



Youth Alcohol Access, Consumption, and Consequences in Anchorage, Alaska: 2012 Update

Prepared for the
Volunteers of America Alaska CMCA Project

by

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This document presents recent information and trend analyses on a number of known indicators of youth access to alcohol, attitudes about alcohol consumption, alcohol consumption activities, and the consequences of youth alcohol consumption in Anchorage. Data for this report were collected from various reports on surveys completed by other researchers and governments, and in some cases state government departments provided unpublished analyses and raw data sets. Where possible, data are presented for Anchorage specifically. However, in some cases, data were available only at substate, state, or national levels. Unless otherwise stated, any differences described between groups or geographic areas in this report should not necessarily be considered to have statistical significance.

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Table of Contents

| | |
|--|----|
| Acknowledgements..... | v |
| Executive Summary | 1 |
| Introduction..... | 6 |
| Youth Access to Alcohol | 8 |
| Compliance Checks | 10 |
| Social Norms and Perceptions | 12 |
| Consumption..... | 20 |
| Consequences..... | 27 |
| School-Related Consequences | 27 |
| Risky Behavior and Underage Drinking..... | 32 |
| Underage Drinking and Driving: Traffic Tickets, Crashes, Injuries and Fatalities | 34 |
| Legal Consequences of Underage Drinking | 38 |
| Alcohol Abuse Requiring Treatment | 42 |
| Health and Safety Consequences of Underage Drinking..... | 43 |
| Economic Consequences of Underage Drinking | 46 |
| Data Gap Analysis | 48 |
| References..... | 50 |
| Appendix - Annotated Bibliography of Survey Sources | 54 |

List of Tables and Figures

| | |
|---|----|
| Table 1. Method of ASD Traditional School Students Obtaining Alcohol, 2009 and 2011 | 8 |
| Table 2. Youth Who Usually Purchased their Alcohol by School Type, 2007, 2009, and 2011 ... | 9 |
| Table 3. ASD Youth Who Perceive No or Slight Risk in Consuming One or Two Drinks of Alcohol Nearly Every Day by Type of School | 12 |
| Table 4. Alaska Youth Who Perceive No Risk of Self-Harm if They Consume One or Two Drinks of an Alcoholic Beverage Nearly Every Day, 2009, 2011..... | 13 |
| Table 5. Estimated Annual Average of Alaska Youth who Perceive Great Risk in Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week, 2005-2006, 2007-2008, 2008-2009, and 2009-2010 | 14 |
| Table 6. Estimated Annual Average of Alaskans Aged 12 and Older Who Perceive Great Risk in Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week by Region, 2006-2008, and 2008-2010 | 15 |
| Table 7. U.S. Youth Who Perceive Great Risk of Self-Harm if They Consume Alcohol, 2000-2011..... | 17 |
| Table 8. Youth in Grades 8 and 10 Who Disapprove or Strongly Disapprove of People Who Consume Alcohol, 2000-2011 | 18 |
| Table 9. Youth in Grade 12 Who Disapprove or Strongly Disapprove of People Age 18 or Older Who Consume Alcohol, 2000-2011 | 19 |
| Table 10. Trends in Per Capita Ethanol Consumption for Alaskans Age 14 Years and Older, 2000 to 2010 (Gallons) | 20 |
| Table 11. Estimated Annual Average of Alaskans Aged 12 and Older Consuming Alcohol in the Past Month by Region, 2006-2008 and 2008-2010 | 21 |
| Table 12. Estimated Annual Average of Alaska Youth Aged 12 to 20 Consuming Alcohol in the Past Month by Region, 2006- 2008 and 2008-2010 | 22 |
| Table 13. Trends in Reported Alcohol Use, by Age Group, Alaska | 23 |
| Table 14. Trends in Percentage of Alaska Youth Ages 18 to 20 Consuming Alcohol, 2005-2010 | 24 |
| Table 15. Trends in Alcohol Use Among Youth in ASD Traditional Schools by Gender, 1995 to 2011..... | 25 |
| Table 16. Alcohol Consumption Among Youth in ASD by Type of High School, 2007, 2009, 2011..... | 26 |

| | |
|---|----|
| Table 17. Reason for Suspension or Expulsion in Alaska Schools, 2005 to 2011 | 27 |
| Table 18. Type of Suspension or Expulsion in Municipality of Anchorage Resulting from Substance Use, 2005 to 2011 | 28 |
| Table 19. Reason for Suspension or Expulsion in Alaska and the Municipality of Anchorage by School Year, 2005 to 2011..... | 29 |
| Table 20. Substance Use Suspension and Expulsions in Municipality of Anchorage by Race, 2005 to 2011 | 30 |
| Table 21. Anchorage School District Prime for Life Participants by Type of School and Substance Used, 2009 to 2010..... | 31 |
| Table 22. ASD Youth Who Participated in Risk Behavior after Consuming Alcohol or Drugs by Type of School, 2009 and 2011 | 32 |
| Table 23. ASD Youth Who Consumed Alcohol or Used Drugs before Last Sexual Intercourse, 1995 to 2011 | 33 |
| Table 24. ASD Youth Who Drove after Drinking or Who Drove with a Drinking Driver in the Past 30 Days, 1995 to 2011..... | 34 |
| Table 25. Tickets Issued to Alaskans Who Were in Traffic Crashes by Age and Location,..... | 35 |
| Table 26. Tickets Issued to Anchorage Youth Ages 20 and Younger Who Were in Crashes by Sex, 2000 to 2009 | 36 |
| Table 27. Injuries Caused by Anchorage Youth Ages 20 and Younger Who Were Responsible for Crashes and Were Issued Alcohol-Related DWI Tickets, 2000 to 2009 | 36 |
| Table 28. Fatal Accidents Involving Drivers with Blood Alcohol Content of .08g/dl or Greater by Age, 2005; 2010..... | 37 |
| Table 29. Total Number of Charges among Alaska Youth Age 20 and Younger, 2000 to 2008. | 38 |
| Table 30. Prosecution and Dismissal of Minor Consuming Charges, 2009-2012..... | 41 |
| Table 31. Prosecution and Dismissal of Charges Filed Against Liquor License Holders, 2009-2012..... | 41 |
| Table 32. Alcohol Abuse Treatment Admissions in Alaska by Age Group, 2007 to 2011 | 42 |
| Table 33. Number of Alcohol-Related Injuries Requiring Hospitalization for Alaskans Ages 20 and Under by Region of Residence, 2001 to 2010 | 44 |
| Table 34. Total Number of Fetal Alcohol Spectrum Disorder Births in Alaska by Maternal Age, 1996-2011 | 44 |
| Table 35. Total Number of Alcohol-Induced Deaths for All Ages in Anchorage, 2001 to 2005, 2005 to 2009 | 45 |

| | |
|---|----|
| Table 36. Total Number of Alcohol-Induced Deaths in Alaska by Age, Race, and Sex, 2001-2005 and 2005-2009 | 45 |
| Table 37. Total Cost of Underage Drinking in the Five States with the Highest Cost-Per-Youth, 2010 (in Millions of Dollars) | 47 |
| Table 38. Cost of Underage Drinking in the Five States with the Highest Cost-per-Youth by Problem, 2010 (in Millions of Dollars)..... | 47 |
| Figure 1. Compliance Rate for Anchorage and Alaska (excluding MOA), 2005-2012 | 10 |
| Figure 2. Map of Anchorage Alcohol License Holder Locations and Local Schools | 11 |
| Figure 3. Alaska Youth Who Perceive that their Parents Would Strongly Disapprove of Consuming One or More Drinks of an Alcoholic Beverage Nearly Every Day, 2005-2007 and 2008-2010 | 16 |
| Figure 4. U.S. Youth Who Perceive that their Parents Would Strongly Disapprove of Consuming One or More Drinks of an Alcoholic Beverage Nearly Every Day, 2005-2007 and 2008-2010 . | 16 |
| Figure 5. Trend in the Total Number of Minor Consuming Charges among Underage Youth in Alaska, 2002 to 2008 | 39 |
| Figure 6. Trend in the Total Number of Charges among Underage Youth in Alaska by Selected Charge, 2002 to 2008..... | 40 |
| Figure 7. Statewide Alcohol-Related Injuries Requiring Hospitalization for Alaskans Ages 20 and under, 2000 to 2010 (per 100,000 population)..... | 43 |
| Figure 8. Total Cost of Underage Drinking per Year, per Youth, in the Five States with the Highest Cost-per-Youth, 2010 | 46 |

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Much of the information in this report was taken or modified from several reports and surveys such as the State (Alaska) Epidemiologic Profile on Substance Use, Abuse, and Dependency; the Youth Risk Behavior Survey; the National Survey on Drug Use and Health; and the Monitoring the Future survey. We also referred to a number of online databases and statistics for this report, as well as to needs assessments that have been completed in Alaska. We would like to thank these parties for making their information available for this report.

Executive Summary

In 2010 a comprehensive report identifying indicators of youth alcohol access, consumption, and consequences in Anchorage and/or Alaska was made available. The purpose of that original indicators report was to provide a baseline description of the underage drinking problem prior to the implementation of CMCA efforts. This updated report seeks to document the current underage drinking problem in Anchorage and/or Alaska and assess changes to the problem that have taken place over time. Where possible, attempts have been made to compare trends that have taken place in Anchorage to those in Alaska and/or nationwide. It is difficult to get a clear picture of how the underage drinking problem has changed over time and the ways in which the problem is similar or different in Anchorage relative to Alaska statewide. The difficulty examining trends over time between Anchorage and Alaska stems from different timelines employed by the various sources of data compiled in this report, different ways of designating age groups, and in most cases the absence of available data specific to Anchorage.

The indicators in this report have been organized into categories of underage access to alcohol, social norms, and perceptions associated with underage drinking, alcohol consumption patterns, and consequences of underage drinking. Consequences examined include school-related consequences of underage drinking, risky behavior associated with underage drinking, and legal consequences of underage drinking. Indicators describing alcohol abuse by people under 21 years of age requiring substance abuse treatment, health and safety consequences of underage drinking, and economic consequences of underage drinking have also been reported. Overall highlights from the report are summarized in this Executive Summary. In addition to overall highlights, indicators of the Anchorage underage drinking problem and changes in the problem over time are highlighted.

Youth Access to Alcohol

- Of students who consumed alcohol in the past 30 days, the majority of students reported in 2011 obtaining the alcohol from someone else (44%) or giving money to someone to purchase it for them (22%). Few students bought alcohol from a licensed establishment (3.5%). This pattern is similar to methods for accessing alcohol students reported in 2009.
- The percentage of students who reported purchasing their own alcohol increased between 2007 and 2011 for Anchorage School District (ASD) traditional and alternative schools as well as across Alaska. The percentage of ASD traditional students who reported purchasing their own alcohol was lower than students across Alaska in 2007 and 2009, but in 2011 a larger percentage of ASD traditional students reported purchasing their own alcohol than did all of Alaska.
- In Anchorage and Alaska, the percent of liquor licensees who passed compliance checks (did not sell alcohol to underage informants) ranged from 85% to 96% between 2005 and 2012. Rates of compliance have increased slightly between 2009 and 2012 in Anchorage and have declined slightly for the rest of Alaska excluding Anchorage.

Social Norms and Perceptions

- Just over one-third of youth in traditional and alternative schools in the ASD and across Alaska reported no or slight risk in consuming one or two drinks of alcohol nearly every day in 2011. This is similar to perceptions reported in 2009.
- The percentage of Alaska Native youth who reported perceiving no risk of self-harm with regular alcohol consumption decreased by four percent from 2009 to 2011 in ASD traditional schools. For the same time period, the percentage of Alaska Native youth statewide reporting no perceived risk of self-harm with regular alcohol consumption increased by four percent.
- The percentage of Alaskan youth ages 12 to 17 and of adults 18 to 25 years old who reported great risk in having five or more drinks of an alcoholic beverage (binge drinking) once or twice a week increased slightly between 2005-6 and 2008-9. Alaskans 12 to 17 years reported perceiving great risk in weekly binge drinking at rates higher than the national average from 2007-2008 to 2009-2010. Alaskans 18 to 25 years reported perceiving great risk in weekly binge drinking at rates lower the national average for all reporting years from 2005-2006 to 2009-2010.

Consumption

- The percentage of Alaskans aged 18 to 20 who reported binge alcohol use decreased from 22% in 2005-7 to 15% in 2008-10 and was lower than the national average of 18% in 2011.
- The percentage of Alaskans aged 18 to 20 who reported current (past month) alcohol use decreased from 42% in 2005-7 to 29% in 2008-10 and was lower than the national average of 57% in 2011.
- Among students in ASD, every indicator of alcohol consumption for both males and females decreased from 1995 to 2011. Improved indicators of alcohol consumption included the following: ever consumed alcohol in lifetime, first consumed alcohol before age 13, consumed alcohol in the past 30 days, binge drinking in the past 30 days, and consumed alcohol on school property in the past 30 days. For 2011, every consumption indicator for students Alaska statewide and in almost every indicator for ASD the percentage of male and female students reporting alcohol consumption was similar to or lower than the national average. In every indicator for males and most indicators for females, the percentage of ASD students reporting alcohol consumption was higher than the percentages reported for Alaska statewide in 2011.

Consequences

School-related consequences

- Since 2005, more students in Anchorage have been suspended and expelled for drug use and other behavior than for alcohol consumption.
- Among ASD students who opted to participate in the Prime for Life intervention program for first time alcohol and drug abuse offenders in 2009 and the first half of 2010, more students were caught with marijuana (67% in 2009 and 2010) than alcohol (18% in 2009 and 16% in 2010).

Risky behavior and underage drinking

- From 2009 to 2011, the percentage of students who reported being a passenger in the car of a drinking driver or drove after drinking within the past year decreased slightly in ASD traditional schools and decreased across Alaska.
- The percentage of students who reported consuming alcohol or drugs before the last time they had intercourse increased between 2009 and 2011 for ASD traditional schools and in 2011 was slightly greater than the percentage of Alaska students who reported drinking before intercourse.
- In 2011, 19% of female and male ASD students reported consuming alcohol or drugs before their most recent experience of sexual intercourse. The percentage of female ASD students was higher than the percentage of female students both in Alaska and nationwide who reported consuming alcohol or drugs before recently having sexual intercourse. The percentage of male ASD students was lower than the percentage of male students both in Alaska and nationwide who reported consuming alcohol or drugs before recently having sexual intercourse.

Underage drinking and driving: Traffic tickets, crashes, injuries, and fatalities

- Twelve percent of all alcohol-related driving while intoxicated tickets (DWI) given to drivers involved in crashes in Anchorage from 2000 to 2009 were given to youth who were 20 years old or younger.
- From 2000 to 2009, Anchorage youth ages 20 and younger who were drivers of the principle vehicles involved in crashes in which they were issued alcohol-related DWI tickets caused a total of 174 injuries.
- Between 2005 and 2010 the percentage of fatal crashes involving 16 to 20 year old drivers with blood alcohol content of .08g/dl or greater decreased slightly in Alaska and decreased nationwide.

Legal consequences of underage drinking

- From 2000 to 2008 there were 30,998 alcohol-related charges given to youth ages 20 and younger in Alaska. Of these charges, 93% were minor consuming charges.
- In Alaska in 2008 there were 3,254 minor consuming charges filed. This was a larger number of charges than any other year since 2002.
- The number of minor consuming charges filed in both Anchorage and Alaska statewide has decreased annually from 2009 to 2012. The dismissal rate for minor consuming charges has also decreased each year.
- In 2008, 267 charges were filed against Alaskan youth for operating vehicles after consuming alcohol. Charges for youth operating vehicles after consuming alcohol have increased each year since 2002 when 63 charges were filed.

Alcohol abuse requiring treatment

- In 2011 among people less than 21 years of age there were 117 admissions to treatment for alcohol abuse only and 178 admissions to treatment for alcohol with a secondary substance of abuse in Alaska.

- The percentage of people under 21 years of age admitted to treatment for alcohol abuse only or alcohol with secondary substance abuse in Alaska decreased between 2007 and 2011.

Health and safety consequences of underage drinking

- The rate of alcohol-related injuries requiring hospitalization for Alaskans aged 20 and under, per 100,000 population, declined from a high of 99.2 in 2004 to a low of 51.5 in 2010.
- The number of alcohol-related injuries requiring hospitalization decreased for Alaskans ages 20 and under in Anchorage and across Alaska between 2001 and 2010.
- Alaska mothers with a maternal age of 15 to 19 had Fetal Alcohol Spectrum Disorder births at a higher rate than their representation among all live births for the years 1996 to 2011.
- For the years 2001-2005 the percent of alcohol-induced deaths out of all deaths was lower for Anchorage than for other areas in Alaska. For the years 2005-2009 the percent of alcohol-induced deaths out of all deaths increased slightly in Anchorage but decreased in all other areas.
- In Alaska from 2001-2005, there were 20 alcohol-induced deaths among Alaskans aged 0 to 24 years. Eleven of the alcohol-induced deaths among Alaskans 0 to 24 years involved Native males, five involved White males, three involved Alaska Native females, and one involved a Black female.
- For Alaskans aged 0 to 24, the number of alcohol-induced deaths decreased between the five year periods 2001-2005 and 2005-2009. For Alaskans aged 25 and older, the number of alcohol-induced deaths increased between the five year periods 2001-2005 and 2005-2009.

Economic consequences of underage drinking

- In 2010, the average cost of underage drinking per youth in the U.S. was \$2,070.00. Alaska had the highest cost of underage drinking per youth in 2010 with a cost per youth of \$4,378.00.
- In Alaska in 2010 it was estimated that nearly \$155 million was spent on youth violence that resulted from underage drinking, \$91 million on youth traffic crashes, and over \$25 million on youth alcohol treatment.

Anchorage Trends

In addition to the highlights presented above, the following trends in the underage drinking problem can be seen in Anchorage.

Access

- 2009-2011 percentage who gave money to someone to purchase alcohol came down but percent that accessed by someone giving it to them increased
- The percentage of youth who reported purchasing their alcohol has increased slightly in traditional and alternative schools in the Anchorage School District (2007-2011).
- The percentage of licensees who passed compliance checks has increased slightly each year since 2009.

Social Norms and Perceptions

- From 2006-2008 to 2008-2010, the percentage of youth in Anchorage who perceived binge drinking as a great risk increased five percent.

Consumption

- A comparison of the 2007, 2009, and 2011 ASD YRBS survey data indicates that every indicator of alcohol consumption for youth in ASD traditional high schools is lower in 2011 than in 2007. Three of five indicators show reduced consumption for youth in ASD alternative high schools between 2007 and 2011. Four out of five indicators show reduced consumption for youth in McLaughlin High School between 2007 and 2009 (the last survey year with sufficient sample size).

Consequences

Risky behavior and underage drinking

- ASD YRBS survey data indicates that fewer youth in traditional schools drove after drinking or were a passenger with a drinking driver in 2011 relative to 2009, but more students reported having intercourse after consuming alcohol or drugs. In ASD alternative high schools, between 2009 and 2011 there was an increase in students who reported driving after drinking and being a passenger with a drinking driver, but a decrease in reported intercourse after consuming alcohol or drugs.

Legal consequences of underage drinking

- The number of minor consuming charges filed in Anchorage has decreased annually from 2009 to 2012. The dismissal rate for minor consuming charges has also decreased each year.

Health and safety consequences of underage drinking

- The percent of alcohol-induced deaths among people of all ages in Anchorage increased by one percent between 2001-2005 and 2005-2009.
- The number of alcohol-induced deaths among people in Anchorage under 24 years of age decreased from 20 in 2001-2005 to 12 in 2005-2009.

Introduction

Underage drinking is a serious problem in Anchorage and Alaska statewide that has been documented extensively. The data provided in this report were originally compiled to provide a baseline depicting the problem that existed in 2009. This updated report documents changes in the underage drinking problem and associated consequences that have taken place in recent years. Indicators available to depict different aspects of the underage drinking problem include access to alcohol, norms, and perceptions surrounding alcohol use, alcohol consumption patterns, and consequences of underage drinking. Data on these indicators have been collected in a variety of ways from multiple sources (see References and the Appendix) and with different strengths and limitations. However, this report identifying indicators provides a comprehensive updated compilation of indicators documenting the underage drinking problem that exists in Anchorage and Alaska. While **comprehensive**, this report is admittedly not exhaustive of every possible indicator directly or indirectly associated with the underage drinking problem. In some cases, existing data may have been unintentionally excluded. This report closes with a data gap analysis identifying additional indicators of the problem that are not currently available, or are not currently available for Anchorage youth.

Data documenting underage access to alcohol includes survey data indicating the method used by youth for obtaining the alcohol they consumed in the last 30 days. Survey data showing the percentage of youth in various Anchorage School District (ASD) school types (traditional, alternative, and McLaughlin Youth Center) who purchased the alcohol they consumed has also been provided. Next, this report summarizes data indicating retail access to alcohol. This data is collected by the Alcohol Beverage Control Board and covers compliance and non-compliance with laws prohibiting sales of alcohol to people less than 21 years of age.

Access to and availability of alcohol contributes to the underage drinking problem, as does the existence of social norms and perceptions that underage drinking poses few risks. Social norms and perceptions are collected via survey and ask youth to rate the amount of risk associated with infrequent, regular, and binge drinking. This data is available for Anchorage and can be examined within various school types, genders, and races/ethnicities. Some of the data has been collected for several years and allows for the examination of trends over time.

Data indicating social norms and perceptions associated with alcohol use, as well as youth perceptions of their parents' disapproval of their child's underage drinking, is available for youth in Anchorage and Alaska.

Indicators of alcohol consumption have also been collected by other surveys and are presented in this report. One indicator reports in gallons the amount of ethanol alcohol consumed by Alaskans aged 14 and older. Another indicator estimates the extent of binge drinking among Alaskans 12 and older and is broken down by region. While the regional data on gallons of alcohol consumption for Alaskans aged 14 and older is available over time, data regarding consumption patterns among Alaskans under 21 cannot be examined separately. However, self-reported rates of current alcohol use, binge drinking, alcohol dependency or abuse, and alcohol use needing treatment is available and can be examined for the under 21 age group. Survey data is also available for ASD students and documents the percentage of students reporting any lifetime alcohol consumption, first consumption before the age of 13, alcohol consumption in the past 30

days, binge drinking in the past 30 days, and consumption of alcohol on school property in the past 30 days. This data has been broken down by gender as well as type of school (traditional, alternative, and McLaughlin Youth Center).

A variety of negative consequences associated directly and indirectly with underage alcohol consumption exists, and an extensive collection of indicators describing these consequences for youth in Alaska and/or Anchorage has been compiled in this report. School-related indicators include suspensions and expulsions associated with substance use in Anchorage and Alaska, and this data has been broken down by race/ethnicity. Data is also presented on students who opted into the Prime for Life program, including the type of school they attended and substance used. Survey data is available for ASD students on risky behavior engaged in by youth after consuming alcohol such as sexual intercourse and driving with a drinking driver. This data has been broken down by gender and multiple years of data have been provided. Several alcohol-related traffic indicators are also presented in this report, including the number of tickets issued to youth 20 years and younger involved in traffic crashes, with the data broken down by gender. In addition, the frequency of injuries caused by youth responsible for traffic crashes and who were issued DWI tickets as well as the number of fatal accidents involving youth and adults driving with blood alcohol levels over the legal limit are provided. Data on minor consuming charges for Alaska youth and trends in alcohol-related charges over time have been presented as well. The frequency of alcohol-related substance abuse treatment admissions for various age groups under the legal drinking age has also been summarized in this report. Other consequences associated with underage alcohol consumption available in Alaska and/or Anchorage and presented in this report include injuries and hospitalizations, FASD births among teen mothers, and financial costs related to underage drinking.

This comprehensive compilation of indicators documenting the underage drinking problem in Anchorage and Alaska is limited by differences between the different data sources. For instance, in some cases data were only available for a recent year while in other cases data for multiple years are available. Various reporting organizations report data on different timelines or collapse multiple years of data hampering annual comparisons. For instance, some data are compiled every other year while other data are compiled annually. Data sources also differ in the way they designate age groups. As an example, some data sources aggregated 12 to 17 year olds as a group while other data sources aggregated 12 to 20 year olds. Finally, some data sources allow for comparisons between Anchorage, Alaska, and the nation, whereas other data sources do not provide data at each level. While differences in data formatting and reporting make some comparisons among the different data sources difficult, taken as whole the various indicators present a comprehensive summary of the underage drinking problem in Anchorage and Alaska.

Youth Access to Alcohol

Within the Anchorage School District (ASD), 65 percent of youth reported that they had not consumed alcohol in the 30 days prior to being surveyed for the 2009 Youth Risk Behavior Survey (YRBS). In 2011, that number had increased to 66 percent. Among youth who reported they had consumed alcohol in 2009, the majority (35%) obtained their alcohol by giving someone money to purchase it for them. In 2011 only 22 percent of youth reported they gave someone money to purchase alcohol for them. Twenty-nine percent of youth reported that someone had given the alcohol to them in 2009 and this increased to 44 percent in 2011. In 2009, 18 percent of youth reported obtaining alcohol through other means while in 2011 the number of youth reporting other sources of alcohol increased to 22 percent. In 2009, 10 percent of youth said they took it [their alcohol] from a store or family member and eight percent of youth had purchased their alcohol themselves at a store, gas station, restaurant, bar or club, or at a public event. In 2011, ten percent of respondents said they stole their alcohol and four percent said they bought it at a retail outlet (Table 1).

Table 1. Method of ASD Traditional School Students Obtaining Alcohol, 2009 and 2011

Column percents

| Way of accessing alcohol | 2009 | | 2011 | |
|-------------------------------|--------------|--------------------|--------------|--------------------|
| | All students | Students who drank | All students | Students who drank |
| | % | % | % | % |
| Did not drink | 65.1 % | -- % | 65.7 % | -- % |
| Gave money to someone | | 35.4 | | 21.8 |
| Someone gave it to me | | 29.1 | | 44.0 |
| Other | | 18.4 | | 21.1 |
| Took it from store/family | | 9.9 | | 9.5 |
| Bought in store/gas station | | 3.7 | | 3.5 |
| Bought at restaurant/bar/club | | 2.8 | | -- |
| Bought at public event | | 0.6 | | -- |

Source of data: Anchorage United for Youth, 2012

Weighted percent

The percentage of youth who reported purchasing their alcohol has increased slightly statewide and within traditional and alternative schools in the Anchorage School District. From 2007 to 2011, the percentage of youth who purchased their alcohol increased by one percent in Alaska schools overall (from 2.0 to 2.9%), two percent in ASD traditional schools (from 1.5% to 3.5%), and over three percent in ASD alternative schools (from 3.7% to 7.0%). In 2011, youth in ASD alternative schools reported purchasing alcohol at twice the rate of ASD traditional school students and more than twice the rate of public students statewide (Table 2).

Table 2. Youth Who Usually Purchased their Alcohol by School Type, 2007, 2009, and 2011

| Purchased alcohol | 2007 | 2009 | 2011 |
|--------------------------|-------------|-------------|-------------|
| ASD Traditional | 1.5 % | 2.4 % | 3.5 % |
| ASD Alternative | 3.7 | 6.4 | 7.0 |
| ASD McLaughlin | 3.8 | -- | -- |
| Alaska | 2.0 | 2.8 | 2.9 |

Sources of data: Kerosky, Chaney, and Kendziora, 2008; Kerosky and Turner, 2010; and Alaska Department of Health and Social Services, 2007; Alaska Department of Health and Social Services and Alaska Department of Education and Early Development, 2012

Traditional school responses weighted by enrollments of sex within grade.

"--" indicates that sample size has fallen below 100 and results are suppressed to insure the integrity and confidentiality of the student data.

Compliance Checks

Data from the Alaska Beverage Control Board (ABC) indicate that for the state of Alaska (excluding the Municipality of Anchorage), 85 percent of liquor licensees passed compliance checks in calendar year 2005 and 85 percent passed in 2011 and 2012 (through September). The percentage of licensees in Alaska who passed compliance checks decreased from 2005 to a low of 75 percent in 2006, and then increased until 2009 when 96 percent of licensees passed compliance checks. Since 2009, the percent of licensees in Alaska who passed compliance checks has decreased slightly each year (Figure 1). Though the ABC Board provided compliance check data for analysis, the ABC Board could not independently verify the results presented here, because they compute compliance rates for state fiscal, rather than calendar, years.

For the Municipality of Anchorage, 90 percent of liquor licensees passed compliance checks in 2005 and 89 percent passed in 2012 (through September). The percentage of licensees in MOA who passed compliance checks decreased from 2005 to a low of 72 percent in 2006. The percentage of licensees who passed compliance checks then increased to 87 percent in 2008, dipped to 85 percent in 2009 and has increased slightly each year since then. A map displaying alcohol license holders in Anchorage and local schools is provided in Figure 2.

Figure 1. Compliance Rate for Anchorage and Alaska (excluding MOA), 2005-2012

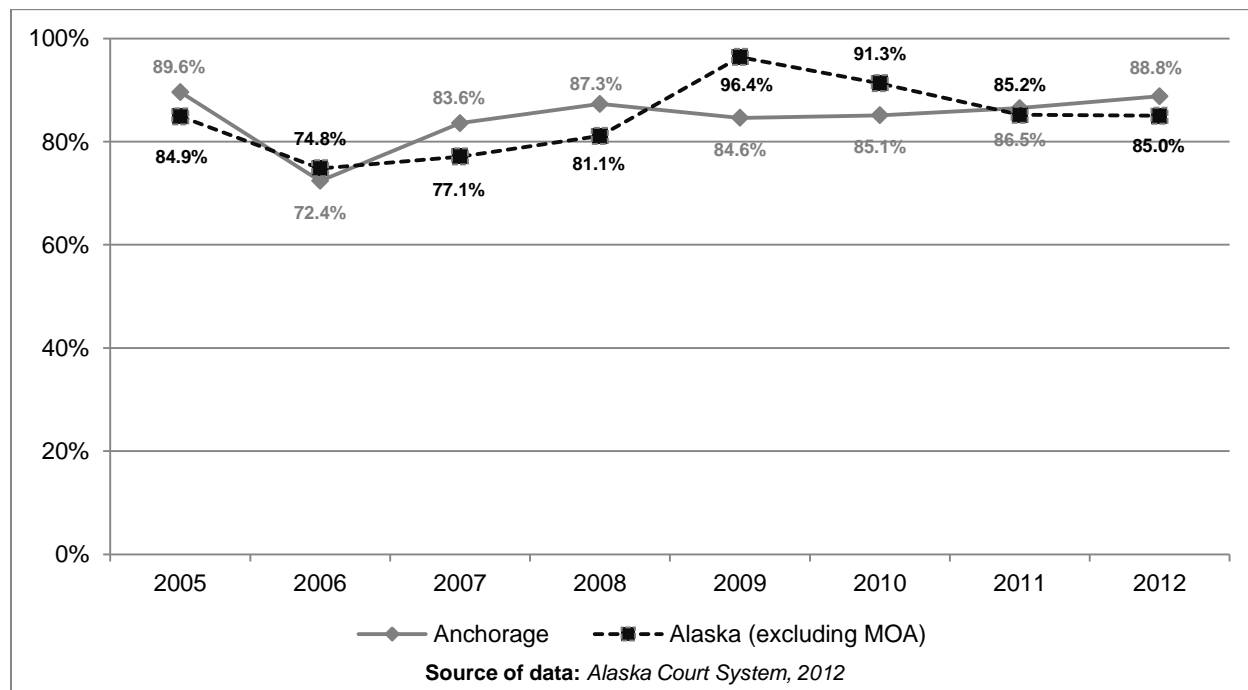
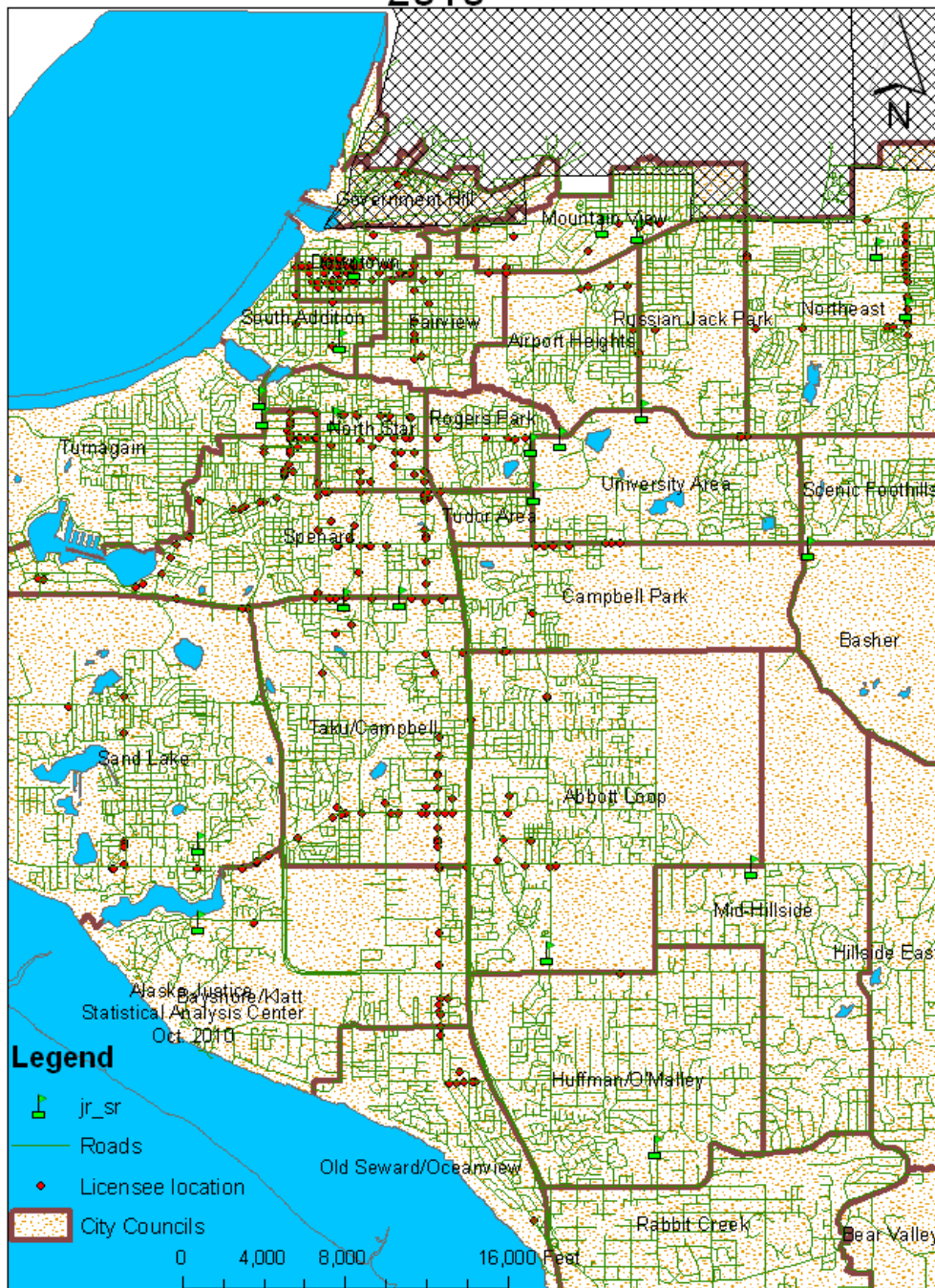


Figure 2. Map of Anchorage Alcohol License Holder Locations and Local Schools

Alcohol License Holders 2010



Social Norms and Perceptions

In 2009, youth in traditional and alternative schools within the Anchorage School District (ASD) reported their perceptions of risk in consuming alcohol daily at rates equal to the state average. Perceptions of drinking alcohol as a low-risk behavior are generally associated with greater rates of consumption. Just over one third of students (35%) in traditional and alternative ASD high schools, as well as across all Alaska high schools, reported no or slight risk in consuming one or two drinks of alcohol nearly every day. A higher percentage of youth in McLaughlin Youth Center (43%) reported no or a slight risk of consuming one or two drinks of alcohol nearly every day. Publicly available data summarizing student perceptions cannot easily be compared from 2007 to 2009 because in 2009 the categories of slight and no risk were collapsed into a single response category, whereas reports of 2007 data present no risk as a stand-alone response category. The perceived risk of daily alcohol consumption increased slightly among ASD students in alternative high schools (1.5%), and this is a good trend, but decreased among ASD students in traditional schools (-0.2%) and students statewide (-0.7%) between 2009 and 2011 (Table 3). Decreased perception of risk is not a desirable trend.

Table 3. ASD Youth Who Perceive No or Slight Risk in Consuming One or Two Drinks of Alcohol Nearly Every Day by Type of School

| | No risk 2007 | Slight/no risk 2009 | Slight/no risk 2011 |
|-----------------|--------------|------------------------|------------------------|
| ASD Traditional | 13.9 % | 34.7 % | 34.5 % |
| ASD Alternative | 16.0 | 34.5 | 36.0 |
| ASD McLaughlin | 11.8 | 43.4 | -- |
| Alaska | NA | 34.7 | 34.0 |

Sources of data: Kerosky, Chaney, and Kendziora, 2008; Kerosky and Turner, 2010; Alaska Department of Health and Social Services and Alaska Department of Education and Early Development, 2012

Traditional school responses rated for combined enrollment of sex within grade.

"--" indicates that sample size has fallen below 100 and results are suppressed to insure the integrity and confidentiality of the student data.

The percent of Alaska youth who reported perceiving no risk of self-harm if they consumed one or two drinks of alcoholic beverage nearly every day decreased from 2009 to 2011. Statewide, youth reported perceptions of self-harm with regular alcohol use decreased by nearly two percent and in ASD alternative schools by nearly one percent. The 2011 YRBS data show that about the same percentage of female youth statewide reported perceiving risk of self-harm through regular alcohol use (7%) as ASD traditional schools, while ASD alternative schools had the lowest percentage (6%). Among male youth in 2011, ASD alternative schools had the highest percentage who reported perceiving no risk of self-harm through regular alcohol use (16%), followed by ASD traditional schools (14%), and statewide with the lowest percentage (13%). It is important to note that in general, males are less likely than females to perceive risk of self-harm if they consume one or two drinks of an alcoholic beverage nearly every day (Table 4).

Looking at this data by race allows us to identify specific cultures and communities that may benefit from outreach and education efforts. In 2011, White youth in ASD traditional schools (12%) and Alaska Native youth statewide (13%) were the youth groups with the largest percentage that reported perceiving no risk of self-harm with regular alcohol use. The percentage of white youth who perceived risk of self-harm through regular alcohol use in ASD traditional schools increased by three percent (from 9% to 12%), decreased by three percent in ASD alternative schools (from 13% to 10%), and decreased four percent statewide (from 13% to 9%) from 2009 to 2011. The percentage of Alaska Native youth who reported perceiving no risk of self-harm with regular alcohol consumption decreased significantly from 2009 to 2011 (-4%) in ASD traditional schools. However, the inverse is true of Alaska Native youth statewide where the percentage of increased (4%) from 2009 to 2011 from 9 percent to 13 percent.

Table 4. Alaska Youth Who Perceive No Risk of Self-Harm if They Consume One or Two Drinks of an Alcoholic Beverage Nearly Every Day, 2009, 2011

Column percents

| | 2009 | | | 2011 | | |
|-----------------------|-----------------|-----------------|---------------|------------------------|------------------------|---------------|
| | ASD Traditional | ASD Alternative | Alaska | ASD Traditional School | ASD Alternative School | Alaska |
| Student Gender | | | | | | |
| Female | 7.3 % | 6.4 % | 6.4 % | 7.2 % | 6.1 % | 7.3 % |
| Male | 14.4 | 17.1 | 17.1 | 14.4 | 16.3 | 13.4 |
| Student Race | | | | | | |
| Alaska Native | 13.3 % | 9.3 % | 9.3 % | 9.4 % | -- % | 13.4 % |
| Asian | -- | -- | -- | 8.3 | -- | -- |
| Black (Non-Hispanic) | -- | -- | -- | -- | -- | -- |
| Hispanic/Latino | 11.7 | -- | -- | 9.4 | -- | 12.1 |
| White (Non-Hispanic) | 9.3 | 12.6 | 12.6 | 12.2 | 9.8 | 8.8 |
| Total Overall | 11.0 % | 11.9 % | 11.9 % | 10.9 % | 11.1 % | 10.5 % |

Source of data: Alaska Department of Health and Social Services, 2009; Alaska Department of Health and Social Services and Alaska Department of Education and Early Development, 2012

Missing data indicate less than 100 youth in the subgroup.

Results from the National Survey on Drug Use and Health (NSDUH) present the percentage of youth ages 12 to 17 in both Alaska and the U.S. overall who perceive great risk in having five or more drinks of an alcoholic beverage once or twice a week (binge drinking). In 2005-2006, 35 percent of Alaskan youth ages 12 to 17 perceived great risk in this behavior, versus 28 percent of Alaskans ages 18 to 25 years. The 2009-2010 NSDUH shows that an increased percentage of Alaska youth aged 12 to 17 years perceive great risk in binge drinking (42%), an increase of seven percent since the 2005-2006 survey. In 2009-2010, more youth aged 18 to 25 reported perceiving great risk in binge drinking (31%), an increase of three percent from 2005-2006.

In 2005-2006, Alaskans in both age groups perceived great risk in binge drinking at rates lower than the national average. A smaller percentage of Alaskans 12 to 17 years old (35%) than 12 to 17 year olds in the U.S. (39%), reported great risk in having five or more alcohol drinks weekly. A smaller percentage of 18 to 25 year old Alaskans (28%) than 18 to 25 year olds in the U.S. (33%) reported great risk in weekly binge drinking. By 2009-2010, the percentage of Alaskan youth aged 12 to 17 years reporting great risk in binge drinking (42%) was higher than the U.S. average (40%). Unfortunately, a smaller percentage of Alaskan youth aged 18 to 25 years reported perceiving great risk in binge drinking (31%) than the U.S. average (33%), although the gap appears to be closing slightly each year (Table 6).

Table 5. Estimated Annual Average of Alaska Youth who Perceive Great Risk in Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week, 2005-2006, 2007-2008, 2008-2009, and 2009-2010

| Region | 12 to 17 years | | | | 18 to 25 years | | | |
|------------|----------------|-----------|-----------|-----------|----------------|-----------|-----------|-----------|
| | 2005-2006 | 2007-2008 | 2008-2009 | 2009-2010 | 2005-2006 | 2007-2008 | 2008-2009 | 2009-2010 |
| Alaska | 34.9 % | 41.7 % | 42.7 % | 42.3 % | 27.9 % | 28.3 % | 29.8 % | 31.1 % |
| Total U.S. | 38.9 | 40.0 | 40.2 | 40.0 | 32.7 | 33.2 | 33.3 | 33.4 |

Source of data: SAMHSA, 2006, 2011, and 2012a.

Estimates based on survey-weighted hierarchical Bayes estimation approach.

The NSDUH further indicates that there may be slight differences in Alaskans' perceptions of great risk in binge drinking depending on the region in which they live using three-year averages¹. Alaskans living in the Anchorage region were most likely of all Alaskans to perceive great risk in having five or more drinks of an alcoholic beverage once or twice a week (binge drinking). From the period of 2006-2008 to 2008-2010, the percentage of youth in Anchorage who perceived binge drinking as a great risk increased five percent. As of 2008-2010, all regions in Alaska reflected higher percentages of people perceiving the dangers of binge drinking than in the prior time period (Table 6). The national average was higher than all Alaskan regions in 2006-2008. This trend continues in the 2008-2010 period, with the exception of Anchorage, which had a higher percentage of people reporting that they perceived great risk in binge drinking behaviors.

¹ The NSDUH reporting regions for Alaska's substate regions changed in the 2008-2010 reporting period. This change was instigated at the request of the Alaska Department of Health and Social Services. SAMHSA has provided statistics for the 2006-2008 time period to provide for comparability, but data trends may not be tracked prior to the 2006-2008 time period.

Table 6. Estimated Annual Average of Alaskans Aged 12 and Older Who Perceive Great Risk in Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week by Region, 2006-2008, and 2008-2010

Column Percents

| Region | 2006-2008 | 2008-2010 |
|------------------|-----------|-----------|
| Anchorage | 40.3 % | 44.6 % |
| Northern | 38.1 | 39.8 |
| South Central | 36.1 | 38.4 |
| Southeast | 38.3 | 40.8 |
| Alaska Average | 38.5 | 41.5 |
| National Average | 41.8 | 42.1 |

Source of data: SAMHSA, *Center for Behavioral Statistics and Quality, 2012b*

Regions:

Anchorage: Borough and Municipality of Anchorage

Northern: Bethel Census Area, Denali Borough, Fairbanks North Star Borough, Nome Census Area, North Slope Borough, Northwest Arctic Borough, Southeast Fairbanks Census Area, Wade Hampton Census Area, and Yukon-Koyukuk Census Area

South Central: Aleutians East Borough, Aleutians West Census Area, Bristol Bay Borough, Dillingham Census Area, Keani Peninsula Borough, Kodiak Island Borough, Lake & Peninsula Borough, Matanuska-Susitna Borough, and Valdez-Cordova Census Area

Southeast: Haines Borough, Juneau City and Borough, Ketchikan Gateway Borough, Prince of Wales-Outer Ketchikan Census Area, Sitka City and Borough, Skagway-Hoonah-Angoon Census Area, Wrangell-Petersburg Census Area, and Yakutat City and Borough.

The 2008-2010 NSDUH data show that 90 percent of 12 to 17 year old American youth (which includes Alaskan youth) believe that their parents would strongly disapprove of them consuming one or more drinks of an alcoholic beverage nearly every day – an increase of one percent since 2005-2007. Similarly, 91 percent of Alaska youth aged 12 to 17 years old believe that their parents would strongly disapprove of their regular alcohol consumption – a decrease of less than one percent.

The percentage of youth believing their parents would strongly disapprove of nearly daily alcohol consumption appears to decrease as age increases. In Alaska 2008-2010, the percentage ranged from 93 percent among 12-13 year olds and 14-15 year olds, to 87 percent among 16-17 year olds. It should be noted that overall, with the exception of 12-13 year olds, Alaska youth reported that their parents would strongly disapprove of them consuming alcohol on a regular basis (Figure 3). In the U.S. for the same time period, the percentage ranged from 94 percent among 12-13 year olds and 91 percent among 14-15 year olds, to 87 percent among 16-17 year olds (Figure 4).

Figure 3. Alaska Youth Who Perceive that their Parents Would Strongly Disapprove of Consuming One or More Drinks of an Alcoholic Beverage Nearly Every Day, 2005-2007 and 2008-2010

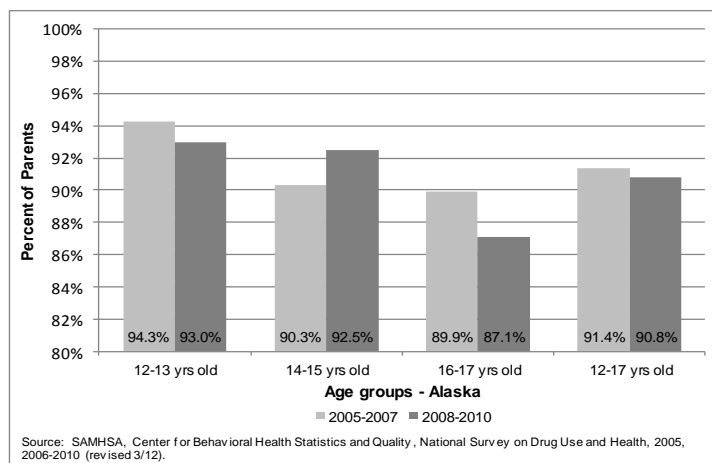
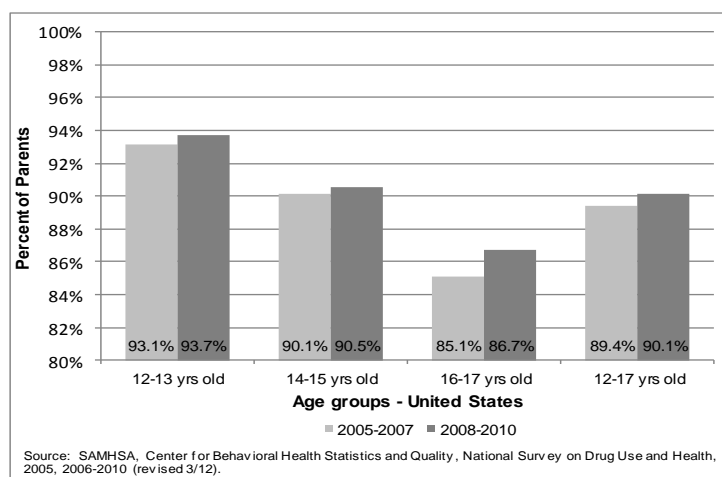


Figure 4. U.S. Youth Who Perceive that their Parents Would Strongly Disapprove of Consuming One or More Drinks of an Alcoholic Beverage Nearly Every Day, 2005-2007 and 2008-2010



Although Alaska does not participate in the Monitoring the Future surveys, an analysis of the perceptions of youth that are reported at a national level may help to provide comparisons to information collected in other Alaska surveys. On average, the percentage of American youth in each grade level who perceives great risk of self-harm from alcohol consumption seems to increase with the amount of alcohol consumed. Youth in all grade levels appeared slightly more likely to report perceptions of great risk of self-harm for all amounts of alcohol consumption in 2011 than they were in 2000. This is a desirable change. In 2011, youth in grade 12 were less likely than youth in lower grades to report perceptions of great risk of self-harm in trying one or

more drinks, taking one or two drinks nearly every day, or having five or more drinks once or twice each weekend (9%, 25%, and 48%, respectively). Tenth graders reported perceiving great risk in trying one or more drinks (12%), having one or two drinks on a daily basis (33%), and binge drinking on the weekend (56%). More eighth graders reported perceiving great risk in trying one or more drinks (15%), taking one or two drinks regularly (32%), and binge drinking on the weekends (58%) than tenth and twelfth graders (Table 7).

From 2010 to 2011, the most significant changes in reported perceptions of great risk of self-harm due to alcohol consumption was recorded in twelfth graders. Among these students, there was a decrease in the percentage who perceived great risk of self-harm through trying alcohol (-1.4%) and through regular use of alcohol (-0.8%). Alternately, more students in grade 12 perceived great risk of self-harm by having four or five drinks daily (1.2%) and binge drinking on the weekends (1.3%).

Table 7. U.S. Youth Who Perceive Great Risk of Self-Harm if They Consume Alcohol, 2000-2011

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Change |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| | % | % | % | % | % | % | % | % | % | % | % | % | 2010-2011 |
| Grade 8 | | | | | | | | | | | | | |
| Try one or more drinks (beer, wine, liquor) | 11.9 % | 12.2 % | 12.5 % | 12.6 % | 13.7 % | 13.9 % | 14.2 % | 14.9 % | 13.5 % | 14.4 % | 14.9 % | 14.5 % | -0.4 % * |
| Take one or two drinks nearly every day | 30.4 | 30.0 | 29.6 | 29.9 | 31.0 | 31.4 | 31.3 | 32.6 | 31.5 | 31.5 | 32.3 | 31.8 | -0.5 |
| Have five or more drinks once or twice each weekend | 55.9 | 56.1 | 56.4 | 56.5 | 56.9 | 57.2 | 56.4 | 57.9 | 57.0 | 55.8 | 57.2 | 58.4 | +1.2 |
| Grade 10 | | | | | | | | | | | | | |
| Try one or more drinks (beer, wine, liquor) | 9.6 % | 9.8 % | 11.5 % | 11.5 % | 10.8 % | 11.5 % | 11.1 % | 11.6 % | 12.6 % | 11.9 % | 11.9 % | 12.3 % | +0.4 % |
| Take one or two drinks nearly every day | 32.3 | 31.5 | 31.0 | 30.9 | 31.3 | 32.6 | 31.7 | 33.3 | 35.0 | 33.8 | 33.1 | 32.9 | -0.2 * |
| Have five or more drinks once or twice each weekend | 51.0 | 50.7 | 51.7 | 51.6 | 51.7 | 53.3 | 52.4 | 54.1 | 56.6 | 54.2 | 54.6 | 55.5 | +0.9 ** |
| Grade 12 | | | | | | | | | | | | | |
| Try one or more drinks (beer, wine, liquor) | 6.4 % | 8.7 % | 7.6 % | 8.4 % | 8.6 % | 8.5 % | 9.3 % | 10.5 % | 10.0 % | 9.4 % | 10.8 % | 9.4 % | -1.4 % |
| Take one or two drinks nearly every day | 21.7 | 23.4 | 21.0 | 20.1 | 23.0 | 23.7 | 25.3 | 25.1 | 24.2 | 23.7 | 25.4 | 24.6 | -0.8 |
| Take four or five drinks nearly every day | 59.9 | 60.7 | 58.8 | 57.8 | 59.2 | 61.8 | 63.4 | 61.8 | 60.8 | 62.4 | 61.1 | 62.3 | +1.2 |
| Have five or more drinks once or twice each weekend | 42.7 | 43.6 | 42.2 | 43.5 | 43.6 | 45.0 | 47.6 | 45.8 | 46.3 | 48.0 | 46.3 | 47.6 | +1.3 |

Source of data: Johnston, O'Malley, Bachman, & Schulenberg, 2009, 2011

* significance of .05 between last two classes in the grade

** significance of .01 between last two classes in the grade

The Monitoring the Future survey has also asked American youth (excluding Alaska) about their approval of other people's alcohol consumption. The percentage of youth in grades eight and ten who disapproved of any consumption has increased from 2000 (49% and 33% respectively) to 2011 (54% and 42% respectively). Although there were slight decreases from 2010 to 2011 in the percentage of grade eight youth who disapproved of others consuming alcohol, these changes were not found to be significant. Significant increases, however, were found among tenth graders who disapproved of others trying one or more drinks, taking one or two drinks nearly every day, and having five or more drinks once or twice each weekend (significant increases of 1.2%, 2.4%, and 1.4%, respectively). Generally, a greater percentage of eighth grade youth than tenth grade youth reported disapproval of other people's alcohol consumption in 2011 (Table 8).

Table 8. Youth in Grades 8 and 10 Who Disapprove or Strongly Disapprove of People Who Consume Alcohol, 2000-2011

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Change 2000 to 2011 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------|
| | % | % | % | % | % | % | % | % | % | % | % | % | |
| Grade 8 | | | | | | | | | | | | | |
| Try one or more drinks (beer, wine, liquor) | 48.7 % | 49.8 % | 51.1 % | 49.7 % | 51.1 % | 51.2 % | 51.3 % | 54.0 % | 52.5 % | 52.7 % | 54.2 % | 54.0 % | -0.2 % |
| Take one or two drinks nearly every day | 77.8 | 77.4 | 78.3 | 77.1 | 78.6 | 78.7 | 78.7 | 80.4 | 79.2 | 78.5 | 79.5 | 80.7 | +1.2 |
| Have five or more drinks once or twice each weekend | 81.2 | 81.6 | 81.9 | 81.9 | 82.3 | 82.9 | 82.0 | 83.8 | 83.2 | 83.2 | 83.6 | 84.8 | +1.2 |
| Grade 10 | | | | | | | | | | | | | |
| Try one or more drinks (beer, wine, liquor) | 33.4 % | 34.7 % | 37.7 % | 36.8 % | 37.6 % | 38.5 % | 37.8 % | 39.5 % | 41.8 % | 39.7 % | 40.3 % | 41.5 % | +1.2 % * |
| Take one or two drinks nearly every day | 73.8 | 73.8 | 74.9 | 74.2 | 75.1 | 76.9 | 76.4 | 77.1 | 79.1 | 77.6 | 77.6 | 80.0 | +2.4 |
| Have five or more drinks once or twice each weekend | 68.2 | 69.2 | 71.5 | 71.6 | 71.8 | 73.7 | 72.9 | 74.1 | 77.2 | 75.1 | 75.9 | 77.3 | +1.4 ** |

Source of data: Johnston, O'Malley, Bachman, & Schulenberg, 2009, 2011

* significance of .05 between last two classes in the grade

** significance of .01 between last two classes in the grade

The Monitoring the Future survey also asks grade 12 youth to describe their disapproval of people age 18 and older consuming alcohol. Overall, disapproval among this group also appears to have increased for each level of consumption from 2000 to 2011. In addition, the percentage of grade 12 youth disapproving of others consuming alcohol seems to have increased with the amount consumed. In 2011, 29% of grade 12 youth disapproved of people age 18 or older trying one or more drinks, 70% disapproved of those who have five or more drinks once or twice each weekend, 73% disapproved of others who take one or two drinks nearly every day, and 91% disapproved of others taking four or five drinks nearly every day (Table 9).

Table 9. Youth in Grade 12 Who Disapprove or Strongly Disapprove of People Age 18 or Older Who Consume Alcohol, 2000-2011

| Consumption disapproval | 2000 % | 2001 % | 2002 % | 2003 % | 2004 % | 2005 % | 2006 % | 2007 % | 2008 % | 2009 % | 2010 % | 2011 % | Change 2010 to 2011 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------------------|
| Try one or more drinks (beer, wine, liquor) | 25.2 % | 26.6 % | 26.3 % | 27.2 % | 26.0 % | 26.4 % | 29.0 % | 31.0 % | 29.8 % | 30.6 % | 30.7 % | 28.7 % | -2.0 % |
| Take one or two drinks nearly every day | 70.0 | 69.2 | 69.1 | 68.9 | 69.5 | 70.8 | 72.8 | 73.3 | 74.5 | 70.5 | 71.5 | 72.8 | +1.2 |
| Take four or five drinks nearly every day | 88.4 | 86.4 | 87.5 | 86.3 | 87.8 | 89.4 | 90.6 | 90.5 | 89.8 | 89.7 | 88.8 | 90.8 | +1.9 |
| Have five or more drinks once or twice each weekend | 65.2 | 62.9 | 64.7 | 64.2 | 65.7 | 66.5 | 68.5 | 68.8 | 68.9 | 67.6 | 68.8 | 70.0 | +1.2 |

Source of data: Johnston, O'Malley, Bachman, and Schulenberg, 2009, 2011

Consumption

Trend data for the years 2000 to 2010 indicate that per capita consumption of beer, spirits, and wine among Alaskans age 14 years and older has remained relatively unchanged. In 2010, Alaskans consumed 1.2 gallons of beer per capita, 1.3 gallons of spirits, and 0.6 gallons of wine. Alaskans' alcohol consumption rate was comparable to the national averages for beer and wine, but was nearly twice the national average for consumption of sprits in 2010. Alaskans consumed 1.3 gallons of spirits per capita versus 0.7 gallons per capita for the U.S average in 2010 (Table 10).

Table 10. Trends in Per Capita Ethanol Consumption for Alaskans Age 14 Years and Older, 2000 to 2010 (Gallons)

| Beverage Type | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | U.S. 2010 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|-----------|
| Beer | 1.4 | 1.3 | 1.4 | 1.3 | 1.3 | 1.2 | 1.2 | 1.1 | 1.2 | 1.3 | 1.2 | 1.1 |
| Spirits | 0.9 | 1.0 | 1.1 | 0.8 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.3 | 0.7 |
| Wine | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.4 |

Source of data: National Institute on Alcohol Abuse and Alcoholism, 2012

On average, Alaskans aged 12 and older reported any alcohol use and binge alcohol use at a higher percentage than the national average in the 2008-2010 time period. Since 2006-2008, the overall percentage of Alaskans who reported any alcohol use in the past month has increased slightly. The only region in which any reported alcohol use increased between the time periods 2006-2008 and 2008-2010 was South Central Alaska (57%). For the 2008-2010 time period the Northern region (44%) was the only Alaska region with lower percentages reporting alcohol use in the past month than the national average (52%). The percentage of those in Alaska who reported binge drinking increased between these time periods. The highest percentage of Alaskans who reported binge drinking was in the Anchorage region (27%), while the lowest was in the Northern region (21%). Overall, reported binge drinking in Alaska increased in the Anchorage and South Central regions, while decreasing in the Northern and Southeast regions (Table 11).

Table 11. Estimated Annual Average of Alaskans Aged 12 and Older Consuming Alcohol in the Past Month by Region, 2006-2008 and 2008-2010

Column percents

| Region | 2006-2008 | | 2008-2010 | |
|------------------|-----------------|-------------------|-----------------|-------------------|
| | Any Alcohol Use | Binge Alcohol Use | Any Alcohol Use | Binge Alcohol Use |
| Anchorage | 56.9 % | 24.2 % | 56.8 % | 26.5 % |
| Northern | 47.7 | 23.1 | 44.0 | 21.1 |
| South Central | 54.1 | 21.4 | 56.5 | 23.2 |
| Southeast | 55.9 | 23.0 | 53.9 | 22.0 |
| Alaska Average | 54.1 | 23.1 | 53.7 | 24.0 |
| National Average | 51.2 | 23.3 | 51.7 | 23.4 |

Source of data: SAMHSA, Center for Behavioral Statistics and Quality, 2012b

Regions:

Anchorage: Borough and Municipality of Anchorage

Northern: Bethel Census Area, Denali Borough, Fairbanks North Star Borough, Nome Census Area, North Slope Borough, Northwest Arctic Borough, Southeast Fairbanks Census Area, Wade Hampton Census Area, and Yukon-Koyukuk Census Area

South Central: Aleutians East Borough, Aleutians West Census Area, Bristol Bay Borough, Dillingham Census Area, Kenai Peninsula Borough, Kodiak Island Borough, Lake & Peninsula Borough, Matanuska-Susitna Borough, and Valdez-Cordova Census Area

Southeast: Haines Borough, Juneau City and Borough, Ketchikan Gateway Borough, Prince of Wales-Outer Ketchikan Census Area, Sitka City and Borough, Skagway-Hoonah-Angoon Census Area, Wrangell-Petersburg Census Area, and Yakutat City and Borough

In the period of 2008-2010, the percentage of Alaskans ages 12 to 20 years reporting any alcohol use ranged from 22 percent in the Northern region to 27 percent in the Anchorage and South Central regions. The percentage of 12 to 20-year-olds reporting any alcohol use in the Anchorage and South Central regions (27%) was higher than the State average (25%) and the same as the U.S. average (27%). The South Central region is the only Alaska region for which any reported alcohol use has increased (slightly) since the 2006-2008 reporting period. Reported percentages of any alcohol use decreased in Alaska statewide and the U.S. overall between these time periods. Reported binge alcohol use in the 2008-2010 period ranged from 16 percent in the Northern and Southeast regions to 17 percent in South Central and 20 percent in the Anchorage region. The Anchorage region is the only region which reported higher binge alcohol use in 2008-2010 than in 2006-2008 – and percentages higher than both the state (18%) and national (18%) averages. Overall, Alaskans aged 12 to 20 years reported lower percentages of any alcohol use and comparable percentages of binge alcohol use to the nation as a whole from 2008-2010, along with lower percentages from the previous reporting period (Table 12).

Table 12. Estimated Annual Average of Alaska Youth Aged 12 to 20 Consuming Alcohol in the Past Month by Region, 2006- 2008 and 2008-2010

Column percents

| Region | 2006-2008 | | 2008-2010 | |
|------------------|-----------------|-------------------|-----------------|-------------------|
| | Any Alcohol Use | Binge Alcohol Use | Any Alcohol Use | Binge Alcohol Use |
| Anchorage | 28.2 % | 19.1 % | 26.5 % | 19.3 % |
| N orthern | 25.7 | 18.0 | 22.2 | 16.3 |
| South Central | 26.6 | 17.3 | 27.1 | 17.2 |
| Southeast | 26.4 | 19.8 | 23.2 | 16.4 |
| Alaska | 27.0 | 18.4 | 25.3 | 17.8 |
| National Average | 27.5 | 18.3 | 26.5 | 17.5 |

Source of data: SAMHSA, *Center for Behavioral Statistics and Quality, 2012b*

Regions:

Anchorage: Borough and Municipality of Anchorage

Northern: Bethel Census Area, Denali Borough, Fairbanks North Star Borough, Nome Census Area, North Slope Borough, Northwest Arctic Borough, Southeast Fairbanks Census Area, Wade Hampton Census Area, and Yukon-Koyukuk Census Area

South Central: Aleutians East Borough, Aleutians West Census Area, Bristol Bay Borough, Dillingham Census Area, Kenai Peninsula Borough, Kodiak Island Borough, Lake & Peninsula Borough, Matanuska-Susitna Borough, and Valdez-Cordova Census Area

Southeast: Haines Borough, Juneau City and Borough, Ketchikan Gateway Borough, Prince of Wales-Outer Ketchikan Census Area, Sitka City and Borough, Skagway-Hoonah-Angoon Census Area, Wrangell-Petersburg Census Area, and Yakutat City and Borough

According to the National Survey on Drug Use and Health (NSDUH) from 2006-2007, as cited by Hull-Jilly and Casto (2011), 15 percent of Alaska youth ages 12 to 17 reported current alcohol use, compared to the U.S. average of 17 percent for the same age group, representing a one percent decrease. In 2007, 10 percent of youth ages 12 to 17 reported binge alcohol use, and six percent reported alcohol dependency/abuse, and five percent needing treatment in the past year. In the U.S. in 2007, the average youth aged 12 to 17 reported binge alcohol use, alcohol dependency/abuse, and needing treatment in the past year, at levels equal to or higher than those of Alaska youth of the same age in the same year. The percentage of youth in Alaska reporting current alcohol use, alcohol dependency, and needing treatment in the past year was stable between the 2003-2004 and 2006-2007 reporting years. Reported binge alcohol use has decreased two percent between 2003 and 2007.

Alaskans aged 18 to 25 reported similar rates of several alcohol consumption behaviors compared to the U.S. figures for this age group. Among Alaskans aged 18 to 25, 61 percent reported current alcohol use in the 2006-2007 reporting year, 42 percent reported binge alcohol use, 18 percent reported alcohol dependency/abuse, and 17 percent reported needing treatment in the past year. In the U.S., 61 percent of 18 to 25-year-olds reported current alcohol use in the 2006-2007 reporting year, 41 percent reported binge alcohol use, 18 percent reported alcohol dependency/abuse, and 17 percent reported needing treatment in the past year. The percentages of Alaskans aged 18 to 25 reporting current and binge alcohol use, alcohol dependency, and

requiring treatment in the past year have increased from reporting years 2003-2004 and 2006-2007.

In 2007, 54 percent of Alaskans of all ages reported current alcohol use, 23 percent reported binge alcohol use, eight percent reported alcohol dependency, and seven percent reported needing treatment for alcohol use in the past year. With the exception of current alcohol use (54% vs. 51% nationally), these levels were about equal to those reported by the average U.S. citizen (all ages), and were relatively equal to those reported by average Alaskans of all ages in the year 2003-2004 (Table 13).

Table 13. Trends in Reported Alcohol Use, by Age Group, Alaska

| | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | U.S. 2006-2007 |
|----------------------------------|-----------|-----------|-----------|-----------|----------------|
| Ages 12 to 17 alcohol use | | | | | |
| Alcohol dependency/abuse | 5.7 % | 6.0 % | 6.1 % | 5.9 % | 5.8 % |
| Binge alcohol use | 11.4 | 9.6 | 9.9 | 9.5 | 10.5 |
| Current alcohol use | 16.0 | 14.7 | 15.0 | 15.0 | 17.1 |
| Needing treatment in past year | 5.2 | 5.7 | 5.7 | 5.2 | 5.5 |
| Ages 18 to 25 alcohol use | | | | | |
| Alcohol dependency/abuse | 16.3 % | 16.1 % | 16.8 % | 17.6 % | 17.5 % |
| Binge alcohol use | 39.1 | 37.3 | 35.9 | 40.8 | 41.5 |
| Current alcohol use | 57.8 | 57.4 | 58.0 | 61.2 | 60.7 |
| Needing treatment in past year | 15.8 | 15.7 | 16.1 | 16.7 | 16.9 |
| All ages | | | | | |
| Alcohol dependency/abuse | 7.4 % | 7.5 % | 7.8 % | 7.8 % | 7.7 % |
| Binge alcohol use | 21.5 | 21.8 | 21.6 | 22.7 | 22.7 |
| Current alcohol use | 49.3 | 50.6 | 52.7 | 53.9 | 51.1 |
| Needing treatment in past year | 7.3 | 7.2 | 7.3 | 7.1 | 7.3 |

Source of data: Hull-Jilly DMC and Casto LD, 2011

According to data released on the Behavioral Risk Factor Surveillance System (BRFSS) survey, 30 percent fewer Alaska youth aged 18 to 20 years reported current alcohol use in 2010 (29%) than in 2007 (42%). Heavy alcohol use was reported half as much in 2010 (2%) as in 2007 (4%) by Alaska youth. In Alaska youth aged 18 to 20 years there was a 32 percent drop in reported binge alcohol use from 2007 (22%) to 2010 (15%).

In 2011, the national average for reported current alcohol use among 18 to 20-year-olds was 57 percent – nearly double the rate in Alaska for 2010 (29%) - and binge drinking was 18 percent – 18 percent higher than in Alaska. According to the 2008-2010 BRFSS data, heavy alcohol use reported by Alaskans ages 18 to 20 was one-third of the national average at seven percent (Table 14).

Table 14. Trends in Percentage of Alaska Youth Ages 18 to 20 Consuming Alcohol, 2005-2010

| Consumption behavior | 2005-2007 | 2006-2008 | 2007-2009 | 2008-2010 | U.S. 2011 |
|----------------------|-----------|-----------|-----------|-----------|-----------|
| Binge alcohol use | 22.0 % | 15.0 % | 13.0 % | 15.0 % | 18.3 % |
| Current alcohol use | 42.0 | 35.0 | 28.0 | 29.0 | 57.1 |
| Heavy alcohol use | 4.0 | 2.0 | 2.0 | 2.0 | 6.6 |

Source of data: Alaska Department of Health and Social Services, 2012.

Female youth in Anchorage School District (ASD) traditional schools have lower alcohol consumption in 2011 (67%) versus 1995 (81%), as indicated by the ASD 2011 Youth Risk Behavior Survey (YRBS). The YRBS asks students to report on how many days they have consumed at least one drink of alcohol as a measure of any lifetime alcohol consumption. Sixty-seven percent of female youth in ASD traditional schools reported any lifetime alcohol consumption in 2011, versus 81 percent in 1995. Similarly, the percentage of female youth who reported they first consumed alcohol before age 13 was dropped by half to 17 percent in 2011 from 36 percent in 1995, and past 30 day use was reported by 36 percent of females in 2011 and 45 percent in 1995. Past 30 days consumption of five or more drinks in a row was 22 percent in 2011 compared to 26 percent in 1995. Female youth's past 30 days alcohol use on school grounds increased from four percent in 1995 to five percent in 2011. With the exception of lifetime alcohol consumption, female youth in ASD traditional schools reported higher rates of various alcohol consumption behaviors than the Alaska average in 2011. In 2011, 17 percent of female youth in ASD traditional schools, and 14 percent of female youth in all Alaska schools, reported that they first consumed alcohol before the age of 13 versus 17 percent for the U.S. average.

Male youth in ASD traditional schools also appear to have reported lower levels of alcohol consumption in 2011 (66%) than in 1995 (80%), according to the ASD 2011 YRBS. In 2011, 66 percent of male youth in ASD traditional schools reported any lifetime alcohol consumption, compared to 80 percent in 1995, and 21 percent reported they first consumed alcohol before the age of 13 versus 42 percent in 1995 – a decrease of more than 50 percent. Past 30 day consumption among ASD traditional school males was 33 percent in 2011 versus 49 percent in 1995. Twenty percent of males reported consuming five or more drinks in a couple hours in the past 30 days in 2011 versus 37 percent in 1995, and four percent reported consuming alcohol on school property in the past 30 days, compared to eight percent in 1995. Male youth in ASD traditional schools appear to have reported higher levels of alcohol consumption behaviors than male youth in Alaska generally. Both ASD traditional school males and Alaska male youth reported lower rates of all alcohol consumption behaviors than the U.S. average in 2011, according to the ASD and national YRBS surveys of 2011 (Table 15).

Table 15. Trends in Alcohol Use Among Youth in ASD Traditional Schools by Gender, 1995 to 2011

| | ASD 1995 | ASD 2005 | ASD 2007 | ASD 2009 | ASD 2011 | Alaska 2011 | U.S. 2011 |
|---|----------|----------|----------|----------|----------|----------------|-----------|
| | % | % | % | % | % | % | % |
| Female youth alcohol use | | | | | | | |
| Lifetime alcohol consumption | 80.8 % | 78.6 % | 76.0 % | 69.6 % | 67.3 % | 68.2 % | 70.9 % |
| First consumed alcohol before age 13 | 35.6 | 23.7 | 18.1 | 21.4 | 17.3 | 14.4 | 17.4 |
| Alcohol consumption in past 30 days | 45.2 | 44.1 | 38.0 | 35.5 | 35.9 | 31.0 | 37.9 |
| Five or more drinks in couple hours in past 30 days | 25.9 | 28.6 | 23.8 | 21.9 | 21.1 | 16.7 | 19.8 |
| Consumed alcohol on school property, past 30 days | 4.4 | 4.4 | 5.5 | 3.6 | 4.7 | 3.1 | 4.7 |
| Male youth alcohol use | | | | | | | |
| Lifetime alcohol consumption | 79.8 % | 72.9 % | 73.6 % | 63.5 % | 66.3 % | 62.0 % | 70.6 % |
| First consumed alcohol before age 13 | 41.8 | 25.0 | 23.0 | 19.3 | 21.1 | 19.1 | 23.3 |
| Alcohol consumption in past 30 days | 49.1 | 38.5 | 43.5 | 34.3 | 32.6 | 26.2 | 39.5 |
| Five or more drinks in couple hours in past 30 days | 36.8 | 27.1 | 28.5 | 23.3 | 19.9 | 16.7 | 23.8 |
| Consumed alcohol on school property, past 30 days | 8.1 | 8.5 | 8.4 | 3.5 | 4.0 | 3.7 | 5.4 |

Sources of data: Kerosky and Turner, 2010; Centers for Disease Control, 2010, 2012; Alaska Department of Health and Social Services and Alaska Department of Education and Early Development, 2012

Traditional school responses weighted by enrollments of sex within grade

A comparison of the 2007, 2009, and 2011 ASD YRBS surveys indicates that the overall consumption of alcohol for youth in each type of school in the ASD appears to be lower in 2011 than in 2007. A lower percentage of youth in traditional ASD schools reported consuming any amount of alcohol, or consuming alcohol on school property, in 2011 than in 2007. The percentage of ASD traditional school students who reported having their first drink of alcohol before the age of 13 decreased from 2007 (21%) to 2011 (19%). Among ASD alternative school youth, 32 percent reported having their first drink of alcohol before the age of 13 in 2011, versus 31 percent in 2007 – an increase of one percent.

Eighty-four percent of ASD alternative school youth reported lifetime consumption of alcohol in 2011, the same as in 2007. In 2011, five percent of alternative school youth reported having consumed alcohol on school property in the past 30 days versus seven percent in 2007. Equal percentages of alternative school youth reported in 2007 and in 2011 having one or more drinks (54%), while 43 percent reported having five or more drinks in a row within a couple hours in the past 30 days in 2011, an increase from 38 percent in 2007. In 2009, 56 percent of McLaughlin Youth Center school youth reported having one or more drinks in the past 30 days, while 76 percent had reported this in 2007. In addition, 48 percent of McLaughlin youth reported consuming five or more drinks in a row within a couple of hours in 2009 versus 64 percent in 2007. Forty-seven percent of McLaughlin youth reported having their first drink before the age of 13 in 2009, compared to 41 percent in 2007. A relatively equal percentage of McLaughlin school youth reported consuming alcohol on school property in the past 30 days in 2009 as in 2007 (15% versus 16%, respectively) (Table 16). Note: YRBS data was not available for McLaughlin High School for the 2011 survey year due to sample size limitations on reporting.

Table 16. Alcohol Consumption Among Youth in ASD by Type of High School, 2007, 2009, 2011

| Consumption Behavior | ASD 2007 | | | ASD 2009 | | | ASD 2011 | | |
|--|--------------------------|--------------------------|------------------------|--------------------------|--------------------------|------------------------|--------------------------|--------------------------|------------------------|
| | Traditional High Schools | Alternative High Schools | McLaughlin High School | Traditional High Schools | Alternative High Schools | McLaughlin High School | Traditional High Schools | Alternative High Schools | McLaughlin High School |
| | % | % | % | % | % | % | % | % | % |
| First drink before age 13 | 20.6 % | 30.8 % | 41.3 % | 20.3 % | 24.2 % | 47.0 % | 19.3 % | 31.9 % | -- % |
| One drink or more in past 30 days | 40.8 | 54.0 | 76.4 | 34.9 | 54.4 | 56.4 | 34.3 | 54.0 | -- |
| Five or more drinks in a row within a couple hours in past 30 days | 26.2 | 37.3 | 63.8 | 22.6 | 38.4 | 47.8 | 20.5 | 43.4 | -- |
| Lifetime consumption | 74.8 | 83.7 | 92.6 | 66.5 | 90.3 | 82.2 | 66.8 | 84.1 | -- |
| Consumption on school property | 7.0 | 7.0 | 15.6 | 3.6 | 3.8 | 15.0 | 4.4 | 5.4 | -- |

Sources of data: Kerosky, Chaney, and Kendzoria, 2008; Kerosky and Turner 2010; Alaska Department of Health and Social Services and Alaska Department of Education and Early Development, 2012

Traditional school responses weighted by combined enrollments of sex within grade

"--" indicates that sample size has fallen below 100 and results are suppressed to insure the integrity and confidentiality of the student data.

Consequences

School-Related Consequences

Author's note: Reporting requirements have changed at the state level and some school districts are no longer reporting detailed reasons for suspensions and expulsions. The following information should be considered with this caveat in mind.

In the Anchorage School District (ASD), two percent of suspensions and expulsions between 2005 and 2011 were related to consumption of alcohol and tobacco, and three percent were related to drug use. Inappropriate behavior was the most common reason for a suspension or expulsion in the ASD from 2005 to 2011 (32% of cases), followed by fighting and assault (12%), and harassment and extortion (6%).

In all other Alaska districts combined, alcohol consumption was the reason for suspension or expulsion in one percent of cases from 2005 to 2011, drug use was the reason in three percent of cases, and tobacco use in four percent of cases. Inappropriate behavior was also the most common reason for a suspension or expulsion in all other school districts from 2005 to 2011 (34%), followed by fighting and assault (16%), and harassment and extortion (8%) (Table 17).

Table 17. Reason for Suspension or Expulsion in Alaska Schools, 2005 to 2011

Column percents

| Reason | Anchorage | | All Other Districts | | Alaska Total |
|-------------------|---------------|-------|---------------------|-------|-----------------|
| | N | % | N | % | |
| Alcohol | 501 | 0.7 % | 920 | 1.1 % | 1,421 |
| Drug use | 1,771 | 2.5 | 2,591 | 3.2 | 4,362 |
| Fighting/assault | 8,280 | 11.8 | 13,334 | 16.2 | 21,614 |
| Inapp. behavior | 22,707 | 32.3 | 28,097 | 34.2 | 50,804 |
| Truancy | 1,613 | 2.3 | 743 | 0.9 | 2,356 |
| Arson/vandalism | 686 | 1.0 | 1,018 | 1.2 | 1,704 |
| Harass./extortion | 4,266 | 6.1 | 6,795 | 8.3 | 11,061 |
| Tobacco | 976 | 1.4 | 2,990 | 3.6 | 3,966 |
| Theft | 1,319 | 1.9 | 1,202 | 1.5 | 2,521 |
| Other | 28,117 | 40.0 | 24,367 | 29.7 | 52,484 |
| Total | 70,236 | | 82,057 | | 152,293 |

Source of Data: Alaska Department of Education and Early Development, 2012

From 2005 to 2011, a total of 70,236 in-school suspensions, suspensions, and expulsions were recorded for schools in the Municipality of Anchorage, 2,790 (4%) of which were related to substance use (Table 18, results not shown). Of the 2,790 suspensions and expulsions that related to substance use, 17 percent were related to alcohol consumption, 57 percent to drug use, and 26 percent to tobacco (results not shown). Among cases that related to alcohol, 94 percent resulted in suspension and six percent in expulsion. There were no in-school suspensions resulting from the consumption of alcohol. Eighty-eight percent of the cases relating to drug use resulted in suspension and 12 percent in expulsion. Unlike with alcohol consumption, there were five in-school suspensions resulting from drug use. Seventeen percent of tobacco use cases resulted in in-school suspension, 83 percent in suspension, and less than one percent in expulsion.

Table 18. Type of Suspension or Expulsion in Municipality of Anchorage Resulting from Substance Use, 2005 to 2011

Column percents

| Suspension | Alcohol | | Drug Use | | Tobacco | | Other | |
|----------------------|------------|-------|--------------|-------|------------|--------|---------------|--------|
| | N | % | N | % | N | % | N | % |
| In-school suspension | 0 | 0.0 % | 8 | 0.5 % | 121 | 16.7 % | 22,595 | 43.0 % |
| Suspension | 438 | 94.4 | 1,404 | 87.7 | 598 | 82.5 | 29,593 | 56.3 |
| Expulsion | 26 | 5.6 | 189 | 11.8 | 6 | 0.8 | 391 | 0.7 |
| Total | 464 | | 1,601 | | 725 | | 52,579 | |

Source of data: Alaska Department of Education and Early Development, 2012

Due to the changes in reporting requirements at the state level, school districts are no longer reporting the details of why students are suspended or expelled. Instead, many categories that were once listed separately, i.e. inappropriate behavior, are being aggregated into the “Other” category. Unfortunately, this limits the usefulness of the data for our purposes. Although this causes difficulties, we can still show some trends from 2005 to 2011 for the Anchorage School District and Alaska as a whole.

In the ASD, substance use has increased significantly in the 2010-2011 school year. Disciplinary actions due to alcohol use rose to nearly two percent of all suspensions and expulsions. In addition, drug use has increased to six percent and tobacco use to four percent. This puts substance use at the highest recorded levels for disciplinary actions in the schools in the time period from 2005 to 2011. Alaska (including Anchorage) is following the same trend as Anchorage, with over one percent of disciplinary actions due to alcohol use, six percent to drug use, and four percent to tobacco use (Table 19).

Table 19. Reason for Suspension or Expulsion in Alaska and the Municipality of Anchorage by School Year, 2005 to 2011*Column percents*

| | 2005 to 2006 | | 2006 to 2007 | | 2007 to 2008 | | 2008 to 2009 | | 2009 to 2010 | | 2010 to 2011 | |
|-------------------------------------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| | N | % | N | % | N | % | N | % | N | % | N | % |
| Alaska (including Anchorage) | | | | | | | | | | | | |
| Alcohol | 281 | 1.1 % | 300 | 1.2 % | 228 | 1.0 % | 187 | 0.7 % | 37 | 0.1 % | 388 | 1.5 % |
| Drug use | 760 | 3.0 | 680 | 2.8 | 627 | 2.6 | 609 | 2.3 | 170 | 0.7 | 1,516 | 5.8 |
| Fight/assault | 4,069 | 15.9 | 3,872 | 16.0 | 3,231 | 13.6 | 3,184 | 12.3 | 942 | 3.6 | 6,316 | 24.3 |
| Inapp. behavior | 10,084 | 39.3 | 10,094 | 41.6 | 9,673 | 40.8 | 11,647 | 44.8 | 9,306 | 35.8 | 0 | 0.0 |
| Truancy | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 743 | 2.9 | 1,609 | 6.2 | 0 | 0.0 |
| Arson/vandal | 352 | 1.4 | 346 | 1.4 | 429 | 1.8 | 337 | 1.3 | 240 | 0.9 | 0 | 0.0 |
| Harass./extort. | 1,944 | 7.6 | 2,115 | 8.7 | 1,980 | 8.4 | 1,983 | 7.6 | 551 | 2.1 | 2,488 | 9.6 |
| Tobacco | 744 | 2.9 | 717 | 3.0 | 623 | 2.6 | 683 | 2.6 | 251 | 1.0 | 948 | 3.6 |
| Theft | 545 | 2.1 | 556 | 2.3 | 473 | 2.0 | 477 | 1.8 | 470 | 1.8 | 0 | 0.0 |
| Other | 6,844 | 26.7 | 5,590 | 23.0 | 6,441 | 27.2 | 6,124 | 23.6 | 8,964 | 34.5 | 18,521 | 71.3 |
| Total | 25,627 | | 24,270 | | 23,705 | | 25,974 | | 22,540 | | 30,177 | |
| Anchorage | | | | | | | | | | | | |
| Alcohol | 98 | 1.0 % | 107 | 1.0 % | 83 | 0.9 % | 63 | 0.7 % | 0 | 0.0 % | 113 | 1.4 % |
| Drug use | 284 | 2.8 | 310 | 3.0 | 236 | 2.5 | 312 | 3.3 | 0 | 0.0 | 459 | 5.5 |
| Fight/assault | 1,565 | 15.3 | 1,362 | 13.3 | 1,180 | 12.4 | 1,191 | 12.7 | 0 | 0.0 | 2,040 | 24.6 |
| Inapp. behavior | 3,241 | 31.7 | 3,201 | 31.2 | 2,859 | 30.0 | 4,100 | 43.9 | 4,552 | 59.3 | 0 | 0.0 |
| Truancy | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Arson/vandal | 106 | 1.0 | 123 | 1.2 | 148 | 1.6 | 69 | 0.7 | 61 | 0.8 | 0 | 0.0 |
| Harass./extort. | 888 | 8.7 | 833 | 8.1 | 749 | 7.9 | 497 | 5.3 | 151 | 2.0 | 748 | 9.0 |
| Tobacco | 104 | 1.0 | 102 | 1.0 | 73 | 0.8 | 79 | 0.8 | 0 | 0.0 | 367 | 4.4 |
| Theft | 243 | 2.4 | 233 | 2.3 | 192 | 2.0 | 181 | 1.9 | 212 | 2.8 | 0 | 0.0 |
| Other | 3,707 | 36.2 | 3,998 | 38.9 | 4,015 | 42.1 | 2,856 | 30.6 | 2,697 | 35.1 | 4,577 | 55.1 |
| Total | 10,240 | | 10,269 | | 9,535 | | 9,348 | | 7,673 | | 8,304 | |

Source of data: Alaska Department of Education and Early Development, 2012

Of the 1,319 suspensions and expulsions relating to substance use that involved White youth from 2005 to 2011, 57 percent were for drug use, 19 percent for alcohol consumption, and 24 percent for tobacco use. Among suspensions and expulsions relating to substance use that were given to Black youth from 2005 to 2011, 63 percent related to drug use, 11 percent to alcohol consumption, and 26 percent to tobacco use. A total of 250 suspensions and expulsion for substance use involved Black youth from 2005 to 2011. Hispanic youth were given 209 suspensions or expulsions for substance use from 2005 to 2011, 56 percent of which related to drug use, 17 percent to alcohol consumption, and 28 percent to tobacco use.

Within the 460 suspensions and expulsions for substance use from 2005 to 2011 that involved Native Alaskan or American Indian youth, 59 percent related to drug use, 28 percent to tobacco use, and 14 percent to alcohol consumption. Asian youth received 103 suspensions and expulsions for substance use from 2005 to 2011, 61 percent of which related to drug use, 20

percent to alcohol consumption, and 18 percent to tobacco use. Ninety-three suspensions and expulsions were given to Native Hawaiian/Pacific Islander youth for substance use from 2005 to 2011. Of these, 46 percent were for drug use, 42 percent for tobacco use, and 12 percent for alcohol consumption. Multi-race youth received 356 suspensions and expulsions for substance use from 2005 to 2011, 56 percent for drug use, 14 percent for tobacco use, and 30 percent for alcohol consumption (Table 20).

Table 20. Substance Use Suspension and Expulsions in Municipality of Anchorage by Race, 2005 to 2011

Row percents

| Student Race | Alcohol | | Drug Use | | Tobacco | | Total |
|--------------------------------------|------------|--------|--------------|--------|------------|--------|--------------|
| | N | % | N | % | N | % | |
| White | 254 | 19.3 % | 754 | 57.2 % | 311 | 23.6 % | 1,319 |
| Black | 28 | 11.2 | 158 | 63.2 | 64 | 25.6 | 250 |
| Hispanic | 35 | 16.7 | 116 | 55.5 | 58 | 27.8 | 209 |
| Asian | 21 | 20.4 | 63 | 61.2 | 19 | 18.4 | 103 |
| Alaska Native/ American Indian | 64 | 13.9 | 269 | 58.5 | 127 | 27.6 | 460 |
| Native Hawaiian/ Pacific Islander | 11 | 11.8 | 43 | 46.2 | 39 | 41.9 | 93 |
| Multi-Race | 51 | 14.3 | 198 | 55.6 | 107 | 30.1 | 356 |
| Total | 464 | | 1,601 | | 725 | | 2,790 |

Source of data: Alaska Department of Education and Early Development, 2012

Prime for Life is an evidence-based educational program “designed to gently but powerfully challenge common beliefs and attitudes that directly contribute to high-risk alcohol and drug use” (Prime for Life, 2010). Gaps exist in Prime for Life data available for analysis in this report. Data is for state fiscal years from July 1 through June 30 for the Anchorage School District (ASD). In 2009-2010, 83 percent of Prime for Life participants were from traditional high schools, two percent were alternative school youth and 15 percent were middle school youth in the ASD. By 2010-2011, 82 percent of participants were from traditional high schools, one percent from alternative schools, and 16 percent from middle schools. This trend shows an increase in younger students opting to participate in the Prime for Life program – an increase of 41 percent in middle school students. This data suggests that: 1) more students are being identified as needing intervention through increased efforts in the schools; 2) students are beginning to use at a younger age; or 3) both.

The most commonly used substance for Prime for Life participants is marijuana (73% in 2010-2011). The percentage of participants who self-identified as marijuana users increased by 38 percent from 2009-2010 to 2010-2011. Alcohol was the second-most commonly identified substance used by students in 2010-2011 (20%); an increase of 36 percent since 2009-2010 (Table 21).

Table 21. Anchorage School District Prime for Life Participants by Type of School and Substance Used, 2009 to 2010

Column percents

| | 2009-2010 | | 2010-2011 | | Change | |
|-----------------------|------------|--------|------------|--------|--------|--------|
| | N | % | N | % | N | % |
| Type of School | | | | | | |
| High schools | 195 | 83.3 % | 245 | 81.7 % | 50 | 25.6 % |
| Alternative schools | 5 | 2.1 | 4 | 1.3 | -1 | -20.0 |
| Middle schools | 34 | 14.5 | 48 | 16.0 | 14 | 41.2 |
| Unknown | 0 | 0.0 | 3 | 1.0 | 3 | 100.0 |
| Total | 234 | | 300 | | | |
| Substance Used | | | | | | |
| Marijuana | 159 | 67.9 % | 219 | 73.0 % | 60 | 37.7 % |
| Alcohol | 44 | 18.8 | 60 | 20.0 | 16 | 36.4 |
| Rx | 23 | 9.8 | 13 | 4.3 | -10 | -43.5 |
| Cocaine | 1 | 0.4 | 0 | 0.0 | -1 | 100.0 |
| Paraphernalia | 4 | 1.7 | 8 | 2.7 | 4 | 100.0 |
| Psychotropic | 1 | 0.4 | 0 | 0.0 | -1 | -100.0 |
| Other | 1 | 0.4 | 0 | 0.0 | -1 | -100.0 |
| Unknown | 1 | 0.4 | 0 | 0.0 | -1 | 100.0 |
| Total | 234 | | 300 | | | |

Source of data: Volunteers of America Alaska, 2012

Risky Behavior and Underage Drinking

Among youth in ASD traditional schools, 23 percent reported being a passenger with a drinking driver, 19 percent consumed alcohol before the last time they had sexual intercourse, and eight percent drove after drinking in 2011. Also in 2011, 38 percent of youth in alternative ASD schools reported being a passenger with a drinking driver, 31 percent consumed alcohol before the last time they had sexual intercourse, and 17 percent drove after drinking. Among McLaughlin school youth in 2009, 33 percent were a passenger with a drinking driver, and 19 percent drove after drinking (Table 22). Note: YRBS data were not available for McLaughlin High School for 2011.

Table 22. ASD Youth Who Participated in Risk Behavior after Consuming Alcohol or Drugs by Type of School, 2009 and 2011

| | Traditional | | Alternative | | McLaughlin | | Alaska | |
|--------------------------------|-------------|--------|-------------|--------|------------|------|--------|--------|
| | 2009 | 2011 | 2009 | 2011 | 2009 | 2011 | 2009 | 2011 |
| Intercourse after consuming | 13.6 % | 19.0 % | 30.9 % | 30.7 % | -- % | -- % | 17.1 % | 18.4 % |
| Drove after drinking | 8.8 | 8.3 | 15.7 | 17.1 | 19.0 | -- | 8.9 | 5.6 |
| Passenger with drinking driver | 24.6 | 23.2 | 34.6 | 37.6 | 33.4 | -- | 21.3 | 18.6 |

Source of data: Anchorage School District Youth Risk Behavior Survey 2009; Alaska Department of Health and Social Services and Alaska Department of Education and Early Development, 2012

Traditional school responses weighted by enrollments of sex within grade

--" indicates that sample size has fallen below 100 and results are suppressed to insure the integrity and confidentiality of the student data.

In the 2011 ASD YRBS, 19 percent of female youth in ASD schools reported that they consumed alcohol before the last time they had sexual intercourse, compared to 12 percent in 1995. This percentage had increased to 25 percent in 2005 from 12 percent in 1995 then dropped to 14 percent in 2007. In 2011, the percentage of female ASD youth who reported consuming alcohol before their last sexual intercourse was higher than both the Alaska average for female youth (16%), and the U.S. average for female youth (18%).

In 2011, 19 percent of male youth in ASD schools reported consuming alcohol before their last sexual intercourse, versus 32 percent in 2005, 30 percent in 2007, and 13 percent in 2009. It appears that a lower percentage of male youth in ASD schools (19%) reported consuming alcohol before the last time they had sexual intercourse in 2011 than did the Alaska average of 21 percent for male youth in 2011, and the 2011 U.S. average of 26 percent. While the U.S. average for males and females differed by eight percent in 2011; the Alaska averages differed by five percent and the ASD averages by less than one percent. The percentage of females in the ASD reporting they consumed alcohol before the last time they had sexual intercourse appears to be slightly lower than males in the ASD in 2011, whereas the percentages for males in Alaska and the U.S. overall were higher than those of females (Table 23).

Table 23. ASD Youth Who Consumed Alcohol or Used Drugs before Last Sexual Intercourse, 1995 to 2011

| | ASD 1995 | ASD 2005 | ASD 2007 | ASD 2009 | ASD 2011 | AK 2011 | U.S. 2011 |
|-----------------------------|----------|----------|----------|----------|----------|---------|-----------|
| Female youth | | | | | | | |
| Consumed before intercourse | 11.6 % | 24.9 % | 14.8 % | 14.1 % | 18.8 % | 16.0 % | 18.1 % |
| Male youth | | | | | | | |
| Consumed before intercourse | 13.1 % | 31.5 % | 29.8 % | 13.1 % | 19.3 % | 21.0 % | 26.0 % |

Sources of data: Kerosky and Turner, 2010; Centers for Disease Control, 2010, 2012; Alaska Department of Health and Social Services and Alaska Department of Education and Early Development, 2012

Traditional school responses weighted by enrollments of sex within grade

Underage Drinking and Driving: Traffic Tickets, Crashes, Injuries and Fatalities

The percentage of female youth in ASD schools who reported driving after drinking was eight percent in 1995 and eight percent in 2011. The Alaska average for female youth who drove after drinking was five percent in 2011, and the U.S. average was seven percent. Female youth appear to be more likely to be a passenger with a drinking driver than they are to drive after drinking themselves. In 1995, 33 percent of ASD female youth reported being a passenger with a drinking driver, compared to 23 percent in 2011. The 2011 average for female youth in Alaska who reported being a passenger with a drinking driver was 18 percent, and the U.S. average was 25 percent. In 2011, a significantly larger percentage of females reported being a passenger with a drinking driver in ASD schools (8%) relative to the average for Alaska (5%), with the U.S. average percentage in the middle at seven percent.

Among male youth in ASD schools, 17 percent reported driving after drinking in 1995, compared to nine percent in 2011. The average for Alaska males reporting driving after drinking was 19 percent in 2011 and the U.S. male average was ten percent. As with female youth, a higher percentage of males reported being a passenger with a drinking driver than driving after drinking themselves. In 1995, 28 percent of ASD male youth reported being a passenger with a drinking driver, compared to 24 percent in 2011. In 2011, the average for Alaskan male youth who reported being a passenger with a drinking driver was 19 percent, and the U.S. average was 23 percent (Table 24). Similar to females, males in ASD schools reported being a passenger with a drinking driver at a higher rate in ASD schools (24%) relative to the average for Alaska (19%), with the U.S. average percentage in the middle at 23 percent.

Table 24. ASD Youth Who Drove after Drinking or Who Drove with a Drinking Driver in the Past 30 Days, 1995 to 2011

| | ASD 1995 | ASD 2005 | ASD 2007 | ASD 2009 | ASD 2011 | AK 2011 | U.S. 2011 |
|--------------------------------|----------|----------|----------|----------|----------|---------|-----------|
| Female youth | | | | | | | |
| Drove after drinking | 7.6 % | 10.4 % | 9.2 % | 7.2 % | 8.0 % | 4.7 % | 6.7 % |
| Passenger with drinking driver | 32.8 | 31.4 | 28.7 | 26.8 | 22.8 | 18.1 | 24.9 |
| Male youth | | | | | | | |
| Drove after drinking | 16.5 % | 11.9 % | 13.6 % | 10.4 % | 8.5 % | 6.4 % | 9.5 % |
| Passenger with drinking driver | 27.9 | 25.5 | 26.7 | 22.6 | 23.5 | 18.9 | 23.3 |

Sources of data: Kerosky and Turner, 2010; Centers for Disease Control, 2010, 2012; Alaska Department of Health and Social Services and Alaska Department of Education and Early Development, 2012

Traditional school responses weighted by enrollments of sex within grade

Traditional school responses weighted by enrollments of sex within grade

There were 269 tickets given to youth ages 15 or younger who were driving vehicles that were involved in crashes in Anchorage from 2000 to 2009 (results not shown). A total of 10,850 tickets were given to youth ages 16 to 20 who drove vehicles that were involved in crashes in

Anchorage from 2000 to 2009 (results not shown). Twelve percent of all alcohol-related driving while intoxicated tickets (DWI) given to drivers involved in crashes in Anchorage from 2000 to 2009 were given to youth who were 20 years old or younger. Fifteen percent of all tickets for having open alcohol in the vehicle while driving that were given to drivers involved in car crashes in Anchorage from 2000 to 2009 were given to youth ages 16 to 20 years.

In all other Alaska areas combined, youth ages 15 and younger who were driving vehicles that were involved in crashes from 2000 to 2009 were given 275 tickets, and youth ages 16 to 20 were given 6,232 tickets (results not shown). Of all alcohol-related DWI tickets that were given to drivers involved in crashes in other areas of Alaska, 17 percent were for youth ages 16 to 20, and one percent were for youth ages 15 or younger. Twelve percent of the tickets for refusing a breathalyzer test that were given to drivers involved in crashes in other areas of Alaska from 2000 to 2009, were to youth ages 16 to 20 (Table 25).

Table 25. Tickets Issued to Alaskans Who Were in Traffic Crashes by Age and Location, 2000 to 2009

Row Percents

| | 15 or Younger | | 16 to 20 | | 21 to 29 | | 30 or Older | | Total |
|-------------------------------------|---------------|-------|----------|--------|----------|--------|-------------|--------|---------------|
| | N | % | N | % | N | % | N | % | |
| Anchorage | | | | | | | | | |
| Alcohol DWI | 4 | 0.2 % | 271 | 11.3 % | 833 | 34.9 % | 1282 | 53.6 % | 2,390 |
| Intoxicated | 0 | 0.0 | 0 | 0.0 | 2 | 8.0 | 23 | 92.0 | 25 |
| Refuse chemical test | 0 | 0.0 | 2 | 13.3 | 6 | 40.0 | 7 | 46.7 | 15 |
| Refuse breathalyser test | 0 | 0.0 | 1 | 4.0 | 11 | 44.0 | 13 | 52.0 | 25 |
| Snow machine intoxicated | 0 | 0.0 | 0 | 0.0 | 1 | 100.0 | 0 | 0.0 | 1 |
| Open alcohol | 0 | 0.0 | 2 | 15.4 | 3 | 23.1 | 8 | 61.5 | 13 |
| Other | 269 | 0.6 | 10,850 | 23.2 | 11,480 | 24.5 | 24,197 | 51.7 | 46,796 |
| Alaska (excluding Anchorage) | | | | | | | | | |
| Alcohol DWI | 13 | 0.6 | 327 | 16.2 | 601 | 29.8 | 1079 | 53.4 | 2,020 |
| Intoxicated | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Refuse chemical test | 0 | 0.0 | 1 | 3.0 | 12 | 36.4 | 20 | 60.6 | 33 |
| Refuse breathalyser test | 0 | 0.0 | 8 | 12.1 | 13 | 19.7 | 45 | 68.2 | 66 |
| Snow machine intoxicated | 0 | 0.0 | 1 | 50.0 | 1 | 50.0 | 0 | 0.0 | 2 |
| Open alcohol | 1 | 2.3 | 2 | 4.7 | 18 | 41.9 | 22 | 51.2 | 43 |
| Other | 275 | 1.3 | 6,232 | 30.0 | 4,544 | 21.9 | 9,724 | 46.8 | 20,775 |

Source of data: Alaska Department of Transportation and Public Facilities, 2012

Male youth ages 20 and younger in Anchorage who were involved in crashes were issued 8,426 tickets from 2000 to 2009. Of these tickets, three percent were alcohol-related DWI tickets, and 97 percent were other tickets. Female youth in Anchorage who were involved in crashes were issued 5,880 tickets from 2000 to 2009. Ninety-eight percent of these were other tickets and two percent were alcohol-related DWI tickets (Table 26).

Table 26. Tickets Issued to Anchorage Youth Ages 20 and Younger Who Were in Crashes by Sex, 2000 to 2009

| | | <i>Column Percents</i> | | | |
|---------------|--------------------------|------------------------|-------|---------------|-------|
| | | Male | | Female | |
| Ticket | | N | % | N | % |
| | Alcohol DWI | 267 | 3.2 % | 135 | 2.3 % |
| | Refuse breathalyser test | 14 | 0.2 | 5 | 0.1 |
| | Open alcohol | 8 | 0.1 | 2 | 0.0 |
| | Other | 8,137 | 96.6 | 5,738 | 97.6 |
| Total | | 8,426 | | 5,880 | |

Source of data : Alaska Department of Transportation and Public Facilities, 2012

From 2000 to 2009, Anchorage youth ages 20 and younger who were drivers of the principle vehicles involved in crashes in which they were issued alcohol-related DWI tickets caused a total of 174 injuries (Table 27). Of these injuries, 92 percent were minor injuries and eight percent were major injuries. There were no fatalities caused in accidents in which Anchorage youth ages 20 and younger were the drivers of the principle vehicle and had been issued an alcohol-related DWI ticket (results not shown).

Table 27. Injuries Caused by Anchorage Youth Ages 20 and Younger Who Were Responsible for Crashes and Were Issued Alcohol-Related DWI Tickets, 2000 to 2009

| | | <i>Column Percents</i> | |
|-----------------|-----------------------|------------------------------------|--------|
| | | Under Age Youth Alcohol DWI | |
| Injuries | | N | % |
| | Minor injuries | 160 | 92.0 % |
| | Major injuries | 14 | 8.0 |
| | Total injuries | 174 | |

Source of data : Alaska Department of Transportation and Public Facilities, 2012

According to the Fatality Analysis Reporting System (FARS), there was one fatal accident in 2010 that involved a driver aged 16 to 20 years (FARS does not indicate whether the drivers were in the primary vehicles or another vehicle involved in the crash, although Alaska Department of Transportation and Public Facilities data does). This fatal crash represents seven percent of all fatal crashes involving drinking drivers in Alaska in 2010 (Table 28).

Table 28. Fatal Accidents Involving Drivers with Blood Alcohol Content of .08g/dl or Greater by Age, 2005; 2010

Row percents

| Location | 16 to 20 | | | | 21 to 34 | | | | 35 and older | | | |
|----------|----------|-------|------|-------|----------|--------|-------|--------|--------------|--------|-------|--------|
| | 2005 | | 2010 | | 2005 | | 2010 | | 2005 | | 2010 | |
| | N | % | N | % | N | % | N | % | N | % | N | % |
| Alaska | 2 | 8.0 % | 1 | 7.1 % | 13 | 52.0 % | 2 | 14.3 % | 10 | 40.0 % | 11 | 78.6 % |
| National | 1,198 | 10.2 | 555 | 7.8 | 5,248 | 44.7 | 2,955 | 41.7 | 5,282 | 45.0 | 3,568 | 50.4 |

Source of data: National Highway Traffic Safety Administration, 2012

Legal Consequences of Underage Drinking

From 2000 to 2008 there were 30,998 alcohol-related charges given to youth ages 20 and younger in Alaska². Of these charges, 93 percent were minor consuming charges. Four percent of the alcohol-related charges given to Alaska youth from 2000 to 2008 were for operating a vehicle after consuming alcohol. Minors being on a licensed premise and minors on a licensed premise with a fake ID each made up one percent of the charges given to underage youth in Alaska from 2000 to 2008 (Table 29).

Table 29. Total Number of Charges among Alaska Youth Age 20 and Younger, 2000 to 2008

Column percents

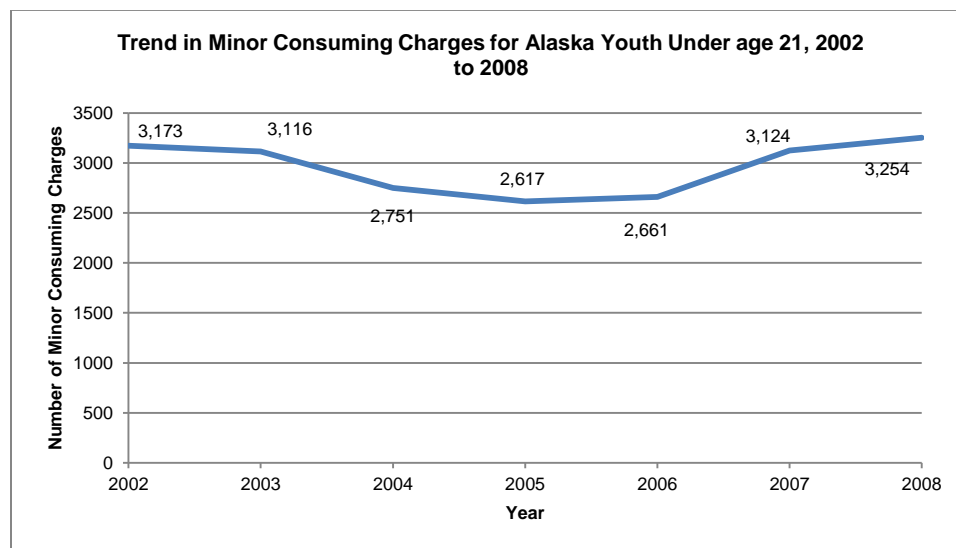
| Charge | Underage Youth | |
|-----------------------------------|----------------|--------|
| | N | % |
| Minor consuming | 28,747 | 92.7 % |
| Operating vehicle within 24 hours | 13 | 0.0 |
| Fake ID on licensed premise | 432 | 1.4 |
| Minor on licensed premise | 333 | 1.1 |
| Minor consuming operating vehicle | 1,199 | 3.9 |
| Minor alcohol violation | 267 | 0.9 |
| Minor in possession | 7 | 0.0 |
| Total | 30,998 | |

Source of data : Alaska Justice Statistical Analysis Center,
2010

In 2002, there were 3,173 minor consuming charges filed against Alaska youth under age 21. The number of minor consuming charges was 3,116 in 2003, 2,751 in 2004, and 2,617 in 2005. In 2006 and 2007, minor consuming charges for underage Alaskan youth totaled 2,661 and 3,124, respectively. There were 3,254 minor consuming charges filed for Alaska youth under the age of 21 in 2008 (Figure 5).

² Note: Data in Table 29, Figure 5 and Figure 6 were not updated for this report.

Figure 5. Trend in the Total Number of Minor Consuming Charges among Underage Youth in Alaska, 2002 to 2008

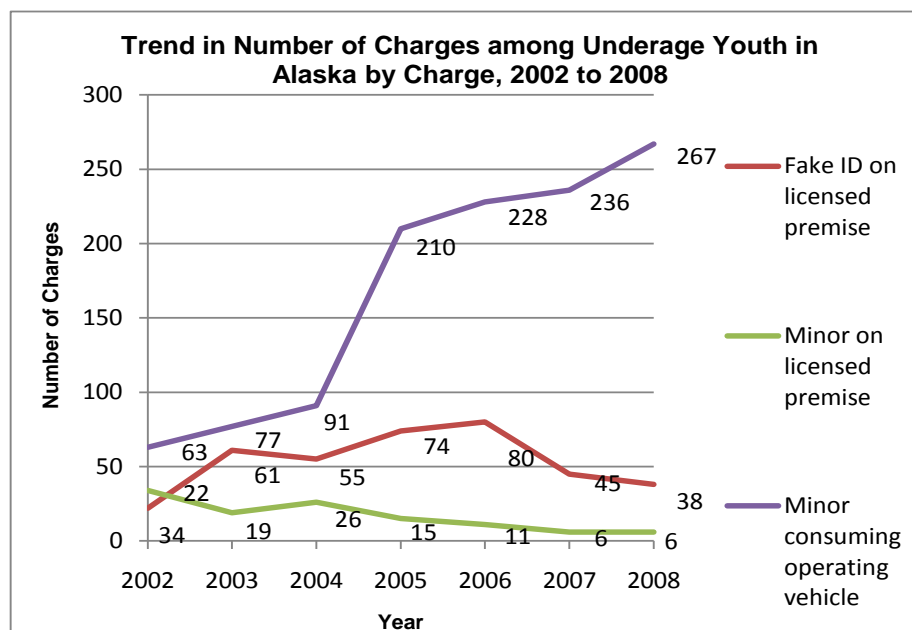


Source of data: Alaska Justice Statistical Analysis Center, 2010

In 2002, there were 63 charges for minors operating a vehicle after consuming alcohol. The number of charges for minors operating vehicles after consuming was 77 in 2003 and 91 in 2004. There were 210 charges for youth operating vehicles after consuming in 2005 in Alaska, 228 in 2006, and 236 in 2007. In 2008, 267 charges were filed for youth operating vehicles after consuming alcohol.

There were 22 charges for minors being on licensed premises and 34 charges for minors being on licensed premises with a fake ID in 2002. The total number of minors on licensed premises charges including 19 charges of minors on licensed premises and 61 charges of minors on licensed premises with a fake ID was 80 in 2003, 81 in 2004, 89 in 2005, and 91 in 2006. In 2007 and 2008, respectively, there were 51 and 44 charges in among underage Alaska youth for minors being on a licensed premise, and minors being on a licensed premise with a fake ID (Figure 6).

Figure 6. Trend in the Total Number of Charges among Underage Youth in Alaska by Selected Charge, 2002 to 2008



Source of data: Alaska Justice Statistical Analysis Center, 2010

The Alaska Court System provided data on dispositions of cases with charges filed against minors for possessing or consuming alcohol. Trends seen in the Municipality of Anchorage (MOA) resemble those for the rest of Alaska over the last four years. The number of charges filed in MOA has decreased annually from a high of 1,021 charges filed in 2009 to a low of 876 in 2011 (the last year for which complete data is available). The rate of dismissal in MOA minor consuming/possession charges has also decreased annually from a high of 21 percent in 2009 to a low of 13 percent for 2012 (through 10/22/12). For the rest of Alaska, the number of minor consuming charges filed has also decreased annually from a high of 2,934 charges filed in 2009 to a low of 2,343 charges filed in 2011. The rate of dismissal in minor consuming/possession charges for the rest of Alaska (excluding MOA) has decreased annually from a high of 33 percent in 2009 to a low of 21 percent in 2012 (through 10/22/12). The dismissal rate for minor consuming/possession charges was higher for all of Alaska (excluding MOA) than for MOA each year from 2009 to 2012 (Table 30).

Table 30. Prosecution and Dismissal of Minor Consuming Charges, 2009-2012

| Result | 2009 Anchorage | | 2009 Alaska | | 2010 Anchorage | | 2010 Alaska | | 2011 Anchorage | | 2011 Alaska | | 2012 Anchorage | | 2012 Alaska | |
|-------------------------|----------------|--------|--------------|--------|----------------|--------|--------------|--------|----------------|--------|--------------|--------|----------------|--------|--------------|--------|
| | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| Dismissed discretionary | 208 | 21.0 % | 881 | 33.2 % | 159 | 18.1 % | 853 | 36.6 % | 130 | 15.5 % | 596 | 25.4 % | 49 | 13.4 % | 223 | 21.2 % |
| Guilty Conviction | 781 | 79.0 | 1,770 | 66.8 | 720 | 81.9 | 1,479 | 63.4 | 709 | 84.5 | 1,747 | 74.6 | 316 | 86.6 | 827 | 78.8 |
| Total | 989 | | 2,651 | | 879 | | 2,332 | | 839 | | 2,343 | | 365 | | 1,050 | |
| Other | 32 | | 283 | | | | 459 | | 37 | | 227 | | 176 | | 655 | |
| Total | 1,021 | | 2,934 | | 879 | | 2,791 | | 876 | | 2,343 | | 541 | | 1,050 | |

Source of data: Alaska Court System, 2012

The Alaska Court System (ACS) provided data on dispositions of cases with charges filed against licensees (liquor license holders) for providing alcohol to a minor, allowing minors on alcohol premises, and allowing minors to serve alcohol. The ACS data indicates the number of charges filed for each of the separate offense involving licensees, but the case dispositions were only provided for the group of charges; dispositions for individual case types could not be disaggregated. As a result, frequencies of charges and dispositions have been provided for this group of offenses rather than for individual offense types. It is worth noting that the majority of the charges filed were for providing alcohol to minors and the next most common charge was for allowing minors on alcohol premises. Very few offenses were for allowing minors to serve alcohol.

When comparing dismissed charges filed against licensees to other case dispositions, relatively few charges were dismissed. In Anchorage, the percent of licensee charges dismissed ranged from a low of seven percent for 2012 (through mid-October) to a high of 22 percent in 2011. The dismissal rate increased from nine percent in 2009 to 15 percent in 2010 and 22 percent in 2011 and then declined to seven percent for 2012 (partial year). In Alaska (excluding Anchorage), eight percent of charges were dismissed in 2009. Since 2010 the dismissal rate ranged from 22 to 24 percent statewide.

Table 31. Prosecution and Dismissal of Charges Filed Against Liquor License Holders, 2009-2012

| Result | 2009 Anchorage | | 2009 Alaska | | 2010 Anchorage | | 2010 Alaska | | 2011 Anchorage | | 2011 Alaska | | 2012 Anchorage | | 2012 Alaska | |
|----------------|----------------|-------|-------------|-------|----------------|--------|-------------|--------|----------------|--------|-------------|--------|----------------|-------|-------------|--------|
| | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| Dismissed | | | | | | | | | | | | | | | | |
| discretionary | 4 | 8.5 % | 4 | 8.3 % | 9 | 14.5 % | 8 | 24.2 % | 4 | 22.2 % | 14 | 22.6 % | 2 | 7.4 % | 8 | 23.5 % |
| Not dismissed* | 43 | 91.5 | 44 | 91.7 | 53 | 85.5 | 25 | 75.8 | # | 77.8 | 48 | 77.4 | # | 92.6 | 26 | 76.5 |
| Total | 47 | | 48 | | 62 | | 33 | | # | | 62 | | # | | 34 | |
| Other** | 1 | | 1 | | 2 | | 1 | | 1 | | 0 | | # | | 11 | |
| Total | 48 | | 49 | | 64 | | 34 | | # | | 62 | | # | | 34 | |

Source of data: Alaska Court System

*The majority of dispositions for cases "not dismissed" are guilty or no contest pleas, but figures may include a small number of acquittals after jury trial

**Other includes cases not disposed

Alcohol Abuse Requiring Treatment

In Alaska in 2011, there were a total of 2,780 alcohol-only abuse treatment admissions for the overall population – an increase of 64 percent. The rates of admissions decreased for Alaskans aged 12-20 years-old, falling from 12 percent of all admission to four percent. Data for adults aged 21 years and older showed an increase in the total number of admissions (78%), accounting for 96 percent of all alcohol treatment admissions in Alaska (Table 32).

In Alaska in 2011, there were a total of 1,955 admissions for alcohol with a secondary substance abuse treatment for the overall population – an increase of 84 percent. The rates of admissions decreased for Alaskans aged 12-17-years-old (from 11% to 4% of all admissions) and for 18-20-year-olds (from 8% to 6%). Data for adults aged 21 years and older showed an increase that more than doubled the total number of admissions (107%) for this age group and accounting for 91 percent of all alcohol with secondary substance treatment admissions in Alaska.

It is unclear whether this decrease in alcohol and alcohol with secondary substance treatment admissions for 12-20 year-olds is due to a decreased need within the age group or an increased availability of treatment for adults over 21.

Table 32. Alcohol Abuse Treatment Admissions in Alaska by Age Group, 2007 to 2011

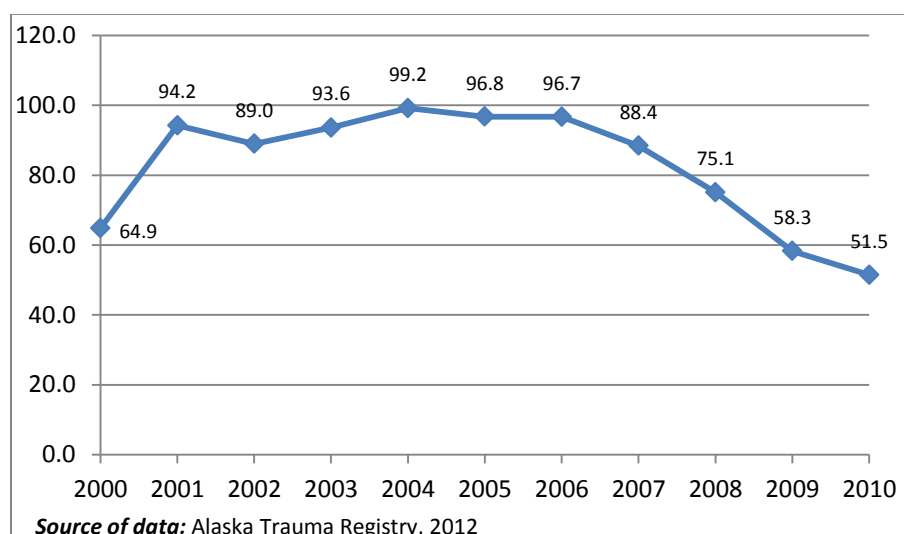
| | <i>Column percents</i> | | | | | | | | | |
|---|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 2007 | | 2008 | | 2009 | | 2010 | | 2011 | |
| | N | % | N | % | N | % | N | % | N | % |
| Alcohol only | | | | | | | | | | |
| 0 to 11 years | 0 | 0.0 % | 0 | 0.0 % | 0 | 0.0 % | 0 | 0.0 % | 0 | 0.0 % |
| 12 to 17 years | 90 | 5.3 | 74 | 3.4 | 86 | 3.7 | 48 | 1.6 | 42 | 1.5 |
| 18 to 20 years | 108 | 6.4 | 117 | 5.4 | 105 | 4.5 | 84 | 2.8 | 75 | 2.7 |
| 21 and older | 1,493 | 88.3 | 1,973 | 91.2 | 2,144 | 91.8 | 2,852 | 95.6 | 2,663 | 95.8 |
| Total | 1,691 | | 2,164 | | 2,335 | | 2,983 | | 2,780 | |
| Alcohol with secondary substance | | | | | | | | | | |
| 0 to 11 years | 1 | 0.1 % | 2 | 0.1 % | 0 | 0.0 % | 0 | 0.0 % | 0 | 0.0 % |
| 12 to 17 years | 120 | 11.3 | 128 | 6.9 | 97 | 5.6 | 88 | 4.3 | 70 | 3.6 |
| 18 to 20 years | 84 | 7.9 | 169 | 9.1 | 153 | 8.8 | 158 | 7.7 | 108 | 5.5 |
| 21 and older | 859 | 80.7 | 1,558 | 83.9 | 1,485 | 85.6 | 1,811 | 88.0 | 1,777 | 90.9 |
| Total | 1,064 | | 1,857 | | 1,735 | | 2,058 | | 1,955 | |

Source of data : Substance Abuse and Mental Health Services Administration, 2012a,b,c

Health and Safety Consequences of Underage Drinking

Trend data from the Alaska Trauma Registry show that in 2000, the rate of alcohol-related injuries requiring hospitalization per 100,000 population among Alaskans ages 20 and under was 65. This rate reached a high of 99 in 2004, and has fallen to 52 per 100,000 population in 2010 (Figure 7).

Figure 7. Statewide Alcohol-Related Injuries Requiring Hospitalization for Alaskans Ages 20 and under, 2000 to 2010 (per 100,000 population)



In the Anchorage region, the number of alcohol-related injuries requiring hospitalization among Alaskans ages 20 and younger appears to show an overall decline from 54 injuries in 2001 to 20 injuries in 2010. For all of Alaska, excluding the Anchorage region, the number of alcohol-related injuries requiring hospitalization among youth age 20 and younger show a significant decrease from 143 in 2001 to 100 in 2010 (Table 33).

Table 33. Number of Alcohol-Related Injuries Requiring Hospitalization for Alaskans Ages 20 and Under by Region of Residence, 2001 to 2010

| Region | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Anchorage | 54 | 40 | 33 | 34 | 35 | 28 | 31 | 30 | 21 | 20 |
| Alaska | 143 | 147 | 163 | 174 | 167 | 173 | 152 | 125 | 100 | 87 |
| Total | 197 | 187 | 196 | 208 | 202 | 201 | 183 | 155 | 121 | 107 |

Source of data: Alaska Trauma Registry, 2012

Fetal Alcohol Spectrum Disorder (FASD) births may also be one of the unfortunate consequences of youth alcohol consumption. Fetal Alcohol Spectrum Disorders (FASD) is an umbrella term describing the range of effects that can occur in an individual whose mother drank alcohol during pregnancy. These effects may include physical, mental, behavioral and/or learning disabilities with possible lifelong implications. Among Alaska mothers with a maternal age of 15 to 19, years, there were 17,203 live births from 1996 to 2011, equaling just over ten percent of all live births in Alaska in that period. This same maternal age group had nearly 14 percent of all FASD births from 1996 to 2011. Alaska mothers with a maternal age of 15 to 19 had FASD births at a higher rate than their representation among all live births. Ninety percent of all live births in Alaska from 1996 to 2011 were to mothers of maternal ages 20 to 45 years, and this same group had nearly 87 percent of all FASD births from 1996 to 2011 (Table 34).

Table 34. Total Number of Fetal Alcohol Spectrum Disorder Births in Alaska by Maternal Age, 1996-2011

Row percents

| | Maternal Age | | Total |
|-------------------|----------------|----------------|----------------|
| | 15 to 19 years | 20 to 45 years | |
| FASD Births | 252 | 13.5 % | 1,610 |
| Total live births | 17,203 | 10.2 | 150,757 |
| | | | 86.5 % |
| | | | 1,862 |
| | | | 167,960 |

Source of data: Alaska Birth Defects Registry, 2012

Between 2001 and 2005, there were 5,954 deaths in Anchorage, three percent of which were alcohol-induced. Of all deaths in Alaska, excluding Anchorage, four percent were alcohol induced. In comparison, between 2005 and 2009, there were 6,571 deaths in Anchorage, of which four percent were alcohol-induced, an increase on one percent from the 2001-2005 time period. Overall, Alaska's rate of alcohol-induced deaths has held steady around four percent from 2001 to 2009 (Table 35).

Table 35. Total Number of Alcohol-Induced Deaths for All Ages in Anchorage, 2001 to 2005, 2005 to 2009

Column percents

| Deaths | Anchorage | | | | All other areas | | | | Alaska total | | | |
|------------------|--------------|-------|--------------|-------|-----------------|-------|---------------|-------|---------------|-------|---------------|-------|
| | 2001-2005 | | 2005-2009 | | 2001-2005 | | 2005-2009 | | 2001-2005 | | 2005-2009 | |
| | N | % | N | % | N | % | N | % | N | % | N | % |
| Alcohol-induced | 205 | 3.4 % | 285 | 4.3 % | 381 | 4.0 % | 415 | 3.9 % | 586 | 3.8 % | 700 | 4.1 % |
| All other deaths | 5,749 | 96.6 | 6,286 | 95.7 | 9,074 | 96.0 | 10,106 | 96.1 | 14,823 | 96.2 | 16,392 | 95.9 |
| Total | 5,954 | | 6,571 | | 9,455 | | 10,521 | | 15,409 | | 17,092 | |

Source of data: Hull-Jilly and Casto, 2009, 2011

In Alaska from 2001-2005, there were 20 alcohol-induced deaths among male and female youth ages 0 to 24 years, nearly double the number in 2005-2009 (12). In 2001-2005, eleven of the alcohol-induced deaths among youth ages 0 to 24 years involved Native males, five involved White males, three involved Alaska Native females, and one involved a Black female. By comparison, in the 2005-2009 time period, seven alcohol-induced deaths in Alaska involved Native males, three White males, one Native female, and one Black female aged 0 to 24 years. Among male and female adults ages 25 and older, there were 564 alcohol-induced deaths from 2001-2005 and 682 from 2005-2009. From 2001-2005, 211 of these deaths involved White males, 149 involved Alaska Native males, and 121 involved Native females. There were 76 alcohol-induced deaths among White females ages 25 and older from 2001-2005, five for Black males, and one each for Asian males and Asian females. From 2005-2009, alcohol-induced deaths involved 255 White males, 151 Native females, 144 Native males, 122 White females, five Asian males, three Black males, and 2 Black females. Most notable between 2005-2009 and 2001-2005 is the increase in alcohol induced deaths for Native females (151 vs. 121 respectively) and White females (122 vs. 76 respectively) (Table 36).

Table 36. Total Number of Alcohol-Induced Deaths in Alaska by Age, Race, and Sex, 2001-2005 and 2005-2009

Row totals

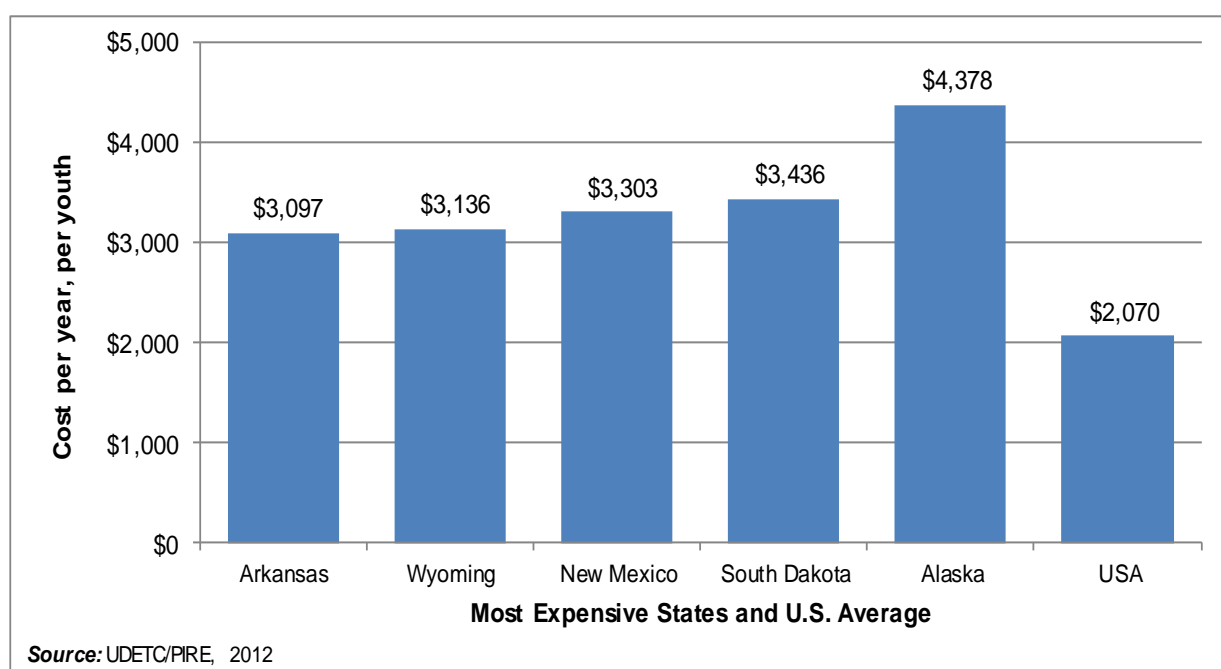
| Alcohol Induced Deaths | | Ages 0 to 24 | | Ages 25 and Older | | All Ages | |
|------------------------|--------------|--------------|-----------|-------------------|------------|------------|------------|
| | | 2001-2005 | 2005-2009 | 2001-2005 | 2005-2009 | 2001-2005 | 2005-2009 |
| Female | | | | | | | |
| | Native | 3 | 1 | 121 | 151 | 124 | 152 |
| | White | 0 | 0 | 76 | 122 | 76 | 122 |
| | Black | 1 | 1 | 0 | 2 | 1 | 3 |
| | Asian | 0 | 0 | 1 | 0 | 1 | 0 |
| Male | | | | | | | |
| | Native | 11 | 7 | 149 | 144 | 160 | 151 |
| | White | 5 | 3 | 211 | 255 | 216 | 258 |
| | Black | 0 | 0 | 5 | 3 | 5 | 3 |
| | Asian | 0 | 0 | 1 | 5 | 1 | 5 |
| | Total | 20 | 12 | 564 | 682 | 584 | 694 |

Source of data: Hull-Jilly and Casto, 2009, 2011

Economic Consequences of Underage Drinking

In 2010, the average cost of underage drinking per youth in the U.S. was \$2,070. Alaska was among the five states with the highest cost of underage drinking per youth in 2010, with a cost per youth of \$4,378. Among the remaining four States, South Dakota reached \$3,436 per youth, New Mexico's cost was \$3,303, Wyoming's cost was \$3,136, and the cost in Arkansas was \$3,097 (Figure 8).

Figure 8. Total Cost of Underage Drinking per Year, per Youth, in the Five States with the Highest Cost-per-Youth, 2010



In 2010, the total cost of underage drinking was \$62 billion; \$37 billion of this went to pain and suffering, \$18 billion went to work lost costs, and \$7 billion to medical costs. In Alaska in 2010, \$190 million was spent on pain and suffering related to underage drinking. The total direct costs of underage drinking in Alaska in 2010 were \$131 million, \$52 million of which went to medical costs and \$79 million to work lost costs. In total, underage drinking cost Alaska \$321 million in 2010 (Table 37).

Table 37. Total Cost of Underage Drinking in the Five States with the Highest Cost-Per-Youth, 2010 (in Millions of Dollars)

Column totals

| | Alaska | South Dakota | New Mexico | Wyoming | Arkansas | U.S. Total |
|---------------------------|--------------|-----------------|---------------|--------------|--------------|----------------|
| Direct Cost | | | | | | |
| Medical Costs | 52.0 | 71.0 | 58.0 | 33.0 | 88.0 | 6900.0 |
| Work Lost Costs | 79.0 | 59.0 | 201.0 | 39.0 | 229.0 | 18200.0 |
| Total Direct Costs | 131.0 | 130.0 | 259.0 | 72.0 | 317.0 | 25100.0 |
| Indirect Cost | | | | | | |
| Pain and Suffering | 190.0 | 152.0 | 395.0 | 95.0 | 538.0 | 36900.0 |
| Total Costs | 321.0 | 282.0 | 654.0 | 167.0 | 855.0 | 62000.0 |

Source of data: UDETC/PIRE, 2012

There are various problems caused by underage drinking that contributed to the \$62 billion spent in the U.S. on underage drinking in 2010. For example, the Pacific Institute for Research and Evaluation (PIRE) estimates that youth violence as a result of underage drinking cost the U.S. over \$35 billion in 2010. An additional \$10 billion was spent on youth traffic crashes, over \$5 billion on high risk sex among those ages 14 to 20 years, and \$5 billion on youth property crime, as a result of underage drinking. In Alaska alone, \$155 million was spent on youth violence that resulted from underage drinking, \$91 million on youth traffic crashes, and \$25 million on youth alcohol treatment. Underage drinking also cost Alaska \$11 million for consequences associated with high risk sex among youth ages 14 to 20 years, and nearly \$22 million for injuries that happened to underage youth who were drinking alcohol. Costs associated with youth property crime resulting from underage drinking in Alaska totaled over \$11 million in 2010 (Table 38).

Table 38. Cost of Underage Drinking in the Five States with the Highest Cost-per-Youth by Problem, 2010 (in Millions of Dollars)

Column totals

| Problem | Alaska | South Dakota | New Mexico | Wyoming | Arkansas | U.S. Total |
|---------------------------------|--------------|-----------------|---------------|--------------|--------------|-----------------|
| Youth violence | 154.7 | 101.8 | 329.7 | 66.6 | 518.5 | 35,094.5 |
| Youth traffic crashes | 91.0 | 94.6 | 178.6 | 47.0 | 131.1 | 9,955.9 |
| High risk sex- ages 14 to 20 | 11.0 | 13.3 | 51.3 | 12.8 | 61.4 | 5,184.0 |
| Youth property crime | 11.4 | 7.5 | 42.3 | 7.7 | 59.8 | 5,138.5 |
| Youth injury | 21.5 | 7.8 | 25.3 | 5.9 | 36.9 | 2,133.3 |
| Poisonings and psychosis | 1.7 | 1.9 | 4.1 | 1.5 | 5.3 | 657.0 |
| FAS among mothers ages 15 to 20 | 4.9 | 1.9 | 14.6 | 1.9 | 17.3 | 1,307.2 |
| Youth alcohol treatment | 25.2 | 54.0 | 6.9 | 23.4 | 24.8 | 2,574.9 |
| Total | 321.4 | 282.8 | 652.8 | 166.8 | 855.1 | 62,045.3 |

Source of data: UDETC/PIRE, 2012

Data Gap Analysis

Following the recommendation of the RAND Corporation in its Preventing Underage Drinking Report (2007), we identified currently available indicators of underage drinking and recommend collection of additional data. Based on the known indicators that were collected for this report, it seems that little is known about youth access to alcohol in Anchorage, and Alaska generally. The information we do know about youth access to alcohol comes from an item on the YRBS that asks youth how they normally get their alcohol, and from one indicator from the Alaska Alcoholic Beverage Control (ABC) Board regarding the percentage of licensees who pass their compliance checks. Information that is lacking in regard to youth access to alcohol, based on the indicators reported in this assessment, include statistics on shoulder tap activities carried out by the Alaska ABC Board. Shoulder tap activities involve law enforcement using youth under 21 to ask adults outside of liquor stores to purchase alcohol for them. Alcohol Beverage Control enforcement collects this data and may be willing to make it available for independent analysis. Some additional indicators that could add to the body of knowledge about youth access to alcohol in Anchorage include the number and percentage of youth who report being permitted by their parents to consume and/or accessing alcohol from parents or other family members, and the number and percentage of parents and other family members who report permitting youth to consume alcohol. Another important indicator for youth access to alcohol is adults' (both near peers aged 21 to 25 and older adults) attitudes and behaviors toward purchasing or providing alcohol for youth. While not presented here, the Justice Center at UAA has prepared a report on Anchorage residents' attitudes regarding underage drinking and adult provision of alcohol to underage persons (see 2010 Anchorage Underage Drinking Survey: A Look at Adult Attitudes, Perceptions, and Norms).

A number of the indicators presented in this report about social norms and youth perceptions of alcohol consumption were available at the state or national levels, but not for Anchorage specifically. It may be useful for future research efforts to focus on such indicators among youth in Anchorage and other parts of Alaska. For example, the Monitoring the Future survey does not include youth from Alaska in their sample population, but survey items, such as youth approval of alcohol consumption by others, could add to our knowledge of youth perceptions if they were asked of youth in Anchorage and other parts of Alaska. Additionally, the National Survey on Drug Use and Health (NSDUH) only offers three-year averages for four regions within the state of Alaska from yearly surveys due to the small sample sizes achieved here. Efforts to increase the sample sizes for this type of survey may allow researchers to track changes in attitudes and behaviors more closely on a year-to-year basis, rather than based on three-year averages.

A number of indicators about alcohol consumption among Anchorage youth were available regarding the amount of consumption and age of first consumption. Additional indicators meriting further research in this area include the circumstances or environments in which youth normally consume alcohol (at parties, in small groups, alone, for example).

The majority of indicators collected for this report related to the consequences of youth alcohol consumption. Much of this information was also available for Anchorage specifically, and for Alaska. However, one potential indicator that was not included in this report is the number

and/or rate of alcohol-related emergency room visits for youth in Anchorage versus other areas of the state. It should also be noted that previous programs requiring very specific reporting requirements for disciplinary actions, and the related details, are no longer required by the state. This incomplete data will make it problematic for research into the impact of alcohol on suspensions and expulsions from public schools in Alaska to be undertaken. We would encourage the reimplementation of guidelines requiring detailed disciplinary actions to be submitted to the state on a quarterly basis.

A number of environmental indicators were not, to our knowledge, available at the time of this report, but could add significantly to our knowledge of youth alcohol access and consumption in Anchorage and improve the ability to form programs and policies to address related issues. Such indicators include the perceptions and attitudes of law enforcement, prosecutors, and judges toward youth alcohol access and consumption; the size and type of the problem in Anchorage; and beliefs among criminal justice professionals, parents and others about how these issues are handled within the criminal justice system. In addition, a review of local laws, policies, and practices related to alcohol consumption and underage drinking could be compiled. A map identifying the location of licensed liquor establishments as well as violators and repeat violators of compliance checks could also be generated. Other reports have suggested that it may be useful to examine the amount of alcohol advertisements or number of licensed alcohol establishments that youth are exposed to on a regular basis, and comparatively, the amount of anti-alcohol or positive alternatives to alcohol that youth are exposed to regularly. Additional environmental indicators that could be examined in future research include the number and percentage of parents that consume alcohol around their children, and the amount of alcohol these parents consume (as reported by youth and/or parents), as well as the number and percentage of friends youth report being in contact with on a regular basis who consume alcohol.

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Appendix - Annotated Bibliography of Survey Sources

Anchorage School District Youth Risk Behavior Survey (YRBS). Available at <http://www.asdk12.org/depts/sdfs/research.asp>

The Anchorage School District (ASD) YRBS is a report that uses data collected from the Alaska YRBS to compare the ASD to the statewide average. The ASD report further analyses the trends occurring in ASD traditional schools and compares ASD traditional schools with the district's alternative and McLaughlin schools. The ASD YRBS has a minimum response rate of 60% required for generalization to the student population.

Centers for Disease Control and Prevention. *Youth Risk Behavior Surveillance System*. Available at <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>

The Youth Risk Behavior Surveillance System (YRBSS) reports on national, state, territorial, tribal and district school-based surveys that monitor priority health-risk behaviors among youth in the United States. Alcohol use is a component of the YRBSS surveys.

YRBSS surveys are conducted every two years from February to May. The national sample is separate from those of state, territorial, tribal, and district surveys, and is a three-stage cluster design that is representative of United States youth in grade 9 through grade 12 in public and private schools. Therefore, state estimates cannot be derived from the national survey results. Estimates derived from the sample are accurate at a 95% confidence interval.

Data from the YRBS are limited by their being self-reported data for which any under or over reporting cannot be accurately known. Data also apply only to youth who are in school. Surveys across sites are inconsistent due to the need to adhere to local procedures for obtaining parental consent. However, as the national YRBS surveys are conducted in Alaska, it offers the State one of a few points of comparison to youth at the national level.

Institute for Social Research at the University of Michigan. *Monitoring the Future*. Available at <http://monitoringthefuture.org/>

Monitoring the Future (MTF) is an ongoing annual study that began in 1975 and is funded by the National Institute on Drug Abuse and conducted by the Institute for Social Research of the University of Michigan. The MTF addresses the behaviors, attitudes, and values of American youth in secondary school and college, and of young adults. The sample of secondary school youth consists of 50,000 students in grades 8, 10, and 12. Data are collected using a multi-stage random sampling design from approximately 420 public and private middle and high schools in the spring of each year. The MTF data collection process does not include youth in Alaska.

National Highway Traffic Safety Administration, National Center for Statistics and Analysis [*FARS Query System*]. Available at <http://www-fars.nhtsa.dot.gov/QueryTool/QuerySection/SelectYear.aspx>

The Fatal Accident Reporting System (FARS) is managed by the National Center for Statistics Analysis (NCSA) and records fatalities caused by traffic crashes and fatalities resulting from injuries sustained during traffic crashes and that occur within 30 days of the crash date. All fatal crashes in the 50 States, the District of Columbia, and Puerto Rico are contained in FARS. Custom queries can be performed online with the FARS Query System, including univariate analyses and cross tabulations. Subsets of data may also be downloaded.

Crashes in the FARS database occur on public traffic ways and all involve at least one death that occurred within 30 days of the crash date. FARS also provides access to files that contain driver BAC estimates through report numbers DOT HS 807 094 and DOT HS 807 095

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The Maternal and Child Health (MCH) Book is an annual publication by the MCH Epidemiology Unit that provides indicators of maternal and child health in Alaska. The 2005 edition includes the first comprehensive analysis of Alaska Birth Defects Registry (ABDR) data. The data for the report come from health care providers and medical records and may be affected by differences in diagnoses, record keeping, and reporting. Information on risk factors was derived from cross-referencing the ABDR databases with birth certificates, which may or may not be an accurate reflection of the prevalence of all risk factors. Causal relationships may not necessarily be assumed as intervening variables may not have been measured or analyzed.

State of Alaska Health and Social Services, Division of Public Health Chronic Disease Prevention and Health Promotion. *Alaska Youth Risk Behavior Survey*. Available at <http://www.hss.state.ak.us/dph/chronic/school/YRBS.htm>

The Alaska Youth Risk Behavior Survey (YRBS) is part of the Centers for Disease Control and Prevention Youth Risk Behavior Surveillance System (YRBSS). The Alaska YRBS monitors youth risk behaviors that for the most prevalent health and social problems relating to adolescence, with the purpose of promoting planning and evaluation for prevention and intervention. The YRBS is an anonymous school-based survey of youth in
The Alaska YRBS was administered in 1995, 1999, 2001, 2003, 2005, 2007, and 2009, with representative data collected in 1995, 2003, 2007, and 2009.

The 2009 Alaska YRBS included a sample of 1,373 students from 43 high schools that are representative of all public high schools in the State in grades 9 through 12. The 2009 survey also included 1,020 students from 15 alternative high schools in Alaska.

Substance Abuse and Mental Health Services Administration, Office of Applied Studies.
National Survey on Drug Use and Health.
Available at <http://www.oas.samhsa.gov/nsduh.htm>

The National Survey on Drug Use and Health (NSDUH) is funded by the Substance Abuse and Mental Health Services Administration and is currently administered by Research Triangle Institute. The NSDUH is a primary source of data about, among other data elements, national and state-level alcohol consumption in the United States. The NSDUH uses a sample of approximately 67, 500 noninstitutionalized Americans ages 12 and older who are contacted for face-to-face interviews. Comparisons described in the report are statistically significant at the .05 level, unless otherwise stated. Due to methodological differences between survey years, NSDUH data from 2002 and later cannot be compared with those from 2001 and earlier to assess changes overtime.