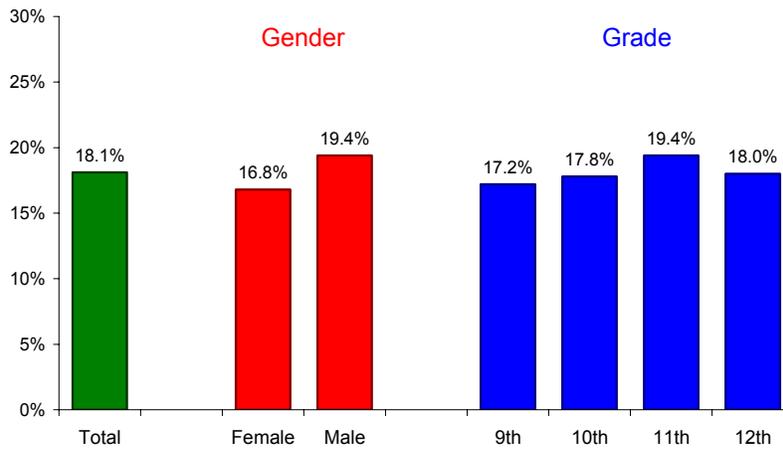


*Students in grades 9-12 who report having used marijuana, cocaine, inhalants, heroin, methamphetamines, ecstasy, steroids or injected illegal drugs one or more times during their life
Source: Nebraska Youth Risk Behavior Survey (YRBS)

Differences by Gender

- Male students had a slightly higher percentage than female students for lifetime illicit drug use during 2005 (39.1% and 33.7%, respectively) as well as lifetime illicit drug use other than marijuana (19.4% and 16.8%, respectively), however, the differences were not significant (Figures 3 and 4).

Figure 4: Lifetime Illicit Drug Use Other than Marijuana* among Nebraska High School Students, by Gender and Grade, 2005



*Students in grades 9-12 who report having used cocaine, inhalants, heroin, methamphetamines, ecstasy, steroids or injected illegal drugs one or more times during their life
Source: Nebraska Youth Risk Behavior Survey (YRBS)

Recent Marijuana Use

According to the U.S. Drug Enforcement Administration (DEA), marijuana is the most prevalent illicit drug in Nebraska.¹ As noted in the *consequences of illicit drug use* section of this report, marijuana is common in drug-related crimes, accounting for three-fourths of all drug possession arrests in 2006, was the most common substance found in drivers who were caught driving under the influence of drugs in 2004/2005, and in 2006 more than half of all new prison inmates in Nebraska reported using marijuana during the five years prior to their incarceration.

Indicator Definitions

- **Source YRBS:** *Marijuana Use in Past Month among High School Students* is the percentage of high school students who report having used marijuana (also called grass or pot) during 30 days preceding the survey
- **Source NSDUH:** *Marijuana Use among Persons 12 and Older* is the percentage of persons 12 and older who report having used marijuana or hashish (also called grass or pot) during one-year preceding the survey / 30 days preceding the survey

Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Marijuana Use in Past Month among High School Students	YRBS	2005	17.5%	17,500	20.2%	Non-Significant	Increased (91-05)
Marijuana Use in Past Year among Persons 12 and Older	NSDUH	2004/2005	9.1%	130,000	10.5%	Non-Significant	Stable (02-04)
Marijuana Use in Past Month among Persons 12 and Older	NSDUH	2004/2005	5.0%	72,000	6.0%	Non-Significant	Stable (02-04)

Recent Marijuana Use in Nebraska

Both surveys suggest that marijuana use is relatively common among Nebraska youth and adults.

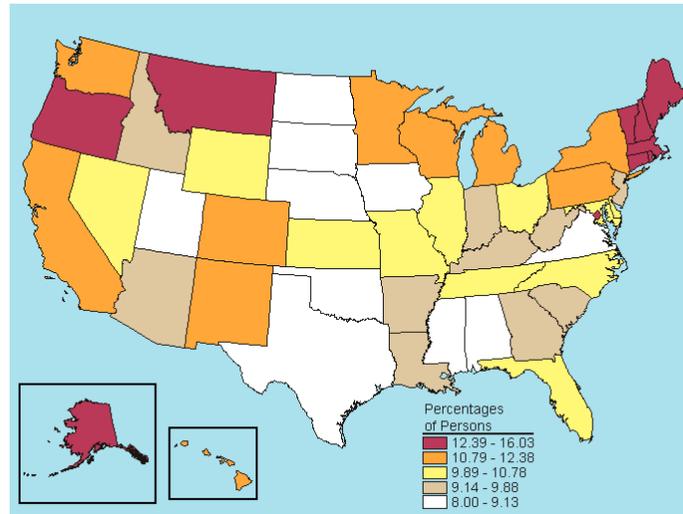
- In 2005, approximately 1 in every 6 Nebraska high school students (17.5%), an estimated 17,500 students, reported marijuana use during the 30 days preceding the survey. (*source: YRBS*)
- During the combined years of 2004 and 2005, about 1 in every 11 Nebraska residents 12 and older (9.1%) reported using marijuana during the one-year preceding the survey while about 1 in every 20 (5.0%) reported using marijuana during the 30 days preceding the survey. (*source: NSDUH*)

Compared to the Nation

Although differences were non-significant, both surveys suggest that Nebraska residents may be less likely than their national counterparts to have recently used marijuana.

- In 2005, high school students in Nebraska reported a lower percentage than high school students nationally for marijuana use during the past month (17.5% and 20.2%, respectively); however, the difference was non-significant. (*source: YRBS*)
- During the combined years of 2004 and 2005, persons 12 and older in Nebraska had a slightly lower (although not significantly lower) percentage than persons nationally for marijuana use during the past year (9.1% and 10.5%, respectively) and past month (5.0% and 6.0%, respectively). Map 3 compares past year marijuana use by state during 2004 and 2005 combined, and suggests that estimates for Nebraska fall below most states nationally. (*source: NSDUH*)

Map 3: Marijuana Use in Past Year among Persons 12 and Older, by State, 2004 and 2005 Combined



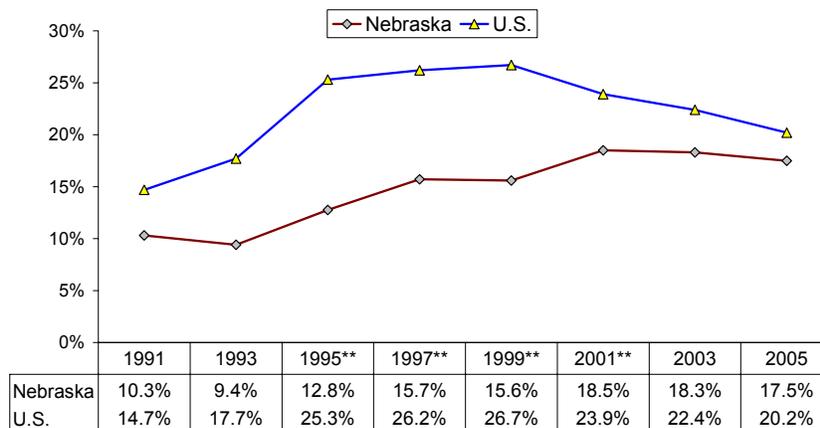
Source: Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health (NSDUH), <www.oas.samhsa.gov/nhsda.htm>

Trends

Trends for past month marijuana use among Nebraska high school students have increased since the early 1990s; however, in recent years marijuana use among Nebraska high school students and all persons 12 and older have remained stable if not declined slightly.

- Since the early 1990s, past month marijuana use among Nebraska high school students increased from approximately 10 percent to 17.5 percent in 2005 (Figure 5). However, more recent estimates (from 2003 and 2005) suggest that marijuana use among Nebraska high school students is remaining stable while it has declined steadily from 1999 (26.7%) to 2005 (20.2%) among high school students nationally. (source: YRBS)
- Past month and past year marijuana use among Nebraska residents 12 and older declined slightly (although non-significantly) between 2002/2003 and 2004/2005 (Figure 6). (source: NSDUH)

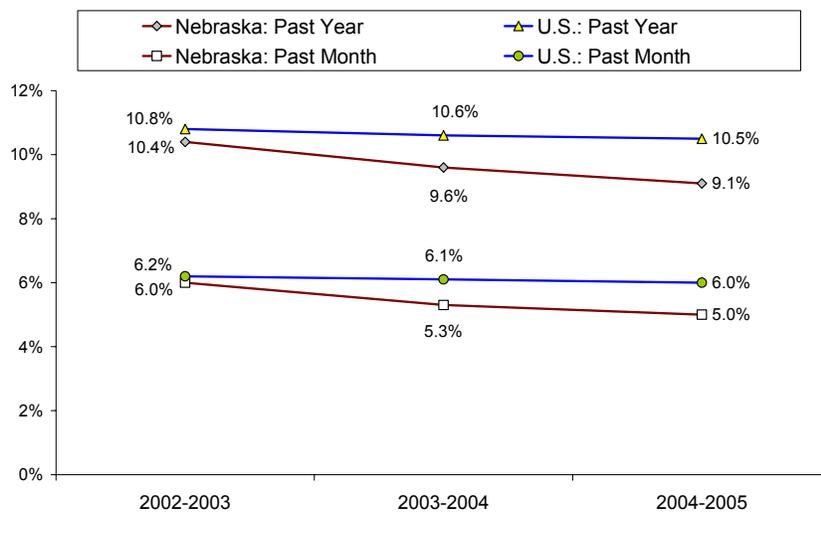
Figure 5: Marijuana Use in Past Month* among High School Students, Nebraska and U.S., 1991-2005



*Students in grades 9-12 who report having used marijuana (also called grass or pot) during 30 days preceding the survey

**Due to a low response rate, Nebraska data were not weighted to represent all students statewide
Source: Youth Risk Behavior Survey (YRBS)

Figure 6: Marijuana Use in Past Year and Past Month among Residents 12 and Older, Nebraska and U.S., 2002-2005



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

Demographic Differences in Recent Marijuana Use among Nebraska Residents

Differences by Age

- Among Nebraska high school students in 2005, as grade level increased, the percentage using marijuana in the past month increased from 13.2 percent among 9th grade students to 22.1 percent among 12th grade students (Figure 7). (source: YRBS)
- During the combined years of 2004 and 2005, past month and past year marijuana use was highest among Nebraska residents 18-25 (23.1% and 14.7%, respectively) followed by those 12-17 and 26 and older (Figure 8). Nebraska residents 18-25 (23.1%) had a lower percentage than 18-25 year olds nationally (27.9%) for past year marijuana use. In addition, estimates of past year and past month marijuana use were lower (although not significantly lower) among Nebraska residents 12-17 and 26 and older (Figure 8). (source: NSDUH)

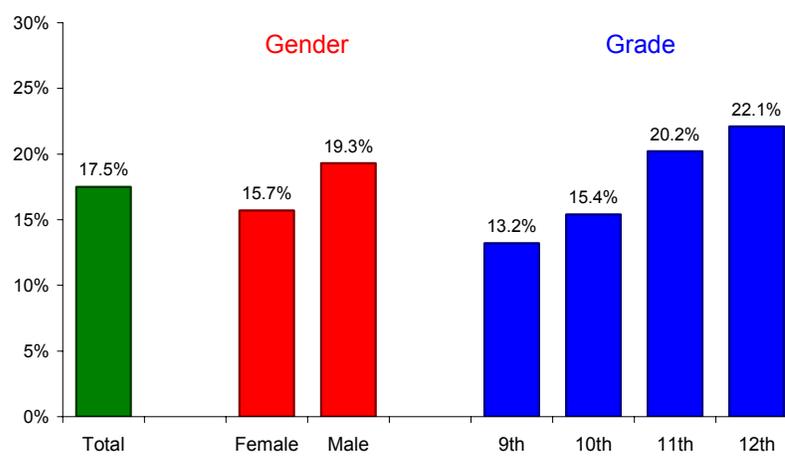
Differences by Gender

- Although non-significant, male students in 2005, compared to female students, had a higher percentage for past month marijuana use 19.3 percent and 15.7 percent, respectively (Figure 7). (source: YRBS)
- Differences by gender among persons 12 and older from the NSDUH were unavailable.

Differences by Urban/Rural and Race/Ethnicity

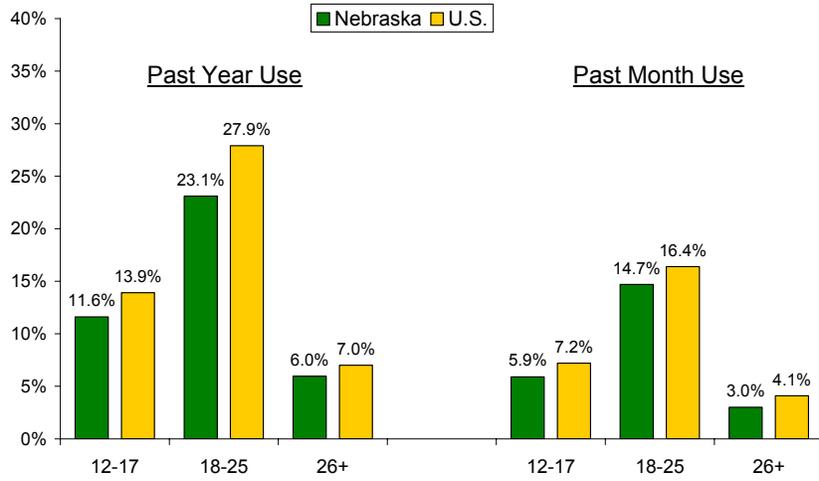
- Differences by urban/rural and race/ethnicity were unavailable.

Figure 7: Marijuana Use in Past Month* among Nebraska High School Students, by Gender and Grade, 2005



*Students in grades 9-12 who report having used marijuana (also called grass or pot) during 30 days preceding the survey
Source: Nebraska Youth Risk Behavior Survey (YRBS)

Figure 8: Marijuana Use in Past Year and Past Month among Persons 12 and Older, Nebraska and U.S., by Age, 2004-2005 Combined



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

Early Initial Marijuana Use among Youth

Early initial marijuana use refers to the use of marijuana before 13 years of age.

Early Initial Marijuana Use Indicator Definition

- **Source YRBS:** Percentage of students in grades 9-12 who report trying marijuana for the first time before age 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 H.S. Students	YRBS	2005	7.0%	7,000	8.7%	Non-Significant	Decreased (91-05)

Early Initial Marijuana Use among Nebraska Youth

- In 2005, approximately 1 in every 14 Nebraska high school students (7.0%), an estimated 7,000 students, reported trying marijuana for the first time before age 13.

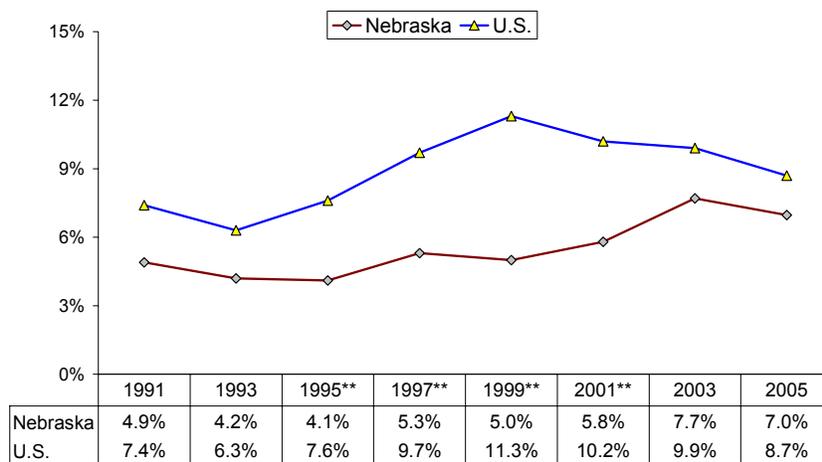
Early Initial Marijuana Use Compared to the Nation

- In 2005, high school students in Nebraska, compared to high school students nationally, had a slightly lower, although not significantly lower, percentage for early initial marijuana use, 7.0 percent and 8.7 percent, respectively.

Trends in Early Initial Marijuana Use among Nebraska Youth

- Early initial marijuana use among Nebraska high school students has increased slightly since the early 1990s (Figure 9). More specifically, the percentage in 2005 (7.0%) was higher than the percentage in 1993 (4.2%); however, there was a slight (although non-significant) decline from 2003 (7.7%) to 2005 (7.0%) among Nebraska high school students and a significant decline from 1999 (11.3%) to 2005 (8.7%) among high school students nationally.

Figure 9: Early Initial Marijuana Use* among High School Students, Nebraska and U.S., 1991-2005



*Students in grades 9-12 who report trying marijuana for the first time before age 13

**Due to a low response rate, Nebraska data were not weighted to represent all students statewide

Source: Youth Risk Behavior Survey (YRBS)

Recent Cocaine Use

According to the DEA, cocaine is available at both the wholesale and retail level in Nebraska, with crack cocaine being more of a problem in the large urban centers of the state.¹ 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 relatively common in drug-related crimes in Nebraska, is a commonly used drug among newly incarcerated prison inmates (in 2006 one-fourth of all new prison inmates in Nebraska reported using cocaine during the five years prior their incarceration), and was the third most commonly reported illicit drug during substance abuse treatment admissions in 2006.

Indicator Definitions

- **Source YRBS:** *Cocaine Use in Past Month among High School Students* is the percentage of high school students who report having used any form of cocaine (including powder, crack, or freebase) during 30 days preceding the survey
- **Source NSDUH:** *Cocaine Use in Past Year among Persons 12 and Older* is the percentage of persons 12 and older who report having used any form of cocaine (including powder, crack, freebase, or coca paste) during one-year preceding the survey.

Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Cocaine Use in Past Month among High School Students	YRBS	2005	3.3%	3,300	3.4%	Non-Significant	Increased (91-05)
Cocaine Use in Past Year among Persons 12 and Older	NSDUH	2004/2005	2.2%	32,000	2.3%	Non-Significant	Stable (02-04)

Recent Cocaine Use in Nebraska

Although cocaine use appears to be more common than some other illicit drugs (Figure 18), both surveys suggest that cocaine use is much less common among Nebraska youth and adults than substances such as alcohol, tobacco, and marijuana.

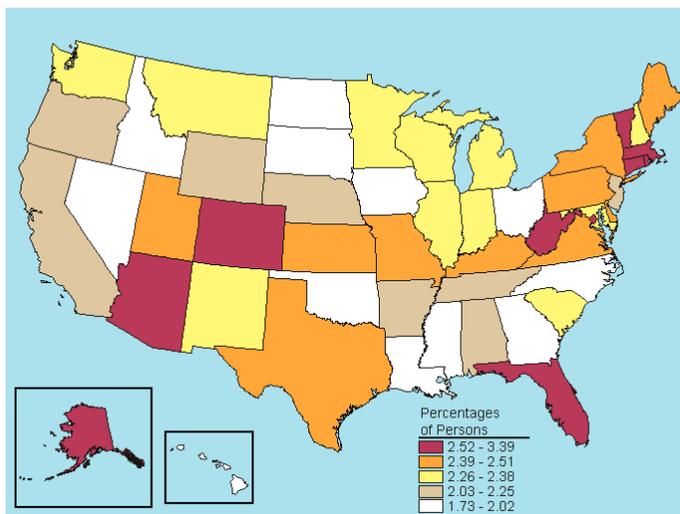
- In 2005, approximately 1 in every 30 Nebraska high school students (3.3%), an estimated 3,300 students, reported cocaine use during the 30 days preceding the survey. (*source: YRBS*)
- During the combined years of 2004 and 2005, about 1 in every 45 Nebraska residents 12 and older (2.2%) reported cocaine use during the one-year preceding the survey. (*source: NSDUH*)

Compared to the Nation

Both surveys suggest that recent cocaine use among Nebraska residents is similar to residents nationally.

- In 2005, high school students in Nebraska reported a similar percentage to high school students nationally for cocaine use during the past month (3.3% and 3.4%, respectively). (*source: YRBS*)
- During the combined years of 2004 and 2005, persons 12 and older in Nebraska had a similar percentage to persons nationally for cocaine use during the past year (2.2% and 2.3%, respectively). Map 4 compares past year cocaine use by state during 2004 and 2005 combined, and suggests that estimates for Nebraska fall below many other states nationally. (*source: NSDUH*)

Map 4: Cocaine Use in Past Year among Persons 12 and Older, by State, 2004 and 2005 Combined



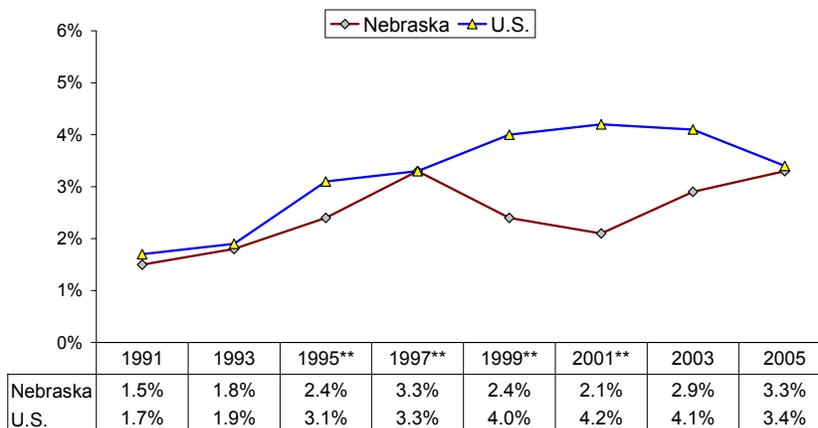
Source: Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health (NSDUH), <www.oas.samhsa.gov/nhsda.htm>

Trends

Trends for past month cocaine use among Nebraska high school students have increased since the early 1990s, however, among Nebraska residents 12 and older past year cocaine use has remained stable in recent years.

- Since the early 1990s, past month cocaine use among Nebraska high school students increased from between one and two percent to 3.3 percent in 2005 (Figure 10). (source: YRBS)
- Past year cocaine use among Nebraska residents 12 and older has remained virtually unchanged between 2002/2003 (2.1%) and 2004/2005 (2.2%), Figure 11. (source: NSDUH)

Figure 10: Cocaine Use in Past Month* among High School Students, Nebraska and U.S., 1991-2005

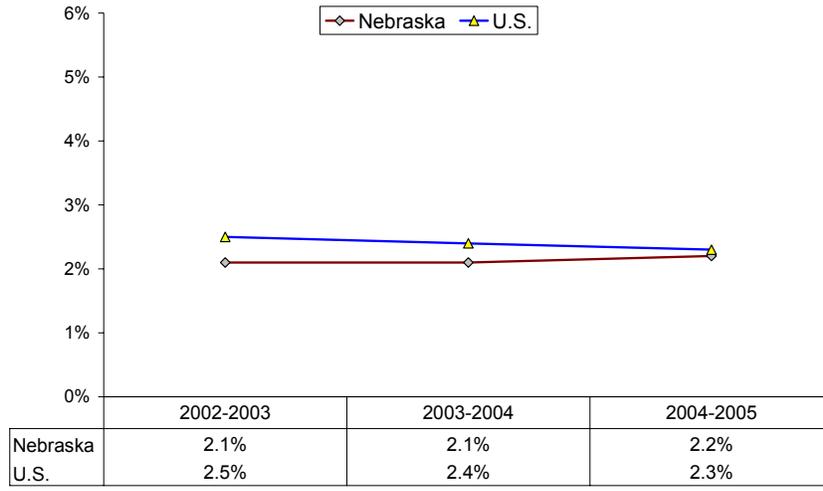


*Students in grades 9-12 who report having used any form of cocaine (including powder, crack, or freebase) during 30 days preceding the survey

**Due to a low response rate, Nebraska data were not weighted to represent all students statewide

Source: Youth Risk Behavior Survey (YRBS)

Figure 11: Cocaine Use in Past Year* among Persons 12 and Older, Nebraska and U.S., 2002-2005



*Persons 12 and older reporting cocaine use (in any form) during the one-year preceding the survey
 Source: National Survey on Drug Use and Health (NSDUH)

Demographic Differences in Recent Cocaine Use among Nebraska Residents

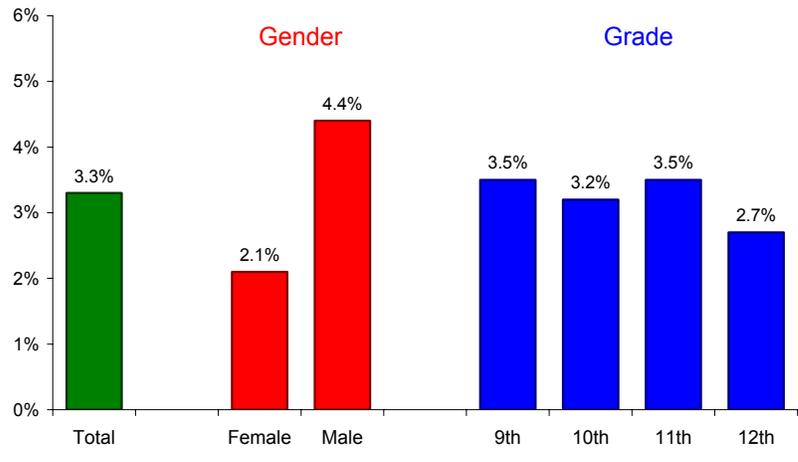
Differences by Age

- In 2005, cocaine use during the past month among Nebraska high school students varied little by grade level (Figure 13). (source: YRBS)
- During the combined years of 2004 and 2005, past year cocaine use was highest among Nebraska residents 18-25 (7.2%) followed by those 12-17 (1.6%) and 26 and older (1.3%) (Figure 13). Nebraska residents 12-17, 18-25, and 26 and older all reported similar percentages to their national counterparts (Figure 13). (source: NSDUH)

Differences by Gender

- In 2005, male students were twice as likely as female students to report having used cocaine during the past month, 4.4 percent and 2.1 percent, respectively (Figure 12). (source: YRBS)
- Differences by gender among persons 12 and older from the NSDUH were unavailable.

Figure 12: Cocaine Use in Past Month* among Nebraska High School Students, by Gender and Grade, 2005

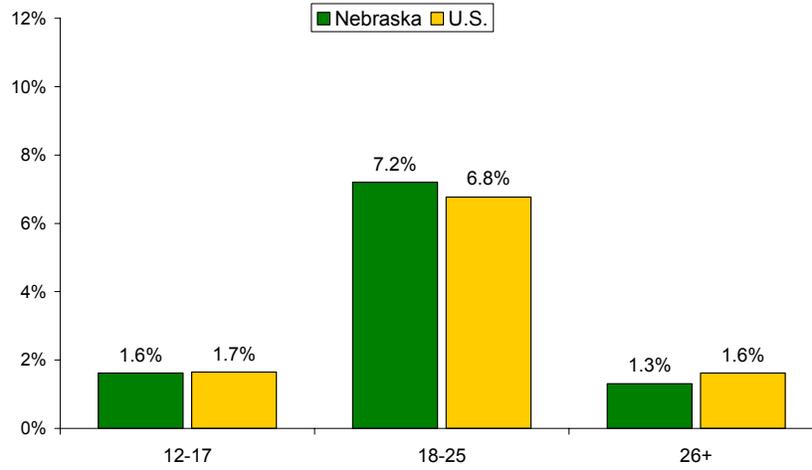


*Students in grades 9-12 who report having used any form of cocaine (including powder, crack, or freebase) during 30 days preceding the survey
 Source: Nebraska Youth Risk Behavior Survey (YRBS)

Differences by Urban/Rural and Race/Ethnicity

- Differences by urban/rural and race/ethnicity were unavailable.

Figure 13: Cocaine Use in Past Year among Persons 12 and Older, Nebraska and U.S., by Age, 2004-2005 Combined



*Persons 12 and older reporting cocaine use (in any form) during the one-year preceding the survey
Source: National Survey on Drug Use and Health (NSDUH)

Methamphetamine Use

According to the DEA, methamphetamine is the greatest drug threat to the state, and is available in almost every town and community.¹ 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, is the second most commonly used drug (to marijuana) among newly incarcerated prison inmates (in 2006, 40 percent of all new prison inmates in Nebraska reported using methamphetamine during the five years prior their incarceration), and when examining the primary drugs of choice, amphetamines (including methamphetamine) were the most commonly reported illicit drugs during substance abuse treatment admissions in 2006.

Indicator Definitions

- **Source YRBS:** *Lifetime Methamphetamine Use among High School Students* is the percentage of high school students who report having used methamphetamine (also called speed, crystal, crank, or ice) during their lifetime. It should be noted that data on past month methamphetamine use was not available for high school students, limiting analysis to lifetime use.
- **Source NSDUH:** *Methamphetamine Use in Past Year among Persons 12 and Older* is the percentage of persons 12 and older who report having used methamphetamine (including crank, crystal, ice, or speed) during one-year preceding the survey.

Indicator Summary Table

Indicator	Data Source	Year	Nebraska	Estimated Persons	Nation	Nebraska vs. Nation	Trend
Lifetime Methamphetamine Use among High School Students	YRBS	2005	5.8%	5,800	6.2%	Non-Significant	NA*
Methamphetamine Use in Past Year among Persons 12 and Older	NSDUH	2002-2004 Combined	1.3%	18,000	0.6%	Higher	NA**

*Weighted data were only available for two points in time, 2003 and 2005

**Data were only available for the combined years of 2002-2004, not by individual year or two-year moving average

Methamphetamine Use in Nebraska

While the consequences of methamphetamine use are serious, rates of use fall somewhere in the middle compared to other illicit drugs (Figure 18), and both surveys suggest that methamphetamine use is much less common among Nebraska youth and adults than substances such as alcohol, tobacco, and marijuana.

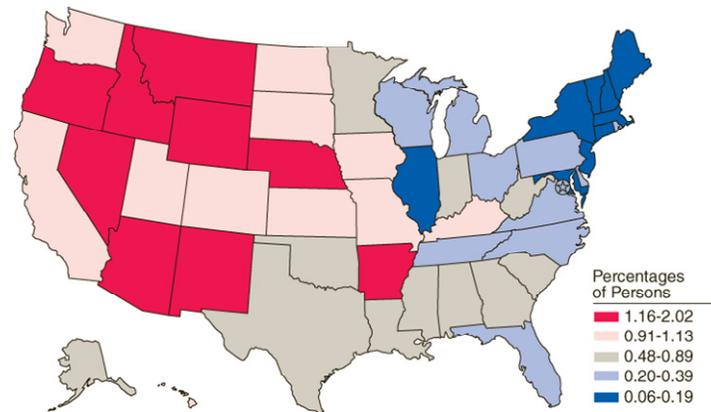
- In 2005, approximately 1 in every 17 Nebraska high school students (5.8%), an estimated 5,800 students, reported using methamphetamine during their lifetime. (*source: YRBS*)
- During the combined years of 2002-2004, about 1 in every 77 Nebraska residents 12 and older (1.3%) reported methamphetamine use during the past year. (*source: NSDUH*)

Compared to the Nation

Lifetime methamphetamine use was similar among high school students in Nebraska and the nation, however, past year methamphetamine use among persons 12 and older in Nebraska was higher than persons nationally.

- In 2005, high school students in Nebraska reported a similar percentage to high school students nationally for lifetime methamphetamine use (5.8% and 5.8%, respectively). (*source: YRBS*)
- During the combined years of 2002-2004, persons 12 and older in Nebraska were twice as likely as persons 12 and older nationally to report past year methamphetamine use, 1.3 percent and 0.6 percent, respectively. Map 5 compares past year methamphetamine use by state during 2002-2005 combined, and suggests that estimates for Nebraska fall in the upper tier of states nationally. (*source: NSDUH*)

Map 5: Methamphetamine Use in Past Year among Persons 12 and Older, by State, 2002-2005 Combined



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

Trends

- Lifetime methamphetamine use among Nebraska high school students in 2005 (5.8%) was similar to the percentage reported in 2003 (6.3%).
- Aside from two (weighted) years of YRBS data, trend data for methamphetamine use among Nebraska residents was unavailable. However, when looking at national trends in self-reported methamphetamine use, it appears that use may be declining among both youth and adults. According to the YRBS, lifetime methamphetamine use among high school students nationally declined from 2001 (9.8%) to 2003 (7.6%) to 2005 (6.2%)² while past year use among persons 12 and older, from the NSDUH, declined significantly from 2002 (0.7%) to 2005 (0.5%).³

Demographic Differences in Methamphetamine Use among Nebraska Residents

Differences by Age

- In 2005, lifetime methamphetamine use among Nebraska high school students increased as grade level increased, from 4.7 percent among 9th grade students to 6.8 percent among 12th grade students (Figure 14). (source: YRBS)
- During the combined years of 2002-2004, past year methamphetamine use was highest among Nebraska residents 18-25 (2.9%) followed by those 12-17 (1.3%) and 26 and older (1.0%) (Figure 15). When compared to residents nationally, Nebraska residents 18-25 and 26 and older were more likely than their national counterparts to report past year methamphetamine use, while residents 12-17 had a higher, although not significantly higher, percentage than residents 12-17 nationally (Figure 15). (source: NSDUH)

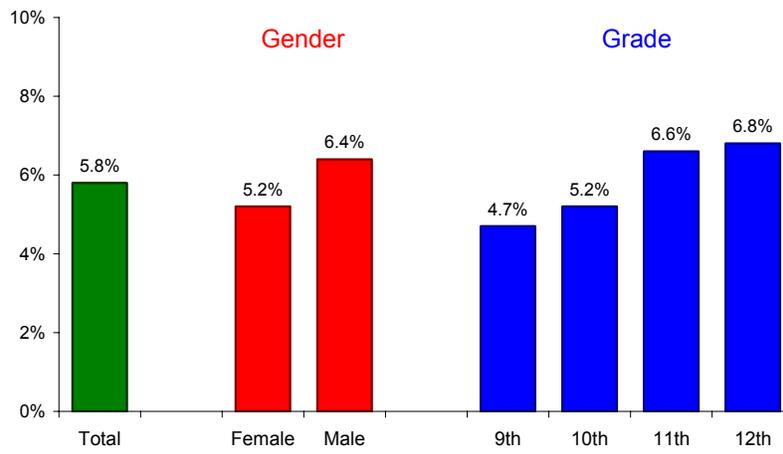
Differences by Gender

- In 2005, male students, compared to female students, had a slightly higher, although not significantly higher, percentage for lifetime methamphetamine use, 6.4 percent and 5.2 percent, respectively (Figure 14). (source: YRBS)
- Differences by gender among persons 12 and older from the NSDUH were unavailable.

Differences by Urban/Rural and Race/Ethnicity

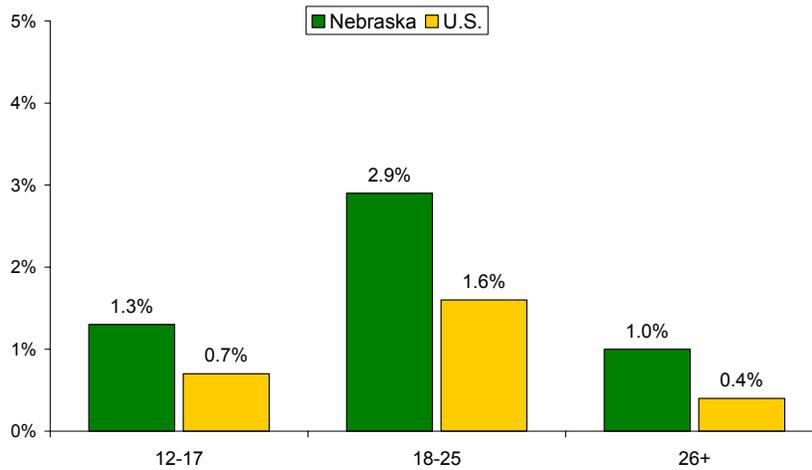
- Differences by urban/rural and race/ethnicity were unavailable.

Figure 14: Lifetime Methamphetamine Use* among Nebraska High School Students, by Gender and Grade, 2005



*Students in grades 9-12 who report having used methamphetamine (also called speed, crystal, crank, or ice) during their lifetime
 Source: Nebraska Youth Risk Behavior Survey (YRBS)

Figure 15: Methamphetamine Use in Past Year among Persons 12 and Older, Nebraska and U.S., by Age, 2002-2004 Combined



*Persons 12 and older reporting methamphetamine use during the one-year preceding the survey
 Source: National Survey on Drug Use and Health (NSDUH)

Recent Non-Medical Use of Pain Relievers

According to the DEA, OxyContin®, hydrocodone, and codeine-based cough syrups continue to be a problem in Nebraska¹. They also suggest that "pharming" parties are becoming popular among junior and senior high school students nationally, where controlled pharmaceuticals are traded and abused¹.

Indicator Definitions

Source: National Survey on Drug Use and Health

- *Non-Medical Use of Pain Relievers in Past Year among Persons 12 and Older* is the percentage of persons 12 and older who report having used of any form of prescription pain relievers (excluding over-the-counter drugs) that were not prescribed or that were taken only for the experience or feeling they caused, during the one-year preceding the survey.

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 12 & Older	NSDUH	2004/2005	4.0%	57,000	4.8%	Non-Significant	Stable (02-04)

Recent Non-Medical Use of Pain Relievers in Nebraska

- During the combined years of 2004 and 2005, about 1 in every 25 Nebraska residents 12 and older (4.0%) reported non-medical use of pain relievers during the one-year preceding the survey.

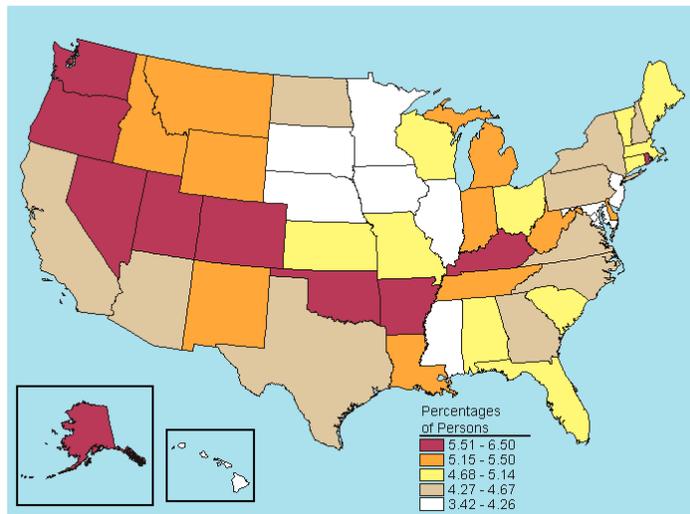
Compared to the Nation

- During the combined years of 2004 and 2005, persons 12 and older in Nebraska had a slightly lower, although not significantly lower, percentage than persons nationally for non-medical use of pain relievers during the past year (4.0% and 4.8%, respectively). Map 6 compares past year non-medical use of pain relievers by state during 2004 and 2005 combined, and suggests that estimates for Nebraska fall below most states nationally.

Trends

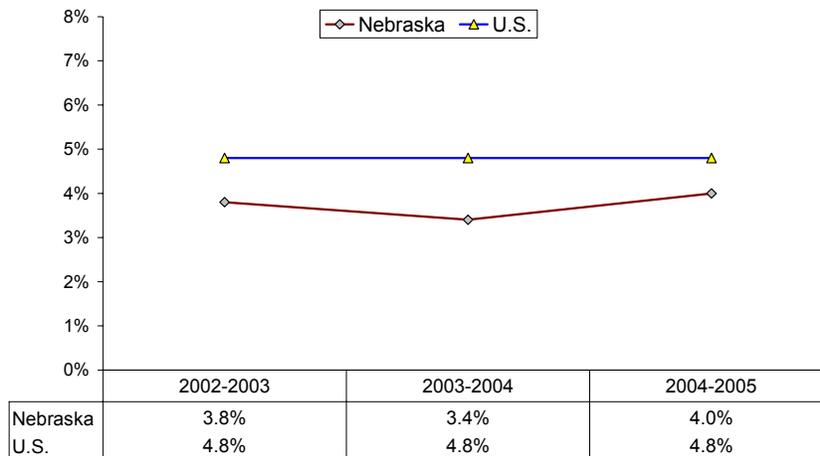
- Past year non-medical use of pain relievers among Nebraska residents 12 and older has remained virtually unchanged between 2002/2003 (3.8%) and 2004/2005 (4.0%), Figure 16.

Map 6: Non-Medical Use of Pain Relievers in Past Year among Persons 12 and Older, by State, 2004 and 2005 Combined



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

Figure 16: Non-Medical Use of Pain Relievers in Past Year* among Persons 12 and Older, Nebraska and U.S., 2002-2005

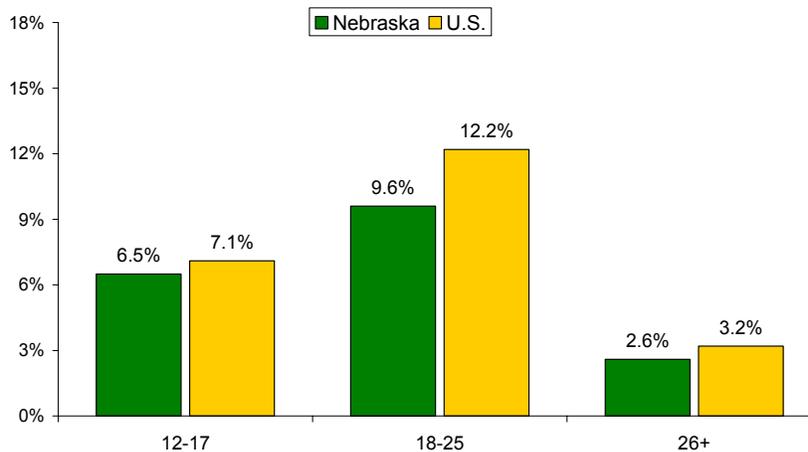


*Persons 12 and older reporting non-medical use of pain relieving drugs (excluding over-the-counter drugs) during the one-year preceding the survey
 Source: National Survey on Drug Use and Health (NSDUH)

Differences by Age

- During the combined years of 2004 and 2005, past year non-medical use of pain relievers was highest among Nebraska residents 18-25 (9.6%) followed by those 12-17 (6.5%) and 26 and older (2.6%) (Figure 2). When compared to residents nationally, Nebraska residents 18-25 reported a lower percentage than their national counterparts (9.6% and 12.2%, respectively) while residents 12-17 and 26 and older reported similar percentages to residents nationally (Figure 17).

Figure 17: Non-Medical Use of Pain Relievers in Past Year among Persons 12 and Older, Nebraska and U.S., by Age, 2004-2005 Combined



*Persons 12 and older reporting non-medical use of pain relieving drugs (excluding over-the-counter drugs) during the one-year preceding the survey
 Source: National Survey on Drug Use and Health (NSDUH)

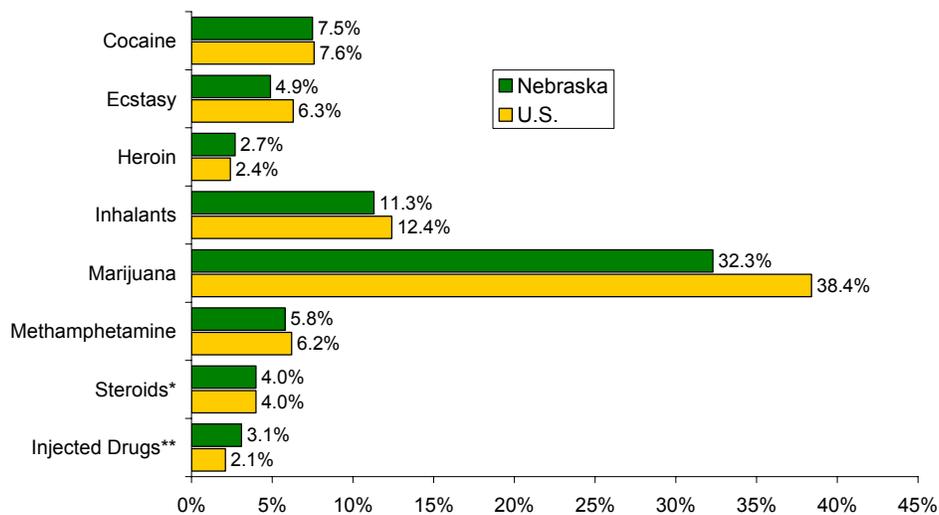
Other Illicit Drug Use among Youth

Lifetime Illicit Drug Use among High School Students by Type of Drug

Source: Youth Risk Behavior Survey

In 2005, Nebraska high school students were asked to report lifetime use of various illicit drugs. Marijuana was the most commonly reported drug, reported by one-third of high school students (32.3%), and was followed by inhalants (11.3%), cocaine (7.5%), methamphetamine (5.8%), and ecstasy (4.9%), Figure 18. Compared to the nation, Nebraska high school students in 2005 reported a lower percentage for lifetime marijuana use, a lower, although not significantly lower, percentage for lifetime ecstasy and inhalant use, a similar percentage for cocaine, heroin, inhalant, methamphetamine, and steroid use, and a higher, although not significantly higher percentage for illegal injection drug use (Figure 18).

Figure 18: Lifetime Illicit Drug Use among High School Students, Nebraska and U.S., by Drug Type, 2005



*Includes steroid pills or shots taken without a doctor's prescription

**Includes using a needle to inject illegal drugs into the body

Source: Youth Risk Behavior Survey (YRBS)

DATA GAPS

After reviewing the availability of data on substance abuse and associated consequences in Nebraska, the NSAEW began identifying and prioritizing data gaps related to substance abuse within Nebraska. 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):

- Lack of representative data on Nebraska youth, resulting from a lack of participation in school-based surveys.
- 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).
- Incomplete 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.

Over the coming months and years, the NSAEW will continue to identify the most serious data gaps and develop strategies to alleviate them. In doing so, the NSAEW will choose specific projects to address these gaps. The following is a list of potential projects that the NSAEW could be involved in:

- Develop an in-depth report on the substance abuse prevention priorities chosen by NePiP. This report could include an expanded analysis of regional differences as well as provide information on risk and protective factors that are related to a specific substance abuse problem (e.g., attitudes, policies, access, and enforcement).
- Assist in developing a community assessment guidance document that could help communities during the assessment phase of their SPF SIG grant. This document could contain tools and materials to help community coalitions collect, interpret, and use local data for planning.
- Assist in developing a strategic plan to encourage greater participation in school-based surveys (e.g., Nebraska Risk and Protective Factor Student Survey, Youth Risk Behavior Survey, and the Youth Tobacco Survey).
- Create an interactive substance abuse data web site for the State of Nebraska, which could serve as a substance abuse data repository. This web site could enhance the availability of current data and provide more complete information across various demographic sub-groups (e.g., urban/rural).
- Provide regular updates on the statewide epidemiological profile.

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

The Highway Safety Section 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 by the Nebraska Department of Motor Vehicles, Office of Highway Safety. For these data, a crash is considered alcohol-related if either driver and/or a nonoccupant (such as a pedestrian or pedalcyclist) 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.

For this report, alcohol-related crash data for Nebraska were obtained for the 10-year time period of 1997-2006 from the Nebraska Office of Highway Safety. Data were presented for alcohol-related fatal crashes as well as non-fatal crashes that resulted in injury (including disabling injury and any injury).

For a national comparison, only alcohol-related fatal crash data are available through the Fatality Analysis Reporting System (FARS), *see FARS methodology for further detail*. Non-fatal alcohol-related crash data do not have a standardized method for reporting at the state or national level, and consequently were not available for this report.

Alcohol testing is conducted during nearly all fatal motor vehicle crashes in Nebraska, making Nebraska one of the national leaders in alcohol testing. In 2006, alcohol testing was conducted during 169 of the 226 fatal motor vehicle crashes (74.8%). Of the 57 fatal crashes that were not tested, many were believed to have been intentionally not tested due to little or no evidence of alcohol involvement. Due to the high level of testing, the number and rate for alcohol-related motor vehicle crashes in Nebraska presented in this report came from the Nebraska Department of Roads and was not adjusted (through estimation), as was done in FARS. FARS data were included in this report for national comparison only.

While substantial information is available on non-fatal alcohol-related motor vehicle crashes in Nebraska, testing is done at the discretion of the officer and is less complete than testing administered during fatal crashes, especially for crashes resulting in minor injury. As a result, these data are intended to provide insight into the involvement of alcohol in non-fatal motor vehicle crashes. However, they should be viewed with some caution, especially when comparing trends.

For more information on the Nebraska Office of Highway Safety visit <http://www.dmv.state.ne.us/highwaysafety> or call 402-471-2515.

Alcohol Sales / National Institute for Alcohol Abuse and Alcoholism

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 wholesaler 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 available in NIAAA reports is obtained from the Nebraska Liquor Control Commission (LCC). Using alcohol tax information, the Nebraska LCC compiles data on alcohol sales at the wholesale level.

As mentioned, these data represent sales at the wholesale level, not sales/consumption at the retail/individual level. As a result, these data may be influenced by factors such as tourism and cross-border sales to buyers from neighboring States. Information on further limitations of these data is available through NIAAA publications.

For more information on the NIAAA visit <http://www.niaaa.nih.gov/>

For more information on the Nebraska Liquor Control Commission visit <http://www.lcc.ne.gov/index.html> or call 402-471-2571.

Behavioral Risk Factor Surveillance System / Division of Public Health / NDHHS

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 Nebraska Department of Health and Human Services. Nebraska began conducting the BRFSS in 1982, and since has conducted the survey on an on-going 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 2006. Data on illicit drug use are not collected by the BRFSS. In 2006, to better align with the National Institute for Alcohol Abuse and Alcoholism's definition of binge drinking, the BRFSS changed the binge drinking question on the survey. Before 2006, the survey asked men and women to report the number of times they consumed five or more drinks during one occasion in the past month. In 2006, the survey question changed to ask women if they had consumed four or more drinks while it continued to ask men if they had consumed five or more drinks.

As a result of the changes made to the binge drinking question, the 2006 estimate for binge drinking is not directly comparable to the 2005 estimate. However, using self-reported data from another BRFSS survey question, asking about the maximum number of drinks consumed during any occasion in the past month, the CDC established methods for comparing the 2006 binge drinking estimate to previous years. For this report, modified estimates of binge drinking were used to better understand changes in trends; however, the modified 2006 estimate was not presented in this report to avoid confusion with the actual 2006 estimate. Although, when presenting estimates for a combined time period, such as differences by race/ethnicity for the combined time period of 2004-2006, the 2006 estimate was modified so that one binge drinking definition could be used across the entire time period. The methods used to modify the 2006 estimate to the traditional binge drinking definition consisted of coding women who reported binge drinking and consuming a maximum of four drinks during any one occasion in the past month as being non-binge drinkers.

For this report, indexing methods were applied to BRFSS data to calculate a more accurate estimate of heavy drinking. By definition, heavy drinking refers to the self-reported consumption of more than 60 drinks 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. Traditionally, BRFSS estimates of heavy drinking were calculated using the quantity (average number of drinks per drinking-day) and frequency (number of drinking-days) questions on the survey. However, as noted by

Stahre, et al in the December 2006 issue of *Addiction*, studies demonstrate that respondents do not typically include binge drinking occasions in estimates of their 'usual' or 'average' daily alcohol consumption; thus leading to an under-estimate of heavy drinking. To account for this, persons who reported averaging less than five drinks per drinking-day, but who binge drank in the past month, had five drinks counted toward their monthly total for each of the number of times that they reported binge drinking in the past month. The number of reported binge drinking occasions were then subtracted from the total number of days that the individual reported drinking, for which their reported average number of drinks per day was applied to the remaining days in which they reported drinking. Although this method provides a more accurate estimate of heavy drinking than the traditional method, it is still believed to under-estimate heavy drinking because the majority of binge drinkers average more than 5.0 drinks per binge episode.

The CDC's BRFSS website contains national as well as state specific data. However, the national median is presented on the website rather than the national mean (or average). To allow Nebraska data to be compared to the national average for the 50 U.S. states and the District of Columbia (excluding the U.S. territories), national BRFSS data files from 1989-2006 were downloaded from the CDC website and analyzed for each indicator presented in this report. As a result of this analysis, the percentages in this report may not match the percentages available through the BRFSS website. In addition, an error was identified in how the CDC calculated the 2006 prevalence estimate for binge drinking. As a result, the Nebraska binge drinking estimate for 2006 included in this report (18.1%) is slightly higher than the Nebraska estimate on the BRFSS website (17.9%).

For more information on the BRFSS, visit the CDC website at <http://www.cdc.gov/brfss/> or contact the Nebraska BRFSS coordinator at 402-471-3488.

Cigarette Sales / Nebraska Department of Revenue

The Nebraska Department of Revenue collects tax 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.

Information on cigarette sales presented in this report was obtained from the *Tax Burden on Tobacco*, volume 41, 2006. As mentioned, these data represent sales at the wholesale level, not sales/consumption at the retail/individual level. As a result, these data may be influenced by factors such as tourism, cross-border sales to buyers from neighboring States, and other factors.

For more information on the Nebraska Department of Revenue visit <http://www.revenue.ne.gov/>

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 drug recognition experts (DREs). The program is federally funded through the Nebraska Office of Highway Safety. As of August 2007 there were 110 law enforcement officers in Nebraska trained as DREs. 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.

While DREs are located throughout the state, there are regions of the state that do not have DREs. The majority of DREs in Nebraska are located in the Omaha metropolitan area, the State's largest urban population. As a result, DRE data presented in this report, especially for drug type, may have been slightly different had all law enforcement agencies statewide had DREs.

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.

In 2006, three-fourths (74%) of the 18,003 drivers suspected of driving under the influence of drugs completed a toxicology test (13,334). Although 87 percent of DRE opinions were supported by toxicology results, this report presents only data obtained from toxicology results to ensure the highest level of accuracy. However, had everyone received a toxicology test, the breakdown of DUI arrests by drug type may have been slightly different.

For additional information on the DRE program and/or DRE data contact the Nebraska Office of Highway Safety at 402-471-2515.

DUI Conviction Data / Nebraska Department of Motor Vehicles

Following a court sentence for DUI, the court electronically enters information on the sentence to the Nebraska Department of Motor Vehicles (DMV) so that it can be added to the individuals driving record. Out of state abstracts are sent to the DMV and added to the driving record. It should be noted that a DUI conviction could pertain to driving under the influence of alcohol and/or drugs. Data on DUI convictions presented in this report were obtained from the Nebraska Office of Highway Safety.

For more information on the Nebraska Department of Motor Vehicles visit <http://www.dmv.state.ne.us/>

For more information on the Nebraska Office of Highway Safety visit <http://www.dmv.state.ne.us/highwaysafety> or call 402-471-2515.

Fatality Analysis Reporting System / National Highway Traffic Safety Administration

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 nonmotorist (such as a pedestrian or pedalcyclist) 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 Road provides the NHTSA with information on fatal crashes in Nebraska using state data that are coded onto a standard FARS form.

One element of FARS addresses the involvement of alcohol in fatal crashes. FARS alcohol files contain driver and nonoccupant BAC (blood alcohol content) estimates, as well as overall crash alcohol estimates, which are used to supplement the data files when no alcohol information would otherwise be available.

As previously noted, Nebraska is one of the national leaders in testing for alcohol involvement in fatal motor vehicle crashes. In contrast, many states test a much lower percentage of fatal motor vehicle crashes for alcohol, resulting in a higher need for estimation. As a result, some caution should be used when comparing estimates for Nebraska to estimates for the nation or other states.

For more information on FARS visit <http://www-fars.nhtsa.dot.gov/>

For more information on the National Highway Traffic Safety Administration visit <http://www.nhtsa.dot.gov/>

Incarceration and Parole Data / Nebraska Department of Correctional Services

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.

Upon incarceration, newly admitted inmates (regardless of their offense) are presented with a set of questions asking them to report drug use during the five years preceding their incarceration. Inmates have the right to refuse to answer the questions; however, the vast majority answers them.

In addition to data on self-reported drug use prior to incarceration, inmates are tested for drug use at the time of admission as well as randomly tested during their incarceration. While these data provide valuable information on drug use at the time of and during incarceration, they were not included in this report but are available from the Nebraska Department of Correctional Services upon request.

These data do not include federal prison inmates who committed crimes within Nebraska, nor do they include inmates that have transferred into Nebraska via the Interstate Compact.

For more information on the Nebraska Department of Correctional Services, visit their website at <http://www.corrections.state.ne.us/> or contact them at 402-471-2654.

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

The Division of Behavioral Health (DBH) of the Nebraska Department of Health and Human Services 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.

Among other variables, information is available on the age, gender, race/ethnicity, and county of residence for persons receiving substance abuse treatment. In addition, clients are asked to report their top three drugs of choice at the time of admission. In 2006, drug of choice data was reported during approximately 91 percent of all substance abuse treatment admissions in the Magellan database (22,718 admissions reported drug of choice data out of 25,083 total admissions).

There are a total of 16 drug categories available for clients to choose when reporting drug of choice data at the time of admission. However, for this report, data presentation was limited to the top three drugs of choice, methamphetamine, marijuana, and cocaine. Heroin was inadvertently left off of the list

of drugs of choice. As a result, heroin users, although unknown, likely responded by choosing 'other opiates/synthetics'.

Data in this report are limited to 2006 records included in the Magellan database. While this covers a large number of substance abuse treatment admissions in the state, it does not include admissions to private facilities that do not report their data to Magellan. Furthermore, the number of treatment admissions in this report does not necessarily reflect completed treatment services since some individuals drop out prior to completion. Magellan data prior to 2006 are available from the DBH, but were not included in this report since the intent of this report was to present a snapshot of substance abuse treatment admissions in the state.

For more information on the Nebraska Division of Behavioral Health call 402-471-3121 or visit http://www.hhs.state.ne.us/Behavioral_Health/

Another source for obtaining Nebraska data on substance abuse treatment is SAMHSA's Treatment Episode Data Set (TEDS). While national comparison data are available within this source, it was not chosen for this report because Magellan data were available for analysis and were more comprehensive for treatment admissions in Nebraska. For more information on TEDS visit <http://www.oas.samhsa.gov/2k2/TEDS/TEDS.cfm>

Minority Over-Sample Behavioral Risk Factor Survey / Division of Public Health / NDHHS

Beginning in 2001, the Nebraska Department of Health and Human Services began conducting an additional BRFSS type survey targeted at minority residents. This survey, which is administered to regions of the state with a high density minority population, is virtually identical to the statewide BRFSS used during the same year. Between 2001 and 2005, all Nebraska census tracts with a minority population of 50 percent or greater were targeted for the survey using the identical statewide BRFSS questionnaire and survey administration techniques. To increase the Native American sample in 2006, census tracts that had a Native American population of 10 percent or greater but that fell below the 50 percent minority population threshold were added to the survey. In addition, to reduce the number of White survey respondents that had completed the survey between 2001 and 2005, questions asking about race/ethnicity were moved toward the front of the survey in 2006 and only one in every four White respondents was asked to complete the survey. Prior to analyzing results by race/ethnicity, the minority over-sample survey was merged with the statewide BRFSS and the results were re-weighted to better represent the states minority population using methods established by the CDC. For this report, data from the minority over-sample survey were only reported when presenting data by race/ethnicity, and not when presenting results statewide or by other demographics.

For more information on the minority over-sample survey please contact the Nebraska BRFSS Coordinator at 402-471-3488.

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 Nebraska Department of Health and Human Services. 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 1999-2004 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 Alcohol-Related Disease Impact (ARDI) software while the number of smoking-related deaths was calculated using fractions obtained from the CDC's Smoking Attributable Morbidity Mortality and Economic Cost (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

Age-adjusted death rates per 100,000 population (2000 U.S. standard population) were used to compare Nebraska to the U.S. for alcohol (year 2001), cigarette smoking (year 2001), and drug use (year 2004). For alcohol-related deaths, age-adjusted rates (using the 2000 U.S. standard population) for Nebraska and the U.S. were calculated using the age-specific output from ARDI along with U.S. census bureau population data using the following age-categories: 0-19, 20-34, 35-49, 50-64, and 65+. It should be noted that U.S. ARDI data were only available for 2001 and ARDI only generates estimates for the select age-categories mentioned above. As a result, rates for alcohol-related death were not calculated using the standard 11 age-categories used in age-adjusting death rates.

Smoking-related death rates for Nebraska and the U.S. during 2001 were age-adjusted per 100,000 population aged 35 and older. These rates were calculated and presented on the CDC SAMMEC website and were only available for calendar year 2001. For years 1999-2004, age-adjusted smoking-related death rates for Nebraska were calculated for all persons by applying SAMMEC methodology to Nebraska vital records data.

Age-adjusted drug-attributable death rates for the U.S. during years 1999-2004 were obtained on-line using CDC Wonder software. These rates were compared to the Nebraska rates generated using Nebraska vital records data.

For more information on age-adjustment see the age-adjustment section on page 123 of this report.

For more information on ARDI visit <http://apps.nccd.cdc.gov/ardi/Homepage.aspx>.

For more information on SAMMEC visit <http://apps.nccd.cdc.gov/sammeec/>.

For more information on CDC Wonder visit <http://wonder.cdc.gov/>.

For more information on Nebraska Vital Records visit <http://www.hhs.state.ne.us/vitalrecords/> or call 402-471-2871.

National Survey on Drug Use and Health / SAMHSA

Sponsored by SAMHSA, the National Survey on Drug Use and Health (NSDUH) is an annual survey of the civilian, noninstitutionalized population of the United States aged 12 years and older. Data are 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.

Although the survey has been administered since 1971, changes made during the 2002 administration have made comparisons to data collected prior to 2002 less accurate. As a result, NSDUH data contained in this report are from 2002-2005 and reported using a two-year moving average. In 2002, the name of the survey was changed from the National Household Survey on Drug Use to the NSDUH. In addition, a \$30 incentive was given to respondents and new data quality control procedures were implemented.

To create more precise estimates of substance use at the state level, small area estimation procedures are conducted. However, due to the complexity of these procedures, data are not available for analysis. As a result, all NSDUH findings included in this report were obtained from either the SAMHSA website or NSDUH published reports.

Due to the cost of the survey, data are collected from a smaller number of respondents than typically collected through other methods, such as telephone based surveys. In 2004 there were 897 completed interviews in Nebraska (76.0% response rate) while 935 Nebraska residents completed the survey in 2005 (73.1% response rate).

Due to the limited number of respondents and complexity of analysis, most data are only available for select demographics at the state level, including an overall estimate as well as estimates for 12-17 years 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.

For more information on the NSDUH visit <http://www.oas.samhsa.gov/nhsda.htm>

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 Association of Hospitals and Health Systems (NAHHS). This information is reported by hospitals using the Uniform Billing Form (UB-92) and is transmitted electronically to the Nebraska Hospital Information System at NAHHS. Ultimately the information is acquired by the Nebraska

Department of Health and Human Services (NDHHS) from NAHHS. 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/sammecc/>.

There are three primary limitations of these data. First, the number of records reported annually by acute care hospitals to the NHIS is lower than the number of 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. Between 1996 and 2003, the completeness of the Nebraska inpatient hospital discharge database was generally high and relatively stable, with the 2003 database being 92 percent complete. However, due to changes in how many hospitals submitted their records to the NHIS, more recent data are less complete with 2004 being 82 percent complete and 2005 being 83 percent complete. As a result, only 2003 hospitalization data were included in this report.

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 which 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 their data to the Nebraska Department of Health and Human Services using National Trauma Registry of the American College of Surgeons (NTRACS) software. These trauma centers included: ByranLGH West Medical Center (Lincoln), Creighton University Medical Center (Omaha), Good Samaritan Hospital (Kearney), Great Plains Regional Medical Center (North Platte), The Nebraska Medical Center (Omaha), Regional West Medical Center (Scotts Bluff), and Saint Francis Medical Center (Grand Island).

To allow for consistent comparisons across centers, the Trauma Registry Data Dictionary subcommittee developed a Nebraska trauma registry data dictionary in 2004. This dictionary provides uniform definitions and standardized data entry options to registrars submitting data to the NTR. Due to increasing participation among centers, HHS worked with ImageTrend, a software company from Minnesota, and developed an online Nebraska Trauma Bridge System (NTBS) to meet the increasing data collection and submission needs. Since March 2007, 20 small hospitals are using the NTBS to submit data to the NTR.

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 concentration (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 there 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.

For more information on the NSTS visit <http://www.dhhs.ne.gov/ems/emstrauma.htm>

Pregnancy Risk Assessment Monitoring System / Division of Public Health / NDHHS

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a surveillance system sponsored by the CDC and state health departments of participating states. PRAMS 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 resident who give birth in their state. Nebraska stratifies their 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.

For this report, 2002 data on alcohol use and cigarette smoking were presented. These data were obtained from the following CDC report:

Williams L, Morrow B, Shulman H, Stephens R, D'Angelo D, Fowler CI. PRAMS 2002 Surveillance Report. Atlanta, GA: Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2006.

Although more recent PRAMS data were available from the Nebraska Department of Health and Human Services, only data from the national report were included in this report because they contained the most recent estimates for the nation. More recent PRAMS data can be obtained by contacting the Lifespan Health Services Unit of the NDHHS, see information below.

For alcohol use, women are asked to report alcohol use and binge drinking during the three months before pregnancy as well as the last three months of pregnancy. Data on binge drinking was not available in the national report and subsequently not included in this report. For cigarette smoking, women are asked to report cigarette smoking during the three months before pregnancy, during the last three months of pregnancy, and after pregnancy. Data on each of these three smoking-related measures was included in the report.

In 2002, PRAMS was administered in 27 states. As a result, comparison to the 27 state national average should be viewed with some caution. In addition, PRAMS is administered three to six months after delivery. As a result, respondents are subject to a long recall period for some of the questions, in addition to the limitations and biases that generally occur through survey research.

For more information on the CDC PRAMS visit <http://www.cdc.gov/prams/>

For more information on the Nebraska PRAMS, please contact the Nebraska PRAMS Coordinator at 402-471-9044 or visit <http://www.hhs.state.ne.us/prams/>

Probation Data / Nebraska Office of Probation Administration

The Nebraska Supreme Court Office of Probation Administration provides central management of probation services for the State of Nebraska. For these 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.

In recent years the Nebraska Probation System has implemented the use of a web-based database, Nebraska Probation Management Information System (NPMIS) as their case management program. The Office of Probation Administration maintains information on all youth and adults sentenced to probation, as well as information from pre-dispositional and pre-sentence investigations.

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.

For more information on the Nebraska Office of Probation Administration:
<http://supremecourt.ne.gov/probation/>

Smoking-Related Fires / Nebraska State Fire Marshal's Office

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. Also, approximately 19 percent of structure fires in 2005 resulted from an unknown cause, suggesting that there may be more smoking-related fires than specifically reported.

For more information on data from the Nebraska State Fire Marshal's Office visit
<http://www.sfm.ne.gov/statistics/fire/fire.html>

Uniform Crime Reporting / Nebraska Crime Commission

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.

While Nebraska law enforcement agencies are required to submit monthly reports to the Nebraska Crime Commission, not every agency does. In 2006, 145 out of 170 agencies (85%) reported their data to the Nebraska Crime Commission. As a result, the arrest data presented within this report may under represent the actual number of arrests statewide.

Within the UCR format, several alcohol and drug offense categories are available and were included in this report. These categories include arrests for DUI, liquor law violations, and drug abuse violations, which are separated by arrests for drug possession and arrests for sale/manufacturing of drugs.

While the UCR categories certainly provide insight into alcohol and drug related crimes, some limitations exist due to how these arrests are categorized. These limitations include:

- It is not possible to decipher between DUI arrests resulting from alcohol use compared to DUI arrests resulting from the use of non-alcoholic substances.
- Arrests for liquor law violations are lumped together and cannot be separated by violation, such as public intoxication, minor in possession, or purchasing or selling alcohol to a minor.
- Drug violations are separated by only four drug type categories, including cocaine/opium, marijuana, synthetic narcotics, and non-narcotic drugs. As a result, arrests for specific illicit drugs such as cocaine, methamphetamine, and others cannot be reported separately.

In addition to arrest data, information on reported violent and property crimes was also included in this report. These data represent the number of crimes reported to law enforcement agencies within Nebraska, and do not necessarily reflect the number of arrests made for these crimes.

The data presented in this report were obtained directly from the Nebraska Crime Commission. It should be noted that the number of arrests within this report may be slightly different from the number of arrests for Nebraska published in the FBI's Crime in the United States, 2006 report. This is a result of State level data being updated when additional data become available.

Although some limitations exist for alcohol and drug-related crimes within the UCR categories, NIBRS is more comprehensive and can allow for more in-depth analysis of alcohol and drug-related crimes. However, due to a limited number of agencies using NIBRS, it was not included in this report. NIBRS is currently being used by 68 of the 170 law enforcement agencies in Nebraska. As more agencies begin using NIBRS, a greater level of detail on alcohol and drug-related crimes in Nebraska will become available.

For more information on UCR data, visit the Nebraska Crime Commission website at <http://www.ncc.state.ne.us/index.htm> or contact them at 402-471-2194.

Youth Risk Behavior Survey / Division of Public Health / NDHHS

The Youth Risk Behavior Survey (commonly referred to as 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 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 since. 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 three-stage cluster sampling design.

Data from the 1991, 1993, 2003, and 2005 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 generalize-able to the population (according to the CDC's criteria). To be more comprehensive, un-weighted data from 1995-2001 were included within many of the YRBS figures presented in this report, but should be viewed with extreme caution when interpreting trends.

Beyond the standard limitations of self-report surveys, some limitations exist specifically for the YRBS.

- Data are only collected from public school students. Although public school students made up approximately 90% of the states 9-12 grade student population in 2005, it is not known how health behaviors differ between public and non-public high school student in Nebraska.
- Data are 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 student population for grades 9-12 as the denominator. These population data were obtained from the Nebraska Department of Education website. As noted, students in public schools may have slightly different results from students in non-public schools; however, we felt that an overall statewide estimate would be more useful and less confusing to users of the report.

For more information on the Nebraska YRBS, please visit the following website <http://www.cdc.gov/HealthyYouth/yrbs/index.htm> or contact the Nebraska YRBS coordinator at 402-471-2101.

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) eleven age categories are typically used, ranging from under one to 85 and older. Rates in this report were calculated using the eleven 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 2000 U.S. standard population.

For more information on age-adjustment visit the National Center for Health Statistics website at <http://www.cdc.gov/nchs/datawh/nchsdefs/ageadjustment.htm>.

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% ranged from 24.7 – 29.9 while the male estimate of 32.2% ranged from 28.5 – 35.8). 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% confidence interval bands for age-adjusted rates is as follows: $R + (1.96 \times S.E.)$; where $S.E. = R/\text{SQRT}(N)$; 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 four urban and rural categories. The categories were based on city size within each county (which was obtained from the 2000 U.S. Census). 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, but rather are included primarily for data sources that contained the higher scoring indicators in the NSAEW indicator selection process. In addition, county of residence information was not available within some of the data sources included in this report. The four categories include:

Metropolitan counties have a city with at least 50,000 residents and a county population of at least 100,000. There are 3 metropolitan counties in Nebraska.

Medium Urban counties do not meet the metropolitan county requirements, but do have at least one city with a population of 10,000 residents or greater. There are 11 medium urban counties in Nebraska.

Small Urban counties do not meet the medium urban county requirements, but do have at least one city with a population of 2,500 residents or greater. There are 27 small urban counties in Nebraska.

Rural counties do not meet the small urban county requirements, thus they do not have any cities with a population of 2,500 residents or greater. There are 52 rural counties in Nebraska.

Below are the Nebraska counties per urban/rural category for the analysis presented in this report.

Metropolitan

Douglas
Lancaster
Sarpy

Medium Urban

Adams
Buffalo
Dakota
Dawson
Dodge
Gage
Hall
Lincoln
Madison
Platte
Scotts Bluff

Small Urban

Box Butte
Butler
Cass
Cherry
Cheyenne
Colfax

Cuming
Custer
Dawes
Hamilton
Holt
Jefferson
Kearney
Keith
Kimball
Merrick
Nemaha
Otoe
Phelps
Red Willow
Richardson
Saline
Saunders
Seward
Washington
Wayne
York

Rural

Antelope
Arthur

Banner
Blaine
Boone
Boyd
Brown
Burt
Cedar
Chase
Clay
Deuel
Dixon
Dundy
Fillmore
Franklin
Frontier
Furnas
Garden
Garfield
Gosper
Grant
Greeley
Harlan
Hayes
Hitchcock
Hooker

Howard
Johnson
Keya Paha
Knox
Logan
Loup
McPherson
Morrill
Nance
Nuckolls
Pawnee
Perkins
Pierce
Polk
Rock
Sheridan
Sherman
Sioux
Stanton
Thayer
Thomas
Thurston
Valley
Webster
Wheeler

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

DPH – Division of Public Health

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

NePiP – Nebraska Partners in Prevention

NHTSA – Nebraska Highway Traffic Safety Administration

NIAAA – National Institute for Alcohol Abuse and Alcoholism

NIBRS – Nebraska Incident-Based Reporting System

NSAEW – Nebraska Substance Abuse Epidemiology Workgroup

NSDUH – National Survey on Drug Use and Health

NSTS – Nebraska Statewide Trauma System

NTR – Nebraska Trauma Registry

PRAMS – Pregnancy Risk Assessment Monitoring System

SAMHSA – Substance Abuse and Mental Health Services Administration

SAMMEC – Smoking Attributable Morbidity Mortality and Economic Cost

SPF SIG – Strategic Prevention Framework State Incentive Grant

TEDS – Treatment Episode Data Set

UB-92 – Uniform Billing Form 92

UCR – Uniform Crime Reports

YRBS – Youth Risk Behavior Survey

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*Note: Individuals included in this appendix were involved in the NSAEW during the completion of this report. Membership has changed slightly since the completion of this report, with some new members joining and some existing members resigning.

APPENDIX B - COMMONLY ABUSED DRUG CATEGORIES

Substance Category and Name	Example of <i>Commercial</i> and (Street Names)	How Drug is Administered	<i>Intoxication Effects</i> / (Potential Health Consequences)	
Cannabinoids				
Hashish	(boom, chronic, gangster, hah, hash oil, hemp,)	swallowed, smoked	<i>euphoria, slowed thinking and reaction time, confusion, impaired balance and coordination, cough</i> / (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	<i>Amytal, Nembutal, Seconal, Phenobarbital</i> ; (barbs, reds, red birds, phennies, tooies, yellows, yellow jackets)	injected, swallowed	<i>sedation, drowsiness</i> / (depression, unusual excitement, fever, irritability, poor judgment, slurred speech, dizziness, life-threatening withdrawal)	<u>For all Depressants:</u> <i>reduced anxiety, feeling of well-being, lowered inhibitions, slowed pulse and breathing, lowered blood pressure, poor concentration</i> / (fatigue, confusion, impaired coordination, memory, judgment; addiction; respiratory depression and arrest; death)
Benzodiazepines (other than flunitrazepam)	<i>Ativan, Halcion, Librium, Valium, Xanax</i> ; (candy, downers, sleeping pills, tranks)	swallowed, injected	<i>sedation, drowsiness</i> / (dizziness)	
Flunitrazepam	<i>Rohypnal</i> ; (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	<i>gamma-hydroxybutyrate</i> ; (G, Georgia home boy, grievous bodily harm, liquid ecstasy)	swallowed	<i>drowsiness, nausea</i> / (vomiting, headache, loss of consciousness, loss of reflexes, seizures, coma, death)	
Methaqualone	<i>Quaalude, Sopor, Parest</i> ; (ludes, mandrex, quad, quay)	injected, swallowed	<i>Euphoria</i> / (depression, poor reflexes, slurred speech, coma)	
Dissociative Anesthetics				
Ketamine	<i>Ketalar SV</i> ; (cat Valiums, K, Special K, vitamin K)	injected, snorted, smoked	(at high doses -- delirium, depression, respiratory depression and arrest)	<u>For all DA:</u> increased heart rate and blood pressure, impaired motor function / (memory loss, numbness, nausea)
PCP and analogs	<i>phencyclidine</i> ; (angel dust, boat, hog, love boat, peace pill)	injected, swallowed, smoked	<i>possible decrease in blood pressure and heart rate, panic, aggression, violence</i> / (loss of appetite, depression)	

Substance Category and Name	Example of Commercial and (Street Names)	How Drug is Administered	Intoxication Effects / (Potential Health Consequences)	
Hallucinogens				
LSD	<i>lysergic acid diethylamide</i> ; (acid, blotter, boomers, cubes, microdot, yellow sunshines)	swallowed, absorbed through mouth tissue	<i>increased body temp, heart rate, blood pressure; loss of appetite, sleepless-ness, numbness, weakness, tremors, persistent mental disorders (for LSD)</i>	<u>For all Hallucinogens:</u> <i>altered states of perception and feeling; nausea persisting perception disorder (flashbacks)</i>
Mescaline	(buttons, cactus, mesc, peyote)	swallowed, smoked		
Psilocybin	(magic mushroom, purple passion, schrooms)	swallowed	<i>nervousness, paranoia</i>	
Opioids (also referred to as Narcotics)				
Opiates				
Codeine	<i>Empirin with Codeine, Fiorinal with Codeine, Robitussin A-C, Tylenol with Codeine</i> ; (Captain Cody, Cody, schoolboy; with glutethimide – doors & flours, loads, pancakes and syrup)	injected, swallowed	<i>less analgesia, sedation, and respiratory depression than morphine</i>	<u>For all Opioids:</u> <i>pain relief, euphoria, drowsiness / (nausea, constipation, confusion, sedation, respiratory depression and arrest, tolerance, addiction, unconsciousness, coma, death)</i>
Morphine	<i>Roxanol, Duramorph</i> ; (M, Miss Emma, monkey, white stuff)	injected, swallowed, smoked		
Heroin	<i>Diacetylmorphine</i> ; (brown sugar, dope, H, horse, junk, skag, skunk, smack, white horse)	injected, smoked, snorted	<i>staggering gait</i>	
Opium	<i>laudanum, paregoric</i> ; (big O, black stuff, block, gum, hop)	swallowed, smoked		
Semi-synthetic opioids				
Oxycodone HCL	<i>Oxycontin</i> ; (Oxy, O.C., killer)	swallowed, snorted, injected		
Hydrocodone	<i>Vicodin</i> ; (vike, Watson-387)	swallowed		
Fully-synthetic opioids				
Fentanyl and fentanyl analogs	<i>Actiq, Duragesic, Sublimaze</i> ; (Apache, China girl, China white, dance fever, friend, goodfella, jackpot, TNT, Tango & Cash)	injected, smoked, snorted		
Methadone	<i>Physeptone</i> ; (Meth, Phy)	swallowed, injected	Note: methadone is commonly used for the treatment of heroin addiction	

Substance Category and Name	Example of Commercial and (Street Names)	How Drug is Administered	Intoxication Effects / (Potential Health Consequences)	
Stimulants				
Amphetamine	<i>Biphetamine, Dexedrine</i> (bennies, black beauties, crosses, hearts, LA turnaround, speed, truck drivers, uppers)	injected, swallowed, smoked, snorted	<i>rapid breathing</i> / (tremor, loss of coordination, irritability, anxiousness, restlessness, delirium, panic, paranoia, impulsive behavior, aggressiveness, tolerance, addiction, psychosis)	<u>For all Stimulants:</u> <i>increased heart rate, blood pressure, metabolism, feelings of exhilaration, energy, increased mental alertness</i> / (rapid or irregular heart beat; reduced appetite, weight loss, heart failure, nervousness, insomnia)
Cocaine	<i>Cocaine Hydrochloride;</i> (blow, bump, C, candy, Charlie, coke, crack, flake, rock, snow, toot)	injected, smoked, snorted	<i>increased temperature</i> / (chest pain, respiratory failure, nausea, abdominal pain, strokes, seizures, headaches, malnutrition, panic attacks)	
MDMA	<i>Methylenedioxy-methamphetamine;</i> (Adam, clarity, ecstasy, Eve, lover's speed, peace, STP, X, XTC)	swallowed	<i>mild hallucinogenic effects, increased tactile sensitivity, emphatic feelings</i> / (impaired memory and learning, hyperthermia, cardiac toxicity, renal failure, liver toxicity)	
Methamphetamine	<i>Desoxyn;</i> (chalk, crank, crystal, fire, glass, go fast, ice, meth, speed)	injected, swallowed, smoked, snorted	<i>aggression, violence, psychotic behavior</i> / (memory loss, cardiac and neurological damage, impaired memory and learning, tolerance, addiction)	
Methylphenidate	<i>Ritalin;</i> (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	<i>Anadrol, Oxandrin, Durabolin, Depo-testosterone;</i> (roids, juice)	injected, swallowed, applied to skin	<i>no intoxication effects</i> / (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)	
Dextromethorphan (DXM)	<i>Found in some cough and cold medications;</i> (Robo, Robotripping, Triple C)	swallowed	<i>Dissociative effects, distorted visual perceptions to complete dissociative effects</i> / (for effects at higher doses, see 'dissociative anesthetics')	

Substance Category and Name	Example of Commercial and (Street Names)	How Drug is Administered	<i>Intoxication Effects / (Potential Health Consequences)</i>
Inhalants	<i>Solvents (paint thinners, gasoline, glues), gases (butane, propane, aerosol propellants, nitrous oxide), nitrites (insoamyl, isobutyl, cyclohexyl); (laughing gas, poppers, snappers, whippets)</i>	inhaled through nose or mouth	<i>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)</i>

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

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