

State of Hawai'i Epidemiological Profile for Youth Alcohol Prevention

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For the:
**Hawai'i State Department of Health,
Alcohol and Drug Abuse Division**



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EXECUTIVE SUMMARY

Background

The State of Hawai'i Epidemiological Profile for Youth Alcohol Prevention was developed to facilitate the use of data to improve prevention, assessment, planning, implementation, and monitoring of adolescent alcohol use. This is part of the Strategic Prevention Framework-State Incentive Grant (SPF-SIG) which focuses on the reduction and prevention of underage alcohol consumption for youth 12-17 years old. The Strategic Prevention Framework-State Incentive Grant (SPF-SIG) was awarded in September 2006 to the State of Hawai'i to improve the quality of life of its citizens by preventing and reducing the abuse of and dependence on alcohol and other drugs among youth. The SPF-SIG is a five-year program that encompasses five interconnected and data-infused steps with sustainability and cultural competence at its core. These steps are (1) assess problems and set priorities; (2) evaluate and mobilize capacity to address them; (3) inform prevention-planning and funding decisions; (4) guide the selection of appropriate and effective strategies for implementation; and (5) monitor key milestones, evaluate initiatives, and adjust prevention efforts as needed.

Methods

The profile was developed using the Youth Risk Behavioral Survey (YRBS) 2005, 2007, and 2009 and the 2007 Alcohol, Tobacco, and Other Drug (ATOD) survey. The YRBS is a national school-based survey conducted by the Centers for Disease Control and Prevention (CDC) with data being collected at the state, territorial, tribal, county and district level in selected states. The Hawai'i YRBS includes alcohol and other drug use, and other health behaviors (not referred to here) for middle and high school students at the state level. The ATOD survey was administered to youth throughout the State of Hawai'i in public, charter, and private schools from the four counties in Hawai'i (City and County of Honolulu, County of Hawai'i, County of Maui, and County of Kauai). In line with the goals of the Hawai'i SPF-SIG, only participants ages 12-17 are presented in this profile. The alcohol related indicators include prevalence of alcohol use, negative effects of alcohol and problems caused by alcohol, alcohol tolerance, dependence, and withdrawals, initiation of alcohol use, access to alcohol, exposure to alcohol use, offers of alcohol, risk from alcohol use, opinion of alcohol use, treatment for alcohol use, and perceptions and rules of alcohol use.

Results from the Youth Risk Behavioral Survey (YRBS)

The analysis of YRBS data revealed an increasing trend from 2005 to 2009 among the middle school students in all alcohol related indicators. An increasing trend was also observed from grade levels 6 to 8. On the other hand, a 'U' pattern was observed among the high school students in all alcohol related indicators, i.e., a decrease from 2005 to 2007 and then an increase in 2009.

Regarding ethnicity, the prevalence of alcohol use was reported higher among Native Hawaiian youth than other ethnic groups among the middle school students. In 2005, Caucasian youth among the high school students had highest prevalence of ever using alcohol. However, Native Hawaiian youth among high school students had the highest prevalence of ever using alcohol in 2009.

A comparison between Hawai'i and the United States based on the 2009 YRBS of the average percentage of alcohol related indicators revealed that youth from Hawai'i reported a slightly lower percentage of ever drinking compared to the national average. Also, current alcohol use percentages in Hawai'i were below the national average with respect to both gender and grade levels. On the other hand, a higher percentage of youth in Hawai'i reported having a first drink of alcohol before the age of 13 compared to their national counterparts. Similarly, youth in all grade levels and both genders in Hawai'i reported higher percentages of drinking alcohol on school property than their counterparts in the United States.

Results from the 2007 Alcohol, Tobacco, and Other Drug (ATOD) survey

Findings from the 2007 ATOD survey showed that the majority of youth in Hawai'i had not drunk or binge drank in the past 30 days. Of those who had drunk or binge drank in the past 30 days, more than half of them drank or suffered the after effects of alcohol while at school, work or taking care of children. About half of the youth who drank alcohol reported being drunk when involved in activities that could have increased their chances of being hurt.

The majority of youth who reported ever drinking alcohol reported that they had never drunk regularly, binge drank, or got drunk. Among those who drank, most of them first used alcohol at ages 13-14 years. About 95% of youth drinkers in the State of Hawai'i reported never buying alcohol at a store, bar, or restaurant. However, about 20% of youth who drank alcohol reported having someone of legal age buy alcohol for them.

Parents and other relatives exposed youth in the State of Hawai'i to alcohol most often. However, the majority of youth in the State of Hawai'i had not been offered alcohol by parents, siblings, other relatives or strangers. More females than males in the State of Hawai'i perceived any risk from drinking four or more drinks of alcohol once or twice each weekend. The majority of youth reported that their family had clear rules about alcohol and drug use. Very few youth in the State of Hawai'i who drank alcohol reported receiving treatment at school, outside of school and of not receiving treatment when they thought they should have.

The 2007 ATOD survey showed that females had higher prevalence in all alcohol related indicators than males. Also, an increasing trend in the prevalence of all alcohol related indicators was observed for increasing grade levels.

Conclusion

Overall, an increasing trend has been observed in all alcohol related indicators among the middle school students, while a 'U' pattern was observed among the high school youth in the YRBS data. The vast majority of indicators had lower percentages of usage in 2007, but then increased in 2009. There was also a distinct pattern when looking at all the indicators broken down by grade levels. Across nearly every indicator, higher grade levels reported poorer results than lower grade levels. Also, females were found to have poorer outcomes over most indicators than males. Regarding ethnicity, Native Hawaiian youth had higher prevalence over most alcohol related indicators than other ethnic groups. Therefore, prevention efforts should focus on the adoption of culturally appropriate programs and implementation of evidence-based curriculums targeting these at risk groups.

ACKNOWLEDGEMENTS

The content of the State of Hawai'i Epidemiological Profile for Youth Substance Abuse Prevention is a collaborative effort on the part of numerous individuals and agencies throughout the State of Hawai'i. It is because of the knowledge and dedication of these entities that we are able to provide the leadership necessary for the development and delivery of quality substance abuse prevention, intervention and treatment services for the youth of the State of Hawai'i.



The Alcohol and Drug Abuse Division (ADAD) of the Hawaii State Department of Health is the primary and often sole source of public funds for substance abuse treatment. ADAD's treatment efforts are designed to promote a statewide culturally appropriate, comprehensive system of services to meet the treatment and recovery needs of individuals and families. Treatment services have, as a requirement, priority admission for pregnant women and injection drug users. ADAD provides the leadership necessary for the development and delivery of quality substance abuse prevention, intervention and treatment services for the residents of the State of Hawai'i.



Office of Public Health Studies

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SPF-SIG BACKGROUND

The *State of Hawai'i Epidemiological Profile for Substance Abuse Prevention* was developed to facilitate the use of data to improve prevention assessment, planning, implementation, and monitoring. This effort was supported by two grants from the Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Prevention (CSAP). The first grant was awarded to the Alcohol and Drug Abuse Division (ADAD) of the Hawai'i State Department of Health (DOH) in March 2006 to establish a State Epidemiological Outcomes Workgroup (SEOW) that would collect, analyze, and report substance use incidence and prevalence, as well as related data and National Outcome Measures (NOMs).

The second grant—the Strategic Prevention Framework (SPF) State Incentive Grant (SIG)—was awarded in September 2006 to the State of Hawai'i *to improve the quality of life of its citizens by preventing and reducing the abuse of and dependence on alcohol and other drugs among youth ages 12-17*. The SPF-SIG is a five-year program that encompasses five interconnected and data-infused steps with sustainability and cultural competence at its core. These steps are (1) assess problems and set priorities; (2) evaluate and mobilize capacity to address them; (3) inform prevention-planning and funding decisions; (4) guide the selection of appropriate and effective strategies for implementation; and (5) monitor key milestones, evaluate initiatives, and adjust prevention efforts as needed (see Figure 1 below).

Figure 1. SPF-SIG Program Model



DEMOGRAPHIC PROFILE OF HAWAI'I

HAWAI'I'S PEOPLE

Admitted into statehood on August 21, 1959, Hawai'i is not only the youngest state in the Union but also possesses characteristics that set it apart from the other states. It is situated approximately 2,400 miles from the United States mainland and is the only state that is completely surrounded by the Pacific Ocean. The State of Hawai'i consists of four counties that are located on seven major islands: County of Hawai'i, City & County of Honolulu, County of Kaua'i, and County of Maui. Thus, its people are separated by both land and water. The state's geography creates diverse communities, ranging from the highly urbanized and populous city of Honolulu located on the island of O'ahu to small, rural communities situated on the "neighbor islands." Table 1 presents the State of Hawai'i's population distribution across the state as a whole and by county.

Table 1. Population (in Thousands) of State of Hawai'i and Counties by Gender and Age, 2010

Gender	Total	Age below 12	Age 12-17	Age 18-20	Age 21-29	Age 30-34	Age 35-54	Age 55-64	Age 65 & over
State of Hawai'i									
Total	1,360	203	100	53	175	88	370	175	195
Male	681	104	51	28	93	45	186	87	86
Female	679	99	49	25	82	43	184	88	109
City & County of Honolulu									
Total	953	142	69	39	130	63	257	114	138
Male	477	73	35	21	70	32	130	56	60
Female	476	69	34	18	60	31	127	58	78
County of Hawai'i									
Total	185	28	14	7	20	11	49	29	27
Male	93	14	7	4	10	6	24	15	13
Female	92	14	7	3	10	5	25	14	14
County of Kaua'i									
Total	67	10	5	2	7	4	18	10	10
Male	34	5	3	1	4	2	9	5	4
Female	33	5	2	1	3	2	9	5	6
County of Maui (includes the islands of Maui, Lana'i and Moloka'i)									
Total	155	24	12	5	17	10	45	21	20
Male	78	12	6	3	9	5	23	11	9
Female	77	12	6	2	8	5	22	10	11

Source: Source: U.S. Census Bureau, 2010 Census. 2010 Census Summary File 1, Table PCT12.

Note: Numbers in the table vary due to rounding the data.

The State of Hawai'i's population of approximately 1.3 million people is comprised of a rich array of ethnicities and cultures such as Native Hawaiians, Pacific Islanders, Caucasians, Japanese, Filipinos, Chinese, African Americans, and people of other and mixed heritages (see Table 2).

Table 2. Population of the State of Hawai'i by Ethnicity, 2010

Ethnicity	Percent
White	25
Black or African American	>1
American Indian and Alaska Native	<1
Asian	39
<i>Chinese</i>	4
<i>Filipino</i>	14
<i>Japanese</i>	14
<i>Korean</i>	>2
<i>Other Asian</i>	<2
Native Hawaiian / Part Hawaiian	10
<i>Native Hawaiian</i>	6
<i>Guamanian or Chamorro</i>	<1
<i>Samoan</i>	>1
<i>Other Pacific Islander</i>	1
Other Ethnicity	1
Two or more ethnicities (excluding Hawaiian)	24

Source: U.S. Census Bureau, Census 2010.

Note: Numbers in the table vary due to rounding the data.

THE COSTS OF UNDERAGE DRINKING IN HAWAI'I

According to the 2009 Pacific Institute for Research and Evaluation (PIRE) Report, underage drinking in Hawai'i cost taxpayers \$189 million dollars in 2007. This translates to a cost of \$1,647 for each youth in the state. Further, Hawai'i is ranked 47th highest out of the 50 states for the cost per youth of underage drinking. The PIRE reports that youth who start drinking before the age of 15 years are four times more likely to develop alcohol dependence and two and a half times more likely to become alcohol abusers before they are 21 years old. Tables 3 and 4 demonstrate the economic impact of underage drinking in the State of Hawai'i in 2007.

Table 3. The Economic Costs of Underage Drinking in The State of Hawai'i by Category, 2007

Outcome Categories of Underage Drinking	Total Cost (in millions)
Pain and Suffering	\$99
Medical Costs	\$44
Work Lost (caretakers and victims)	\$46
Total	\$189

Source: Pacific Institute for Research and Evaluation Report, 2009.

Table 4. The Breakdown of Outcome Categories of Underage Drinking in The State of Hawai'i, 2007

Outcome of Underage Drinking	Total Cost (in millions)
Youth Violence	\$89
Youth Traffic Crashes	\$31
High Risk Sex, 14-20 years old	\$9
Youth Property Crime	\$17
Youth Injury	\$6
Poisonings and Psychoses	\$1
Fetal Alcohol Syndrome in Babies born to Mothers aged 15-20	\$3
Youth Alcohol Treatment	\$32
Total	\$188

Source: Pacific Institute for Research and Evaluation Report, 2009.

RISK AND PROTECTIVE FACTORS

In addition to targeting the consumption of alcohol by specific subpopulations (such as by current users), prevention services could shift the balance from vulnerability to resilience among individuals who have the potential for alcohol abuse and addiction. Youth who have successfully avoided abusing alcohol and other substances have done so because the adults in their lives assisted them in developing personal qualities and supported them in their homes, schools, and communities. Table 5 presents a list of risk and protective factors in four domains: peer-individual, family, school, and community. See Appendix A for data about risk and protective factors among Hawaii's youth.

Table 5. Risk and Protective Factors in Peer-Individual, Family, School, and Community Domains

Domain	Risk Factors	Protective Factors
Peer-Individual	<ul style="list-style-type: none"> • Early initiation of problem behaviors • Favorable attitudes toward ATOD use • Low perceived ATOD-use risk • Antisocial behaviors • Favorable attitudes toward antisocial behaviors • Friends' ATOD use • Interaction with antisocial peers • Rewards for antisocial involvement • Rebelliousness • Sensation seeking 	<ul style="list-style-type: none"> • Peer disapproval of ATOD use • Belief in the moral order • Education aspirations
Family	<ul style="list-style-type: none"> • Poor family supervision • Lack of parental sanctions for antisocial behaviors • Parental attitudes favorable toward ATOD use • Exposure to family ATOD use • Parental attitudes favorable toward antisocial behavior • Family (sibling) history of antisocial behaviors 	<ul style="list-style-type: none"> • Family attachment • Family opportunities for positive involvement • Family rewards for positive involvement
School	<ul style="list-style-type: none"> • Low school commitment • Poor academic performance 	<ul style="list-style-type: none"> • School opportunities for positive involvement • School rewards for positive involvement
Community	<ul style="list-style-type: none"> • Community disorganization • Transition and mobility • Exposure to community ATOD use • Laws and norms favorable to ATOD use • Perceived availability of drugs and handguns • Ability to purchase alcohol or tobacco 	<ul style="list-style-type: none"> • Community opportunities for positive involvement • Community rewards for positive involvement

Source: Pearson, R. S. (2004). The 2003 Hawai'i student alcohol, tobacco, and other drug use study (1987-2003); Hawai'i adolescent prevention and treatment needs assessment. Honolulu: Hawai'i Department of Health, Alcohol and Drug Abuse Division.

YOUTH ALCOHOL PREVALENCE TRENDS IN HAWAI'I, 2005-2009

The Youth Risk Behavioral Survey (YRBS) monitors priority health-risk behaviors among youth. The YRBS is a national school-based survey conducted by the Centers for Disease Control and Prevention (CDC) with data being collected at the state, territorial, tribal, county and district level in selected states. The Hawai'i YRBS includes behaviors that contribute to unintentional injuries and violence, tobacco use, alcohol and other drug use, sexual behaviors that contribute to unintended pregnancy and sexually transmitted infections, dietary behaviors, and physical activity for middle and high school students.

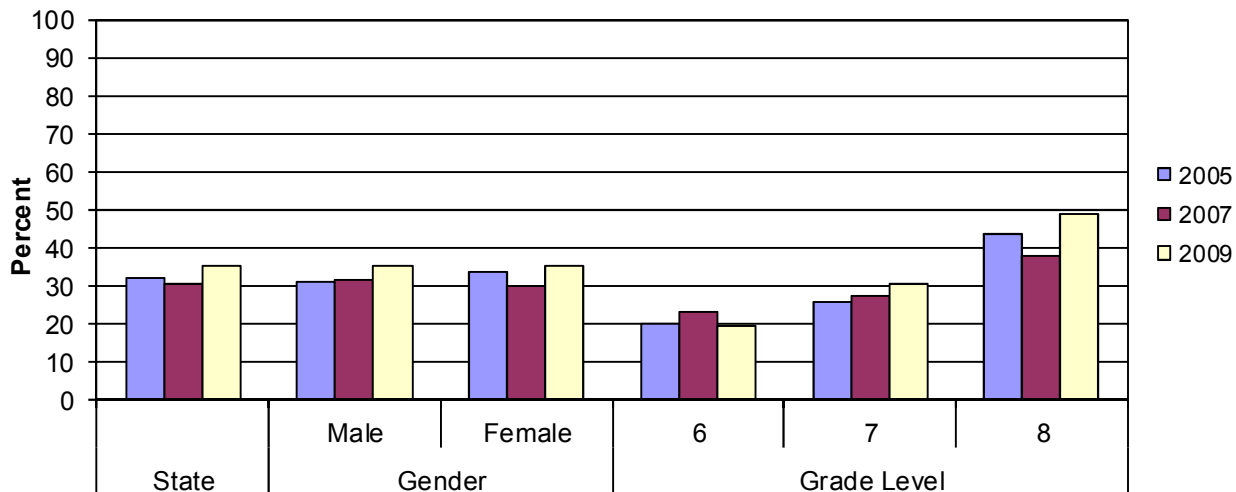
The purpose of this section is to demonstrate past trends in underage drinking over the past 5 years in Hawai'i using YRBS data from 2005, 2007, and 2009. State data is included to show a comparison of overall State's status in underage drinking but is not discussed in details. Please see Appendix C for glossary of terms used in this section.

Alcohol Related Health Indicators in Middle and High School Youth

Health Indicator: Ever Drank Alcohol *State, Gender and Grade Level*

As indicated in Figure 2, compared to previous years at the state level, more middle school youth in 2009 reported ever drinking alcohol. In 2005, slightly more females ever drank alcohol than males; however in 2007 and 2009, the percentage of males and females who ever drank alcohol was almost equal. The prevalence of ever using alcohol increased with grade level across all years.

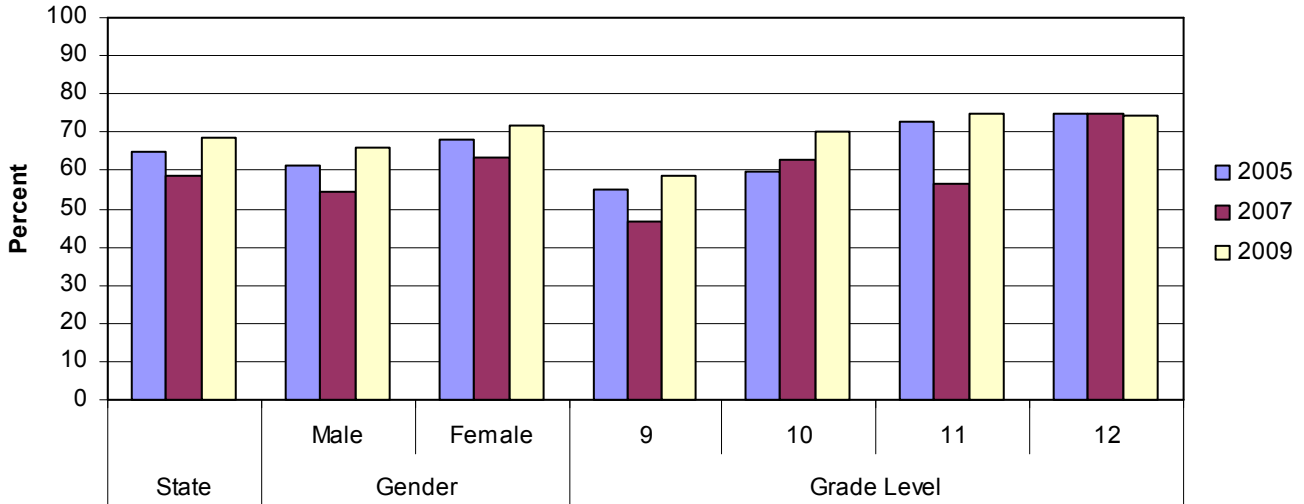
Figure 2. Ever Drank Alcohol for Middle School Youth by Year, Gender, and Grade Level



Source: 2005, 2007, 2009, YRBS.

Figure 3 shows that the percentage of high school youth who reported ever drinking alcohol increased from 2007 to 2009 across the state, for both genders and all grade levels except grade 12. Across all years, females had higher percentages of ever drinking alcohol than males. With respect to grade levels, the percentages increase with grade level. However, in 2007, 11th grade youth had lower percentages of drinking than 10th graders.

Figure 3. Ever Drank Alcohol for High School Youth by Year, Gender, and Grade Level

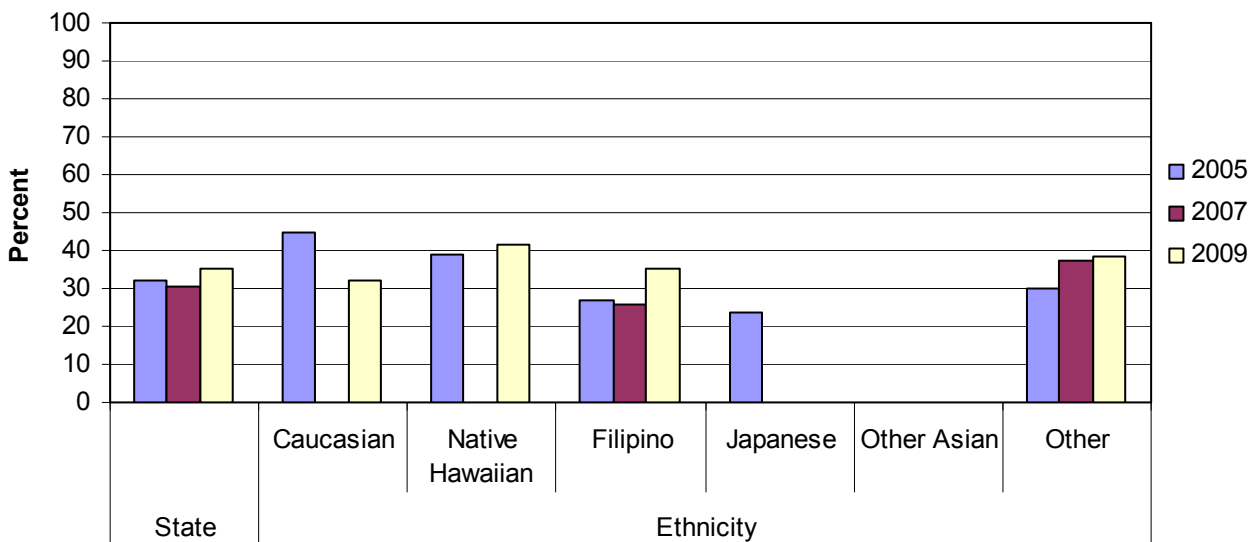


Source: 2005, 2007, 2009, YRBS.

Ethnicity

Figure 4 shows that in 2005, Caucasian youth in middle school had the highest percentage of ever using alcohol, followed by Native Hawaiian youth. In 2009, however, Native Hawaiian youth reported the highest percentage of ever drinking alcohol, followed by “Other” and Filipino youth.

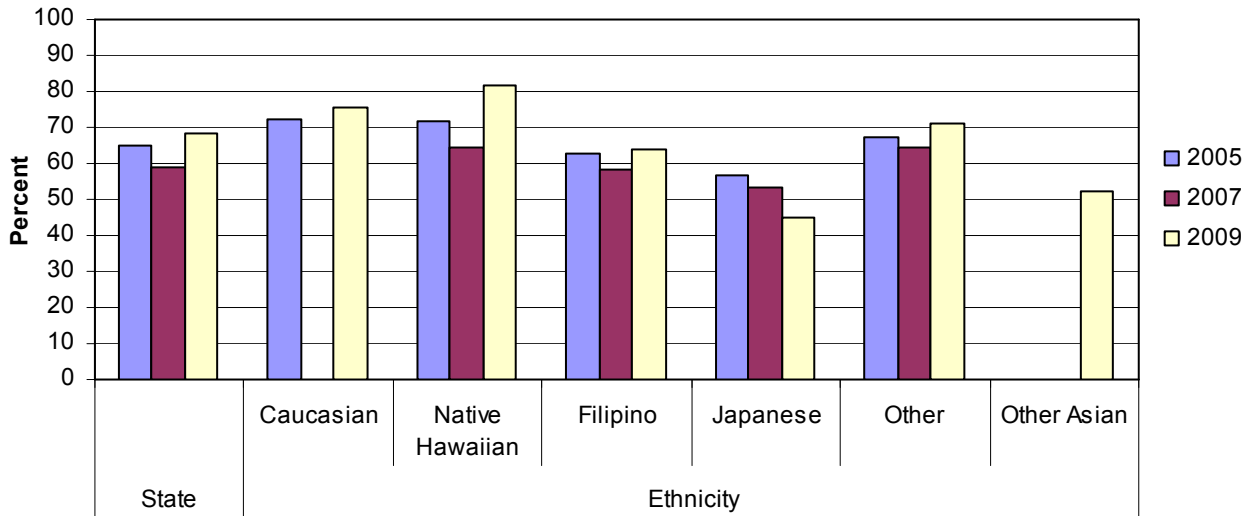
Figure 4. Ever Drank Alcohol for Middle School Youth by Year and Ethnicity



Source: 2005, 2007, 2009, YRBS; Missing data indicates (1) data that was not reported due to limited sample size or (2) data was not collected that year.

Figure 5 displays the percentage of high school youth who ever drank alcohol by year and ethnicity. Across all years except 2005, Native Hawaiian youth reported the highest percentage of ever drinking alcohol. Across all years, Japanese youth had the lowest percentage of ever drinking alcohol. Japanese was the only ethnicity whose percentages of youth who “ever drank alcohol” illustrated a decreasing trend across all years.

Figure 5. Ever Drank Alcohol for High School Youth by Year and Ethnicity

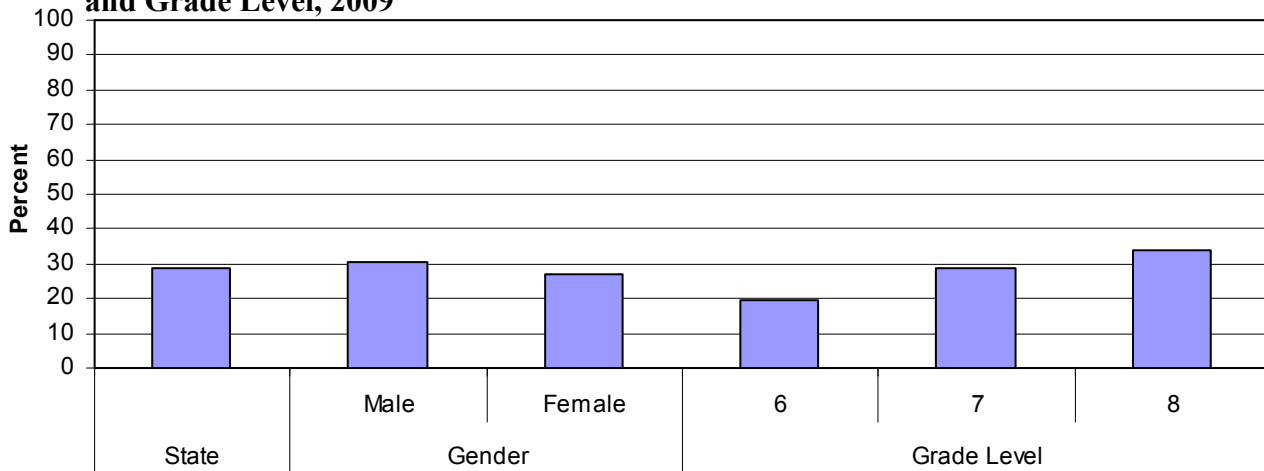


Source: 2005, 2007, 2009, YRBS; Missing data indicates (1) data that was not reported due to limited sample size or (2) data was not collected that year.

Health Indicator: Had First Drink of Alcohol before Age 13
State, Gender and Grade Level

As seen in Figure 6, in 2009, almost 30% of middle school youth had their first drink of alcohol before age 13. A slightly higher percentage of males reported drinking alcohol before age 13 than females. The percentage of drinking before age 13 increased with grade level.

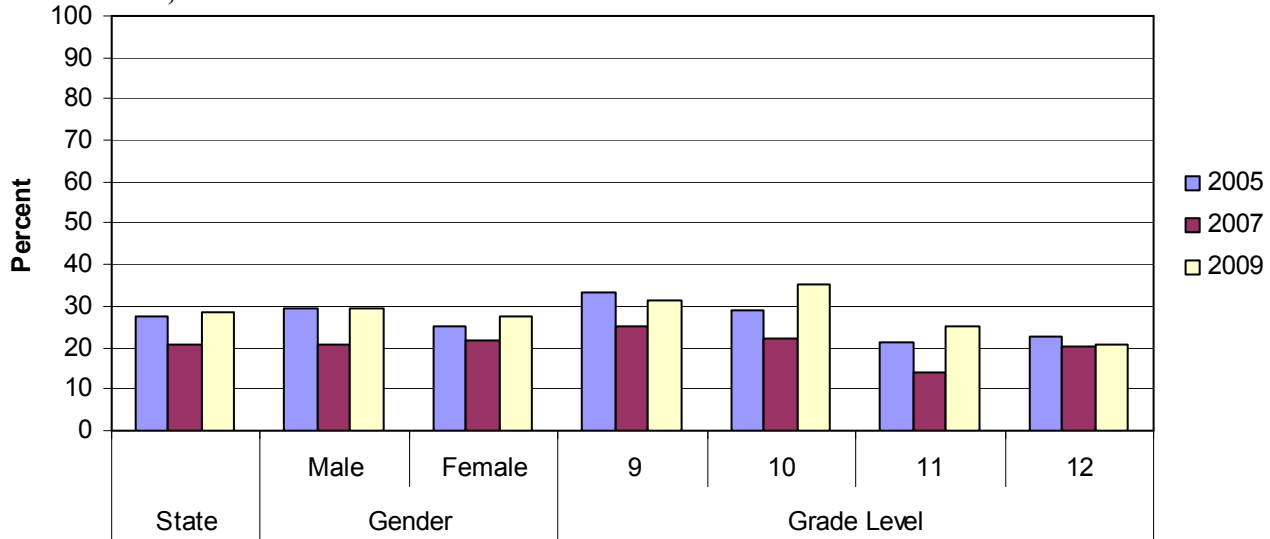
Figure 6. Had a First Drink of Alcohol before Age 13 for Middle School Youth by Gender and Grade Level, 2009



Source: 2009, YRBS.

As seen in Figure 7, the percentage of high school youth who had a drink of alcohol before age 13 followed a “U” trend with respect to both gender and grade level. The most recent data in 2009 indicates that the percentage of high school youth who reporting using alcohol before age 13 increased from 2007 to 2009.

Figure 7. Had a First Drink of Alcohol before Age 13 for High School Youth by Year, Gender, and Grade Level

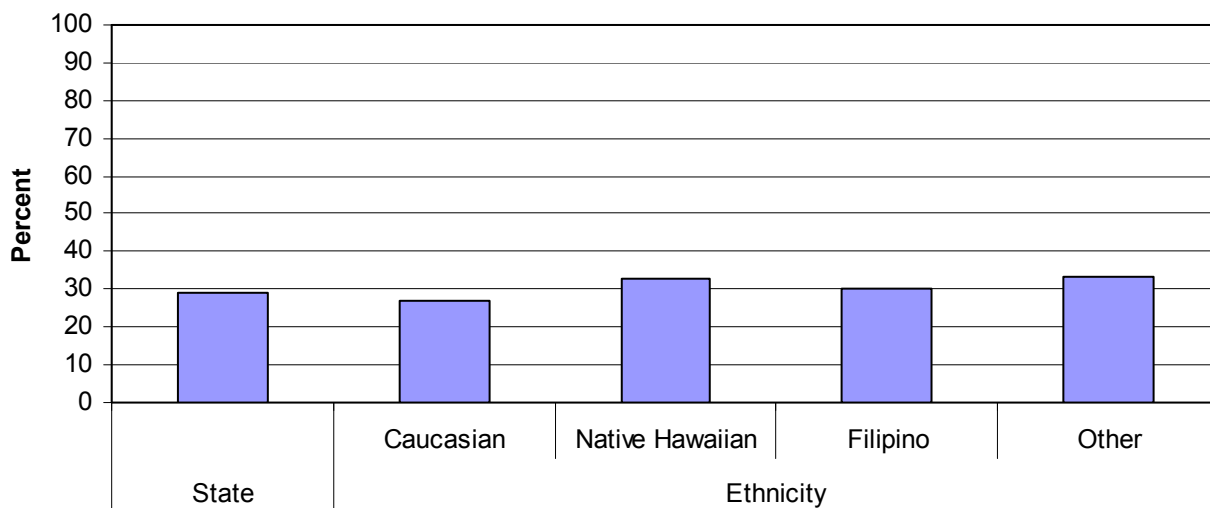


Source: 2005, 2007, 2009, YRBS.

Ethnicity

According to Figure 8, in 2009 middle school youth of “Other” ethnicity had the highest percentage of drinking alcohol before age 13, closely followed by Native Hawaiian youth. Caucasian youth had the lowest percentage of drinking alcohol before age 13.

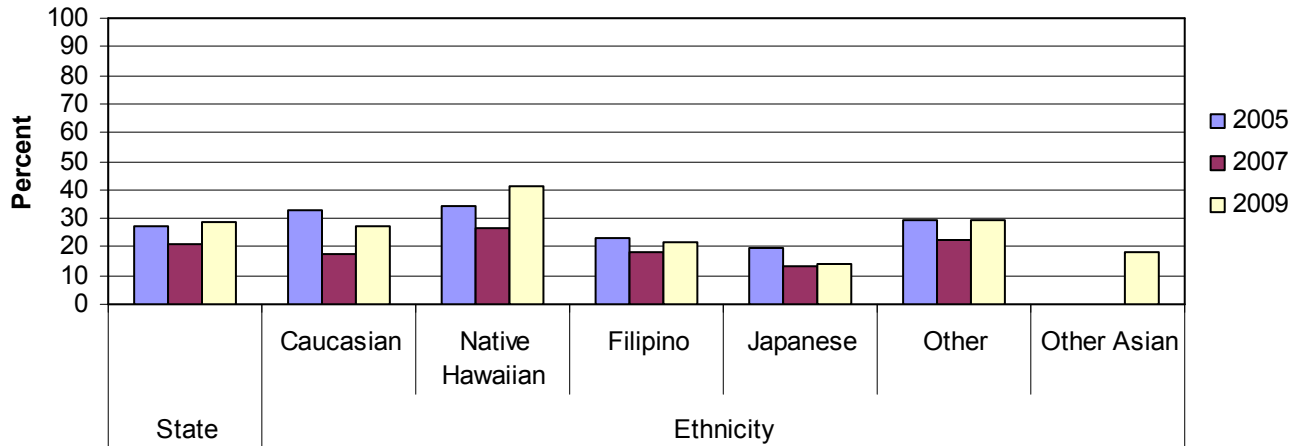
Figure 8. Had a First Drink of Alcohol before Age 13 for Middle School Youth by Ethnicity, 2009



Source: 2009 YRBS.

Figure 9 shows that high school youth of Native Hawaiian ethnicity had the highest percentage of using alcohol before the age of 13 across all years, whereas Japanese youth had the lowest. Across all ethnicities, there was a decrease in the percentage of youth who reported using alcohol before age 13 from 2005 to 2007, then an increase in 2009.

Figure 9. Had a First Drink of Alcohol before Age 13 for High School Youth by Year and Ethnicity

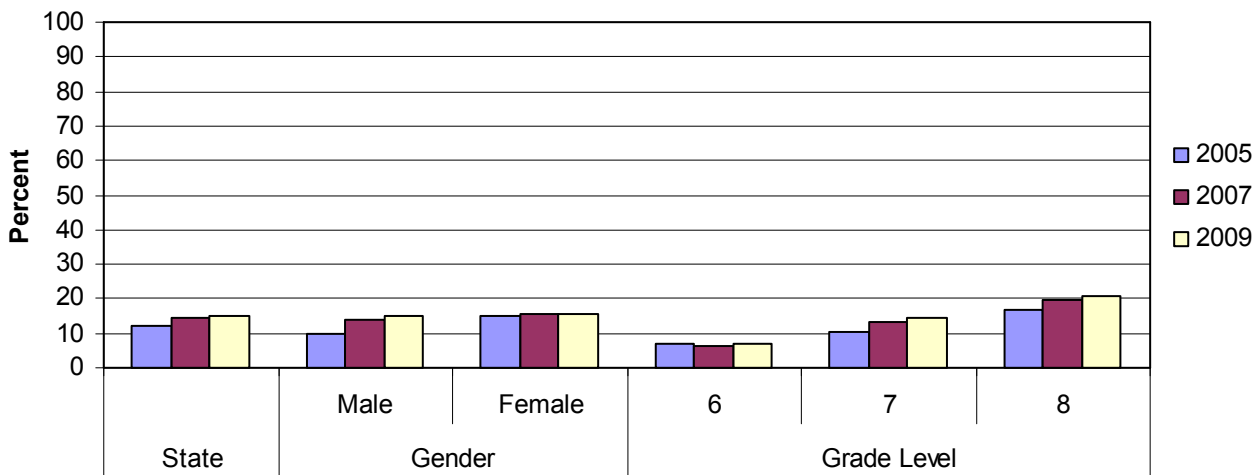


Source: 2005, 2007, 2009, YRBS; Missing data indicates (1) data that was not reported due to sample size or (2) data was not collected that year.

Health Indicator: Current Alcohol Users
State, Gender and Grade Level

Figure 10 displays the percentage of current alcohol users in middle school from 2005 through 2009. The percentage of current drinkers in middle school increased each year. Male youth who reported being a current drinker also increased across all years whereas females who reported being a current drinker were relatively unchanged across all years. The percentage of youth who reported being current drinkers increased with grade level for each year.

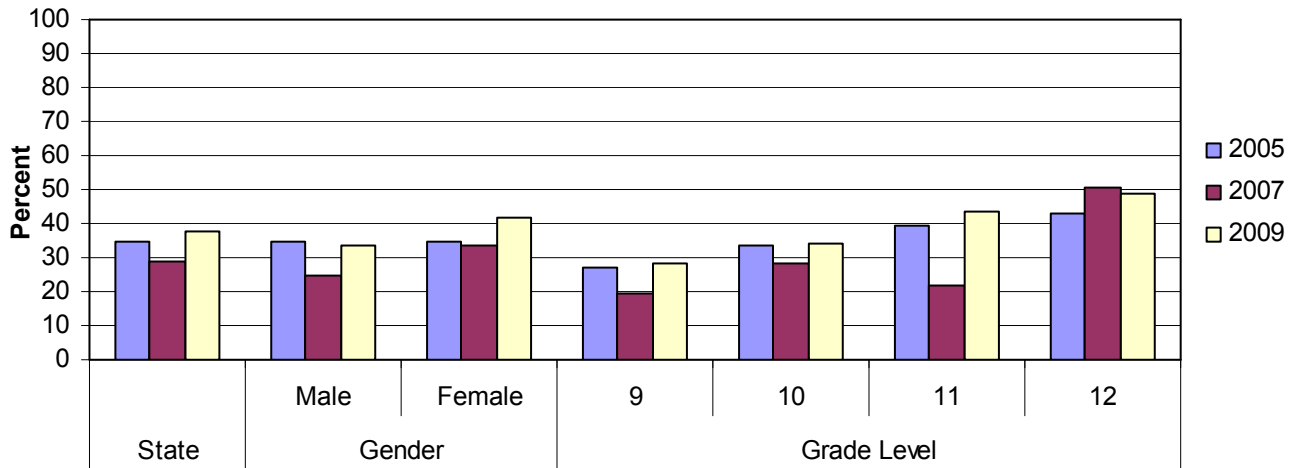
Figure 10. Current Alcohol Drinkers in Middle School by Year, Gender and Grade Level



Source: 2005, 2007, 2009, YRBS.

As seen in Figure 11, more high school females reported currently drinking alcohol in 2007 and 2009 compared to their male counterparts. In 2007, every grade except for grade 12 showed a decrease in the percentage of youth who were current alcohol drinkers from 2005. In 2009, youth in every grade level except grade 12 reported an increase in the percentage of current alcohol users from 2007.

Figure 11. Current Alcohol Drinkers in High School by Year, Gender and Grade Level

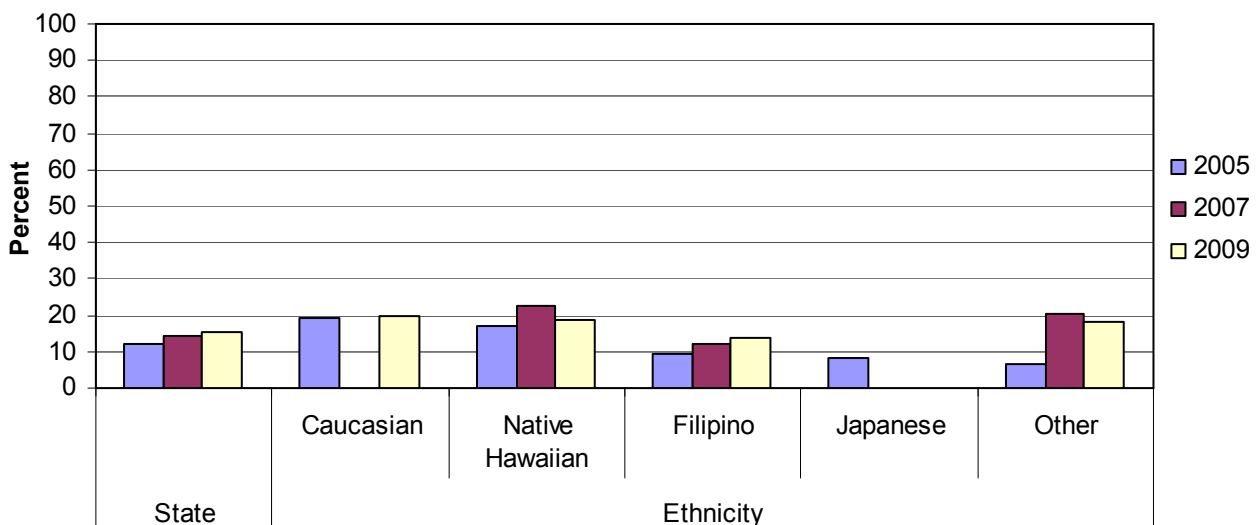


Source: 2005, 2007, 2009, YRBS.

Ethnicity

As seen in Figure 12, Caucasian middle school youth reported the highest percentage of being current drinkers in 2005 and 2009, while Native Hawaiian youth reported the highest percentage in 2007 (although Caucasian was not reported on). Youth of “Other” ethnicity reported the lowest percentage of being a current drinker in 2005, then increased to the second highest percentage in 2007. Filipino youth are the only ethnicity that showed an increasing trend of current drinkers across all years.

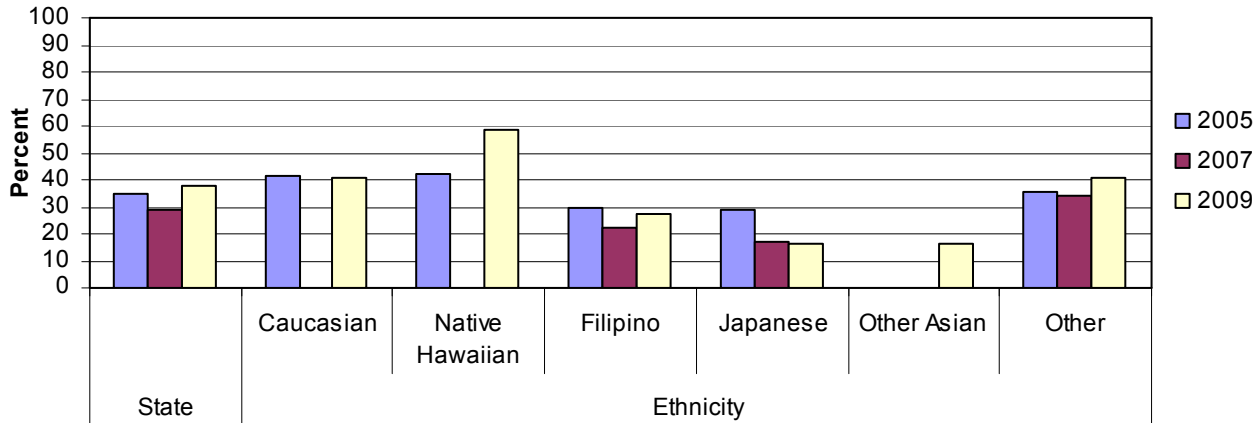
Figure 12. Current Alcohol Drinkers in Middle School by Year and Ethnicity



Source: 2005, 2007, 2009, YRBS; Missing data indicates (1) data that was not reported due to limited sample size or (2) data was not collected that year.

Figure 13 displays the percentage of high school youth that were current drinkers by year and ethnicity. Native Hawaiian youth had higher percentages of being current drinkers across all years, followed closely by Caucasian and “Other” youth. Japanese youth had the lowest percentage of current alcohol drinkers and showed a decrease in percentage of drinking from 2005 to 2007 and again in 2009.

Figure 13. Current Alcohol Drinkers in High School by Year and Ethnicity

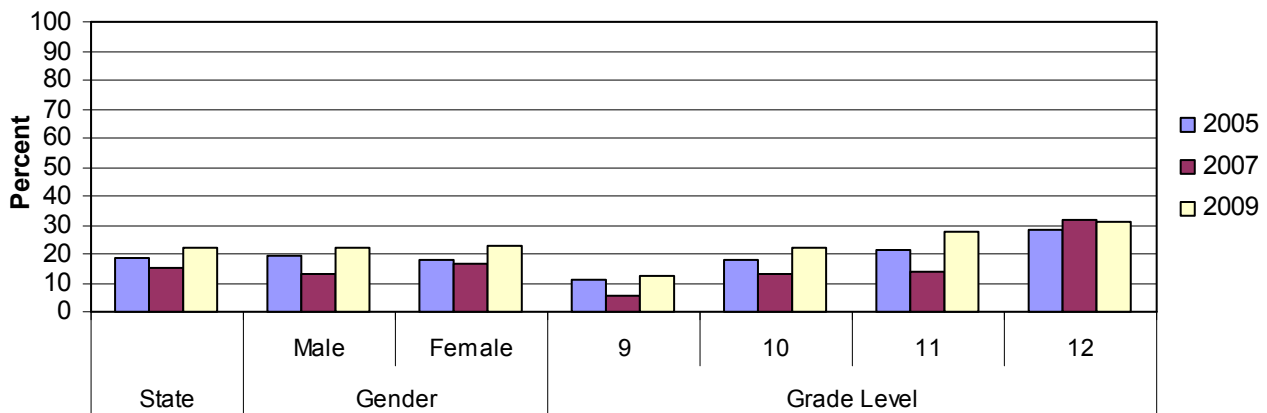


Source: 2005, 2007, 2009, YRBS; Missing data indicates (1) data that was not reported due to limited sample size or (2) data was not collected that year.

Health Indicator: Binge Drinking
State, Gender and Grade Level

Binge drinking is defined by the CDC YRBS as having five or more drinks of alcohol in a row within a couple of hours for both males and females. As seen in Figure 14, high school youth who reported binge drinking increased from 2007 to 2009, after seeing a decline from 2005 to 2007. Females reported a slightly higher percentage of binge drinking than males in 2007. In 2005 and 2009 males and females reported almost equal percentages of binge drinking. Binge drinking percentages among all grade levels followed a “U” trend, except for grade 12 where binge drinking remained about the same 2007 to 2009. YRBS data for binge drinking data in middle school youth was last collected in 2005. Please see Appendix B for this data.

Figure 14. Binge Drinking among High School Youth in the Past 30 Days by Year, Gender, and Grade Level

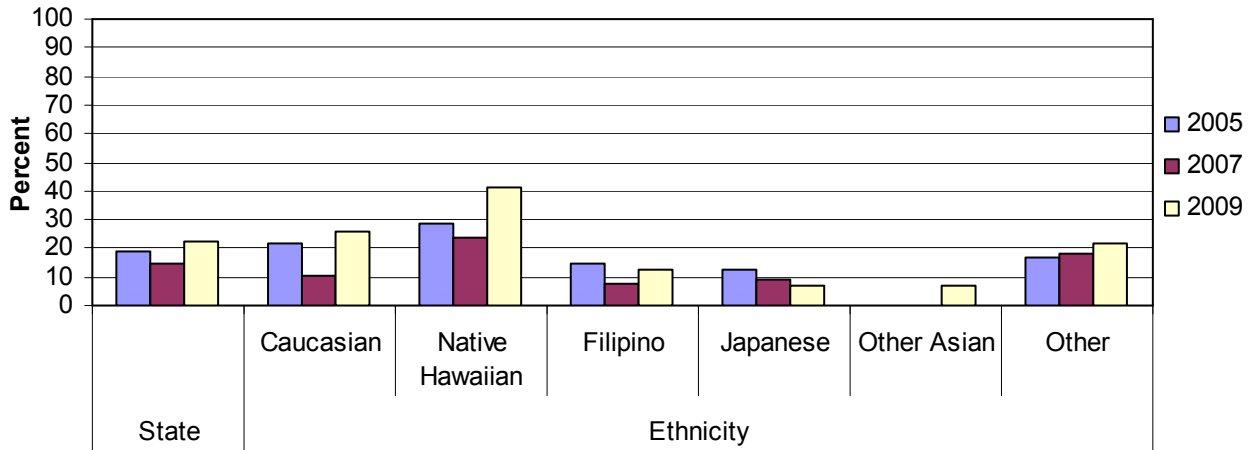


Source: 2005, 2007, 2009, YRBS.

Ethnicity

Figure 15 shows that high school youth of Native Hawaiian and Caucasian ethnicities had the highest percentage of binge drinking in the past 30 days across all years. Japanese youth reported the lowest percentage of binge drinking and was the only ethnicity to decrease in percentage of binge drinkers across years. Youth of "Other" ethnicity is the only group to see a steady increase in binge drinking across all years.

Figure 15. Binge Drinking among High School Youth in the Past 30 Days by Year and Ethnicity

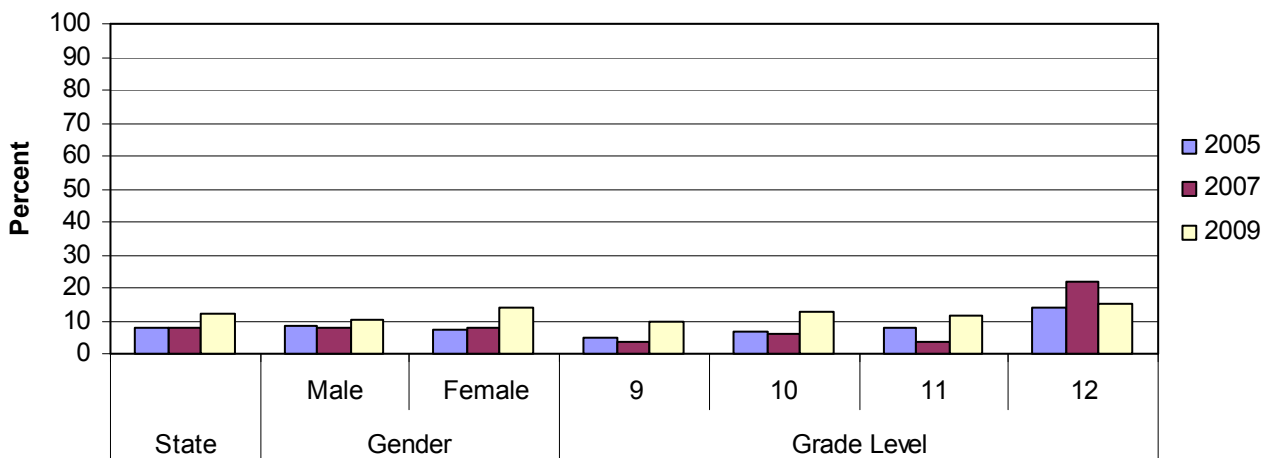


Source: 2005, 2007, 2009, YRBS; Missing data indicates (1) data that was not reported due to limited sample size or (2) data was not collected that year.

Health Indicator: Drove After Drinking Alcohol in the Past 30 Days
State, Gender and Grade Level

Figure 16 displays the percentage of high school youth who drove after drinking in the past 30 days. The percentage of youth who drove after drinking in the past 30 days increased from 2007 to 2009 across both genders and grade levels, except for grade 12, which reported a decrease.

Figure 16. Drove After Drinking Alcohol in the Past 30 Days among High School Youth by Year, Gender and Grade Level

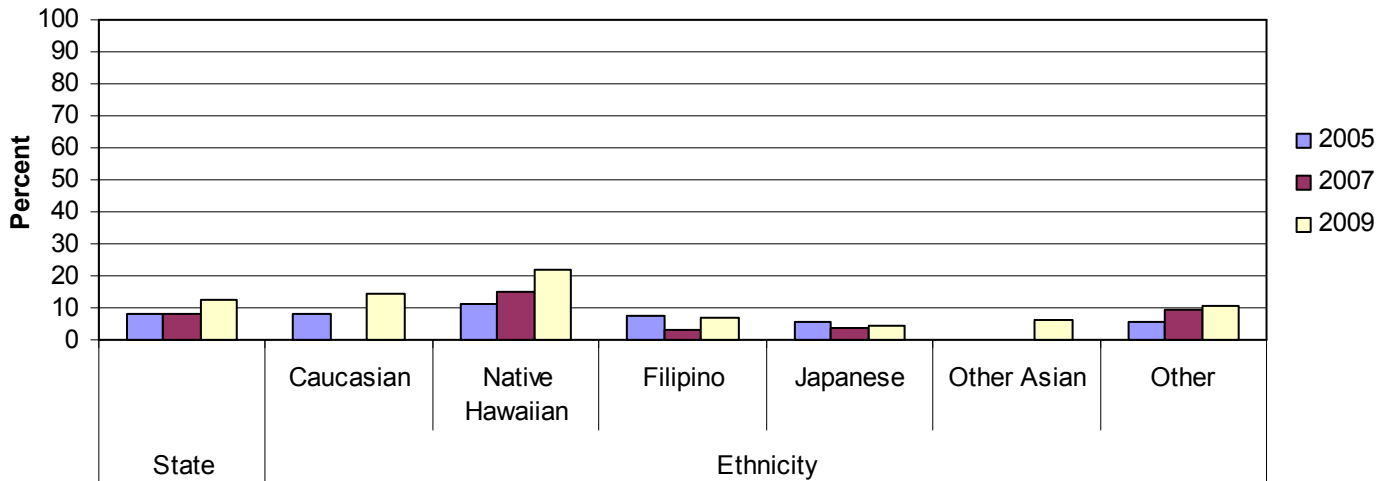


Source: 2005, 2007, 2009, YRBS.

Ethnicity

In Figure 17, it is evident that high school youth of Native Hawaiian ethnicity reported the highest percentage of driving after drinking in the past 30 days across all years. Caucasian youth reported the second highest percentage of drinking and driving in 2005 and 2009. Across all years, Japanese youth reported the lowest percentage of driving after drinking in the past 30 days.

Figure 17. Drove After Drinking Alcohol in the Past 30 Days among High School Youth by Year, and Ethnicity



Source: 2005, 2007, 2009, YRBS; Missing data indicates (1) data that was not reported due to sample size or (2) data was not collected that year.

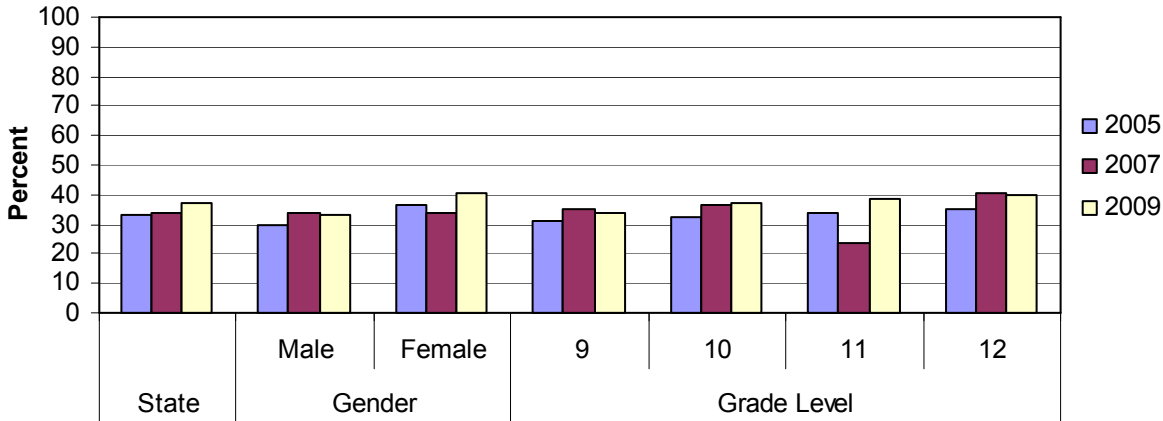
Health Indicator: Been a Passenger When a Driver Drank Alcohol and Drove in the Past 30 days

State Level, Gender and Grade Level

YRBS data for being a passenger when a driver drank and drove in the past 30 days in middle school youth was last collected in 2005. Please see Appendix B for this data.

Figure 18 demonstrates that the percentage of high school youth who have been a passenger when a driver drank in the past 30 days increased from 2005 to 2009. Except for 2007, females had a higher percentage of being a passenger of someone who drank in the past 30 days compared to males. Youth in the 12th grade reported the highest percentage of being a passenger when a driver drank in the past 30 days.

Figure 18. High School Youth who have been a Passenger When a Driver Drank Alcohol and Drove in the Past 30 days by Year, Gender, and Grade Level

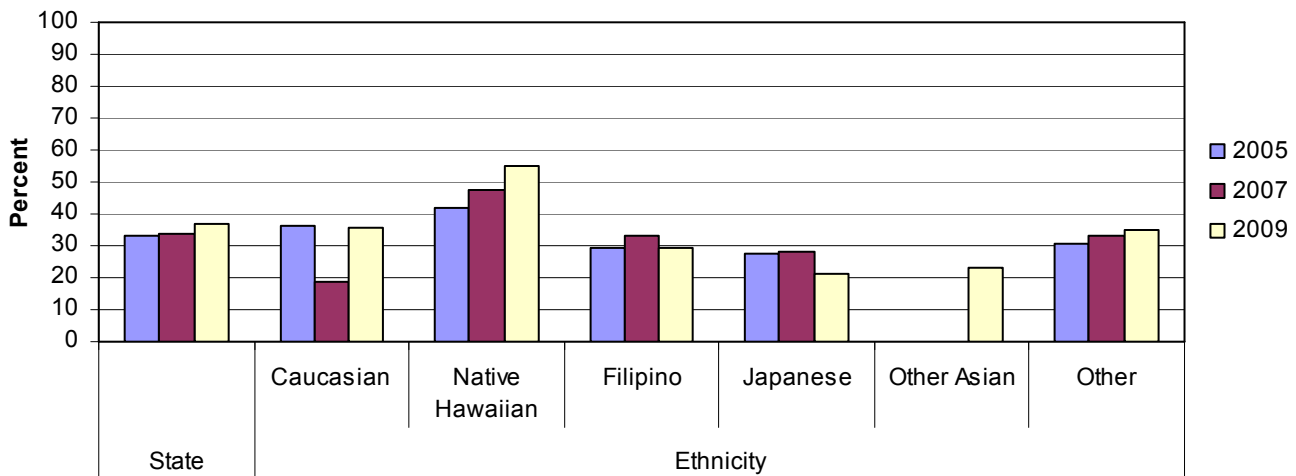


Source: 2005, 2007, 2009, YRBS.

Ethnicity

As seen in Figure 19, high school youth of Native Hawaiian ethnicity reported the highest percentages of being a passenger when a driver drank in the past 30 days across all years. Japanese youth reported the lowest percentages of being a passenger when a driver drank in the past 30 days, except in 2007 when Caucasian youth reported the lowest percentage. From 2007 to 2009, only two ethnicities (Japanese and Filipino) reported a decrease in youth who had been a passenger when a driver drank in the past 30 days.

Figure 19. High School Youth who have been a Passenger When a Driver Drank Alcohol and Drove in the Past 30 days by Year and Ethnicity

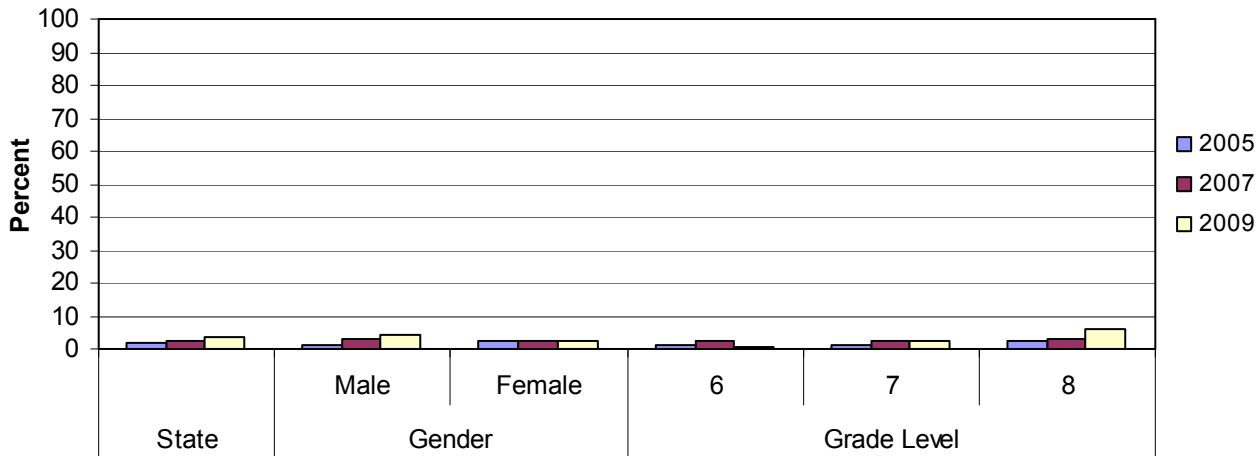


Source: 2005, 2007, 2009, YRBS; Missing data indicates (1) data that was not reported due to limited sample size or (2) data was not collected that year.

Health Indicator: Alcohol Use on School Property in the Past 30 Days
State Level, Gender and Grade Level

Figure 20 displays the percentage of middle school youth who had consumed alcohol on school property in the past 30 days. Less than 5% of youth reported using alcohol on school property across all years. This trend is seen across both genders and grade levels, except for grade 8 in 2009.

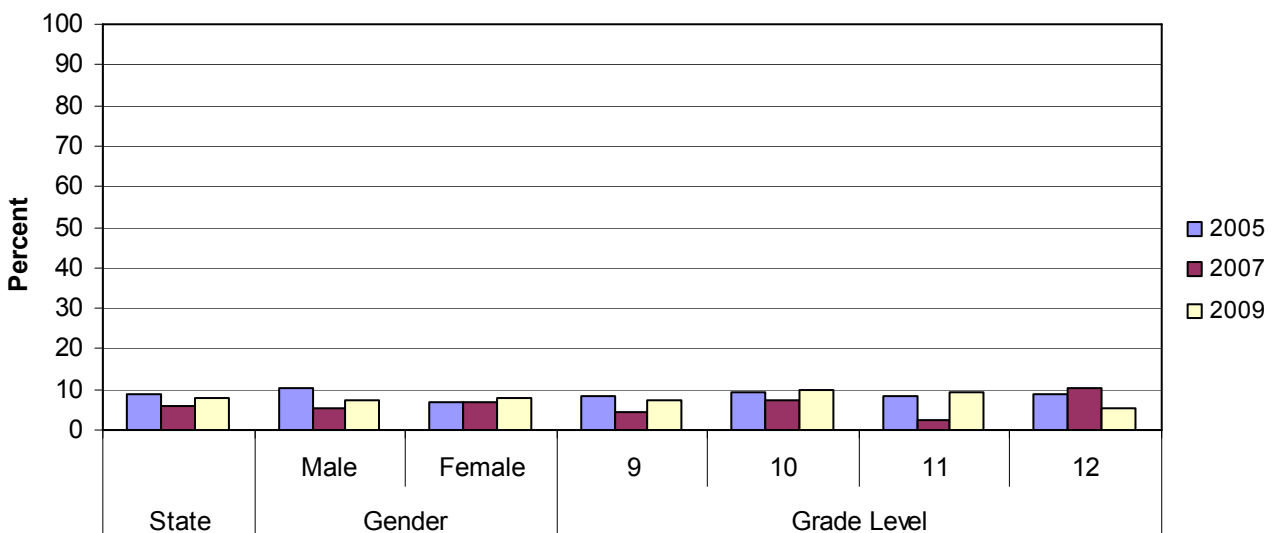
Figure 20. Middle School Youth Who Used Alcohol on School Property in the Past 30 Days by Year, Gender, and Grade Level



Source: 2005, 2007, 2009, YRBS.

As evident in Figure 21, less than 10% of high school youth in 2005, 2007, and 2009 used alcohol on school property in the past 30 days. Youth in grade 12 were the only ones to report a decrease from 2007 to 2009 with regard to using alcohol on school property.

Figure 21. High School Youth Who Used Alcohol on School Property in the Past 30 Days by Year, Gender, and Grade Level

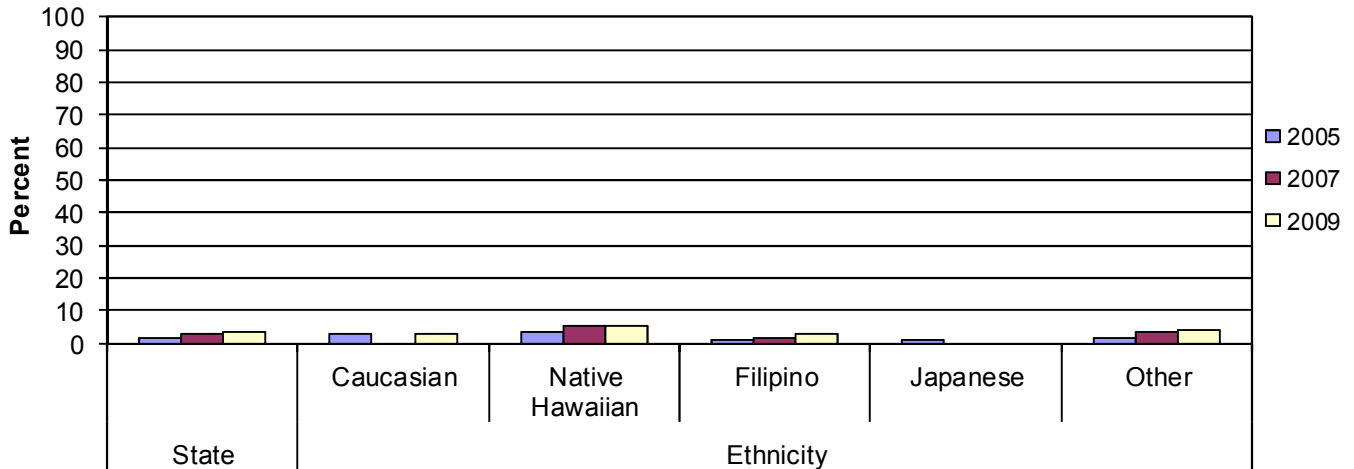


Source: 2005, 2007, 2009, YRBS.

Ethnicity

As evident in Figure 22, Native Hawaiian youth reported the highest percentage of drinking alcohol on school property across all years, followed by “Other” ethnicity. Japanese and Filipino youth reported the lowest percentage of drinking on school property across years.

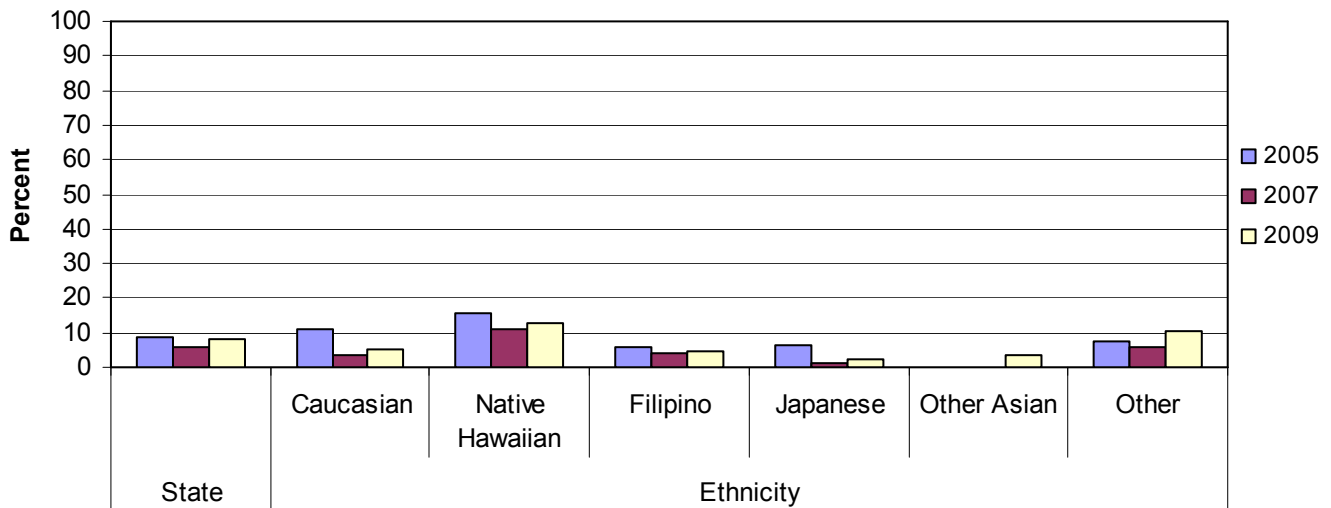
Figure 22. Middle School Youth Who Used Alcohol on School Property in the Past 30 Days by Year and Ethnicity



Source: 2005, 2007, 2009, YRBS; Missing data indicates (1) data that was not reported due to sample size or (2) data was not collected that year.

Figure 23 indicates that high school youth of Native Hawaiian ethnicity reported the highest percentage of using alcohol on school property in the past 30 days across all years. In 2007 and 2009 Japanese youth reported the lowest percentage of using alcohol on school property in the past 30 days, while in 2005 Filipino youth reported the lowest percentage of drinking on school property.

Figure 23. High School Youth Who Used Alcohol on School Property in the Past 30 Days by Year and Ethnicity



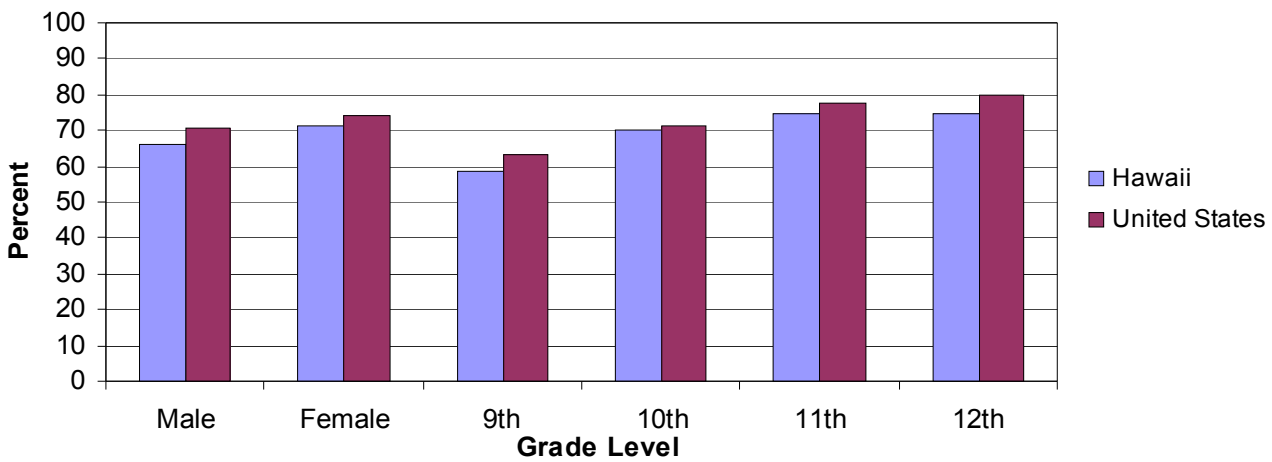
Source: 2005, 2007, 2009, YRBS; Missing data indicates (1) data that was not reported due to sample size or (2) data was not collected that year.

THE BIG PICTURE: ALCOHOL USE IN HAWAII'S YOUTH COMPARED TO YOUTH NATIONWIDE USING THE YOUTH RISK BEHAVIOR SURVEY (YRBS), 2009

The comparison of the average percentage of alcohol related indicators between Hawai'i and the United States (U.S.) was based on the 2009 YRBS. Comparisons are made by gender and grade level for grades 9–12.

As evident in Figure 24, male and female youth from Hawai'i reported a slightly lower percentage of ever drinking compared to the national average. This trend was also seen across all grade levels.

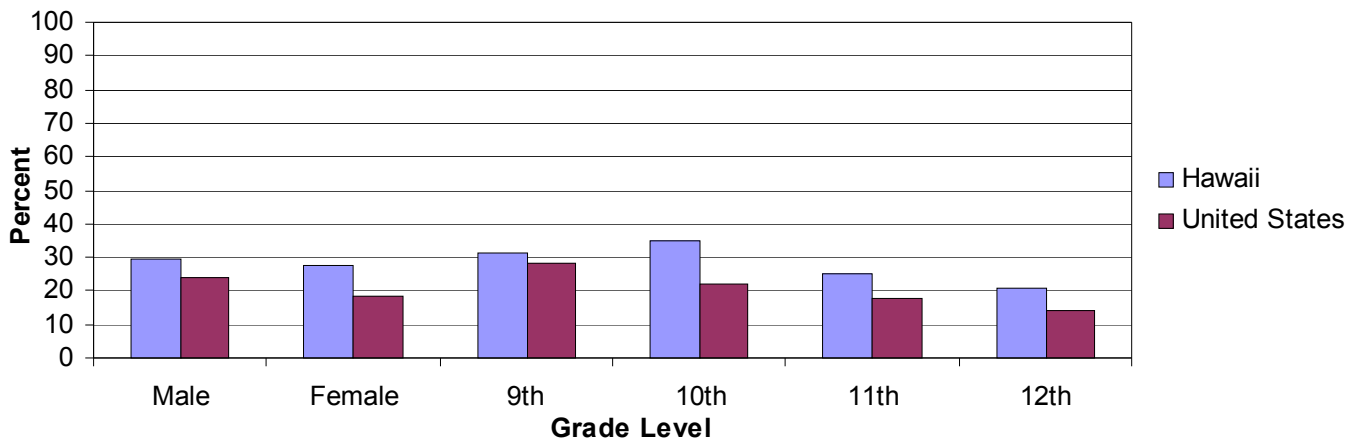
Figure 24. Youth Who Ever Had a Drink of Alcohol by Gender and Grade Level, Hawai'i vs. United States



Source: YRBS, 2009.

Figure 25 illustrates that a higher percentage of youth in Hawai'i reported having a first drink of alcohol before the age of 13 compared to their national counterparts. This trend is apparent across both genders and all grade levels.

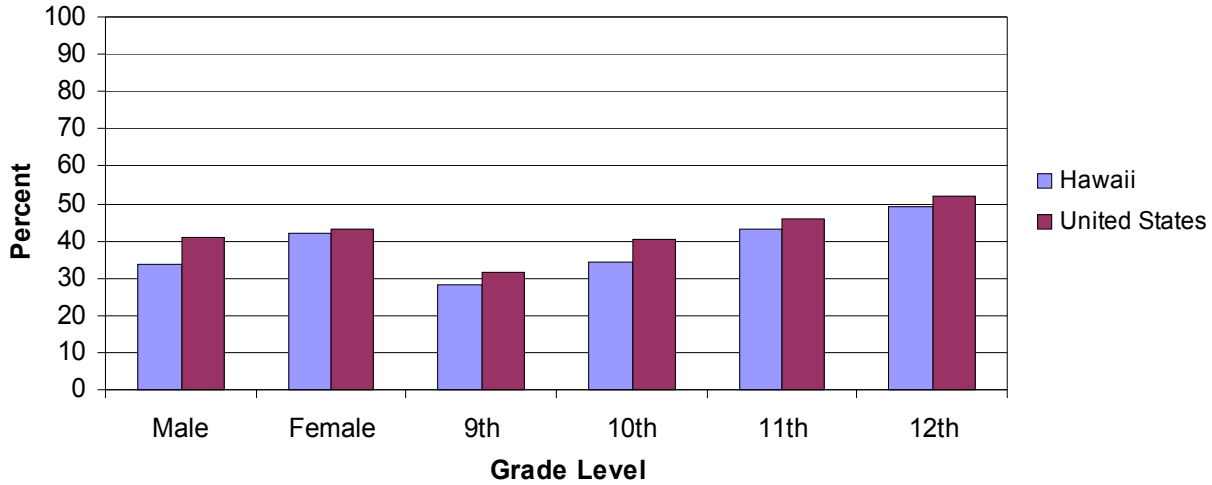
Figure 25. Youth Who Had a First Drink of Alcohol before the Age of 13 by Gender and Grade Level, Hawai'i vs. United States



Source: YRBS, 2009.

Current alcohol use is defined by the YRBS as consuming alcohol within the past 30 days. As seen in Figure 26, current alcohol use percentages in Hawai'i were below the national average with respect to both gender and grade level. With regard to grade level, both state and national percentages of youth who reported being current drinkers increased with grade level.

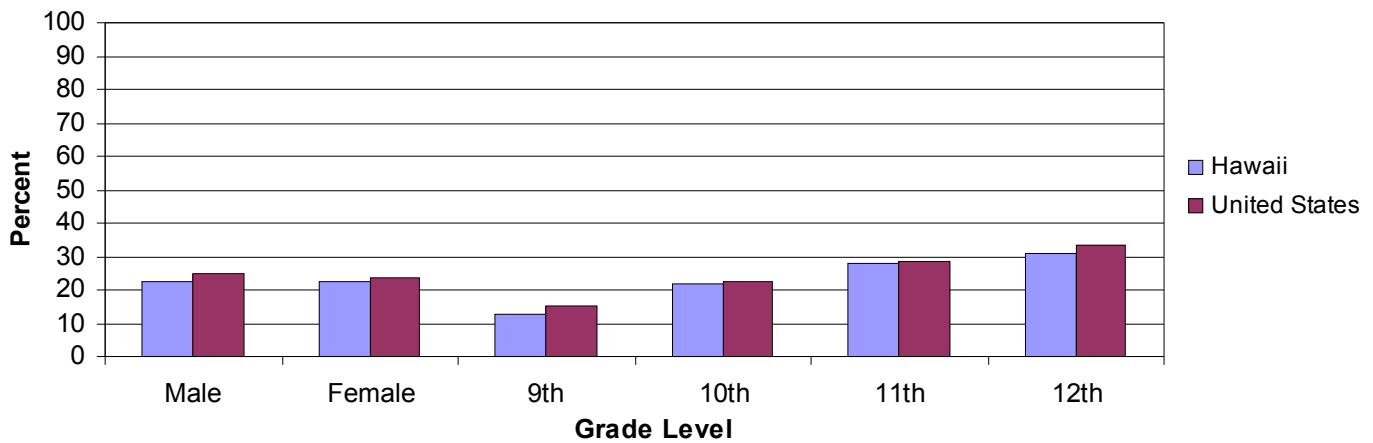
Figure 26. Youth Who Are Current Alcohol Users by Gender and Grade Level, Hawai'i vs. United States



Source: YRBS, 2009.

Binge drinking is defined by the CDC as having five or more drinks within a couple of hours. As evident in Figure 27, binge drinking percentages in Hawai'i were similar to the national averages with respect to both gender and grade level. The figure also demonstrates that current binge drinking percentages for both the state and U.S. increased with grade level.

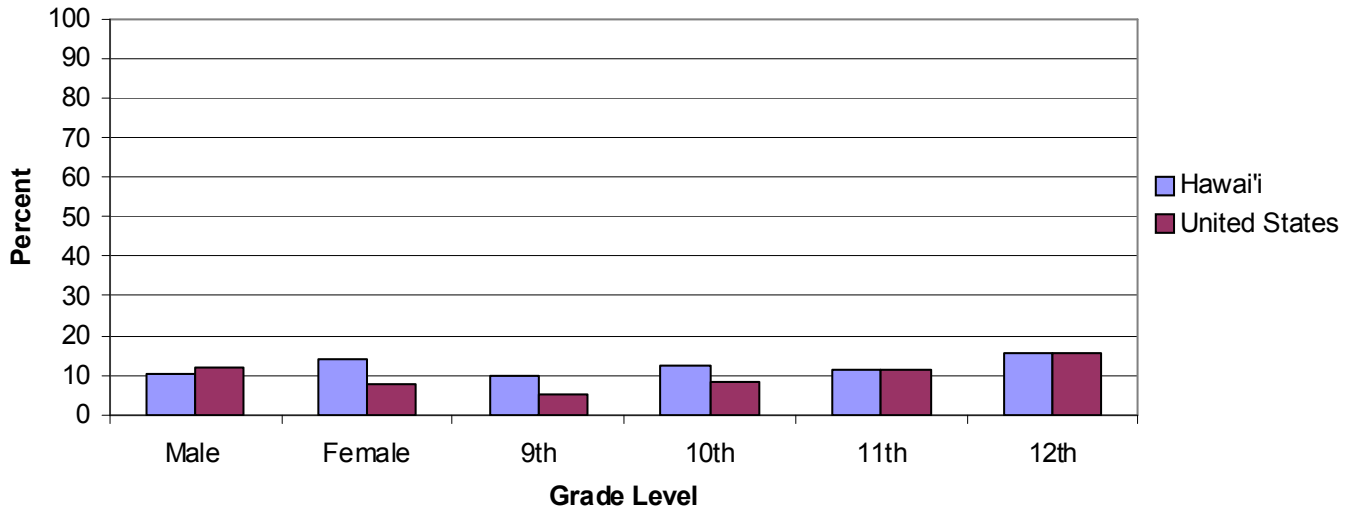
Figure 27. Youth Who Binge Drank in the Past 30 Days by Gender and Grade Level, Hawai'i vs. United States



Source: YRBS, 2009.

Figure 28 shows the percent of youth who drank and drove in the past 30 days. Females in Hawai'i reported higher percentages of driving after drinking alcohol in the past 30 days compared to the United States average. In Hawai'i, youth in grades 9 and 10 also reported higher percentages than the United States average. About 15% of 12th graders in both Hawai'i and the United States reported drinking after driving in the past 30 days.

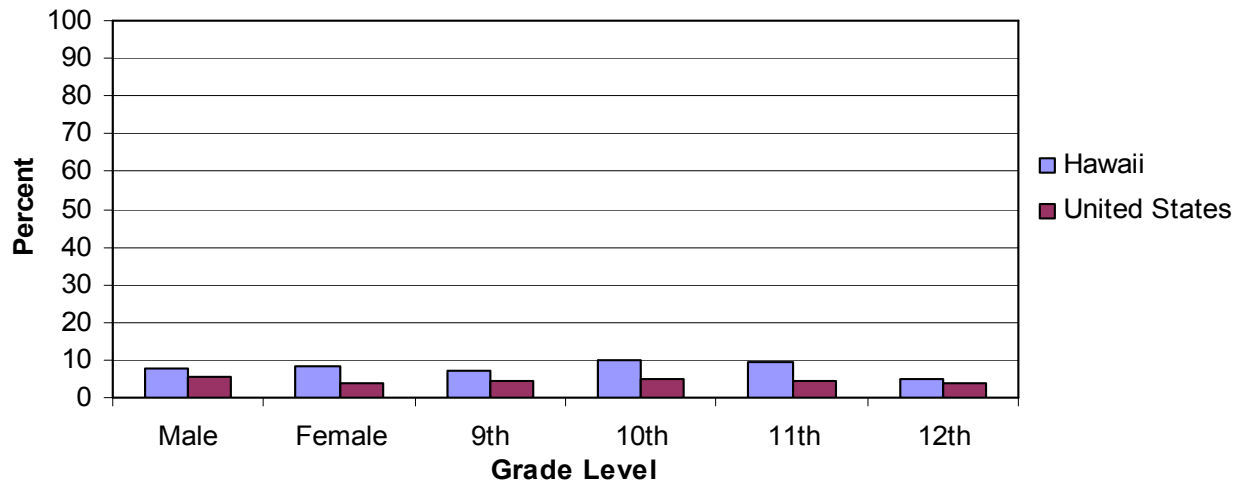
Figure 28. Youth Who Drove After Drinking Alcohol in Past 30 Days, Hawai'i vs. United States, by Gender and Grade Level



Source: YRBS, 2009.

Figure 29 illustrates the percent of youth who drank alcohol on school property. Both genders and youth in all grade levels in Hawai'i reported higher percentages of drinking alcohol on school property than their counterparts in the United States. The smallest difference (about 1%) between youth in Hawai'i and the United States occurs in the 12th grade.

Figure 29. Youth Who Drank Alcohol on School Property, Hawai'i vs. United States, by Gender and Grade Level



Source: YRBS, 2009.

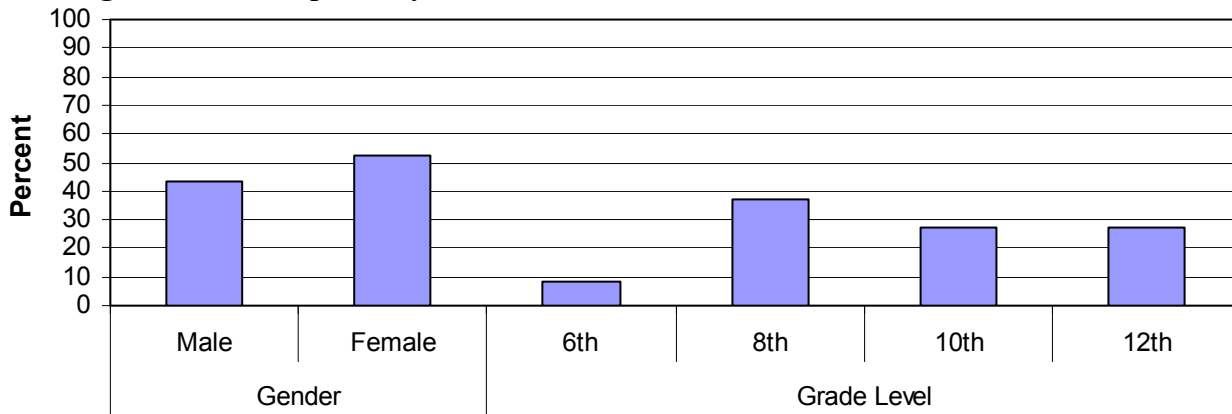
2007 HAWAI'I ALCOHOL, TOBACCO AND OTHER DRUG SURVEY

The 2007 Alcohol, Tobacco, and Other Drug (ATOD) survey was administered to youth in Hawai'i. Approximately 7,000 students from public, charter, and private schools completed the survey. In line with the goals of the Hawai'i SPF-SIG, participants *ages 12-17* are presented in this section. Please see Appendix C for glossary of alcohol terms used in this section.

Participants

As seen in Figure 30, just over 50% of participants were female. A majority of participants were in the 8th grade, followed by 10th and 12th grade.

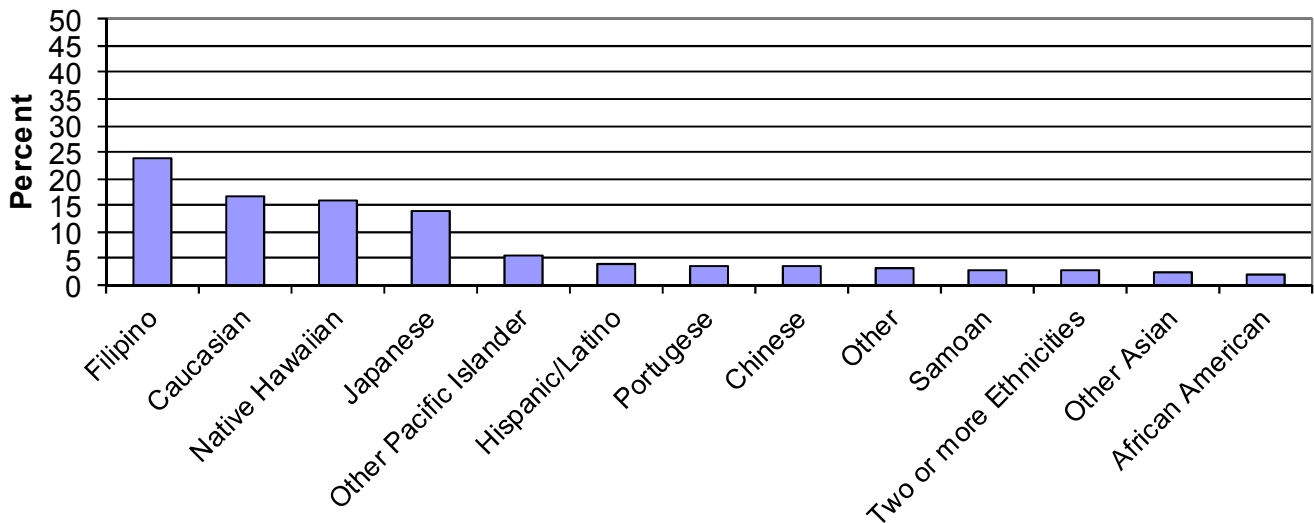
Figure 30. Participants by Gender and Grade Level



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

As evident in Figure 31, a majority of participants were of Filipino ethnicity (24%), followed by Caucasian (17%), Native Hawaiian (16%) and Japanese (14%).

Figure 31. Participants by Ethnicity



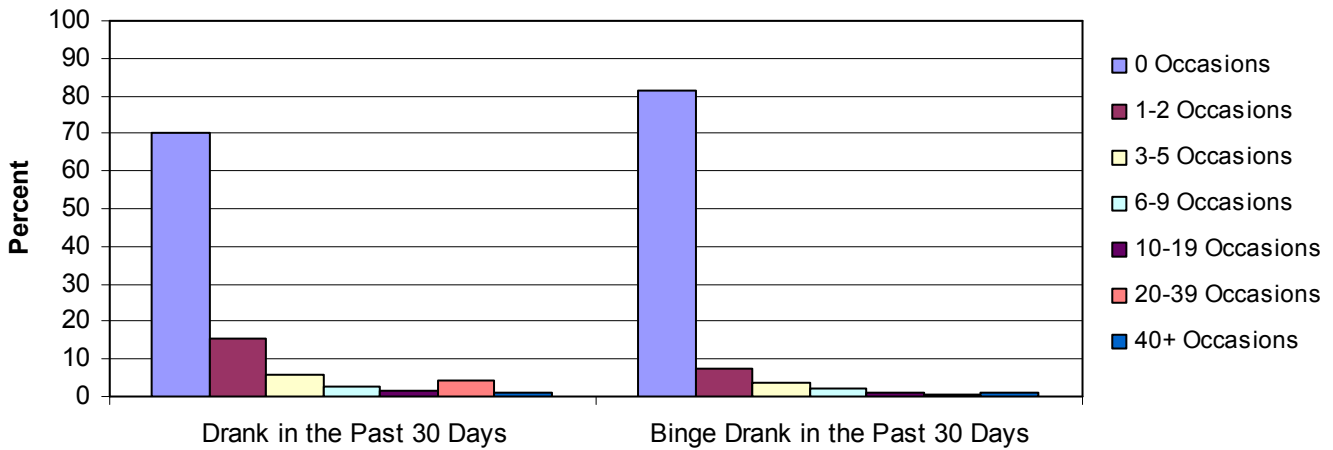
Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

Note: Scale to 50%

Prevalence of Alcohol Use

Figure 32 shows that about 70% of youth did not drink alcohol in the past 30 days and just under 15% drank alcohol on “1-2 occasions.” Over 80% of youth reported that they did not binge drink in the past 30 days, which is defined by the ATOD survey as 5 or more drinks within a couple of hours for both males and females. Fewer than 10% of youth reported binge drinking on “1-2 occasions.”

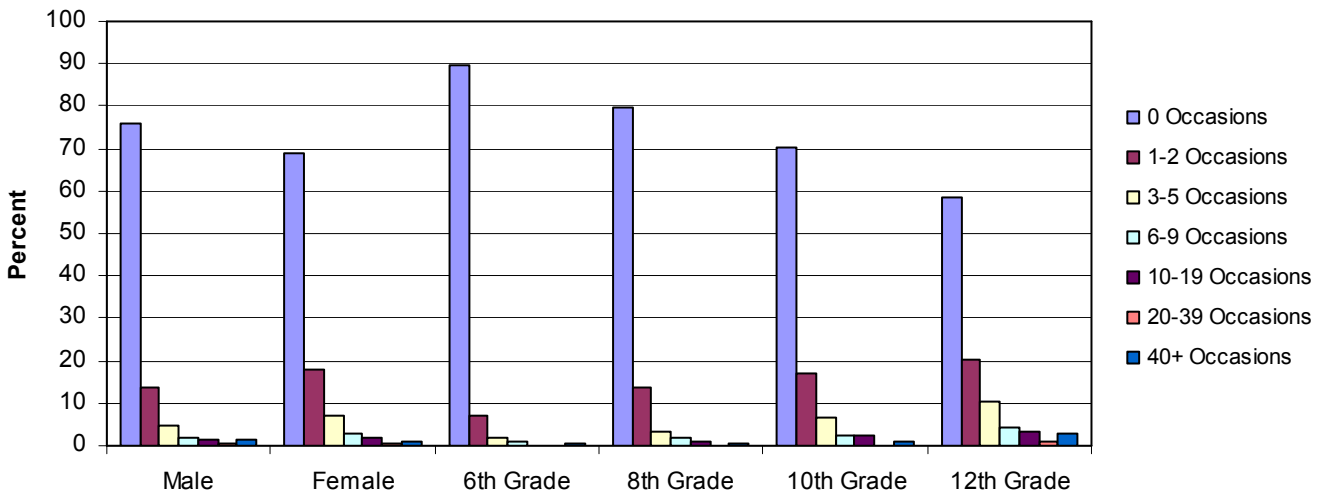
Figure 32. Alcohol Use and Binge Drinking Occasions Among Youth in the Past 30 Days



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

As seen in Figure 33, a higher percentage of males compared to females did not drink in alcohol in the past 30 days. Slightly more females than males drank on “1-2 occasions” in the past 30 days. In general, the percentage of youth that did not drink in the past 30 days was lower across grade levels and those that reported drinking on “1-2 occasions” was higher among youth in 10th and 12th grades compared to the lower grades.

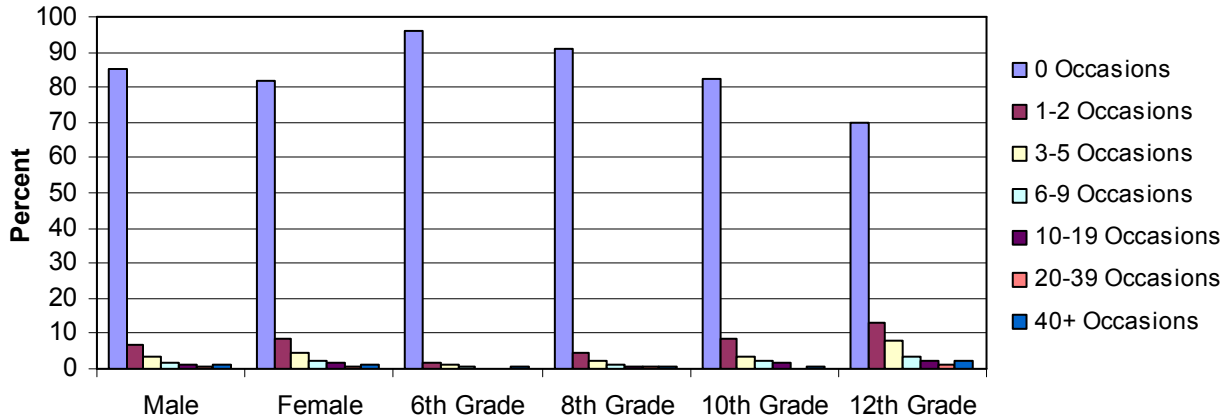
Figure 33. Youth Who Drank Alcohol in the Past 30 Days by Gender and Grade Level



Source: 2007 ATOD survey.

Binge drinking is defined on the 2007 ATOD survey as drinking four or more alcoholic drinks on one occasion for both males and females. As evident in Figure 34, a majority of youth across both genders and all grade levels reported that they did not binge drink in the past 30 days. Just fewer than 10% of males and females reported that they binge drank in the past 30 days on “1-2 occasions.” Youth in the 12th grade reported more instances of binge drinking on “1-2 Occasions” and “3-5 Occasions” in the past 30 days than youth in the lower grade levels.

Figure 34. Youth Who Binge Drank in the Past 30 Days by Gender and Grade Level

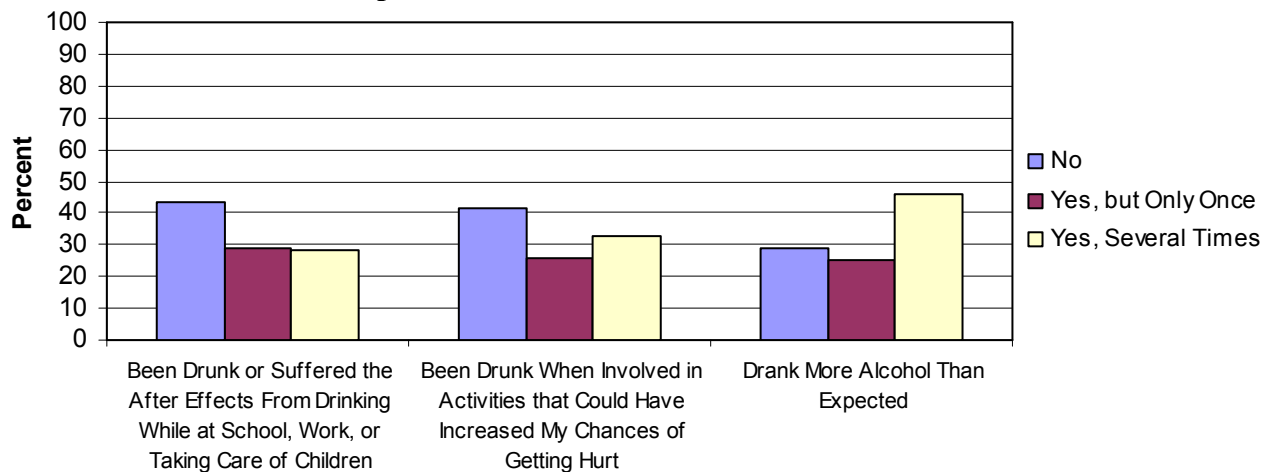


Source: 2007 ATOD survey.

Alcohol Tolerance, Dependence, and Withdrawals

Figure 35 displays negative effects that youth may have experienced as a result of drinking alcohol. Over 40% of youth reported that they have not been drunk or suffered the after effects from drinking while at school, work, or taking care of children. However, almost 30% of youth reported that have done this “only once” or “several times.” About 40% of youth reported that they have not been drunk when involved in activities that could have increased their chances of getting hurt, while over 30% have done this “several times.” About 45% of youth reported they drank more alcohol than expected on several occasions, while 30% reported not doing this.

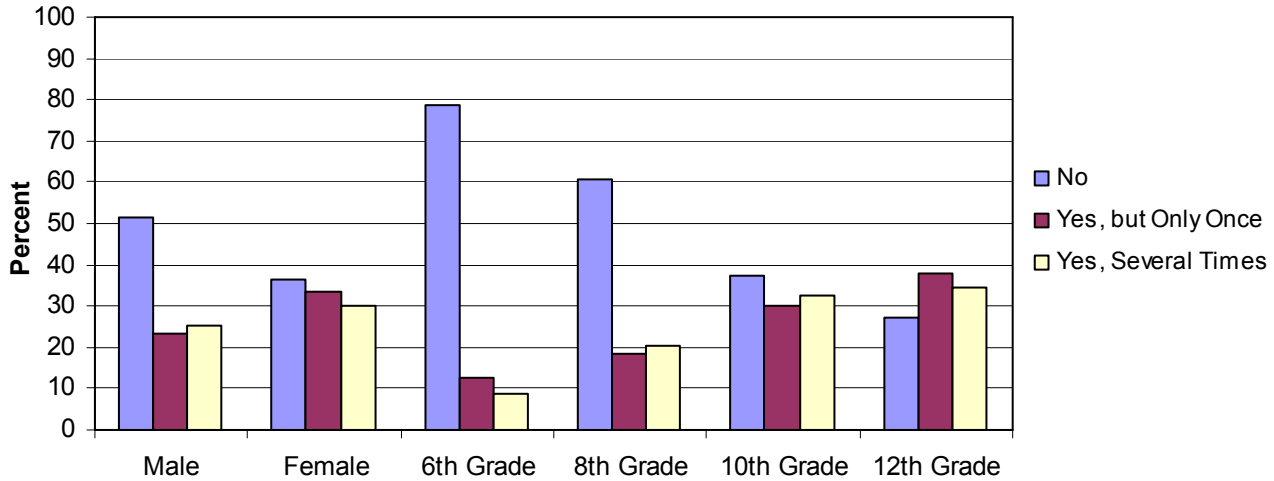
Figure 35. Youth Who Experienced Negative Effects from Drinking Alcohol and Drank More Alcohol Than Expected



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

As seen in Figure 36, about 50% of males compared to about 35% of females reported that they have not been drunk or suffered the after effects from drinking alcohol while at school, work, or taking care of children. The percentage of youth who suffered the after effects from drinking alcohol “only once” and “several times” was higher among youth in 10th and 12th grade than the lower grades.

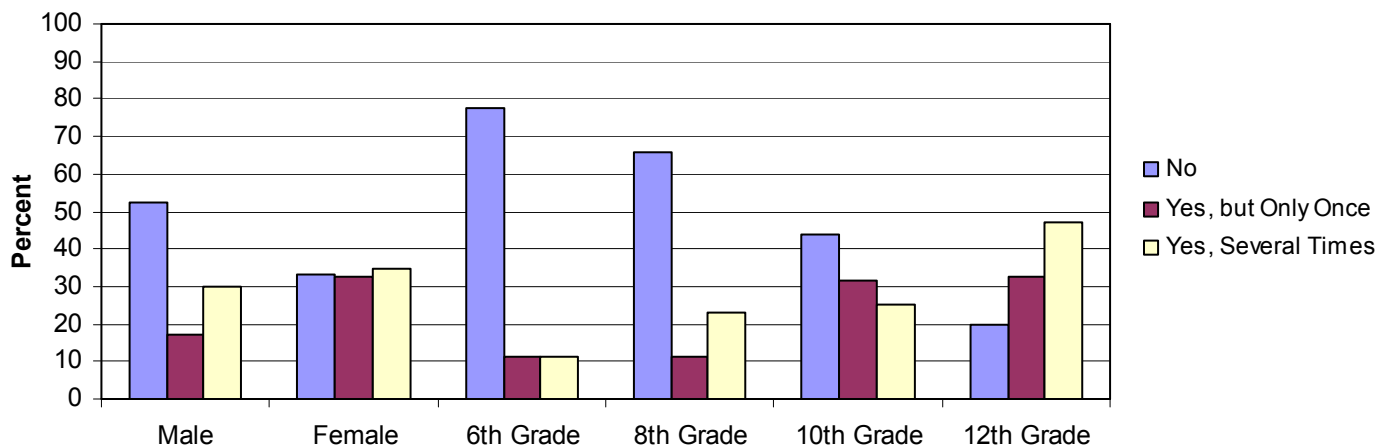
Figure 36. Youth Who Have Been Drunk or Suffered the After Effects from Drinking Alcohol While at School, Work, or Taking Care of Children by Gender and Grade Level



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Figure 37 shows that more females compared to males reported being drunk at least once when involved in activities that could have increased their chances of being hurt. A higher percentage of youth in grades 10 and 12 reported they were involved in activities that could have increased their chances for getting hurt at least once when compared to youth in grades 6 and 8.

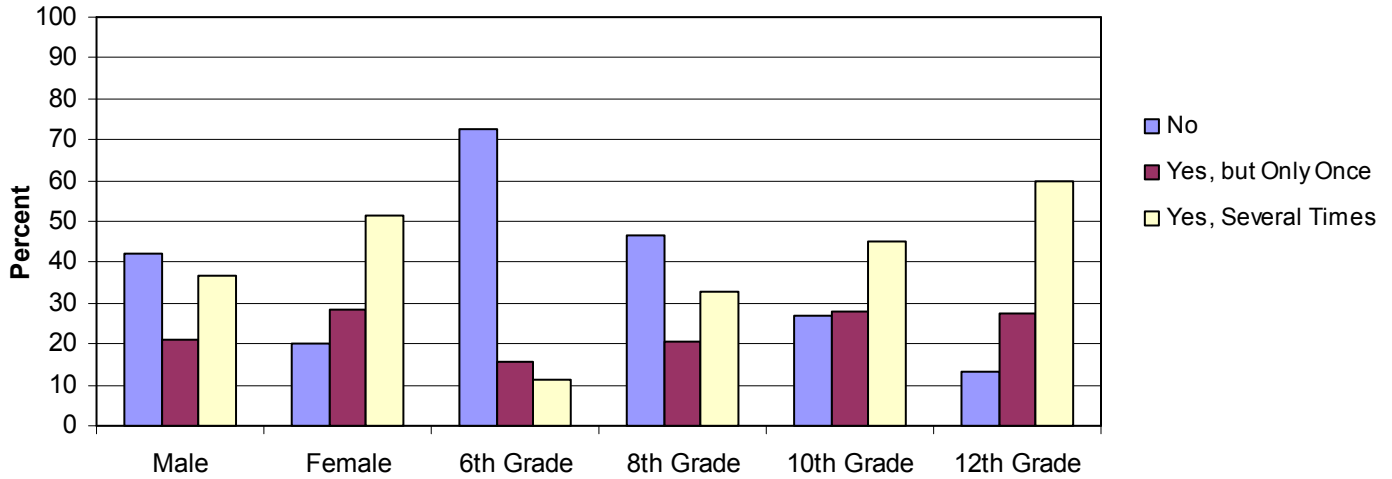
Figure 37. Youth Who Have Been Drunk When Involved in Activities that Could Have Increased Their Chances of Getting Hurt by Gender and Grade Level



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Figure 38 reveals more males reported “no,” they had not drunk more alcohol than expected compared to females. Over 50% of females reported they had drunk more alcohol than expected “several times,” compared to just over 35% of males. Across all grade levels, the percentage of youth who reported drinking more alcohol than expected “several times” was higher in grades 10 and 12.

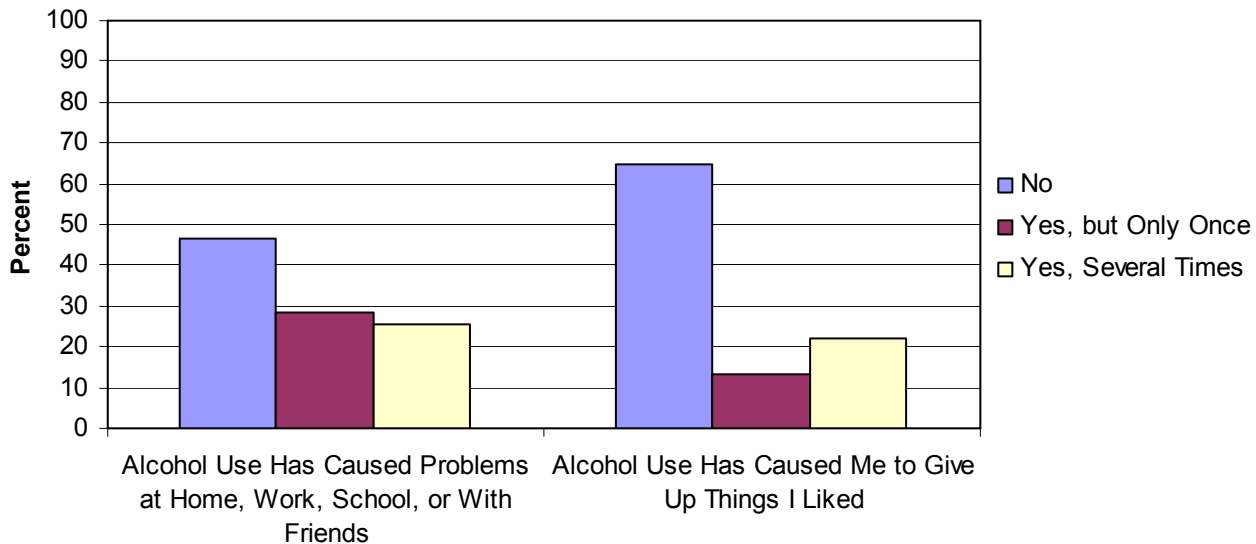
Figure 38. Youth Who Drank More Alcohol Than Expected by Gender and Grade Level



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Figure 39 displays problems that were caused by youth alcohol use. About 45% of youth reported that alcohol use has not caused problems at home, work, school or friends, while about 25% of youth reported it has caused them problems “several times.” The majority of youth reported that alcohol has not caused them to give up things that they liked, though slightly over 20% reported that they have given things up they liked “several times.”

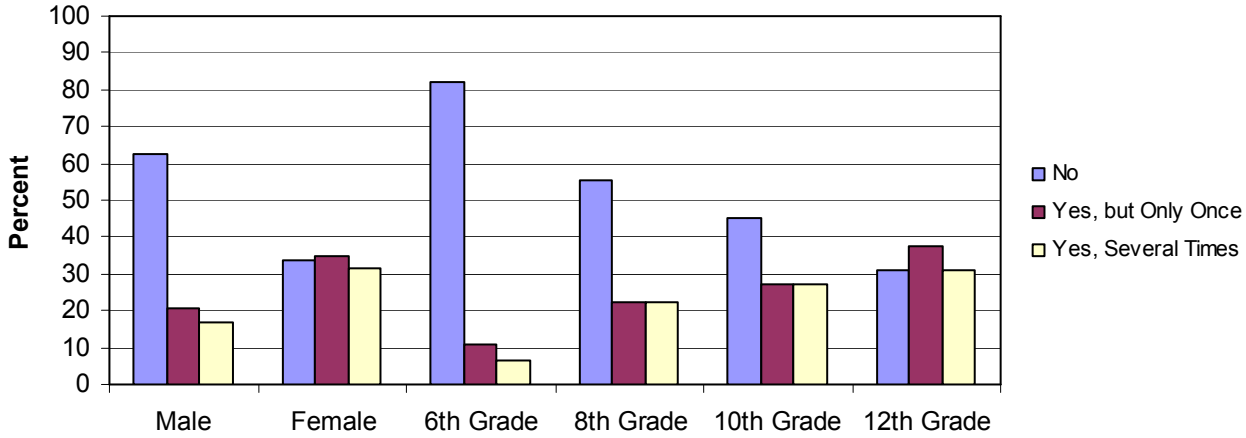
Figure 39. Problems Caused by Alcohol Use



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Figure 40 shows that almost twice as many females compared to males reported that alcohol has caused them problems at home, work, school or with friends. The percentage of youth who reported having problems at least once was about 70% in grade 12.

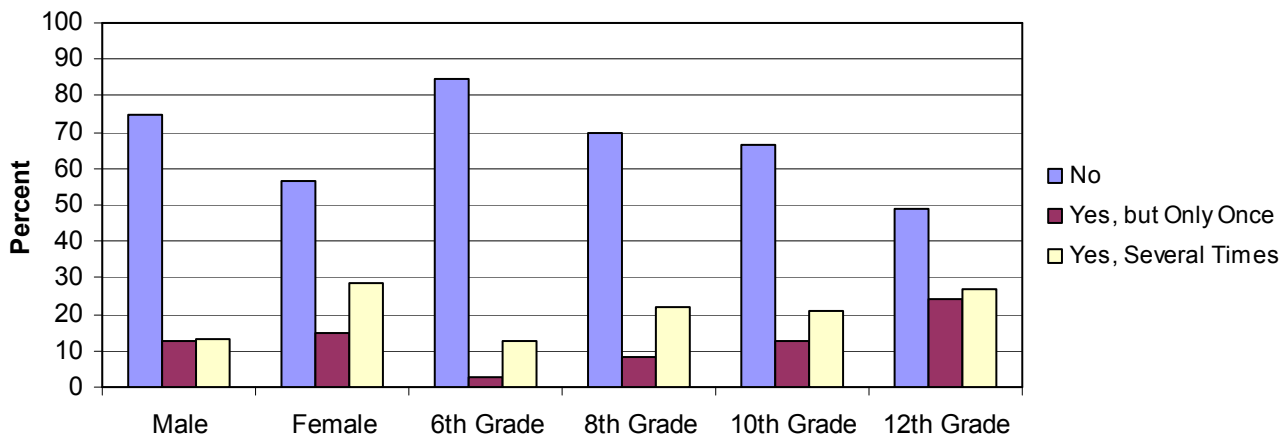
Figure 40. Alcohol Use Has Caused Problems at Home, Work, School, or With Friends by Gender and Grade Level



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

As seen in Figure 41, a majority of males and females reported not giving up things as a result of alcohol use. Almost 30% of females compared to about 10% of males reported giving up things as a result of alcohol use “several times.” The percentage of youth who reported never giving things up as a result of alcohol was lower in each higher grade level.

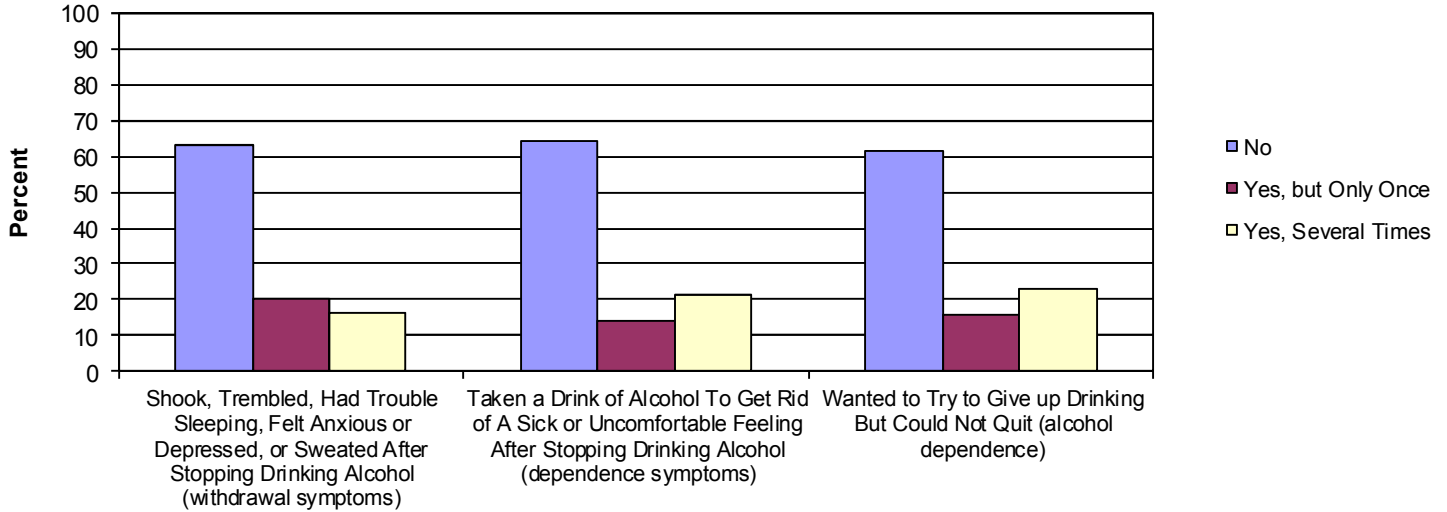
Figure 41. Youth Who Gave Things Up As a Result of Alcohol by Gender and Grade Level



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Figure 42 displays the percentage of youth who reported experiencing alcohol withdrawal and dependence symptoms. About 60% of youth responded that they had not experienced alcohol withdrawal symptoms or alcohol dependence symptoms. About 40% of youth reported wanting to give up drinking but not being able to.

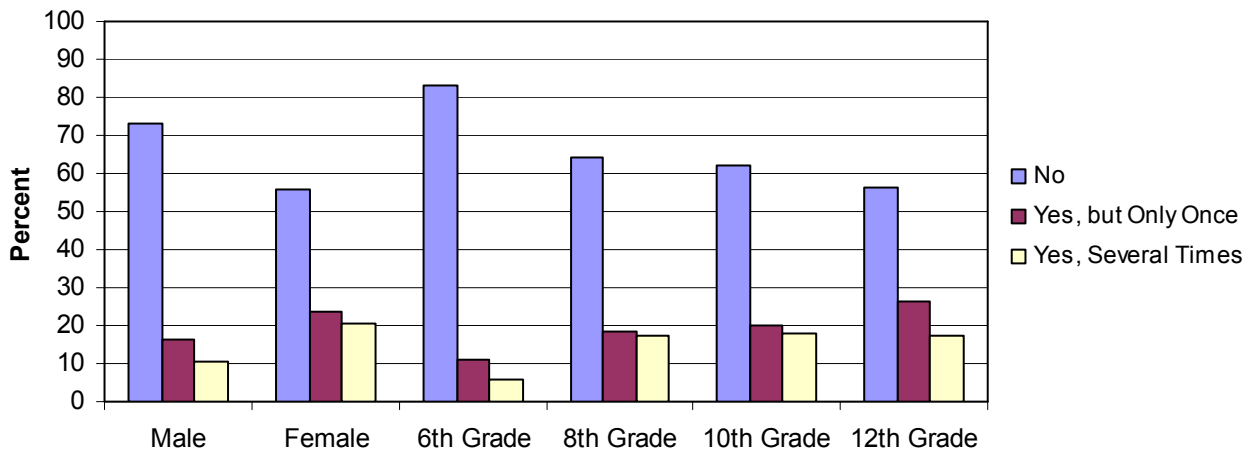
Figure 42. Youth Who Experienced Alcohol Withdrawals and Alcohol Dependence



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Figure 43 shows that a majority of both males and females have not experienced alcohol withdrawals. However, about 20% of females and 10% of males reported that they had experienced alcohol withdrawals “several times.” About 80% of youth in 6th grade reported never experiencing alcohol withdrawal symptoms, compared to 55% of 12th graders. About 20% of youth across grade levels 8, 10, and 12 reported experiencing alcohol withdrawals “several times.”

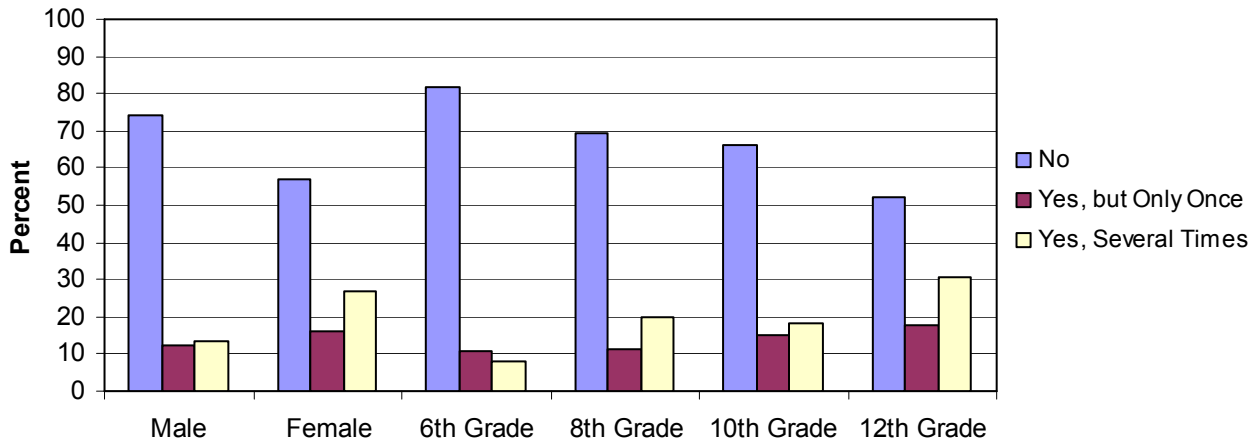
Figure 43. Youth Who Experienced Alcohol Withdrawals by Gender and Grade Level



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Figure 44 shows that a majority of male and female youth reported not experiencing symptoms of alcohol dependence, such as shaking, trembling, trouble sleeping or feelings of anxiousness or depression, after stopping drinking alcohol. Almost twice as many females than males reported experiencing symptoms of alcohol dependence “several times.” The percentage of youth who reported that they experienced alcohol dependence symptoms “several times” was highest in grade 12 (about 20%).

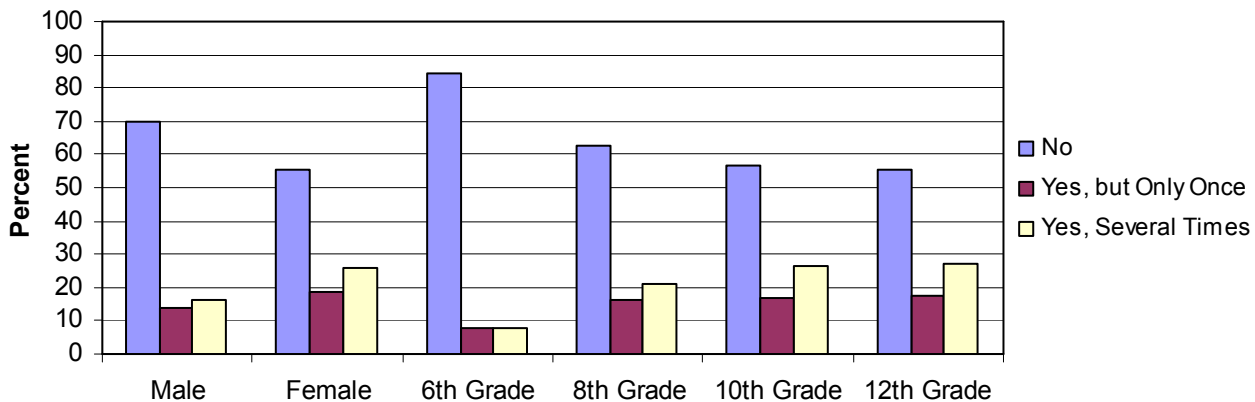
Figure 44. Youth Who Experienced Alcohol Dependence Symptoms by Gender and Grade Level



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Figure 45 illustrates the percentage of youth that wanted to give up drinking but could not (alcohol dependence). A majority of male and female youth reported that they have not experienced alcohol dependence. However, females reported a higher percentage of wanting to give up alcohol “several times” compared to males. The percentage of youth reporting alcohol dependence “several times” was highest youth in grades 8, 10 and 12, with about 15% of youth reporting this.

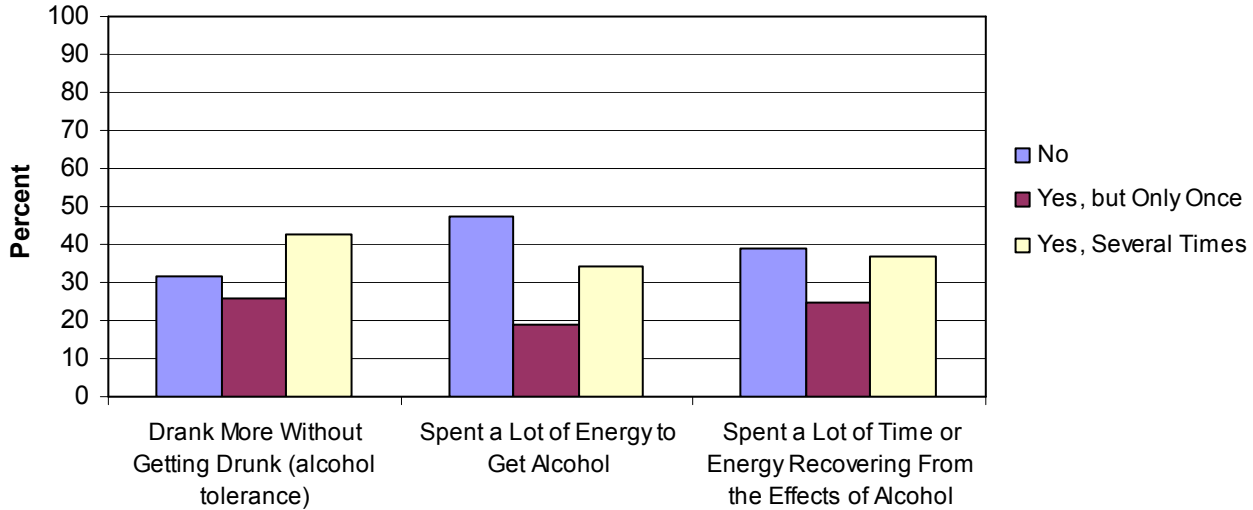
Figure 45. Youth Who Wanted to Give up Alcohol but Could Not by Gender and Grade Level



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Figure 46 displays the percentage of youth who reported alcohol tolerance and spending a lot of energy to get or recover from alcohol. Over 40% of youth indicated they had experienced alcohol tolerance “several times,” while 30% reported that they had never experienced alcohol tolerance. Almost 50% of youth reported never exerting a lot of energy trying to obtain alcohol. Nearly 60% of youth reported spending a lot of time or energy recovering from the effects of alcohol at least once.

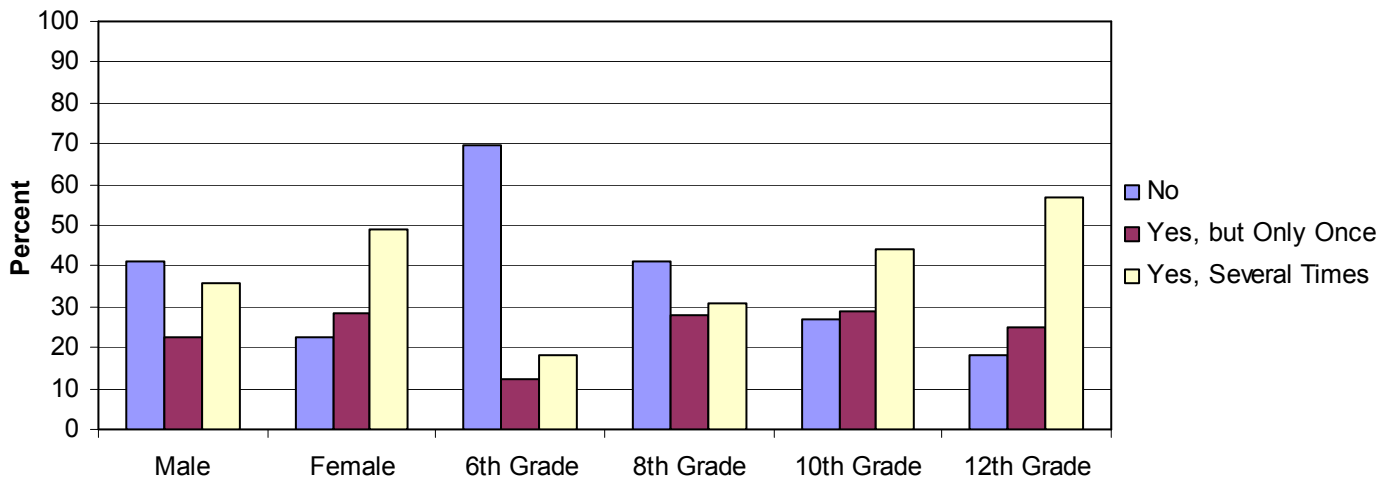
Figure 46. Alcohol Tolerance and Energy Expenditures on Alcohol



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

As seen in Figure 47, females reported a higher percentage of experiencing alcohol tolerance at least once compared to males. About 70% of youth in 6th grade reported never experiencing alcohol tolerance, while less than 20% of 12th graders reported the same.

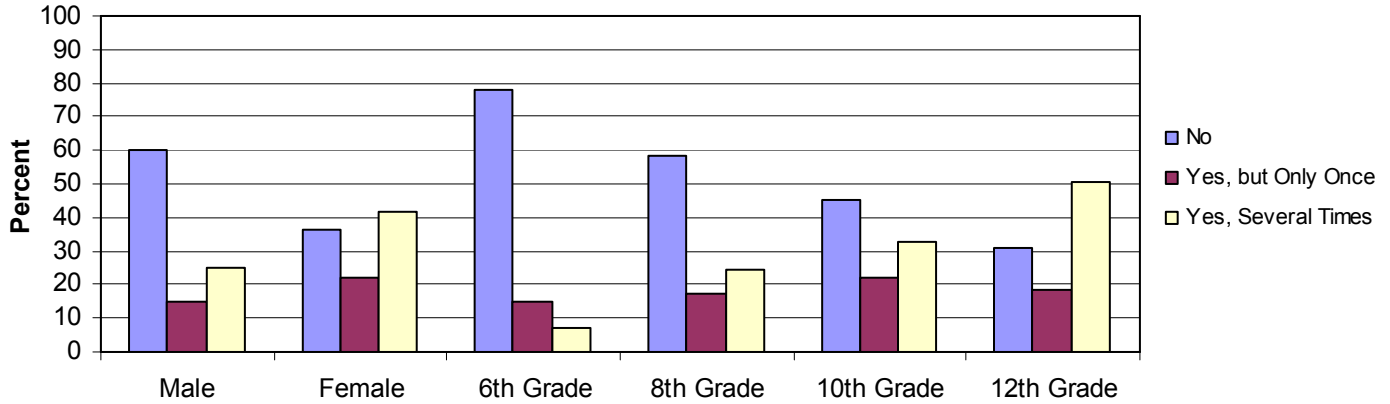
Figure 47. Youth Who Experienced Alcohol Tolerance by Gender and Grade Level



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Figure 48 illustrates that female youth reported spending more energy to get alcohol compared to males. About 60% of males reported not spending energy to get alcohol compared to about 35% of females. Figure 48 also indicates that as youth progress in grade level, a higher percentage of youth reported spending a lot of energy to get alcohol “several times.”

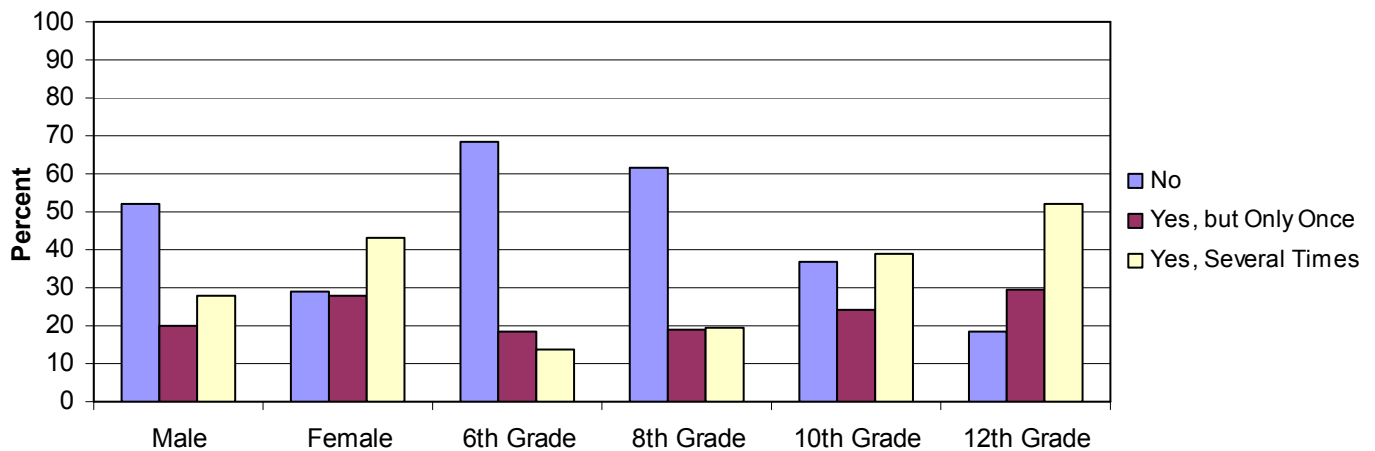
Figure 48. Youth Who Spent a Lot of Energy to Get Alcohol by Gender and Grade Level



Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

According to Figure 49, females reported a higher percentage of spending time recovering from the effects of alcohol than males. A larger percent difference between reporting “no” and reporting “yes, but only once” was seen in males compared to females. Youth in grades 10 and 12 reported the highest percentages of spending time recovering from the effects of alcohol once or “several times.”

Figure 49. Youth Who Spent a Lot of Time or Energy Recovering from the Effects of Alcohol by Gender and Grade Level

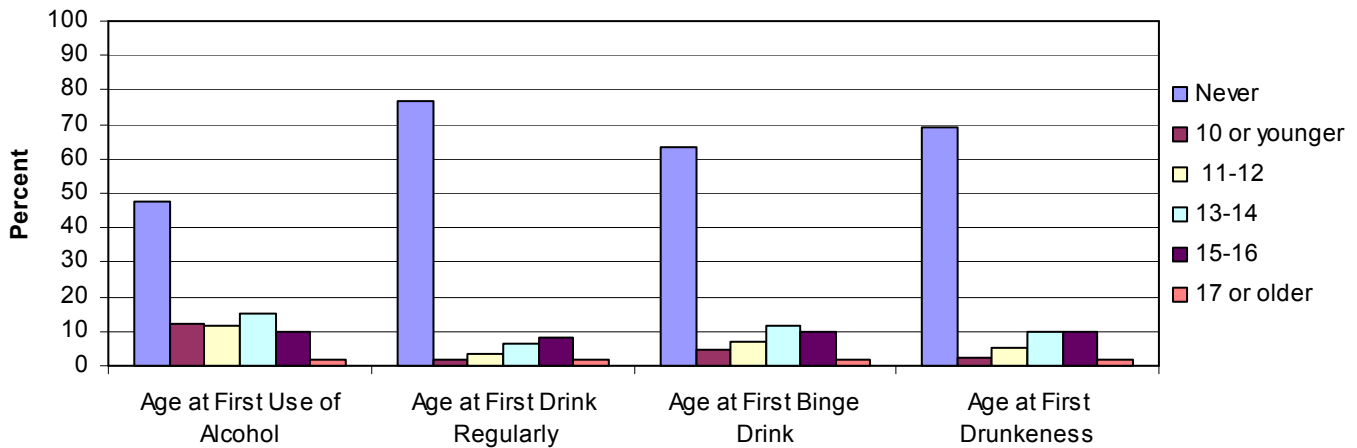


Source: 2007 ATOD survey. This question was only answered by youth who previously had answered “yes” to having ever used alcohol in the past 12 months.

Initiation of Alcohol Use

According to Figure 50, almost 50% of youth have never used alcohol. Of the youth that have used alcohol, a majority first used alcohol at the ages 13-14, followed by youth who first used at 10 years or younger. Nearly 10% of youth reported that they began drinking alcohol regularly at 15-16 years of age. Among youth who had binge drank, the highest percentage of them started at 13-14 years of age, followed closely by youth who started at 15-16 years of age. About 10% of youth reported that they were 13-14 years old and 15-16 years old when they first experienced drunkenness.

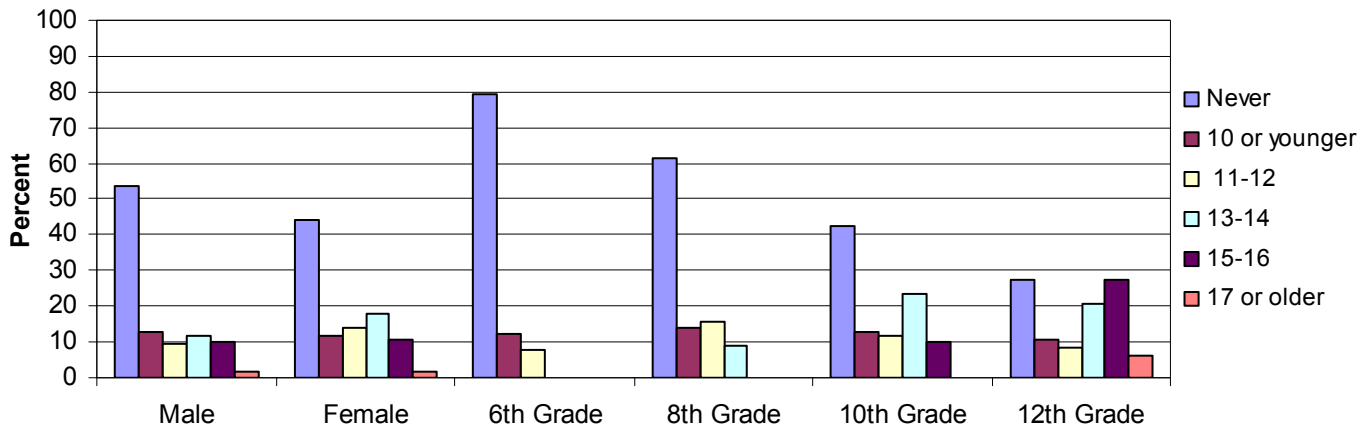
Figure 50. Age at First Use of Alcohol Indicators



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

According to Figure 51, about 10% of male and female youth began drinking alcohol at age 10 or younger. Just over 10% of youth across all grade levels reported first using alcohol at age 10 or younger. The most common age for first alcohol use among 12th graders was 15-16.

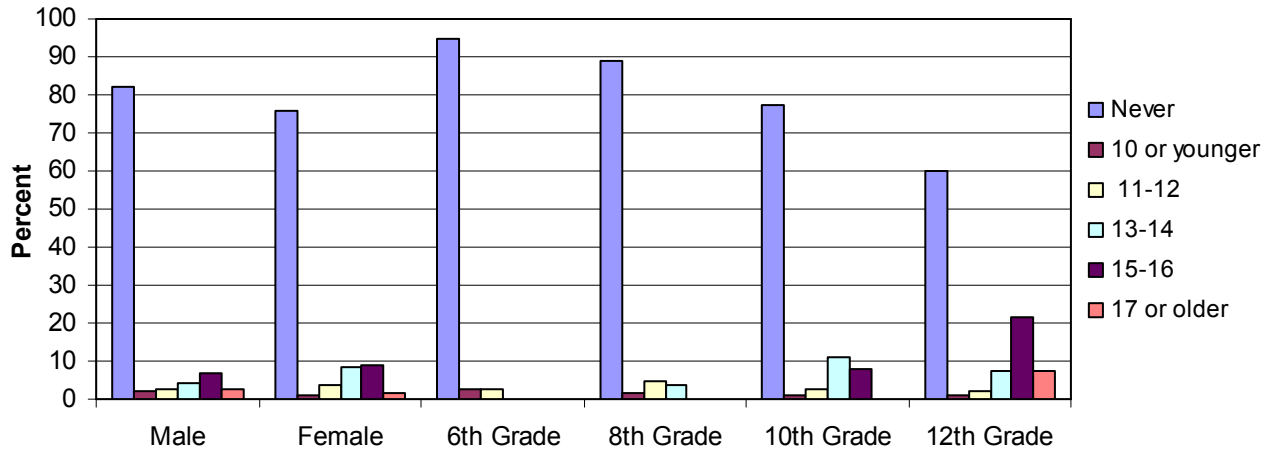
Figure 51. Age at First Use of Alcohol by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 52 shows that a majority of youth across both genders and all grade levels do not drink alcohol regularly. A higher percentage of males and females first drank alcohol regularly at ages 15-16 than any other age group. The percentage of youth who reported never having drunk regularly was lower in each higher grade level.

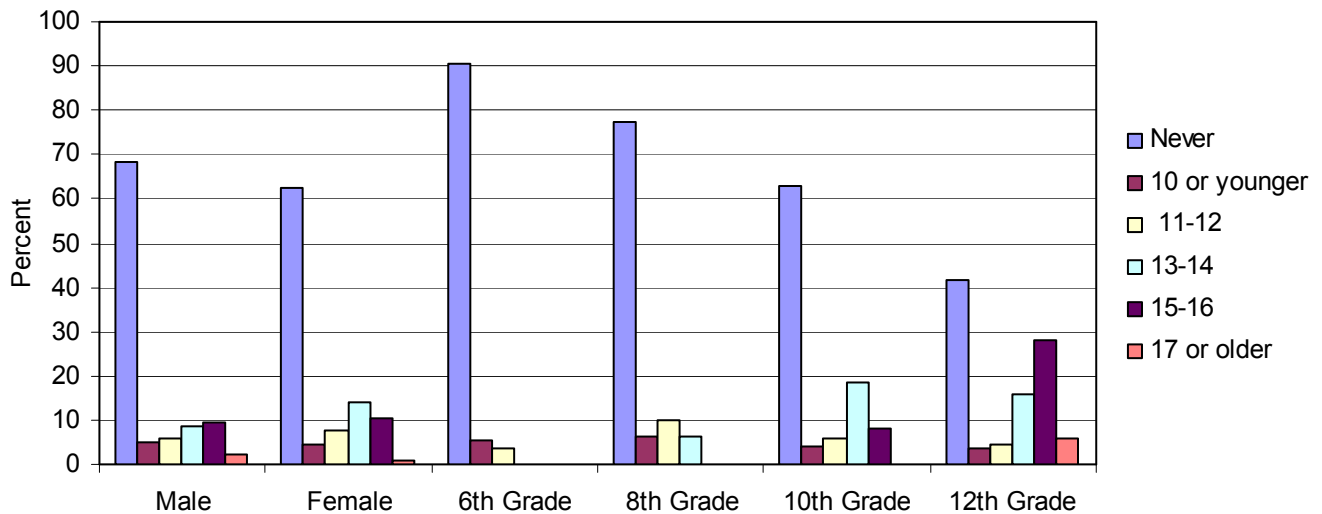
Figure 52. Age at First Use of Drinking Alcohol Regularly by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure 53, a majority of youth across both genders and all grade levels reported never binge drinking. Most females had their first binge drink at ages 13-14, while more males reported their first binge drink at ages 15-16. Almost 30% of youth in grade 12 reported having their first binge drink at ages 15-16.

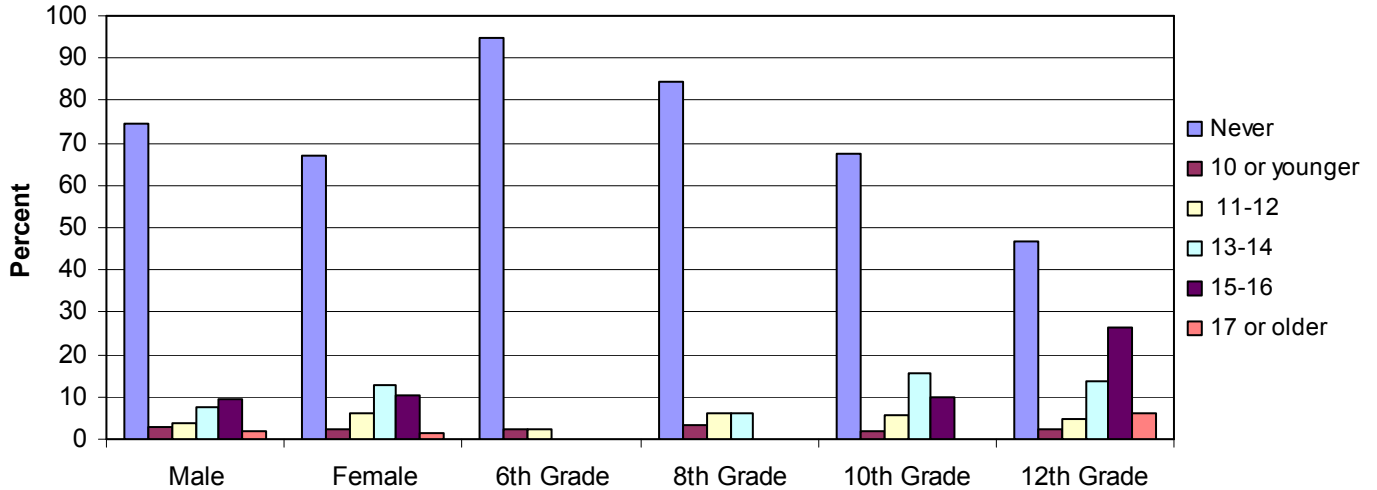
Figure 53. Age at First Binge Drink by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure 54, over 70% of males and 65% of females reported that they have “never” been drunk. The percentage of youth who reported that they were “never” drunk went from over 90% among 6th grade youth to 45% among 12th grade youth. The most reported ages at first drunkenness were ages 13-14 and 15-16.

Figure 54. Age at First Drunkenness by Gender and Grade Level

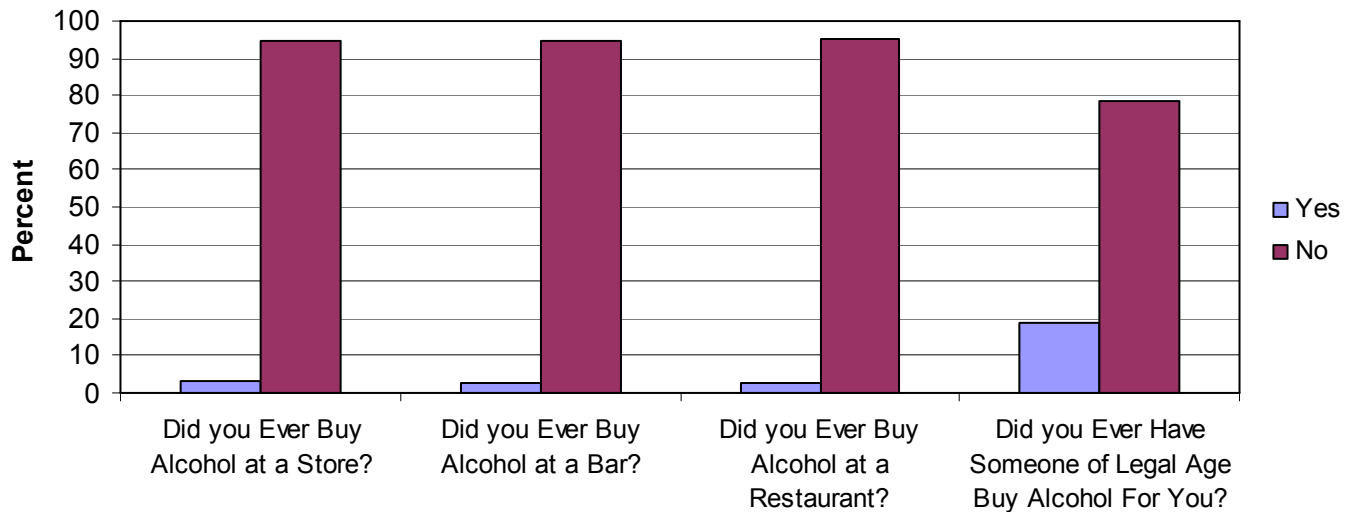


Source: 2007 ATOD survey.

Access to Alcohol

Figure 55 depicts youth access to alcohol. About 95% of youth had not bought alcohol in a store, bar or restaurant. Most youth who reported having access to alcohol had someone of legal drinking age (21 years and over) buy it for them.

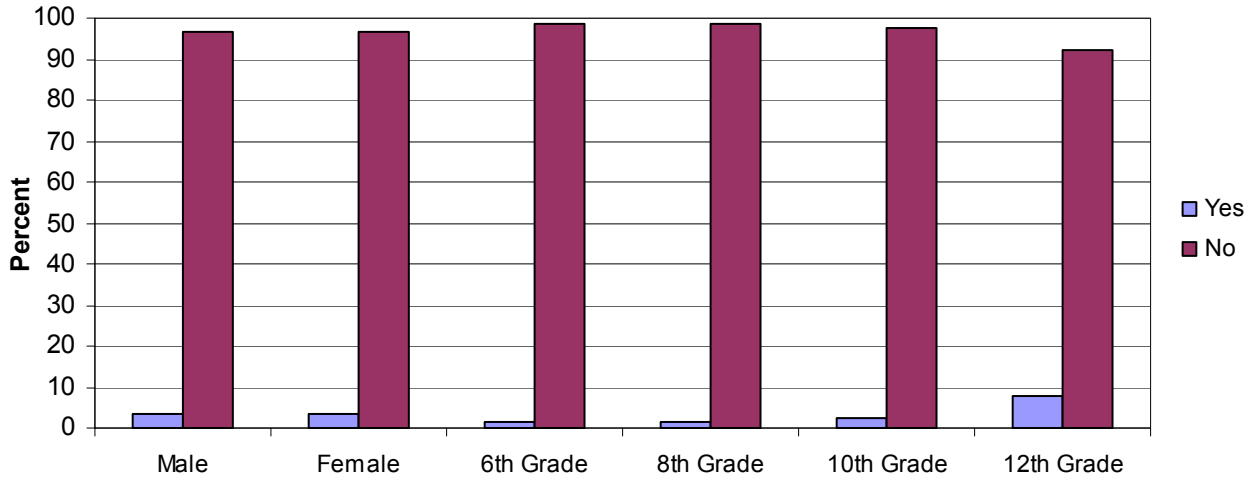
Figure 55. Access to Alcohol



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

According to Figure 56, most youth had not bought alcohol in a store; only about 4% of males and females reported buying alcohol in a store. The percentage of youth that purchased alcohol at a store was more than three times higher in 12th grade than 6th grade.

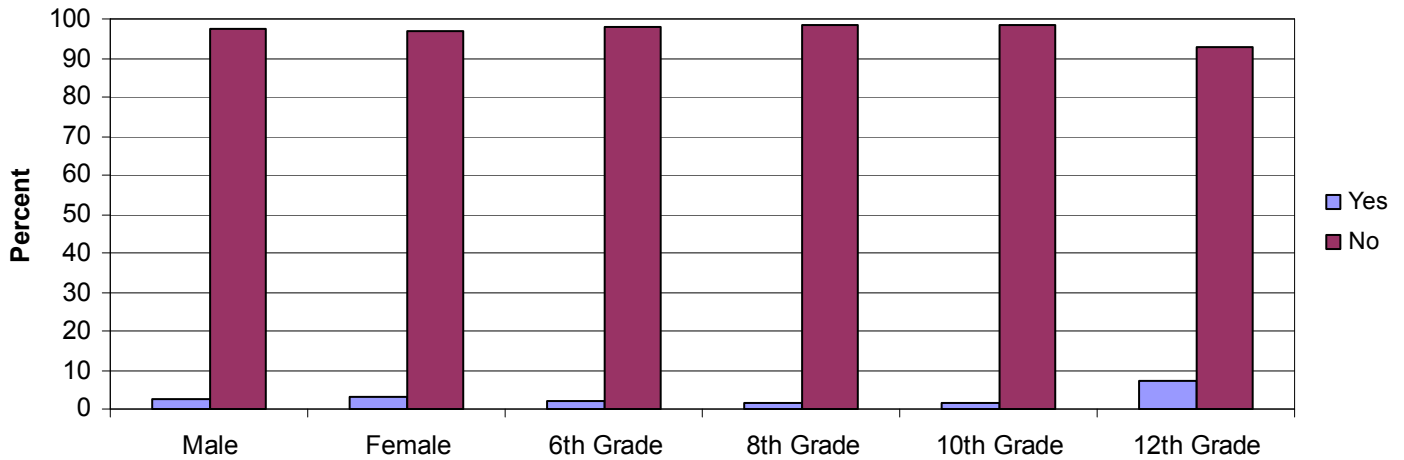
Figure 56. Youth Who Bought Alcohol at a Store by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure 57, over 90% of youth had not bought alcohol at a bar. Less than 5% of youth across both genders and in grades 6, 8 and 10 reported buying alcohol at a bar; this percentage was closer to 10% among youth in grade 12.

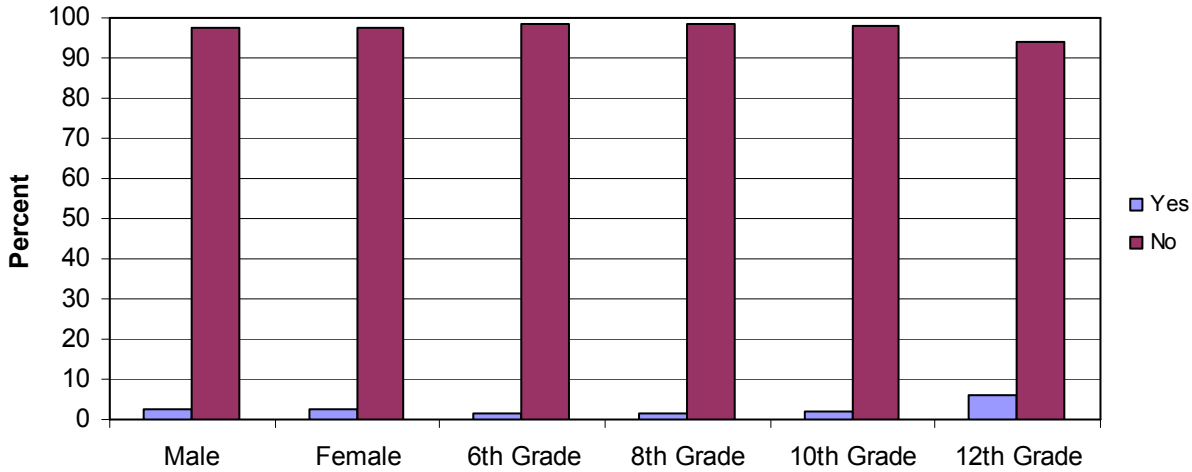
Figure 57. Youth Who Bought Alcohol at a Bar by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure 58, well over 90% of youth across both genders and all grade levels reported that they had not bought alcohol in a restaurant. Youth in the 12th grade reported the highest percentage of buying alcohol at a restaurant, at just over 5 percent.

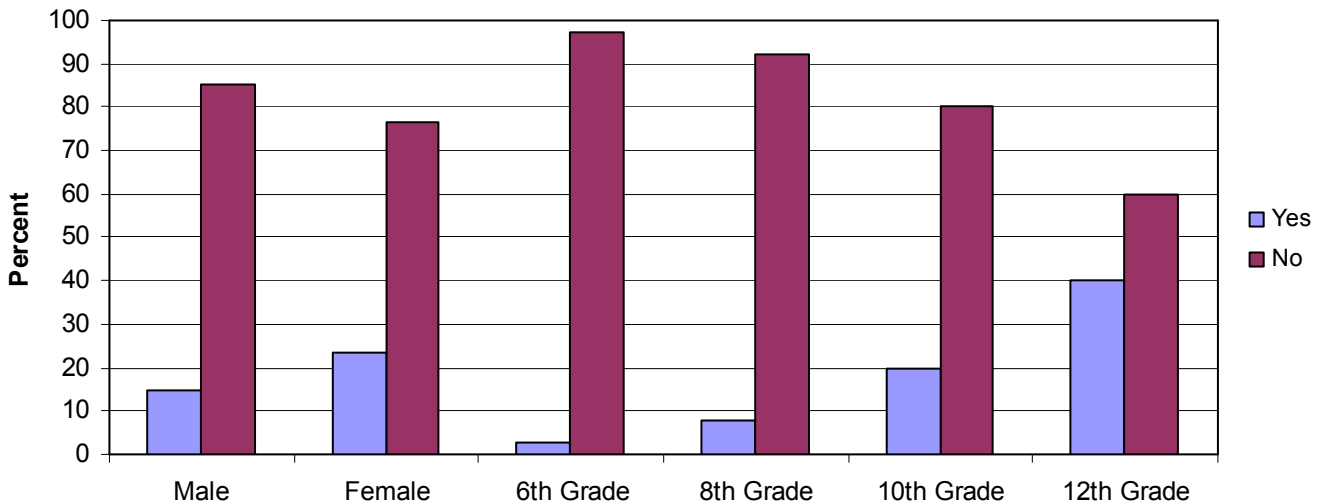
Figure 58. Youth Who Bought Alcohol at a Restaurant by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 59 shows the percentage of youth who had obtained alcohol by someone of legal age (aged 21 years or older) purchasing it for them. More females than males reported that someone of legal age bought them alcohol. The percentage of youth who reported that someone of legal age bought them alcohol doubled from grade 10 (20%) to grade 12 (40%).

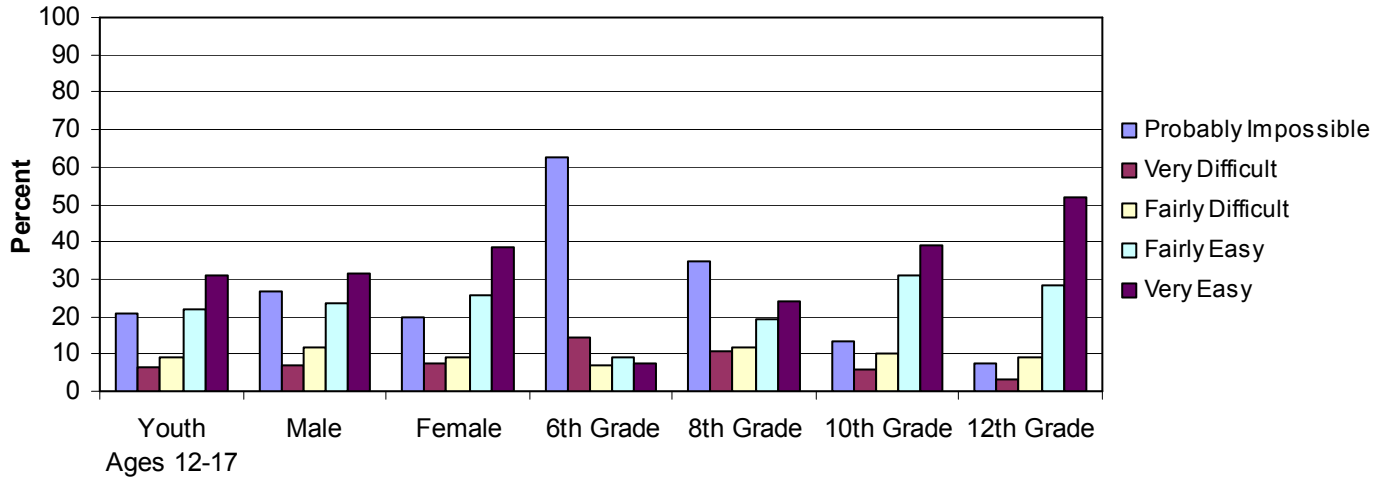
Figure 59. Youth Who Had Someone of Legal Age Buy Alcohol for Youth by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 60 displays youths' perceived difficulty of buying alcohol. Over 30% of youth ages 12-17 reported that it was "very easy" to buy alcohol, while about 20% reported that it was "probably impossible" to buy alcohol. A higher percentage of females perceived it was "very easy" to buy alcohol compared to males. The percentage of youth who reported that it is "fairly easy" or "very easy" was higher in each higher grade level from grades 6-12.

Figure 60. Youths' Perceived Difficulty in Buying Alcohol by Gender and Grade Level

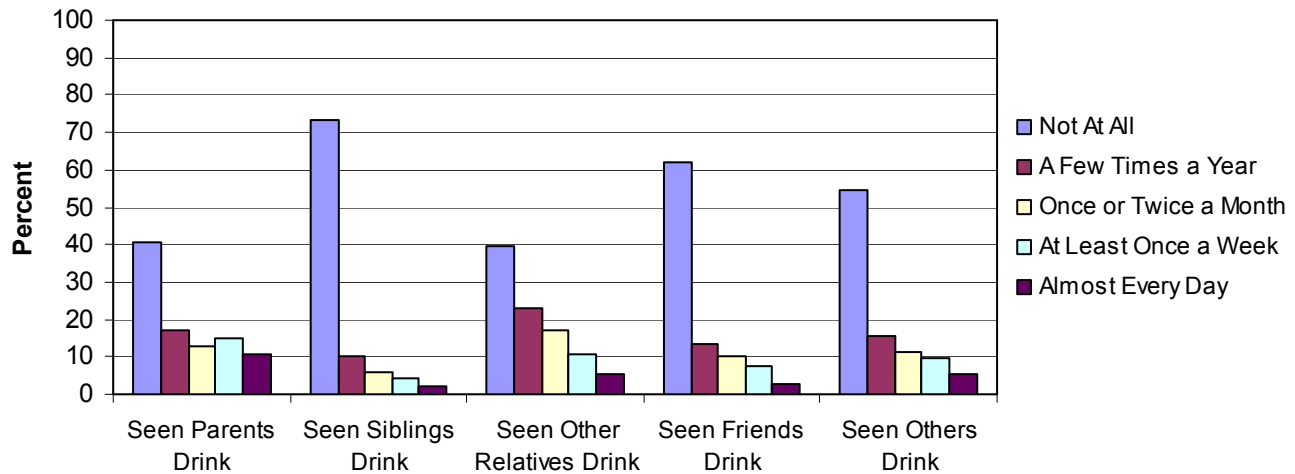


Source: 2007 ATOD survey; Youth Ages 12-17 totals may not add up to 100% due to missing data.

Exposure to Alcohol Use

Figure 61 displays youths' exposure to alcohol. A majority of youth reported that they had not seen siblings, friends or others drink alcohol. Parents and Other Relatives exposed youth to alcohol most often, while siblings and friends exposed youth to alcohol the least. About 10% of youth reported seeing their parents drink "almost everyday."

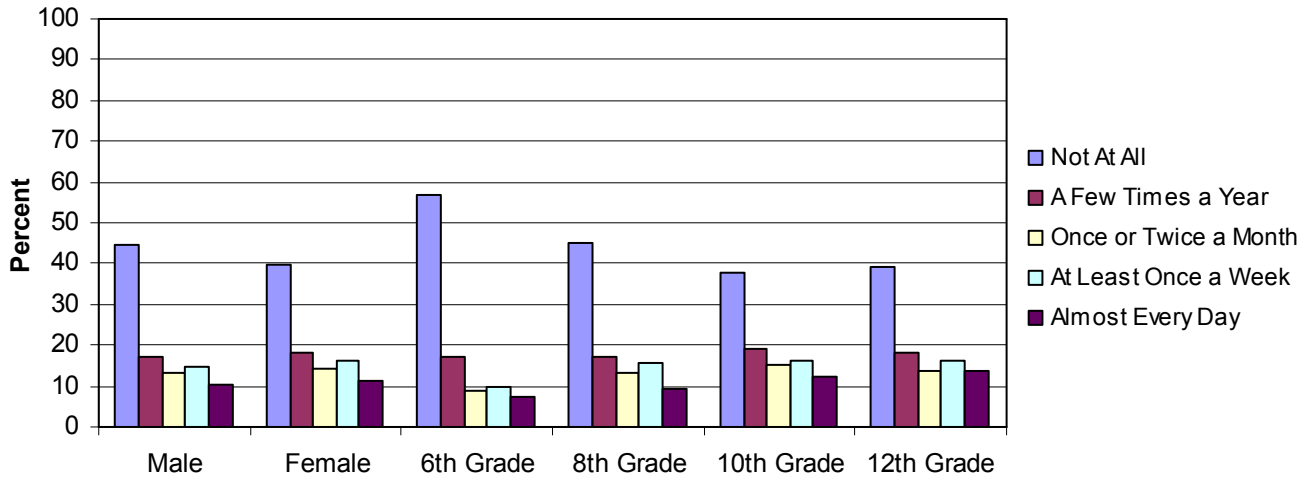
Figure 61. Exposure to Alcohol Use



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

Figure 62 shows youth exposure to alcohol by their parents. Slightly more females than males reported seeing their parents drink alcohol at any time. Youth in grade 12 reported the highest percentage of seeing their parents drink alcohol overall; nearly 15% reported seeing this “almost everyday.”

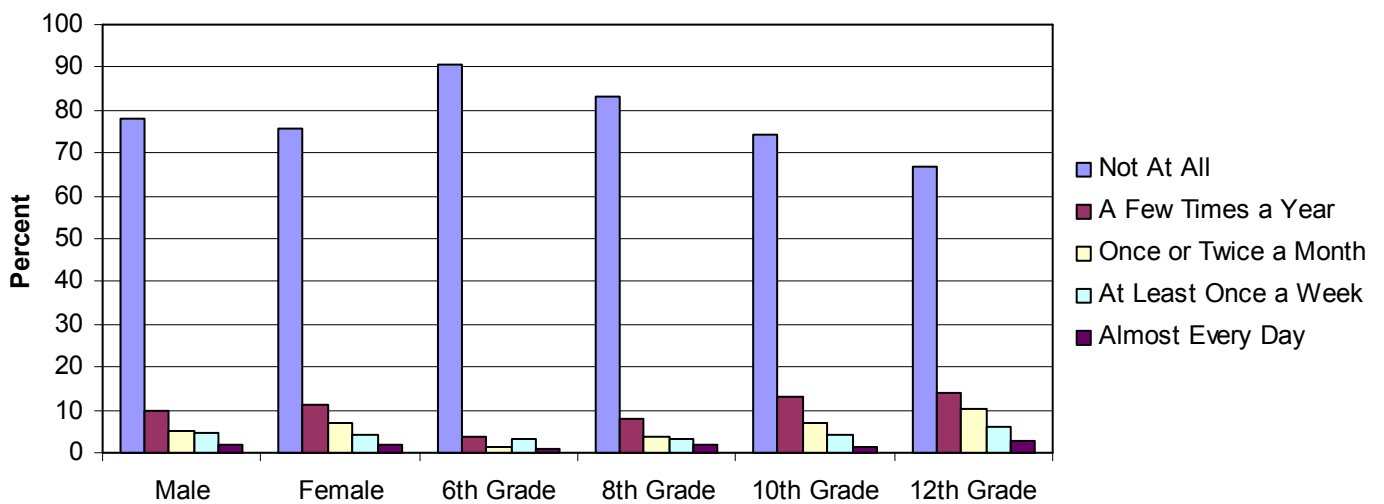
Figure 62. Youth Who Have Seen Parents Drink Alcohol by Gender and Grade Level



Source: 2007 ATOD survey.

In Figure 63, it is evident that a majority of youth had not been exposed to alcohol by their siblings. Slightly more females than males reported seeing their siblings drink overall. The percentage of youth who reported seeing their siblings drink at least once was higher in each higher grade level. Youth in grade 12 reported the highest percentage of seeing their siblings drink at any time.

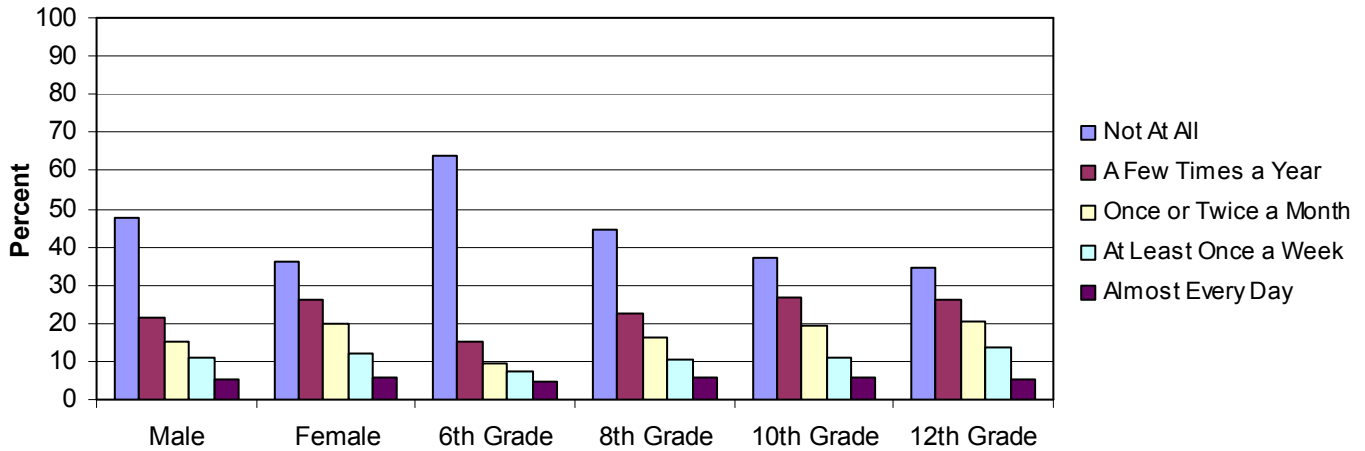
Figure 63. Youth Who Have Seen Siblings Drink Alcohol by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 64 shows the exposure of youth to alcohol by other relatives. About 5% of youth across both genders and all grade levels reported seeing other relatives drink “almost every day.” The percentage of youth who reported never seeing other relatives drink was lower in each higher grade level from grades 6-12.

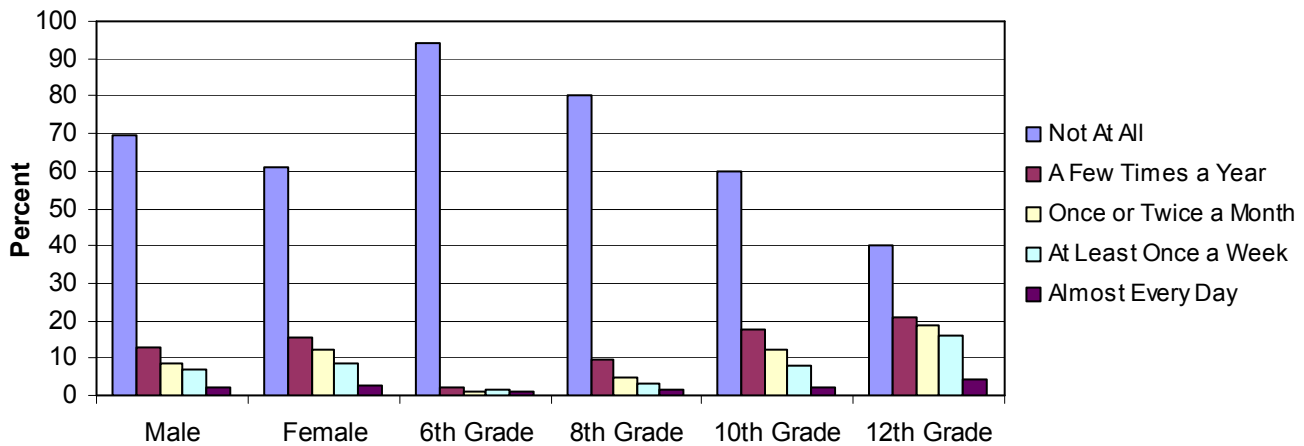
Figure 64. Youth Who Have Seen Other Relatives Drink Alcohol by Gender and Grade Level



Source: 2007 ATOD survey.

Exposure to alcohol by friends is depicted in Figure 65. Females reported a higher percentage than males of being exposed to alcohol by friends at any time. The percentage of youth who reported never seeing their friends drink was lower in each higher grade level. About 60% of youth in grade 12 reported seeing their friends drink alcohol at least once.

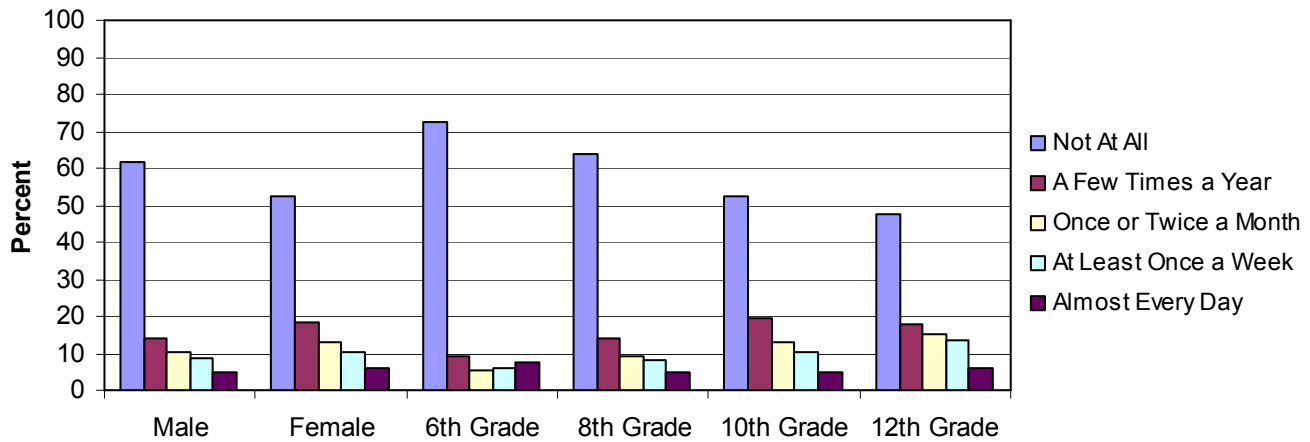
Figure 65. Youth Who Have Seen Friends Drink Alcohol by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 66 shows the percentage of youth who have seen other people drink alcohol. More females than males reported being exposed to alcohol by other people overall. Over 70% of youth in grade 6 reported not seeing other people drink, while less than 50% of youth in 12th grade reported the same.

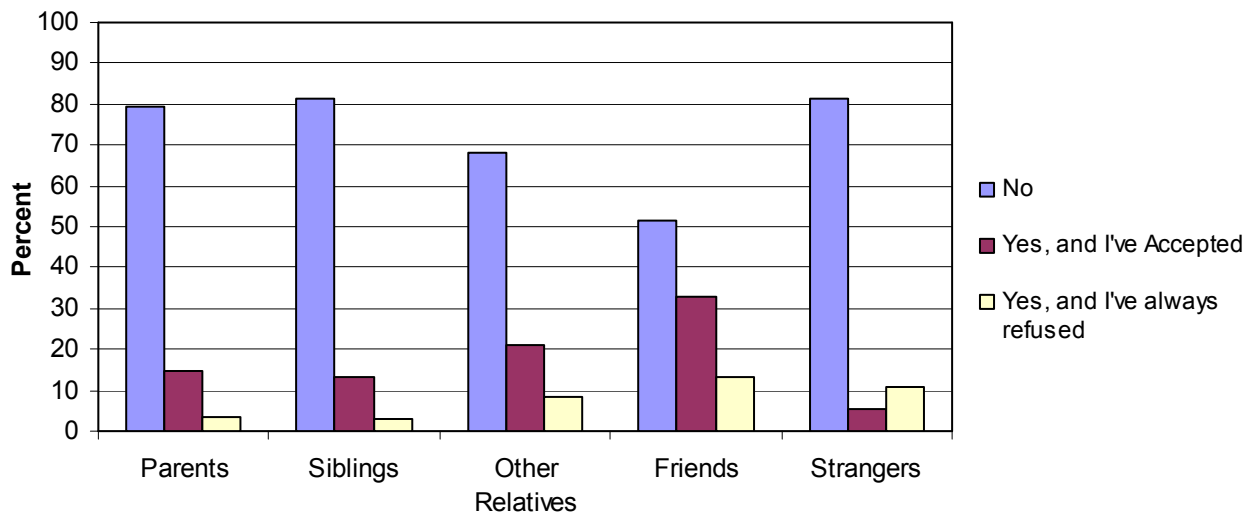
Figure 66. Youth Who Have Seen Other People Drink Alcohol by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure 67, the majority of youth had not been offered alcohol by parents, siblings, other relatives, friends or strangers. Friends made the most solicitations of alcohol to youth, followed by other relatives. Strangers, parents, and siblings made the fewest offers of alcohol. However, in all cases except strangers, these offers were accepted more often than they were refused.

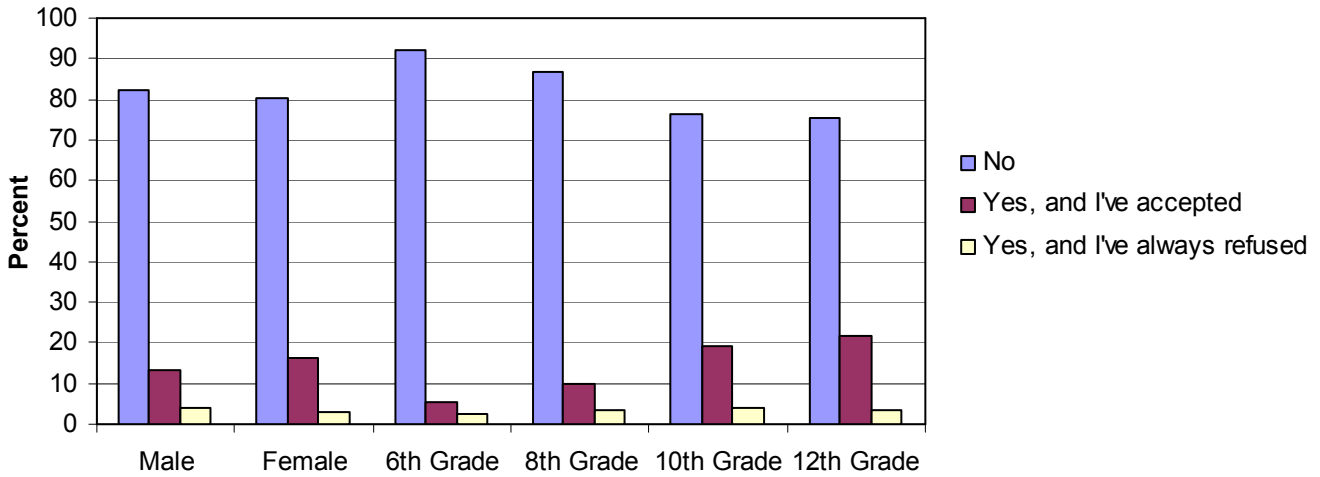
Figure 67. People Who Have Made Offers of Alcohol to Youth



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

According to Figure 68, the majority of youth had not been offered alcohol by their parents. Both males and females reported about the same percentage of being offered alcohol by their parents, regardless of response. Only about 5% of youth across both genders and all grade levels reported that they refused alcohol when offered by parents. Youth who reported that they have accepted offers of alcohol by their parents was about 5% in 6th grade and about 20% in 12th grade.

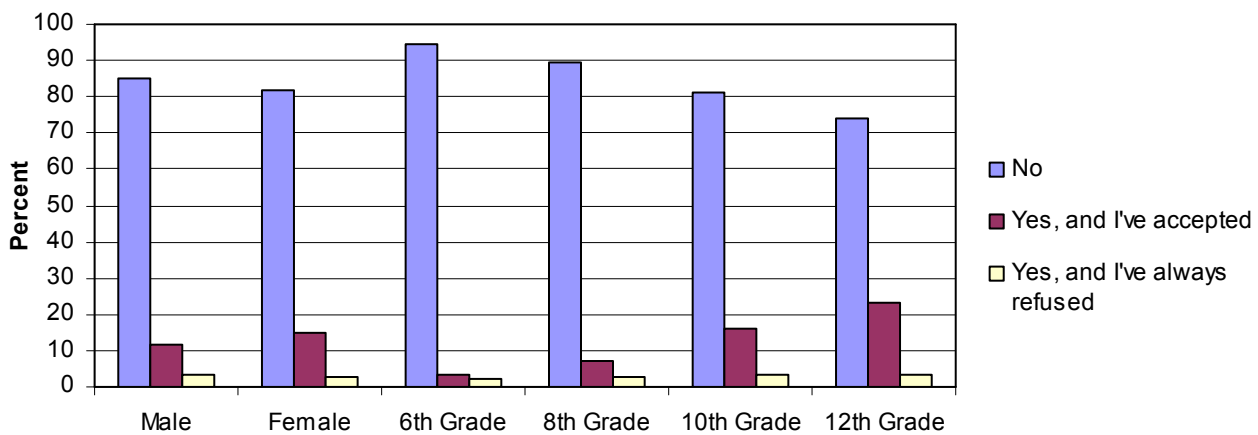
Figure 68. Youth Who Were Offered Alcohol by Parents by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 69 reports on the percent of youth offered alcohol by their siblings. Over 80% of males and females have not been offered alcohol by their siblings. A slightly higher percentage of females reported accepting alcohol from their siblings compared to males. The percentage of youth who reported accepting alcohol from siblings was higher in each higher grade level; over 20% of 12th graders reported doing so.

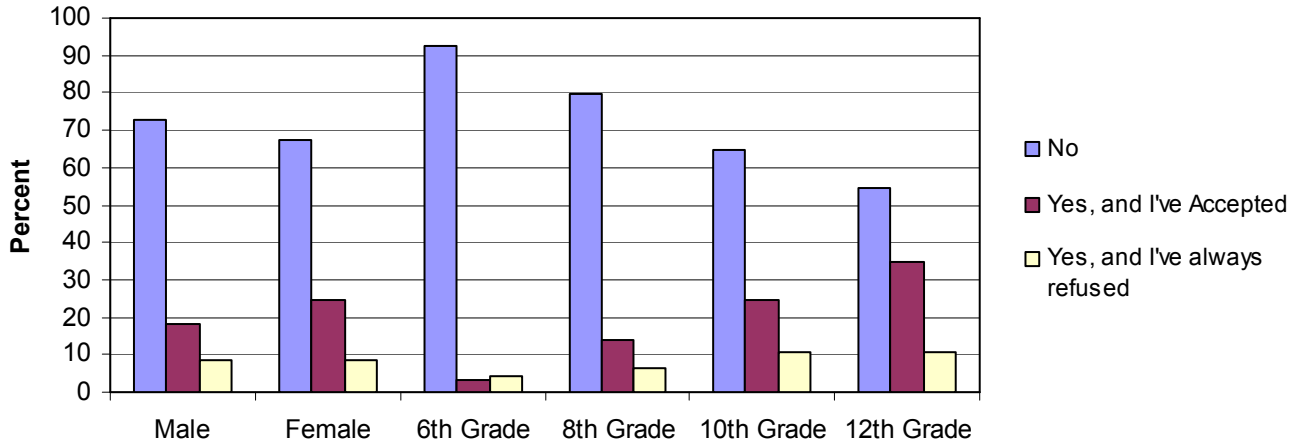
Figure 69. Youth Who Were Offered Alcohol by Siblings by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 70 shows that more females reported accepting alcohol offers from other relatives compared to males. Males and females reported similar percentages of refusing alcohol offers made by other relatives. Over 90% of 6th graders reported never being offered alcohol by other relatives, while 55% of 12th graders reported the same. About 35% of 12th graders reported accepting offers of alcohol from other relatives.

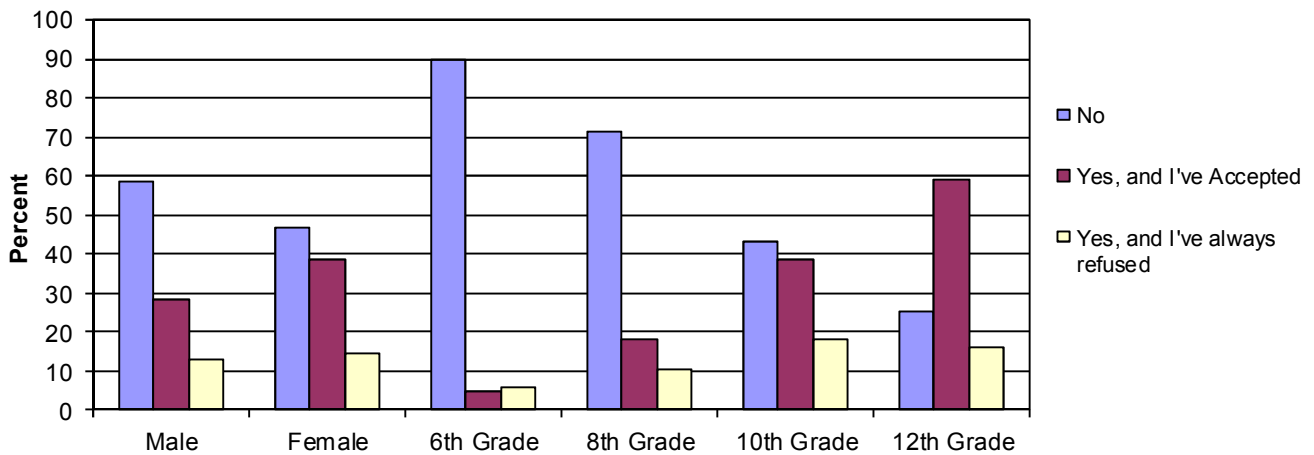
Figure 70. Youth Who Were Offered Alcohol by Other Relatives by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure 71, females reported a higher percentage of accepting alcohol offers from friends compared to males. The percentage of youth who reported that they had accepted alcohol offers from friends was higher in each higher grade level. Nearly 60% of youth in grade 12 reported they have been offered alcohol by friends and accepted, compared to about 5% of youth in grade 6.

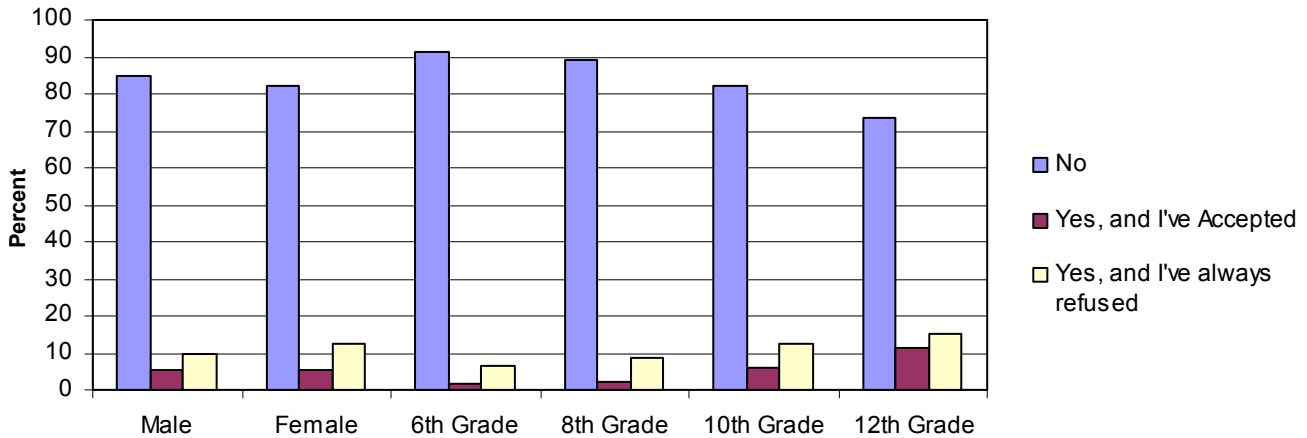
Figure 71. Youth Who Were Offered Alcohol by Friends by Gender and Grade Level



Source: 2007 ATOD survey.

As indicated in Figure 72, over 80% of males and females reported that they had not been offered alcohol by strangers. About 5% of males and females reported that they had accepted offers of alcohol by strangers. Overall, among the youth who had been offered alcohol by strangers, a higher percentage refused the offers compared to those who accepted. About 10% of youth in 12th grade reported accepting alcohol from strangers.

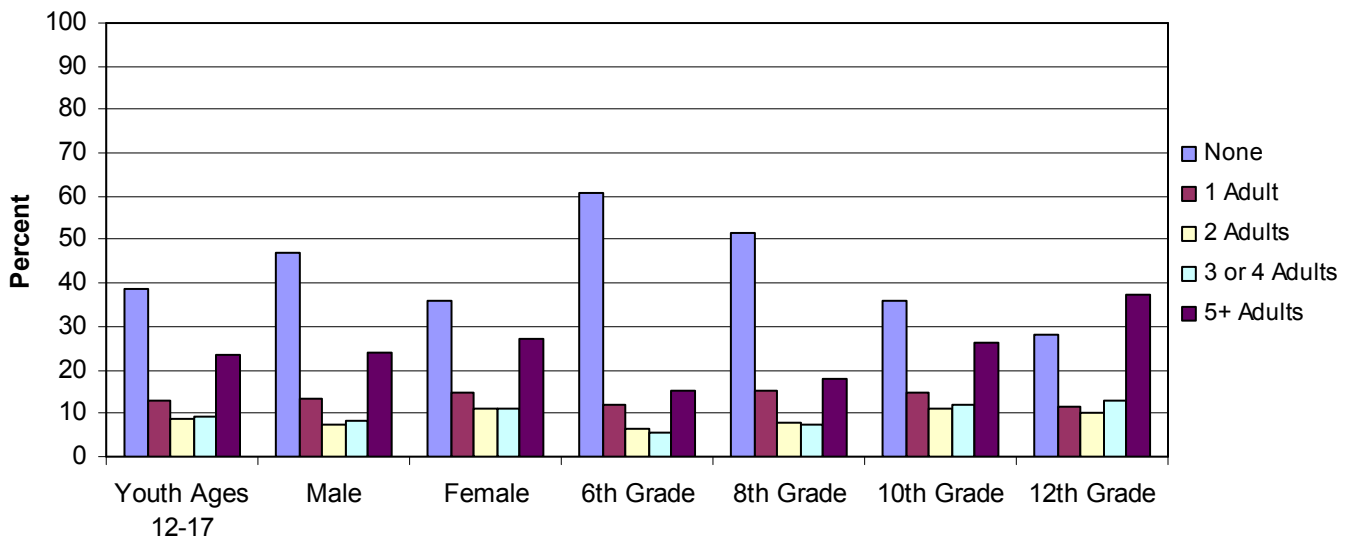
Figure 72. Youth Who Were Offered Alcohol by Strangers by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 73 illustrates the number of adults that youth personally knew who had gotten drunk or high in the past year. Of youth 12-17 years old, nearly 25% reported that they had known “5+ adults” who had been high or drunk in the past year. Of the youth who had known adults who were drunk or high in the past year, the highest percentage across both genders and all grade levels reported knowing “5+ adults.”

Figure 73. Adults That Youth Personally Knew Who Have Gotten Drunk or High in the Past Year by Gender and Grade Level

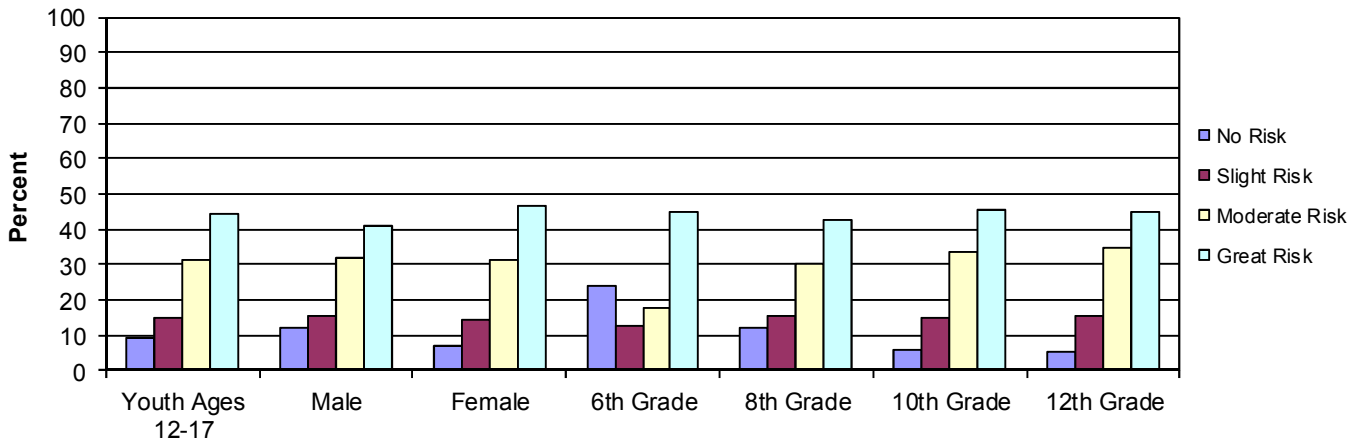


Source: 2007 ATOD survey; Youth Ages 12-17 totals may not add up to 100% due to missing data.

Risk from Alcohol Use

Figure 74 displays the perceptions that youth have in regards to risk from drinking four or more drinks of alcohol once or twice each weekend. Just over 40% of youth ages 12-17 reported perceiving “great risk” in this activity. A slightly higher percentage of males than females reported they perceive “no risk” from drinking four or more drinks of alcohol once or twice each weekend. Nearly 25% of 6th graders reported perceiving “no risk” in this, while only 5% of 12th graders reported the same.

Figure 74. Youth Perceptions of People Harming Themselves When They Have 4 or More Drinks of Alcohol Once or Twice Each Weekend by Gender and Grade Level

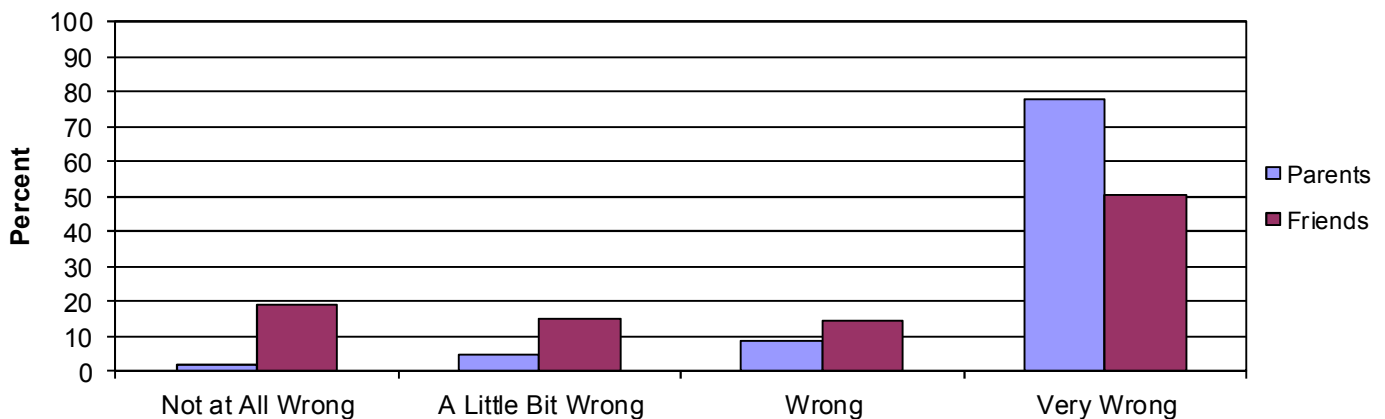


Source: 2007 ATOD survey; Youth Ages 12-17 totals may not add up to 100% due to missing data.

Opinion of Alcohol Use

Figure 75 displays youths’ perceptions of how their parents and friends would feel about them drinking alcohol regularly. Nearly 80% of youth reported that their parents would feel it is “very wrong” to drink alcohol regularly; this perception only held true for about 50% of friends.

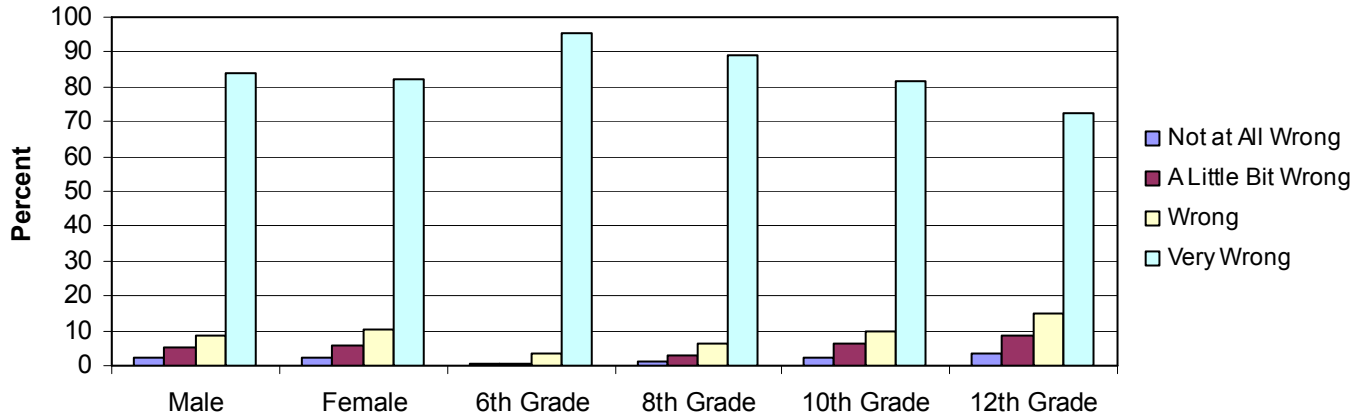
Figure 75. Youth Perceptions of How Their Parents and Friends Would Feel About Them Drinking Alcohol Regularly



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

As seen in Figure 76, over 80% of males and females reported that their parents would feel it would be “very wrong” for them to drink alcohol regularly. About 90% of youth in grade 6 reported that it would be “very wrong” for them to drink alcohol regularly, compared to 70% of youth who reported this in grade 12.

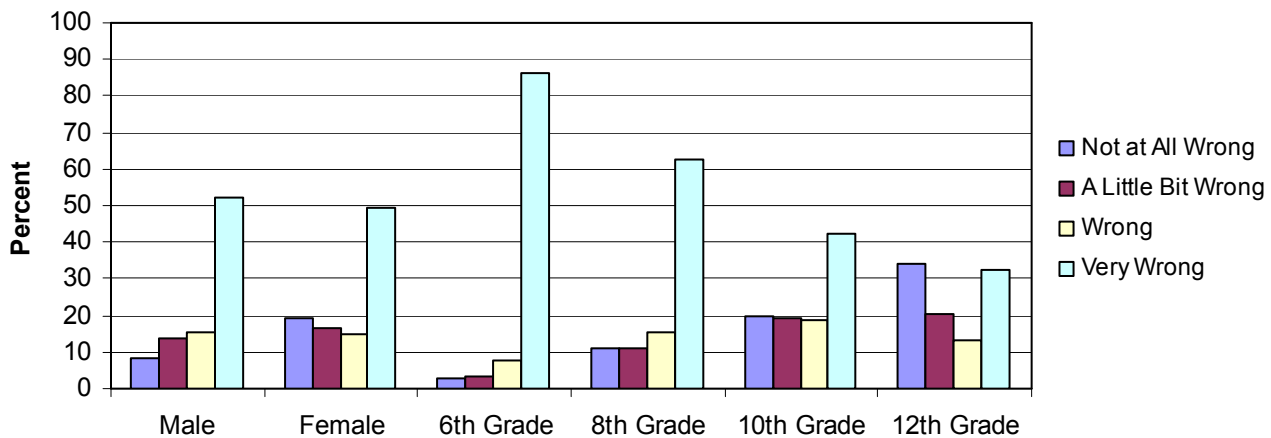
Figure 76. Youth Perceptions of How Their Parents Would Feel About Them Drinking Alcohol Regularly by Gender and Grade Level



Source: 2007 ATOD survey.

As indicated in Figure 77, about 50% of males and females reported that their friends would think it would be “very wrong” for them to drink alcohol regularly. Less than 10% of males and about 20% of females reported that their friends would think that it was “not at all wrong” for them to drink alcohol regularly. Youth who indicated that their friends would think drinking alcohol regularly was “not at all wrong” rose from less than 5% in grade 6 to nearly 35% in grade 12.

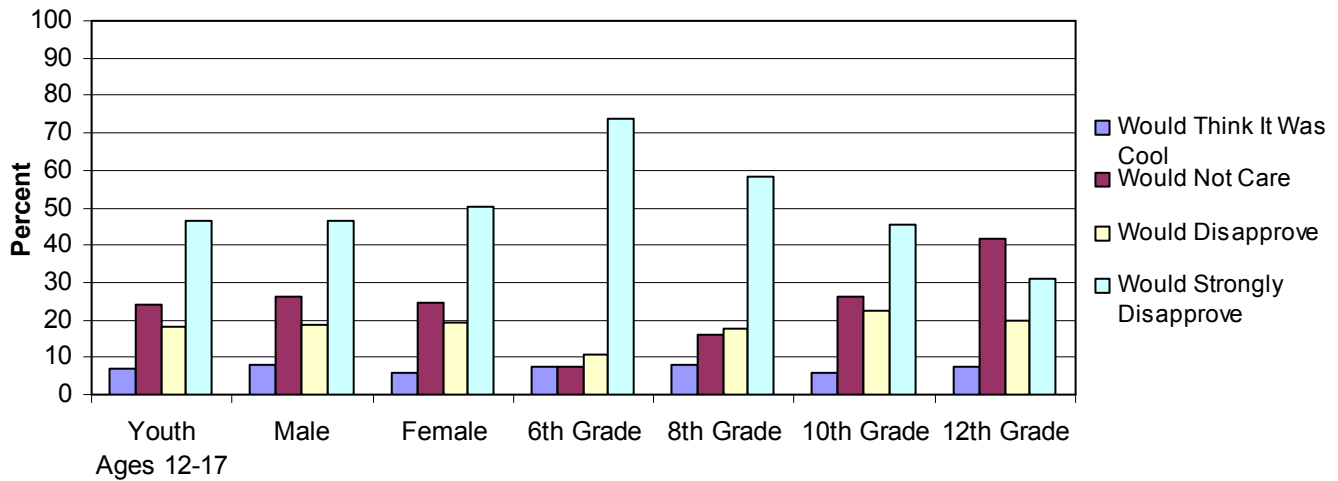
Figure 77. Youth Perceptions of How Their Friends Would Feel About Them Drinking Alcohol Regularly by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure 78, almost 50% of youth reported that their close friends “would strongly disapprove” of them having four or more drinks of alcohol once or twice each weekend. Males and females reported about the same percentage of perceptions of how friends would feel about them having four or more drinks of alcohol once or twice each weekend. Less than 10% of youth in all grade levels reported that their friends “would think it was cool” if they had four or more drinks of alcohol once or twice each weekend.

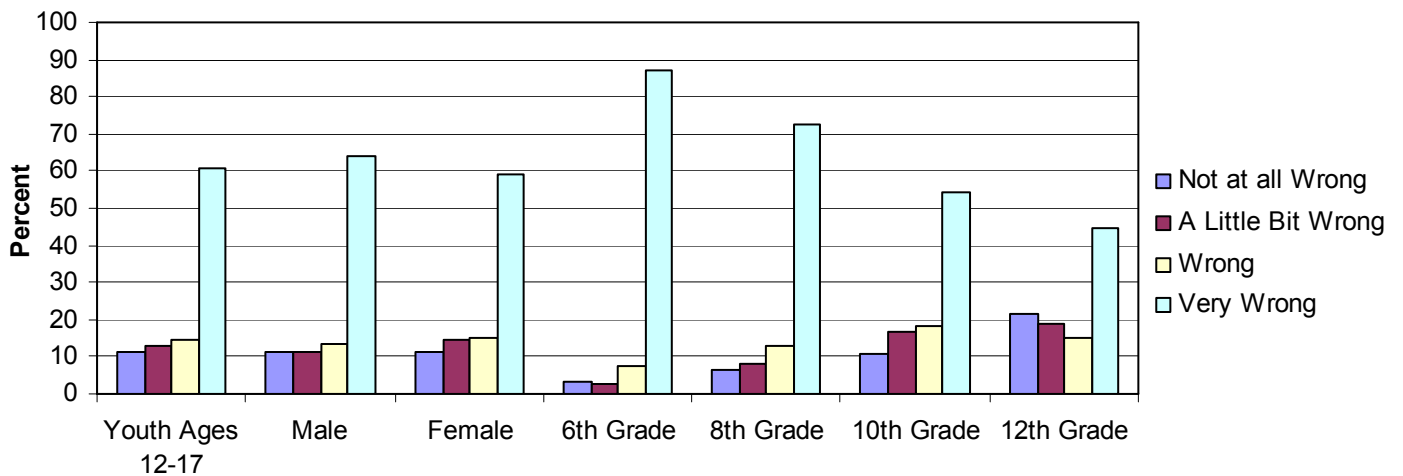
Figure 78. Youth Perceptions of How Their Peers Would Feel About Them Having 4 or More Drinks of Alcohol Once or Twice Each Weekend by Gender and Grade Level



Source: 2007 ATOD survey; Youth Ages 12-17 totals may not add up to 100% due to missing data.

Figure 79 shows that about 60% of youth reported that they think it is “very wrong” for their peers to drink alcohol regularly. Almost 65% of males and 60% of females reported that they think it is “very wrong” for their peers to drink regularly. Youth who reported that their peers would think it was “not at all wrong” for them to drink alcohol regularly was less than 5% in grade 6 and about 20% in grade 12.

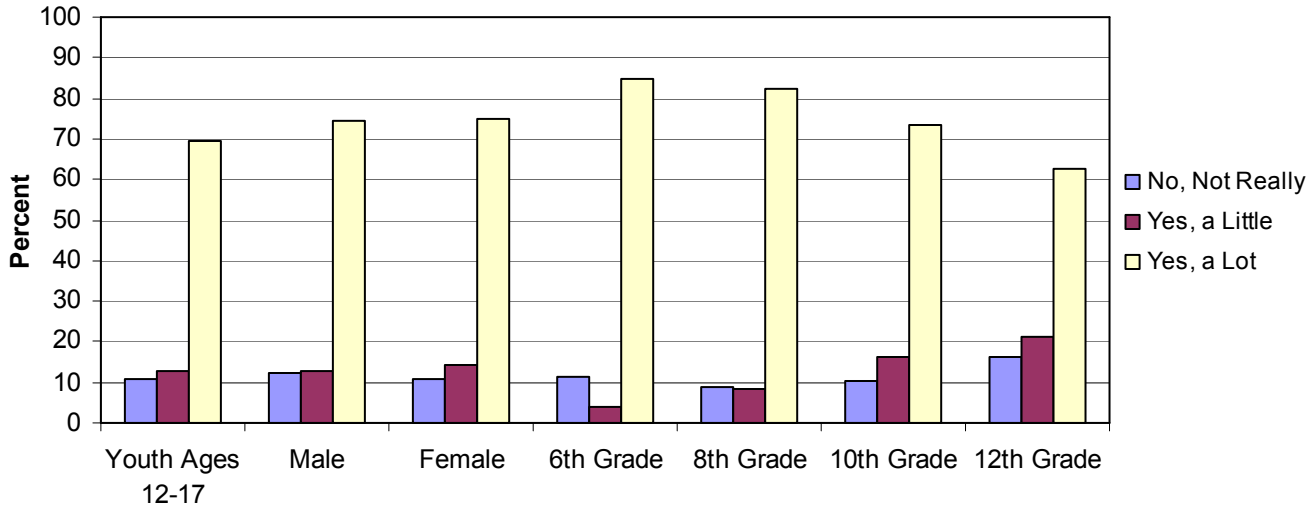
Figure 79. Youth Perceptions of How Their Peers Would Feel About Them Drinking Alcohol Regularly (Once or Twice a Month) by Gender and Grade Level



Source: 2007 ATOD survey; Youth Ages 12-17 totals may not add up to 100% due to missing data.

Figure 80 shows that about 70% of youth ages 12 – 17 reported that they would be in “a lot” of trouble if their parents caught them drinking alcohol. Almost 75% of males and females reported that they would be in “a lot” of trouble if their parents caught them drinking alcohol. Youth in grades 6 and 12 reported the highest percentage that “no, not really” would they be in trouble if they were caught drinking by their parents.

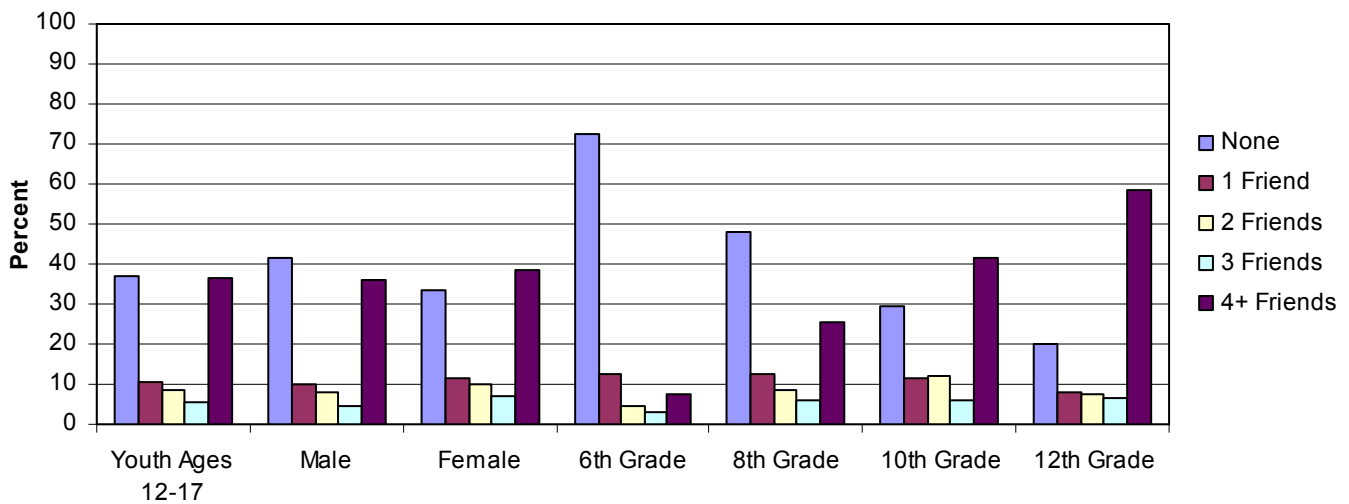
Figure 80. Youth Who Would be in Trouble if Their Parents Caught Them Drinking Alcohol by Gender and Grade Level



Source: 2007 ATOD survey; Youth Ages 12-17 totals may not add up to 100% due to missing data.

As seen in Figure 81, just over 35% of youth reported that “none” of their friends or “4+ friends” tried alcohol without their parents knowing in the past year. Females reported knowing more friends who had tried alcohol without their parents’ knowledge compared to males. The percentage of youth who reported that “none” of their friends had tried alcohol without their parents’ knowledge fell from over 70% in grade 6 to 20% in grade 12.

Figure 81. Youth Who Have Friends That Tried Alcohol without Their Parents’ Knowing in the Past Year by Gender and Grade Level

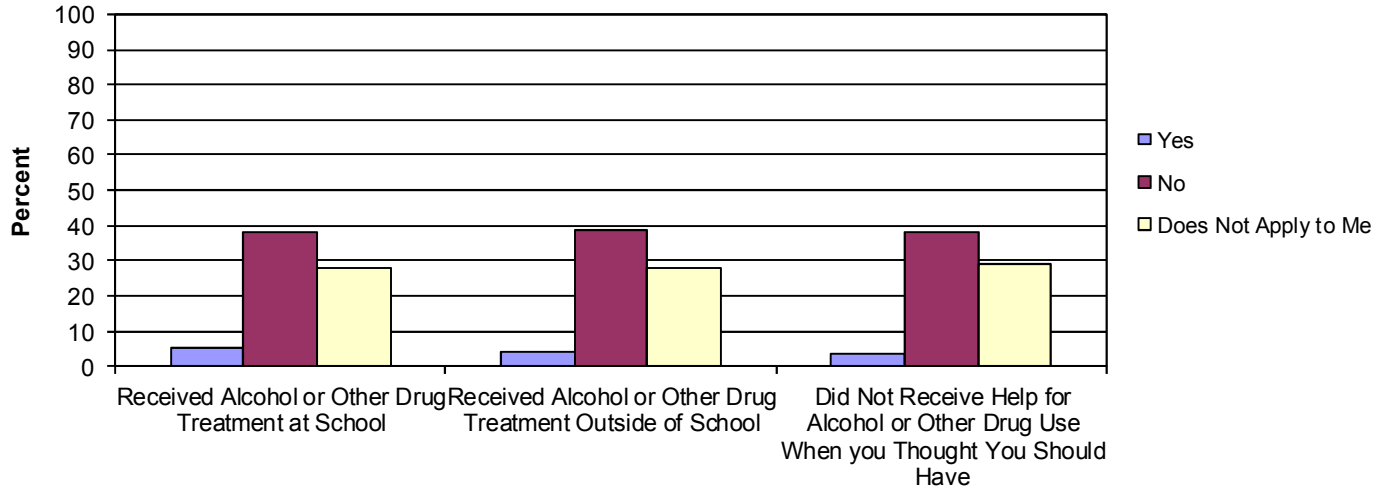


Source: 2007 ATOD survey; Youth Ages 12-17 totals may not add up to 100% due to missing data.

Treatment for Alcohol Use

Figure 82 describes the percentage of youth who received treatment for alcohol or other drug use. About 5% of youth reported “yes” to receiving alcohol treatment at school or outside of school. Also, about 5% of youth reported not receiving treatment for alcohol when they should have.

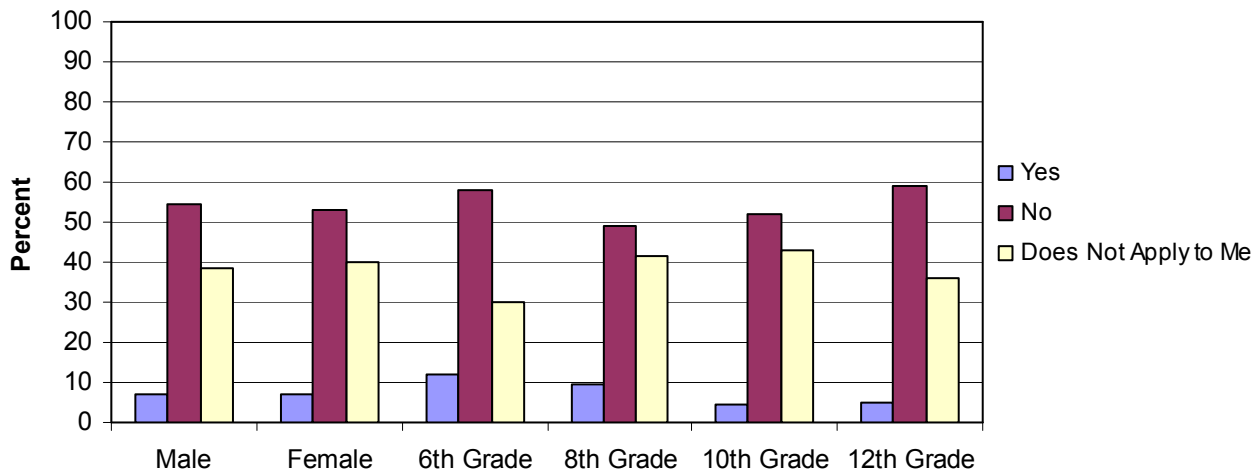
Figure 82. Youth Who Have Received Treatment for Alcohol or Other Drug Use



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

Figure 83 shows that about just over 5% of males and females reported receiving treatment for alcohol or other drug use at school. The percentage of youth who reported “yes” to receiving treatment at school was lower in each higher grade level; over 10% of 6th graders reported doing so.

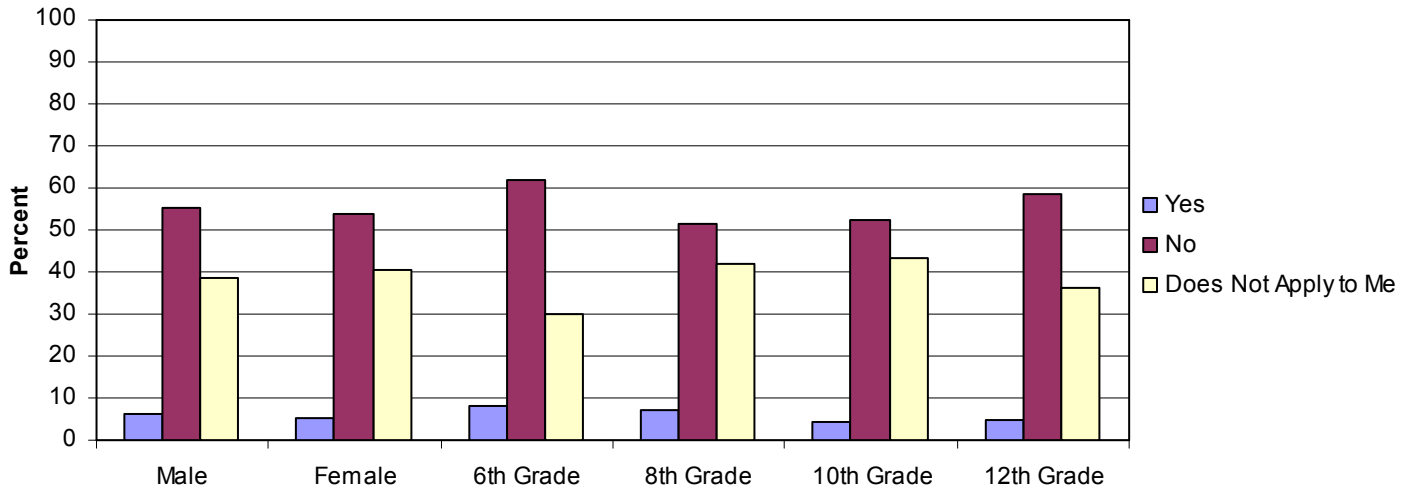
Figure 83. Youth Who Have Received Treatment for Alcohol or Other Drug Use at School by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 84 indicates that over 50% of youth across both genders and all grade levels reported that they did not receive treatment for alcohol or other drug use outside of school. About 5% of males and females and youth across all grade levels reported that they received treatment for alcohol or other drug use outside of school when needed.

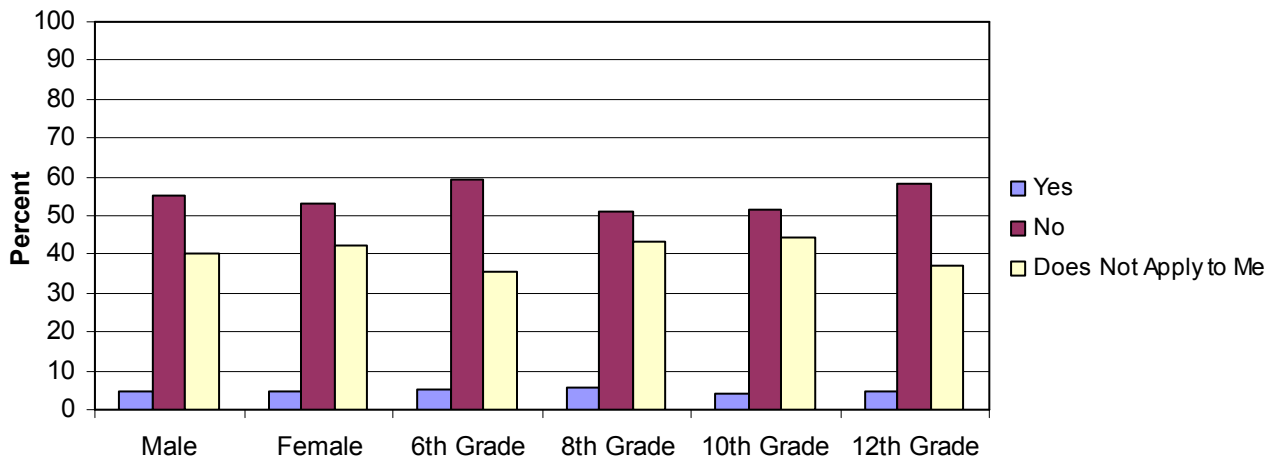
Figure 84. Youth Who Have Received Treatment for Alcohol or Other Drug Use Outside of School When Needed by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure 85, over 50% of males and females and youth across all grade levels reported “no” to receiving help for alcohol or other drug use when they thought that they should have. Less than 10% of youth reported “yes” to receiving help when needed. This should be interpreted with caution, as we do not know if students reported “no” to not receiving help or “no” to not needing help.

Figure 85. Youth Who Did Not Receive Help for Alcohol or Other Drug Use When Needed by Gender and Grade Level

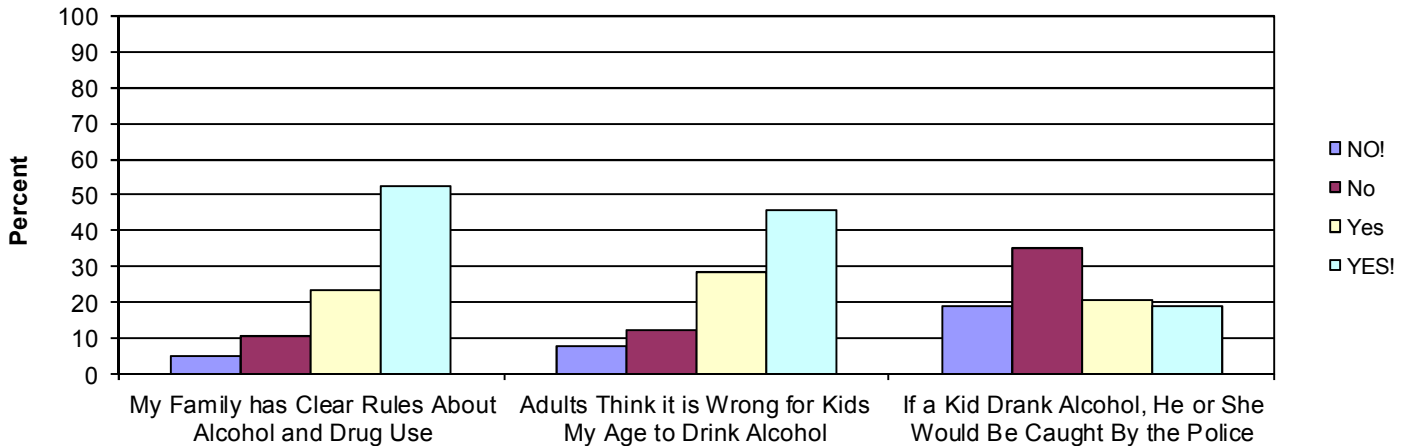


Source: 2007 ATOD survey.

Perceptions and Rules of Alcohol Use

Figure 86 describes the perceptions that youth have about adults' views and rules on underage drinking. Over 70% of youth reported that "YES!" or "yes," their family had clear rules about alcohol and drug use, while about 15% reported that there were no clear rules about drinking. Almost 75% of youth reported "YES!" or "yes," adults think it is wrong for kids their age to drink alcohol, while about 20% of youth reported "No" or "NO!" to the same question. Almost 55% of youth reported "NO!" or "No" that if a kid drank alcohol, he or she would be caught by the police.

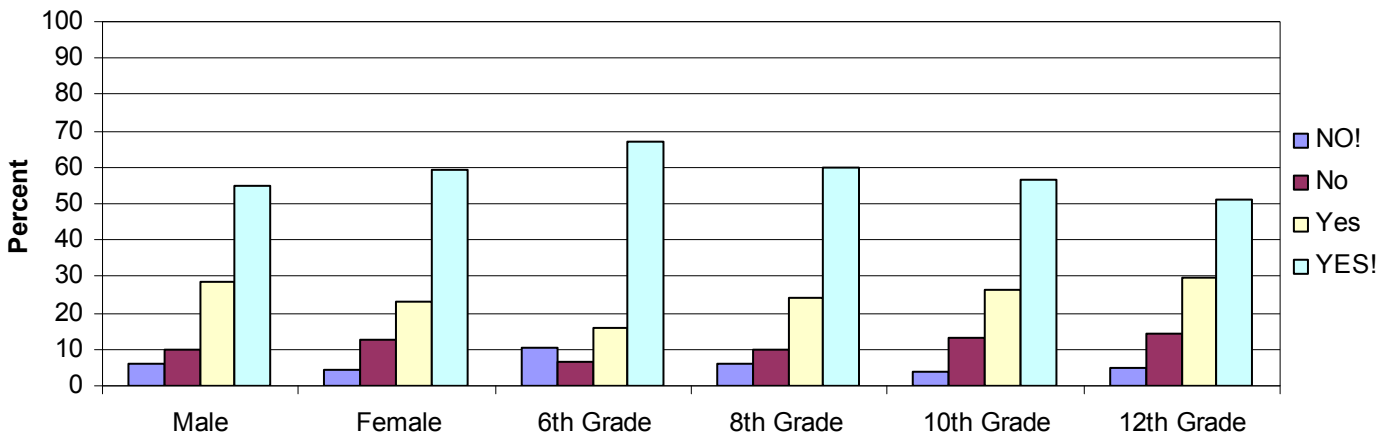
Figure 86. Youth Perceptions and Rules about Drinking Alcohol



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

Figure 87 shows that over 80% of youth across both genders and all grade levels reported "YES!" or "Yes" their family has clear rules about alcohol and drug use. Youth in grade 6 reported the highest percentage of "NO!" their parents did not have clear rules about alcohol use, but also the highest percentage of "YES!" to this question.

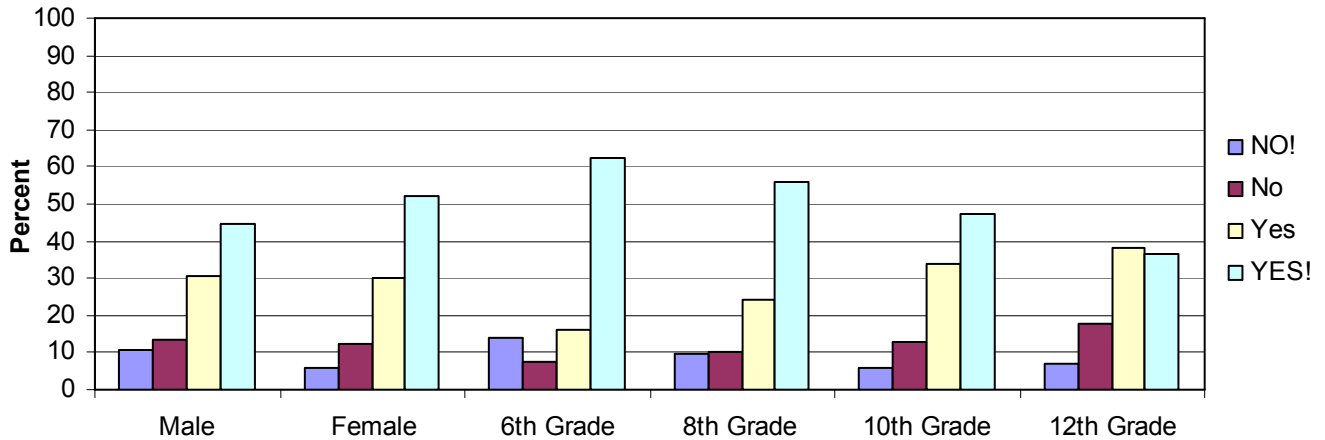
Figure 87. Youth Who Perceive That Their Family has Clear Rules about Alcohol and Drug Use by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure 88, over 70% of males and 80% of females reported “YES!” or “Yes,” adults think it is wrong for kids their age to drink alcohol. About 80% of youth in grades 6-10 reported “YES!” or “Yes,” adults think it is wrong for children their age to drink, while over 25% of 12th graders reported “NO!” or “No” to this question.

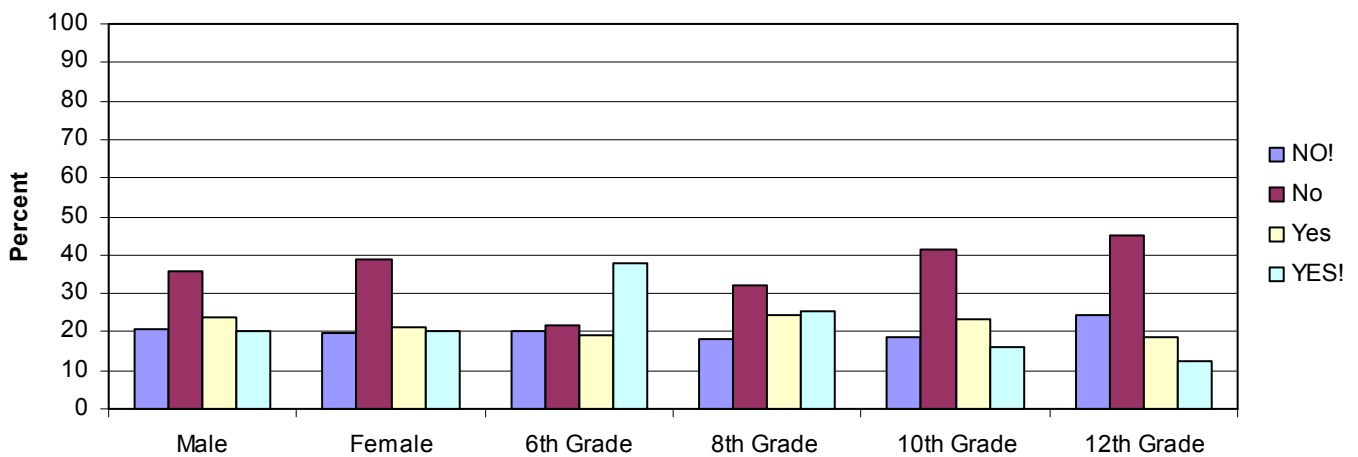
Figure 88. Youth Who Perceive That Adults think it is wrong for Kids Their Age to Drink Alcohol by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 89 shows that about 55% of males and almost 60% females reported “No” or “NO!” when asked if a kid would be caught by police if they drank alcohol. A majority of 6th graders reported “YES!” or “Yes” that they would be caught by the police for drinking alcohol. However, a majority of 8th, 10th and 12th grade students reported “No,” or “NO!” they would not be caught by the police if they drank alcohol.

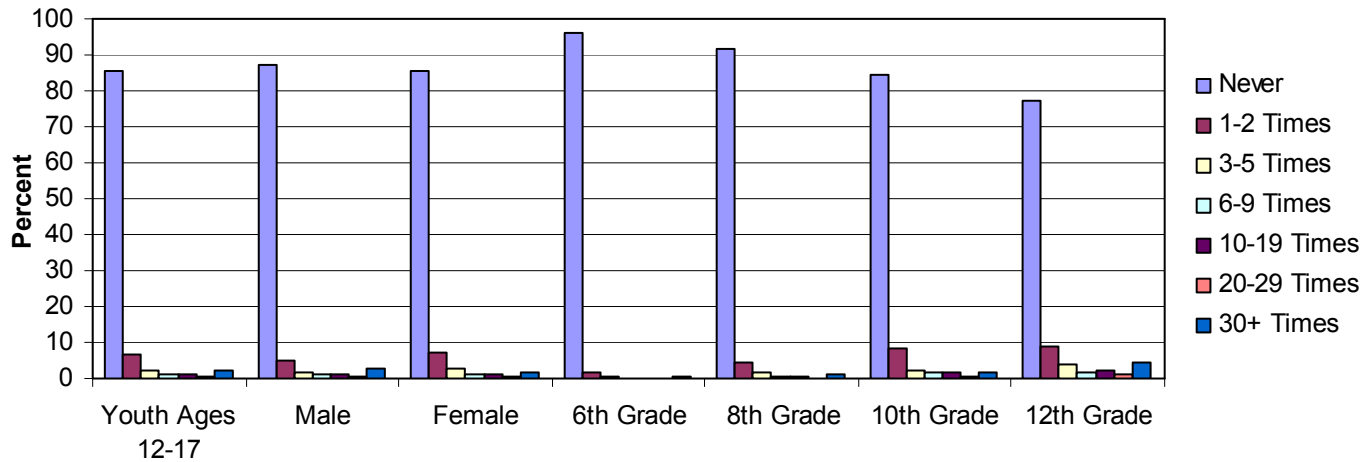
Figure 89. Youth Who Perceive That If a Kid Drank Alcohol, He or She Would Be Caught By Police by Gender and Grade Level



Source: 2007 ATOD survey.

Figure 90 indicates that almost 85% of youth statewide reported that they were “never” drunk or high at school during the past year. About 5% of youth aged 12 - 17 reported that they were drunk or high at school during the past year “1-2 times.” Youth in grades 10 and 12 reported the highest percentage of being drunk or high at school “1-2 times.” About 5% of youth in grade 12 reported they have been high or drunk at school “30+ times” in the past year.

Figure 90. Youth Who Were Drunk or High At School During the Past Year by Gender and Grade Level



Source: 2007 ATOD survey; Youth Ages 12-17 totals may not add up to 100% due to missing data.

Summary

Overall, an increasing trend has been observed in all alcohol related indicators among the middle school students, while a ‘U’ pattern was observed among the high school youth in the YRBS data. The vast majority of indicators had lower percentages of usage in 2007, but then increased in 2009. There was also a distinct pattern when looking at all the indicators broken down by grade levels. Across nearly every indicator, higher grade levels reported poorer results than lower grade levels. Also, females were found to have poorer outcomes over most indicators than males. Regarding ethnicity, Native Hawaiian youth had higher prevalence over most alcohol related indicators than other ethnic groups. Therefore, prevention efforts should focus on the adoption of culturally appropriate programs and implementation of evidence-based curriculums targeting these at risk groups.

APPENDIX A ALCOHOL RISK AND PROTECTIVE FACTORS

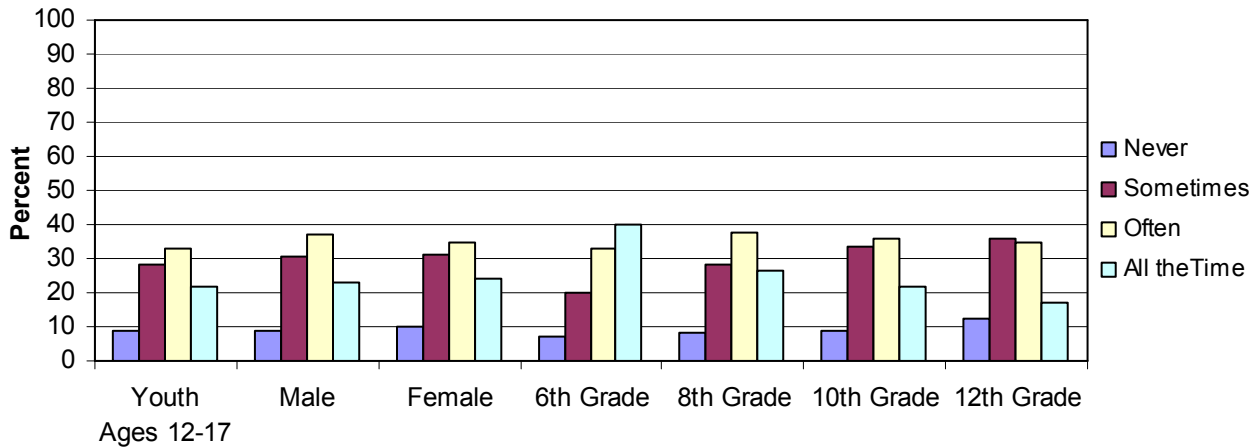
The data in Appendix A are based on the Risk and Protective Factors (RPF) discussed in Table 5 on page xvi and derived from the 2007 Alcohol, Tobacco and Other Drugs (ATOD) survey distributed to youth in grades 6, 8, 10 and 12. The RPF represented here include family, school and community.

Family Protective Factors

Parental Influence on Alcohol Use

As seen in Figure A1, over 30% of youth ages 12-17 reported that their parents “often” tell them that they are doing a good job, and just less than 30% reported that their parents tell them this “sometimes.” Males and females reported similar responses to this question. The percentage of youth who reported that their parents tell them that they are doing a good job “all the time” decreased with grade level, from 40% in the 6th grade to just over 15% in the 12th grade.

Figure A1. Youth Who Report That Their Parents Tell Them That They Are Doing a Good Job



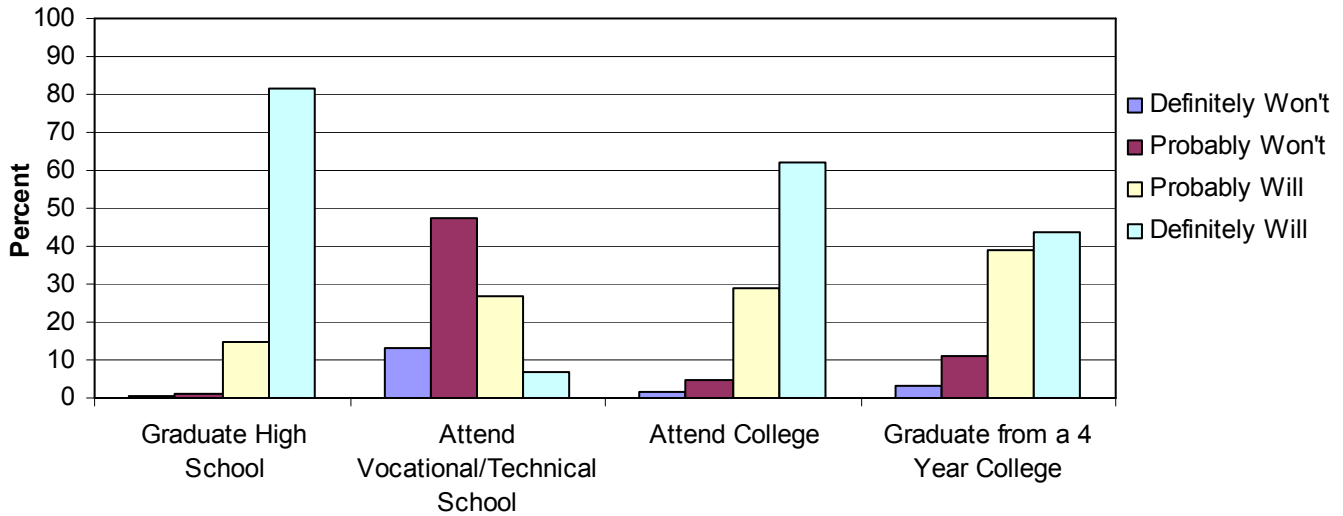
Source: 2007 ATOD survey; Youth Ages 12-17 totals may not add up to 100% due to missing data.

School Protective Factors

Educational Aspirations

Figure A2 reveals that over 80% of youth reported they “definitely will” graduate from high school. Less than 1% reported that they “definitely won’t” or “probably won’t” graduate from high school. Over 45% of youth reported that they “probably won’t” attend vocational or technical school, while almost 30% said they “probably will” attend vocational or technical school. Over 60% of youth reported that they “definitely will” and 30% reported that they “probably will” attend college. Almost 40% of youth reported that they “probably will” graduate from a four-year college, while just over 40% said they “definitely will” graduate from a four-year college.

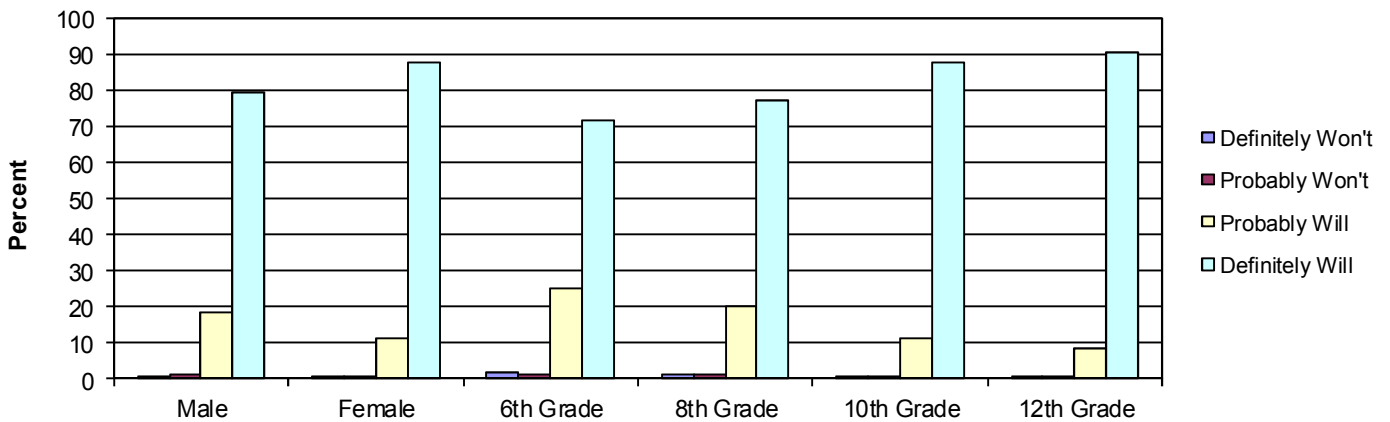
Figure A2. Youth Who Report That They Are Likely to Graduate High School and Attend College



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

Figure A3 shows how likely youth are to graduate from high school. A majority of both males and females reported that they “definitely will” graduate from high school. The percentage of youth who reported that they “definitely will” graduate from high school increases with grade level. Less than 1% of youth across all genders and grade levels reported that they “probably won’t” or “definitely won’t” graduate from high school.

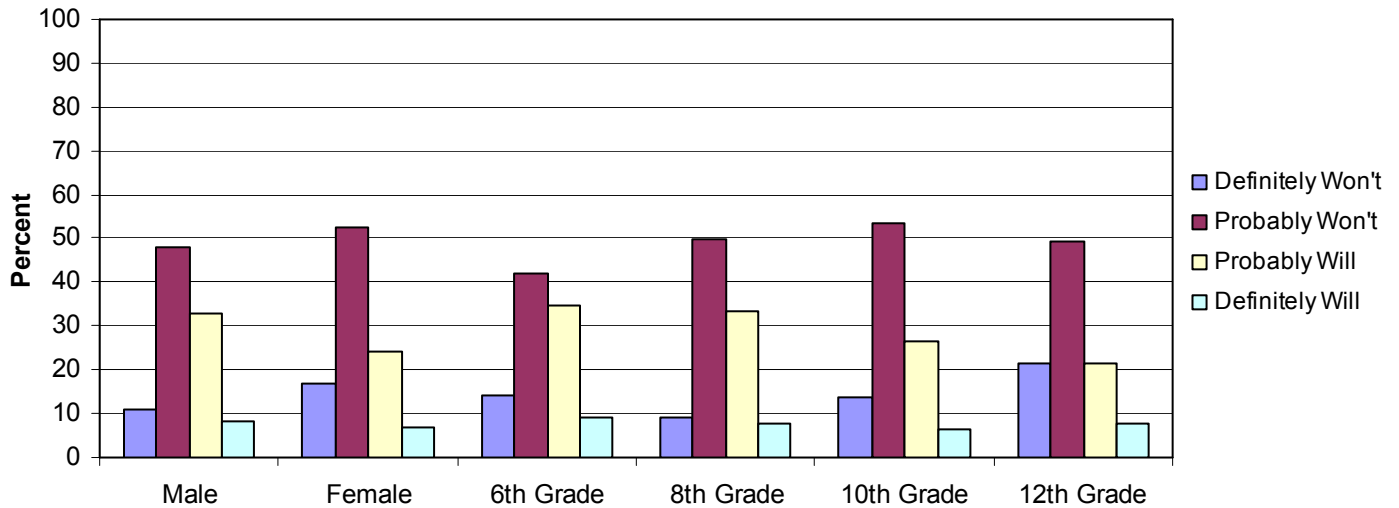
Figure A3. Youth Who Report That They Are Likely to Graduate High School by Gender and Grade Level



Source: 2007 ATOD survey

As seen in Figure A4, the largest percentage of youth across all genders and grade levels reported that they “probably won’t” attend vocational or technical school. More males than females reported that they “probably will” attend vocational or technical school. The percentage of youth reporting that they “probably will” attend a vocational or technical school decreased with grade level.

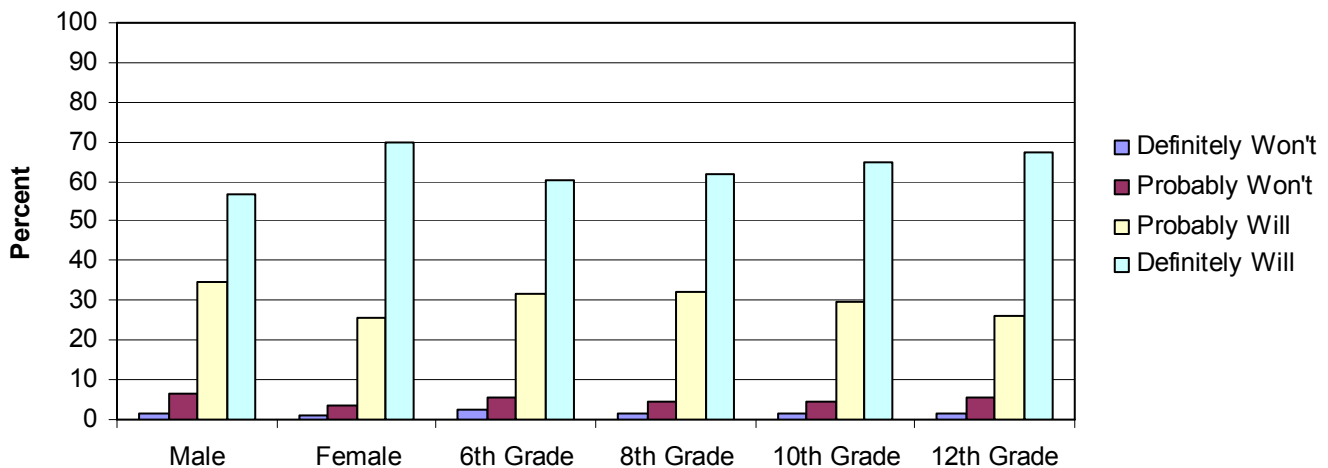
Figure A4. Youth Who Report That They Are Likely to Attend Vocational or Technical School by Gender and Grade Level



Source: 2007 ATOD survey.

Figure A5 shows that a majority of youth across all genders and grade levels “definitely will” attend college. More females than males reported that they “definitely will” attend college (about 70% and 55%, respectively). One percent or less of youth across both genders and all grade levels reported that they “definitely won’t” attend college. The percentage of youth who reported they “definitely will” attend college is slightly higher in each higher grade level.

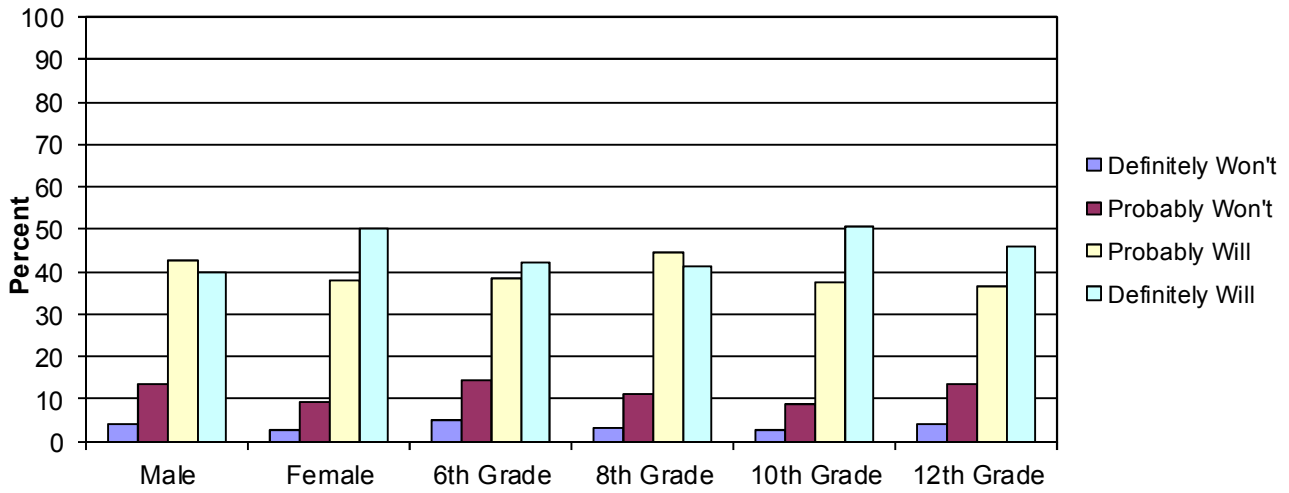
Figure A5. Youth Who Report That They Are Likely to Attend College by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure A6, about 40% of males and 50% of females reported that they “definitely will” graduate from a four-year college. A large majority of youth across all grade levels reported that they “probably will” or “definitely will” graduate from a four-year college.

Figure A6. Youth Who Report That They Are Likely to Graduate from a Four-Year College by Gender and Grade Level

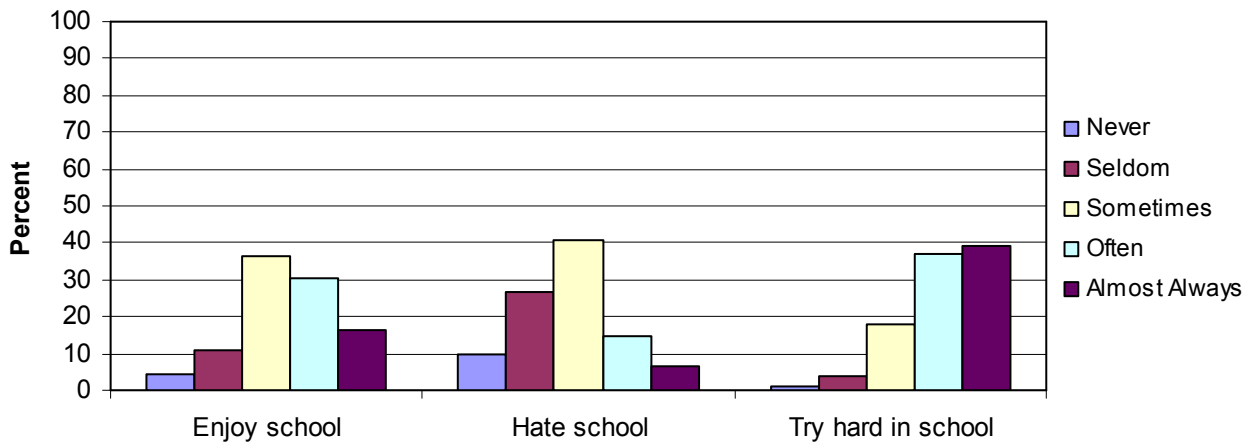


Source: 2007 ATOD survey.

Perceptions about School and Alcohol Use in School

Figure A7 describes youth’s attitudes about school. About 35% of youth reported that they “sometimes” enjoy school, while just about 30% reported that they “often” enjoy school. About 40% of youth reported that they “sometimes hate school” and about 25% reported that they “seldom” hate school. A majority of youth reported that they “often” or “almost always” try hard in school.

Figure A7. Youth’s Attitude Towards School

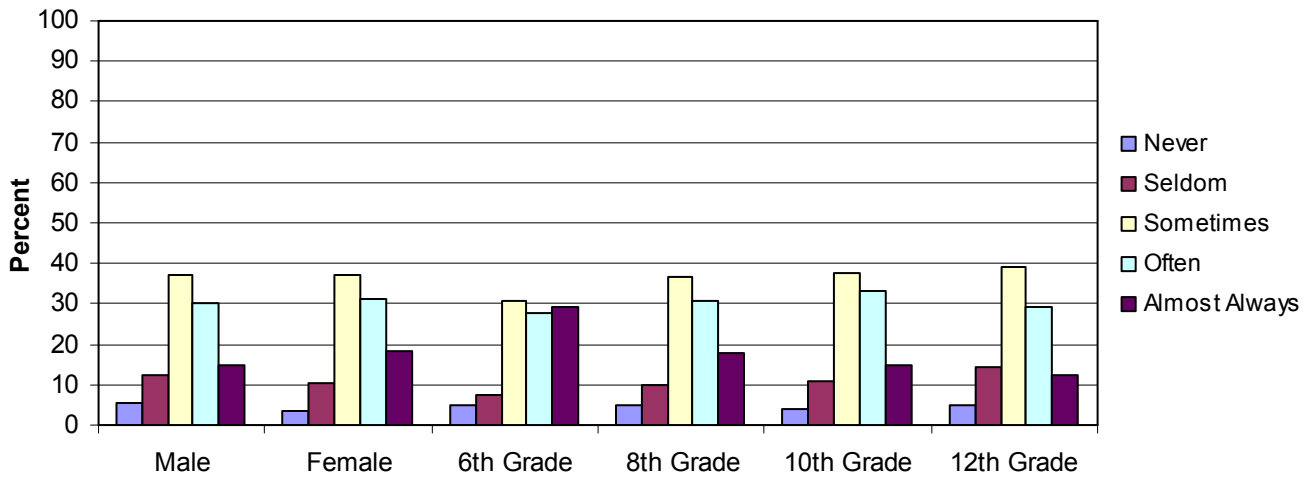


Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

As seen in Figure A8, about 35% of males and females reported that they “sometimes” enjoy school. Slightly more females reported that they “almost always” enjoy school, while slightly more males reported that they “seldom” enjoy school. The largest percentage of students across both genders and all grade levels reported that they “sometimes” enjoy school. The percentage of

students who reported they enjoyed school “almost always” decreased from about 30% in the 6th grade to about 10% in the 12th grade.

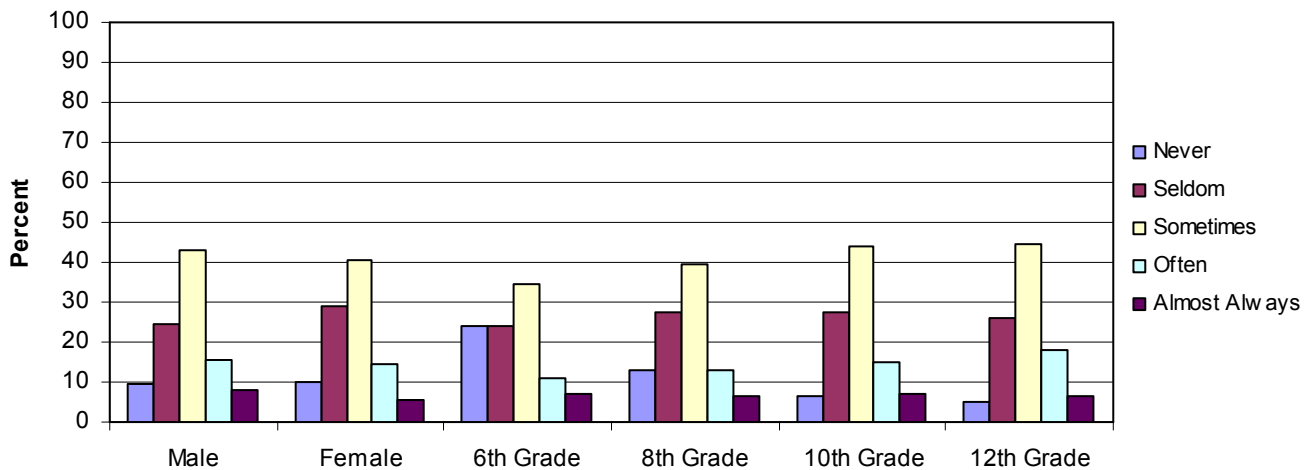
Figure A8. Youth Who Enjoy School by Gender and Grade Level



Source: 2007 ATOD survey.

Figure A9 shows that over 40% of males and females “sometimes” hate school and about 15% “often” hate school. About 30% of females and nearly 25% of males “seldom” hate school. The percentage of youth who “often” hate school increased with grade level, while the percentage of youth who reported that they “never” hate school decreased with grade level.

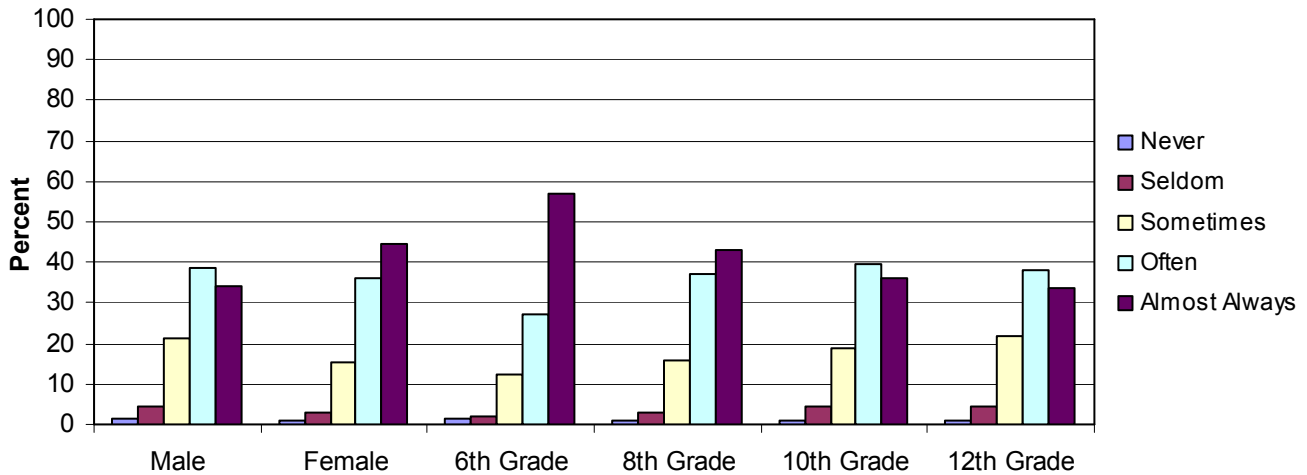
Figure A9. Youth Who Hate School by Gender and Grade Level



Source: 2007 ATOD survey.

As seen in Figure A10, more females than males reported that they “almost always” try hard in school, while more males reported that they “sometimes” try hard in school. The percentage of youth who reported that they “almost always” try hard in school decreased with grade level. Less than 5% of youth across both genders and all grade levels reported that they “never” try hard in school.

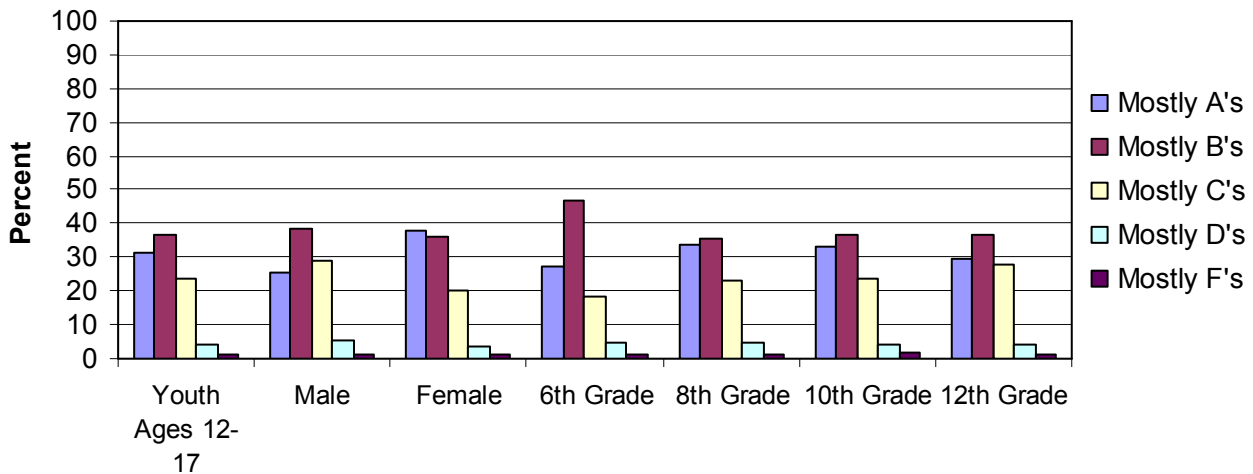
Figure A10. Youth Who Try Hard in School by Gender and Grade Level



Source: 2007 ATOD survey.

Figure A11 shows that just over 35% of youth ages 12-17 received average course grades of “mostly B’s.” More females than males received average course grades of “mostly A’s.” The largest percentage of youth across all grade levels received “mostly B’s” followed by “mostly A’s”. About 5% of youth across both genders and all grade levels reported that they received “mostly D’s.”

Figure A11. Average Course Grades for the Past Year

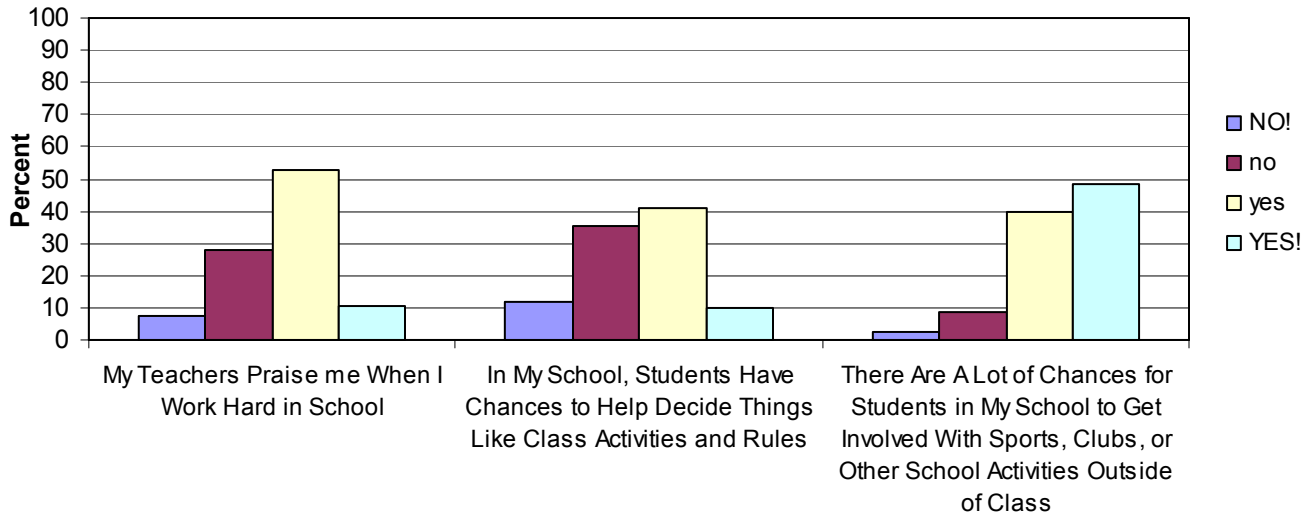


Source: 2007 ATOD survey; Youth Ages 12-17 totals may not add up to 100% due to missing data.

Student Support and Involvement at School

Figure A12 describes support that youth received at school. Over 50% of youth reported that “yes” their teachers praised them when they worked hard. However, almost 30% reported “no” when asked if their teachers praised them when they worked hard in school. Over 40% of youth reported that “yes” they have chances to decide things like class activities and rules. However, about 35% reported “no” when asked this question. Nearly 90% of youth reported “YES!” or “yes” there are a lot of chances for youth to get involved with sports, clubs and other activities outside of class.

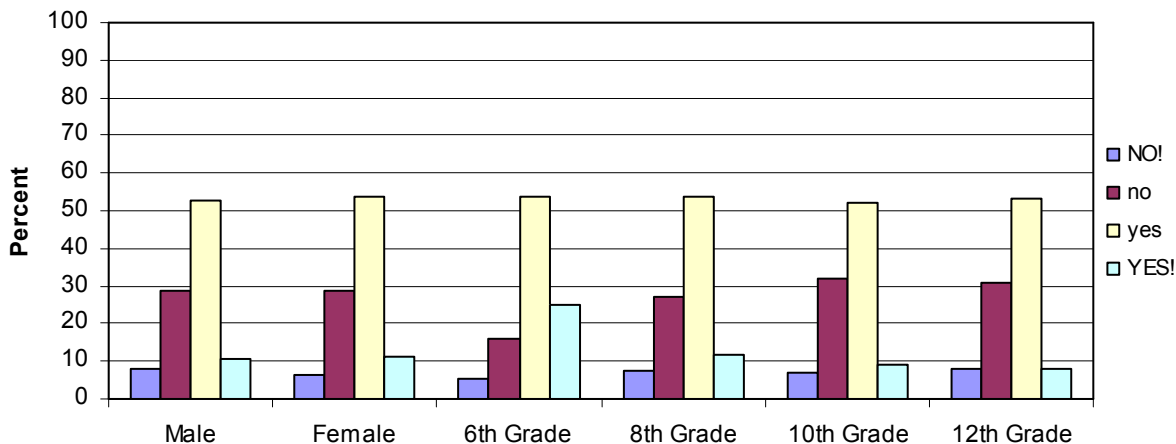
Figure A12. Youth Who Report Receiving Support at School



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

As seen in Figure A13, over 50% of youth across both genders and all grade levels reported that “yes” teachers praise them when they work hard in school. The percentage of youth that reported “no” when asked if their teachers praised them when they work hard in school was higher in each higher grade level.

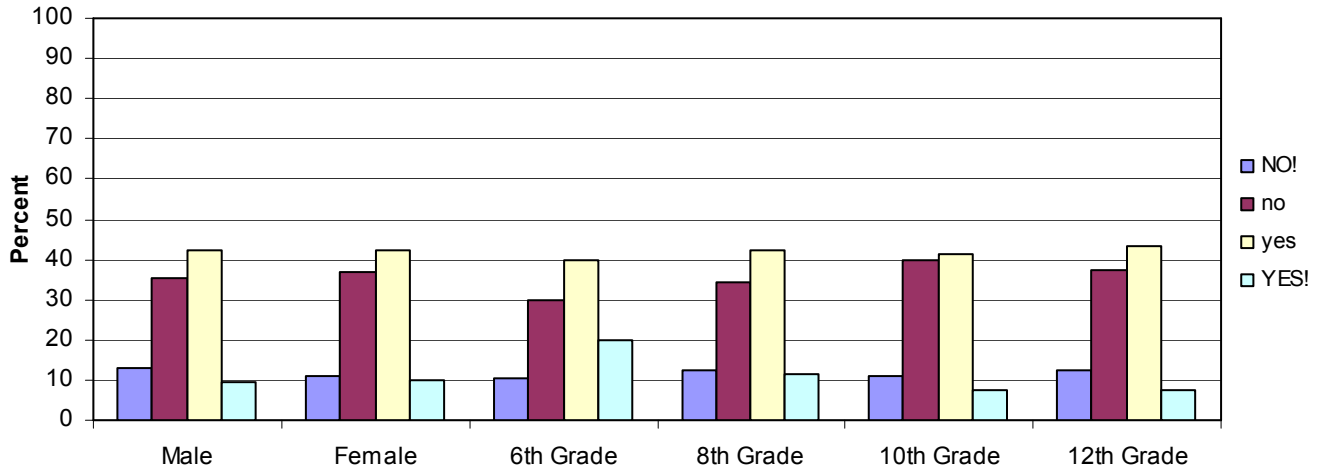
Figure A13. Youth Who Report That Their Teacher’s Praise Youth When They Work Hard in School by Gender and Grade Level



Source: 2007 ATOD survey.

Figure A14 shows youth who reported that they have chances to help decide things like class activities and rules. An average of 40% of youth across both genders and all grade levels reported “yes,” they did have chances to help decide things like class activities and rules, while an average of 35% reported “no” to this.

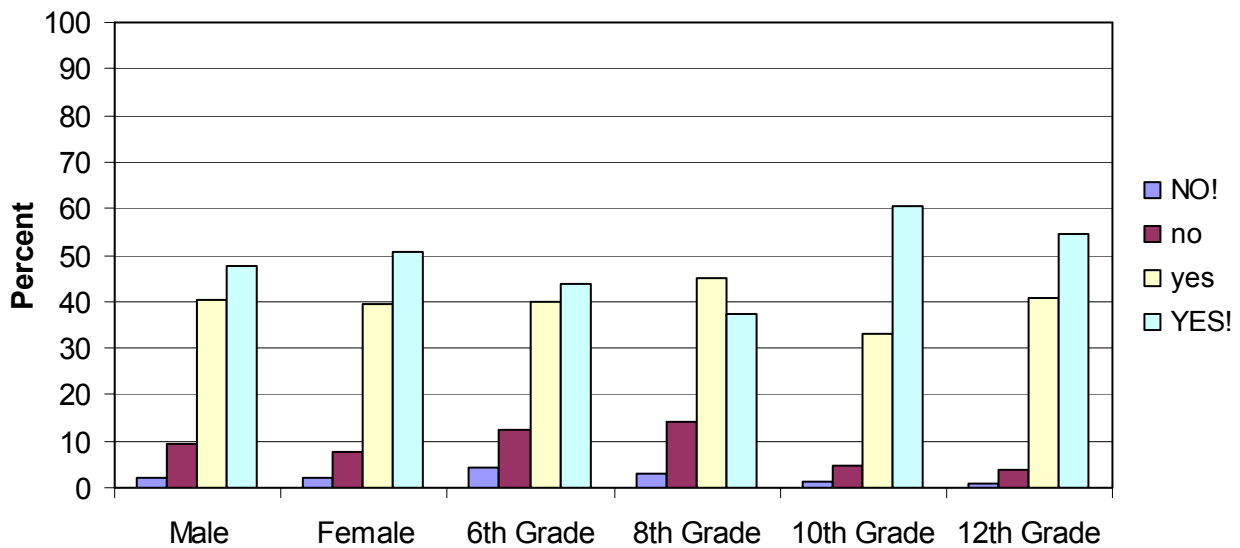
Figure A14. Youth Who Report That They Have Chances to Help Decide Things like Class Activities and Rules by Gender and Grade Level



Source: 2007 ATOD survey.

Figure A15 shows that about 50% of both males and females reported that “YES!” they do have a lot of chances to get involved with sports, clubs or other school activities. Less than 15% reported that they do not have the opportunity to get involved with sports, clubs or other school activities. A majority of youth in all grades reported “YES!” or “yes” there are a lot of chances for students to get involved with sports, clubs or other school activities.

Figure A15. Youth Who Report That There Are A Lot of Chances for Students to Get



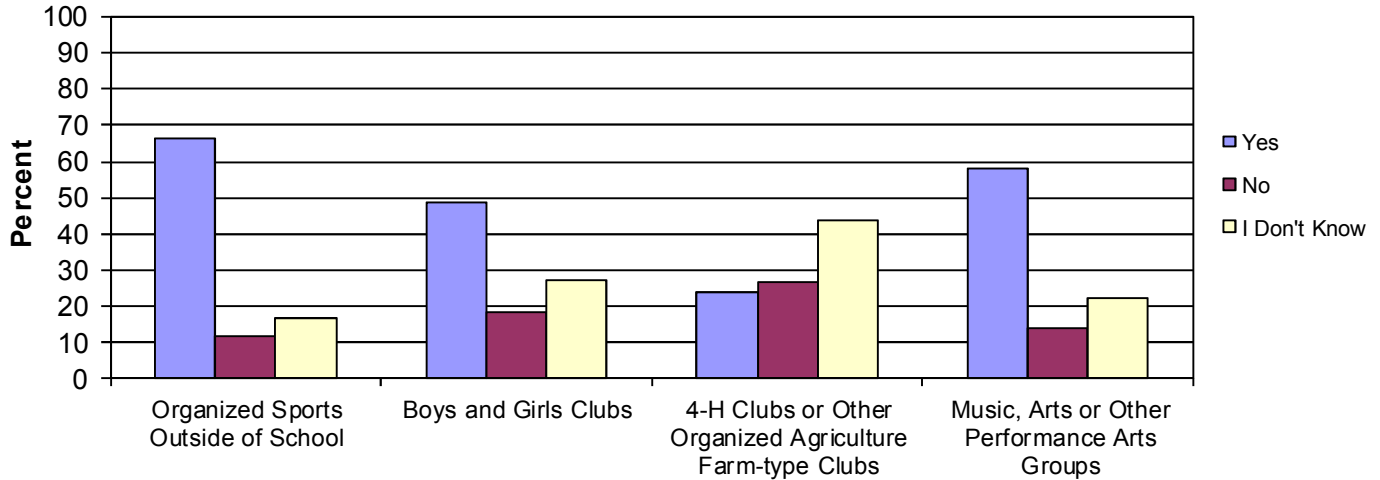
Source: 2007 ATOD survey.

Community Protective Factors

Perceptions about the Community and Alcohol Use in Community

Figure A16 displays youths' perceptions of availability of community activities. About 65% of youth reported "Yes" when asked if there were organized sports outside of school. A majority of youth also reported that there were Boys and Girls Clubs and music, arts or other performing arts groups. Over 40% of youth reported that they did not know if 4-H Clubs or other organized agriculture farm-type clubs are available.

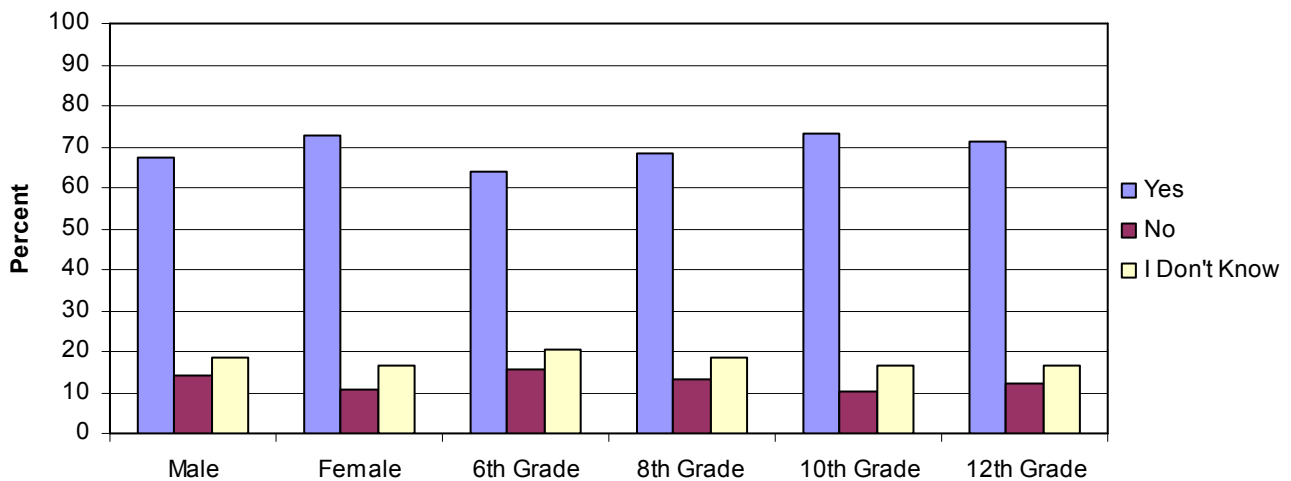
Figure A16. Perceptions of Availability of Community Activities for Youth



Source: 2007 ATOD survey; totals may not add up to 100% due to missing data.

As seen in Figure A17, over 65% of males and 70% females and a majority of youth across all grade levels reported that "Yes" there are organized sports outside of school. About 20% of youth across both genders and all grade levels reported that they did not know if there were organized sports outside of school and between 10 and 15% reported "No" there weren't any.

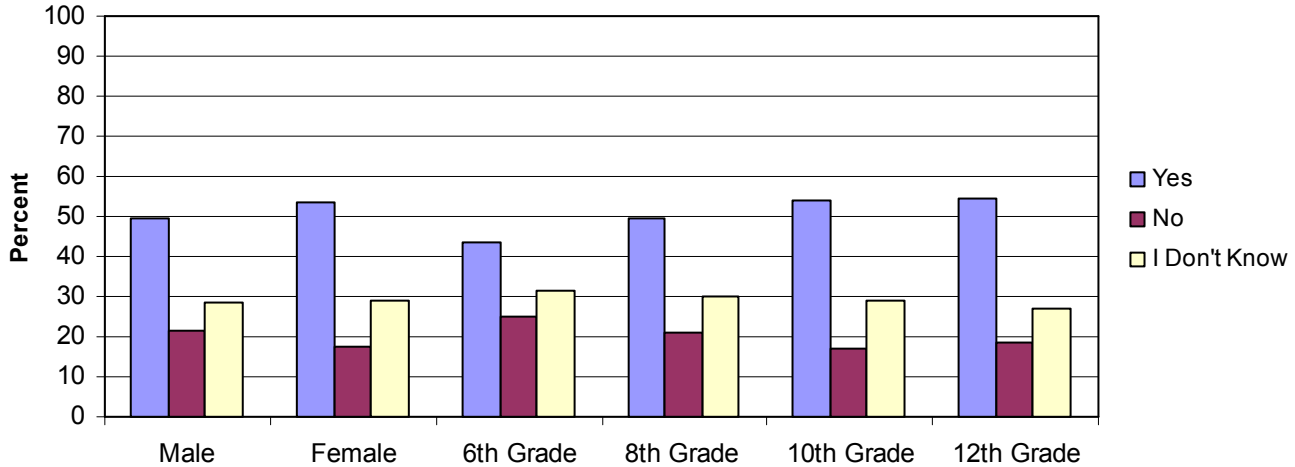
Figure A17. Youth Who Report That There are Organized Sports Outside of School



Source: 2007 ATOD survey.

Figure A18 shows that about 50% of males and females reported that “Yes” there are Boys and Girls Clubs in their community. However, almost 30% did not know if there were any Boys and Girls Clubs in their community. The percentage of youth who reported that “Yes” there are Boys and Girls Clubs in their community was slightly higher in each higher grade level.

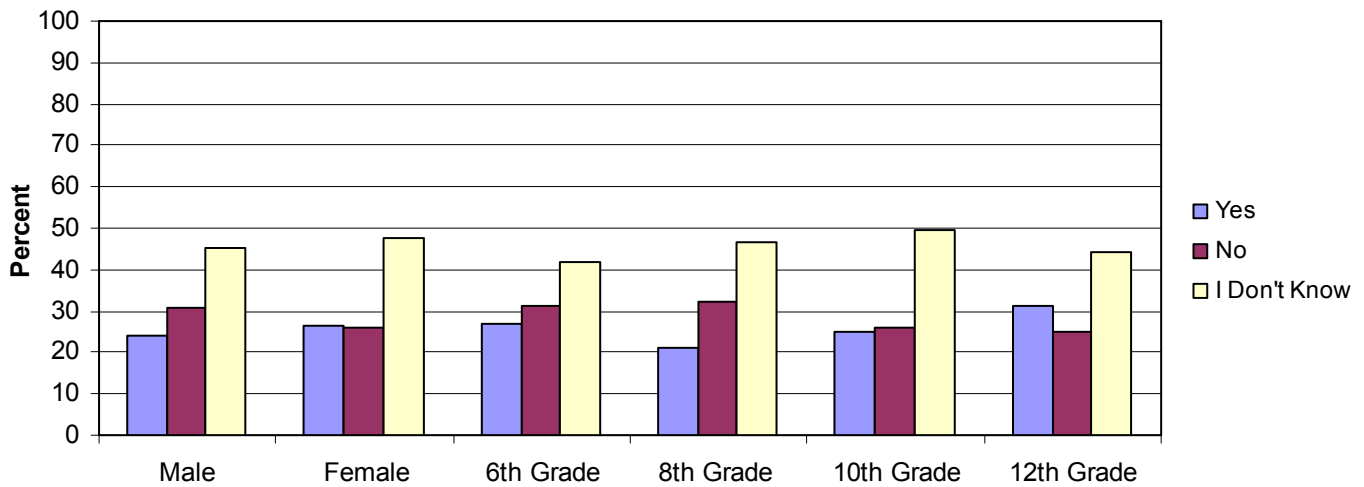
Figure A18. Youth Who Report That There are Boys and Girls Clubs in Their Community



Source: 2007 ATOD survey.

As seen in Figure A19, the largest percentage of youth across both genders and all grade levels reported that they did not know if there were 4-H Clubs or other organized agriculture farm-type clubs in their community. Twelfth graders reported the highest percentage of answering “Yes” when asked if there are 4-H Clubs or other organized agriculture farm-type clubs in their community.

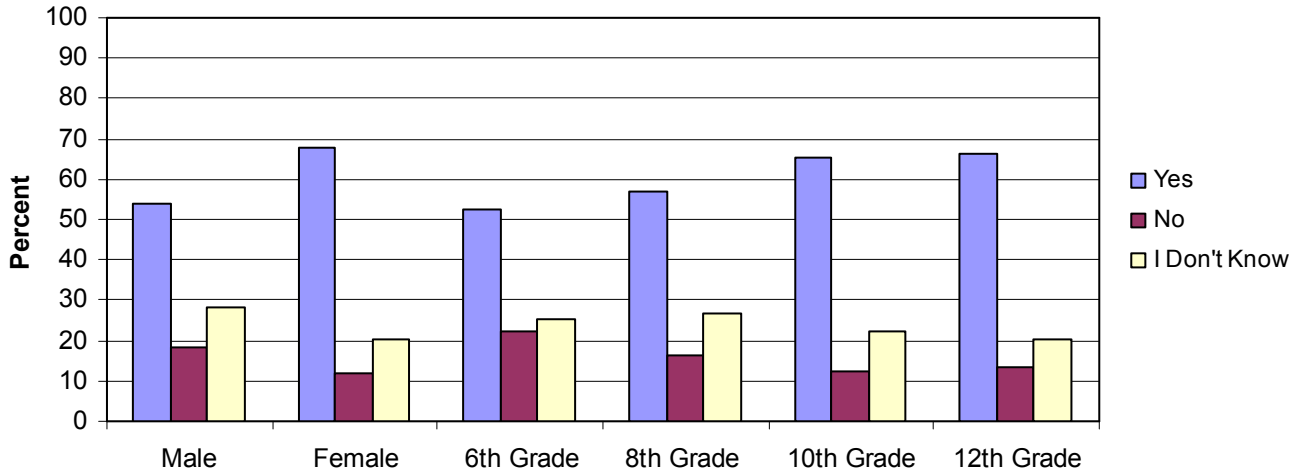
Figure A19. Youth Who Report That There are 4-H Clubs or Other Organized Agriculture Farm-type Clubs in Their Community



Source: 2007 ATOD survey.

As seen in Figure A20, a majority of male and female youth reported that “Yes” there are music, arts or performing arts groups in their community. Slightly more males than females reported “No” or “I Don’t Know” when asked if there is music, arts or performing arts groups in their community. A majority of youth across all grade levels reported that “Yes” there is music, arts or performing arts groups in their community.

Figure A20. Youth Who Report That There are Music, Arts, or Performing Arts Groups in Their Community

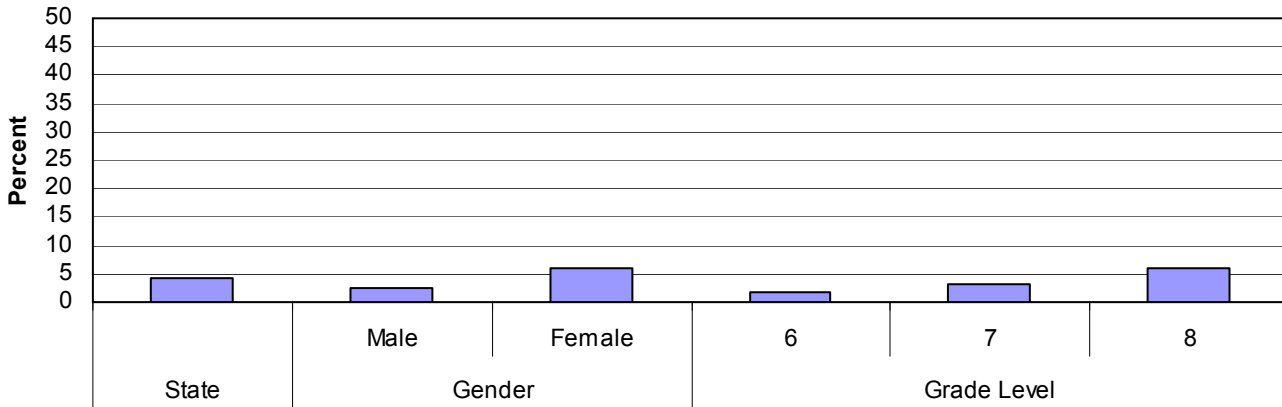


Source: 2007 ATOD survey.

**APPENDIX B
SELECTED 2005 YRBS MIDDLE SCHOOL DATA**

Figure B1 illustrates the percentage of middle school youth who reported binge drinking in 2005. Almost 5% of youth in middle school reported binge drinking. Twice as many females compared to males reported binge drinking. The percentages of binge drinkers increased with grade level.

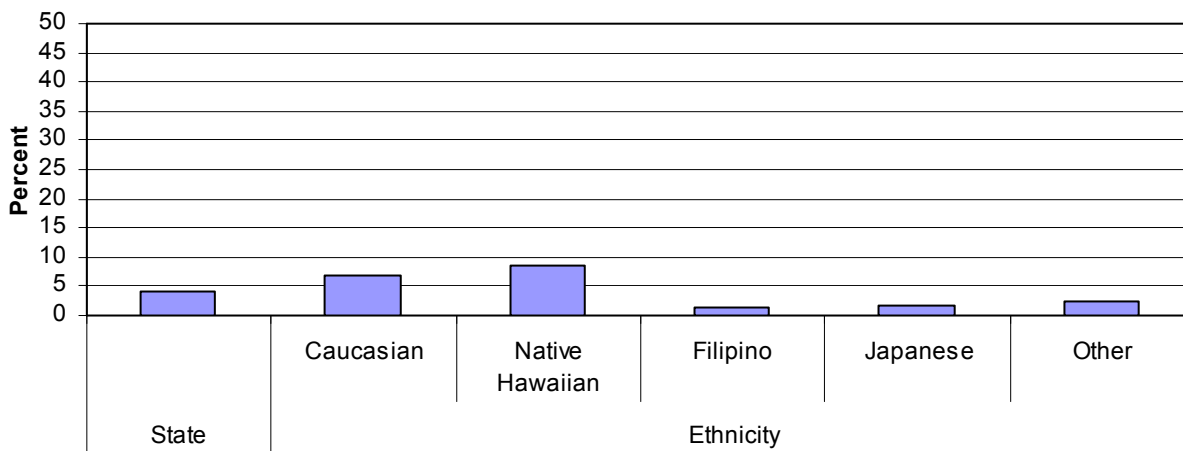
Figure B1. Binge Drinking among Middle School Youth in the Past 30 Days by Gender and Grade Level



Source: 2005 YRBS.
Note: Scale to 50%

As evident in Figure B2, Native Hawaiian youth reported the highest percentage of binge drinking in 2005, followed by closely by Caucasian. Less than 2% of Japanese and Filipino youth reported binge drinking in 2005.

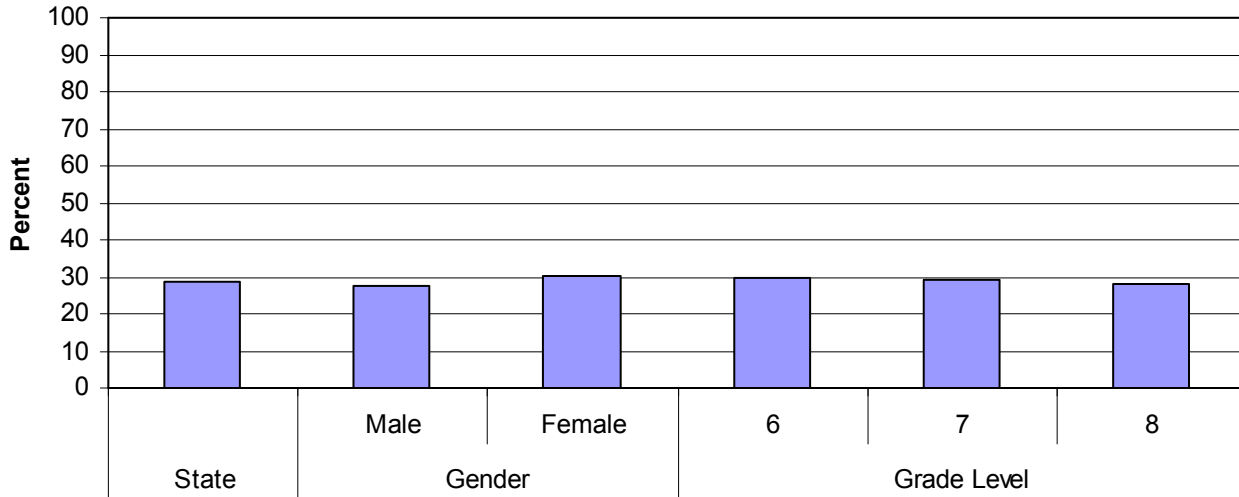
Figure B2. Binge Drinking among Middle School Youth in the Past 30 Days by Ethnicity



Source: 2005 YRBS.
Note: Scale to 50%

Figure B3 displays the percentage of middle school youth who reported being a passenger in a vehicle operated by a person who drank alcohol in the past 30 days in 2005. A slightly higher percentage of females reported being a passenger in a car when a driver drank alcohol compared to males. About 30% of middle school youth in grades 6, 7 and 8 reported riding with someone who had been drinking alcohol.

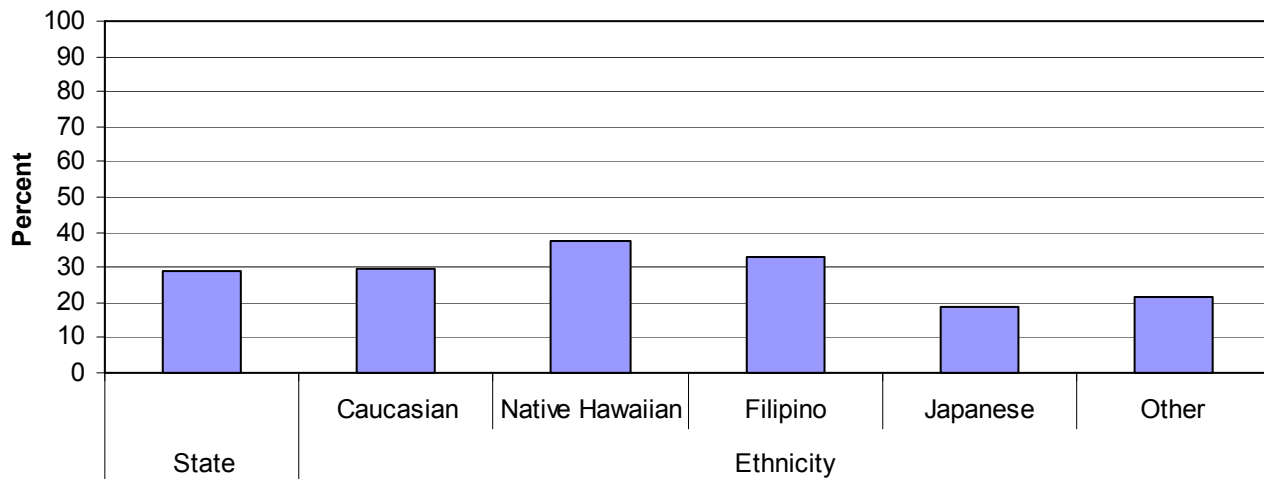
Figure B3 Middle School Youth who have been a Passenger When a Driver Drank Alcohol and Drove in the Past 30 days by Gender and Grade Level



Source: 2005 YRBS.

As evident in Figure B4, Native Hawaiian and Filipino youth have a higher percentage of being a passenger when a driver drank alcohol when compared to the state average of about 30%. Youth of “Other” and Japanese ethnicities reported the lowest percentages of being a passenger in a car when a driver drank alcohol.

Figure B4. Middle School Youth who have been a Passenger When a Driver Drank Alcohol and Drove in the Past 30 days by Ethnicity



Source: 2005 YRBS.

APPENDIX C GLOSSARY OF TERMS

Alcohol Abuse – Occurs when a person's drinking leads to problems, but not physical addiction.¹

Alcohol Dependence - Dependency on alcohol, also known as alcohol addiction and alcoholism, is a chronic disease. The signs and symptoms of alcohol dependence include:¹

- A strong craving for alcohol.
- Continued use despite repeated physical, psychological, or interpersonal problems.
- The inability to limit drinking.

Alcohol Tolerance – Occurs when consumption of a constant amount of alcohol produces a lesser effect or increasing amounts of alcohol are necessary to produce the same effect.²

Alcohol Withdrawals - Symptoms, such as shakiness and rapid emotional changes, that may occur when a person who has been drinking too much alcohol every day suddenly stops drinking alcohol.³

Binge Drinking – Defined by the Youth Risk Behavior Survey as 5 or more drinks on the same occasion for both males and females.

Binge Drinking – Defined by the Alcohol, Tobacco and Other Drug survey as 4 or more drinks on the same occasion for both males and females.

Indicator - A characteristic of an individual, population, or environment which is subject to measurement (directly or indirectly) and can be used to describe one or more aspects of the health of an individual or population (quality, quantity and time).⁴

Prevalence – The percentage of a population that is affected with a particular disease at a given time.⁵

1 Diagnostic and Statistical Manual of Mental Disorders Fourth Edition (DSM-IV), published by the American Psychiatric Association, Washington D.C., 1994.

2 American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*. Washington, DC: the Association, 1994.

3 Schuckit MA. Alcohol-use disorders. *Lancet*. 2009;373:492-501.

4 Definition of Wellness (n.d.). Definition of Health Indicator.

5 Merriam Webster Dictionary (2011). *Definition of prevalence*.