

# SFY 2011 Idaho State & Regional Substance Abuse Prevention Needs Assessment

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## Youth Substance Use in Idaho

Idaho residents use a number of different illicit substances. For Idaho's minor population, these substances include alcohol, smoking and smokeless tobacco, marijuana, cocaine, opiates, depressants, tranquilizers, hallucinogens, inhalants, methamphetamines, ecstasy, steroids, and over-the-counter and prescription medications. According to the Idaho Substance Use, Safety, and School Climate Survey (SUSSCS) administered by the Safe and Drug Free School office of the Idaho Department of Education, the three most common substances used by Idaho's minors are alcohol, tobacco, and marijuana. Of the more than 15,000 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grade respondents to the SUSSCS in 2008, 23.9% reported consuming alcohol in the 30 days prior to the survey. Approximately 11 percent reported using tobacco in the prior 30 days and 8.99% indicated that they had used marijuana in the same time period. Nearly 11% of the respondents reported using two substances in the 30 days prior to the survey. When multiple substances were reported, the most common combinations involved alcohol.

The percentages of respondents reporting 30-day use of the most common substances are shown in Table 1. Because of alcohol's popularity among Idaho's minors and because it was almost always involved if more than one drug was reported, it was used as the primary indicator of substance use and substance abuse prevention need.

Table 1. Reported current substance use by 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grade respondents on the 2008 Idaho Substance Use, Safety, and School Climate Survey

<i>Substance</i>	Percent of respondents reporting use in prior 30 days
Alcohol	24.14% <sup>1</sup>
Tobacco	11.91%
Marijuana	9.90%
Methamphetamines	0.90%
Cocaine	1.53%
Ecstasy	2.12%

## Idaho Trends

Statewide trends in substance use among Idaho teens are tracked by two federal agencies, the Substance Abuse Mental Health Services Administration (SAMHSA) and the Centers for Disease Control and Prevention (CDC). Substance use reported by school-aged youth is also tracked by the Idaho Department of Education. Each of these organizations conducts regular surveys with the goal of measuring substance use by minors. Results from each of these organizations are highlighted below.

<sup>1</sup>These rates represent the simple proportion of SUSSCS respondents reporting use of each substance 30 days prior to completing the survey. These rates are unweighted. Subsequent alcohol use rates discussed later in this report are weighted by population.

## SAMHSA and the National Survey on Drug Use & Health

Annually, SAMHSA conducts the National Survey on Drug Use & Health (NSDUH). Among other issues, the survey gathers data concerning substance use by household members throughout the United States. Starting in 2002, SAMHSA began providing state level estimates of substance use by age group. SAMHSA combines two years of data into a single number and divides the respondents into three categories by age, 12-17, 18-25, and 26 and older. Since 2002, five substance use estimates based on 2002/2003, 2003/2004, 2004/2005, 2005/2006, 2006/2007, 2007/2008 are available. The data in Table 2 show the Idaho NSDUH 30-day substance use rates for individuals 12-17 years old. Over the six year period, reported alcohol and tobacco use has decreased which marijuana use has remained relatively unchanged.

Table 2. Idaho NSDUH 30-day substance use rates for individuals 12-17 years old.

Substance	Survey Years					
	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008
Alcohol	17.37%	17.21%	15.88%	16.14%	14.12%	12.18%
Tobacco	14.70%	14.51%	13.14%	12.45%	11.19%	10.75%
Marijuana	7.92%	7.29%	6.24%	5.91%	6.11%	6.97%

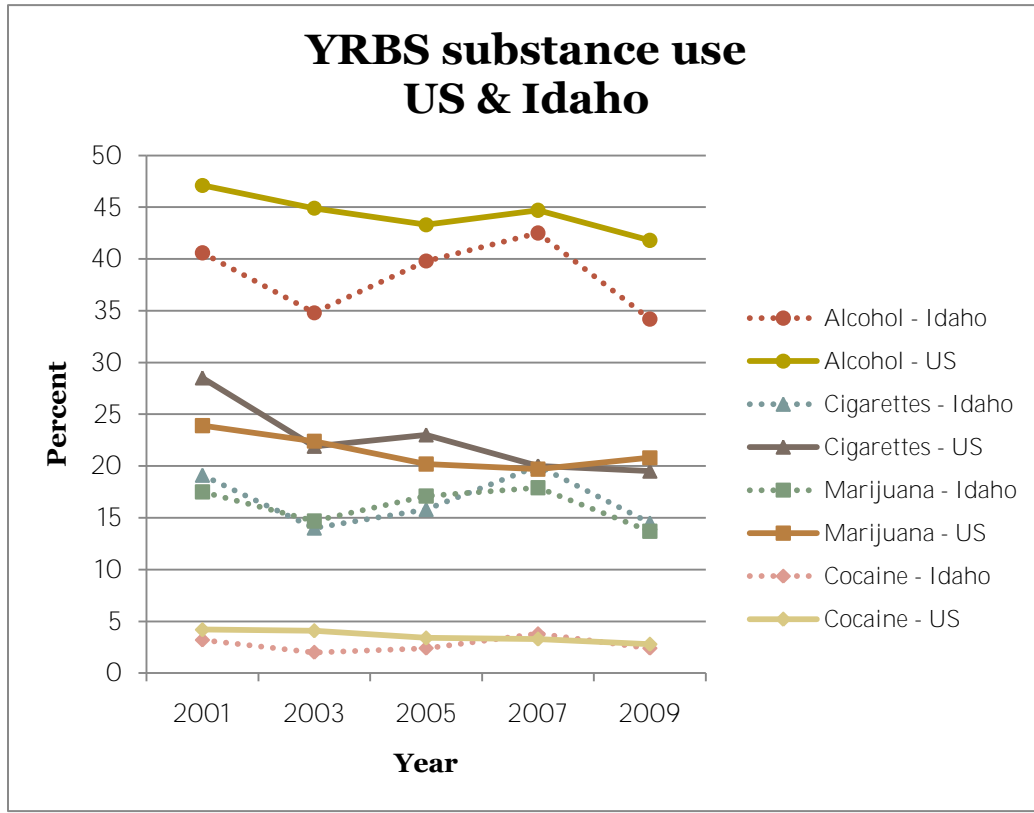
## Centers for Disease Control and the Youth Risk Behavior Survey

The CDC has conducted the national Youth Risk Behavior Survey (YRBS) every other year since 1991. Idaho has participated in the YRBS for a number of years. The YRBS surveys a representative sample of 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> graders and monitors health risk behaviors in six categories:

- tobacco use;
- alcohol and other drug use;
- behaviors that contribute to unintentional injuries and violence;
- sexual behaviors that contribute to unintended pregnancy and STDs, including HIV infection;
- unhealthy dietary behaviors;
- physical inactivity.

The YRBS asks respondents to report if they have used substances in the 30 days prior to completing the survey. Data for Idaho concerning use of substances 30 days prior to the survey are shown in Figure 1. For alcohol, cigarettes and marijuana, the data show Idaho rates converging with the national averages. In the most recent survey year, however, the data show Idaho and national rates diverging.

Figure 1. Idaho and national youth-reported current substance use rates as measured by the YRBS (percent of respondents).

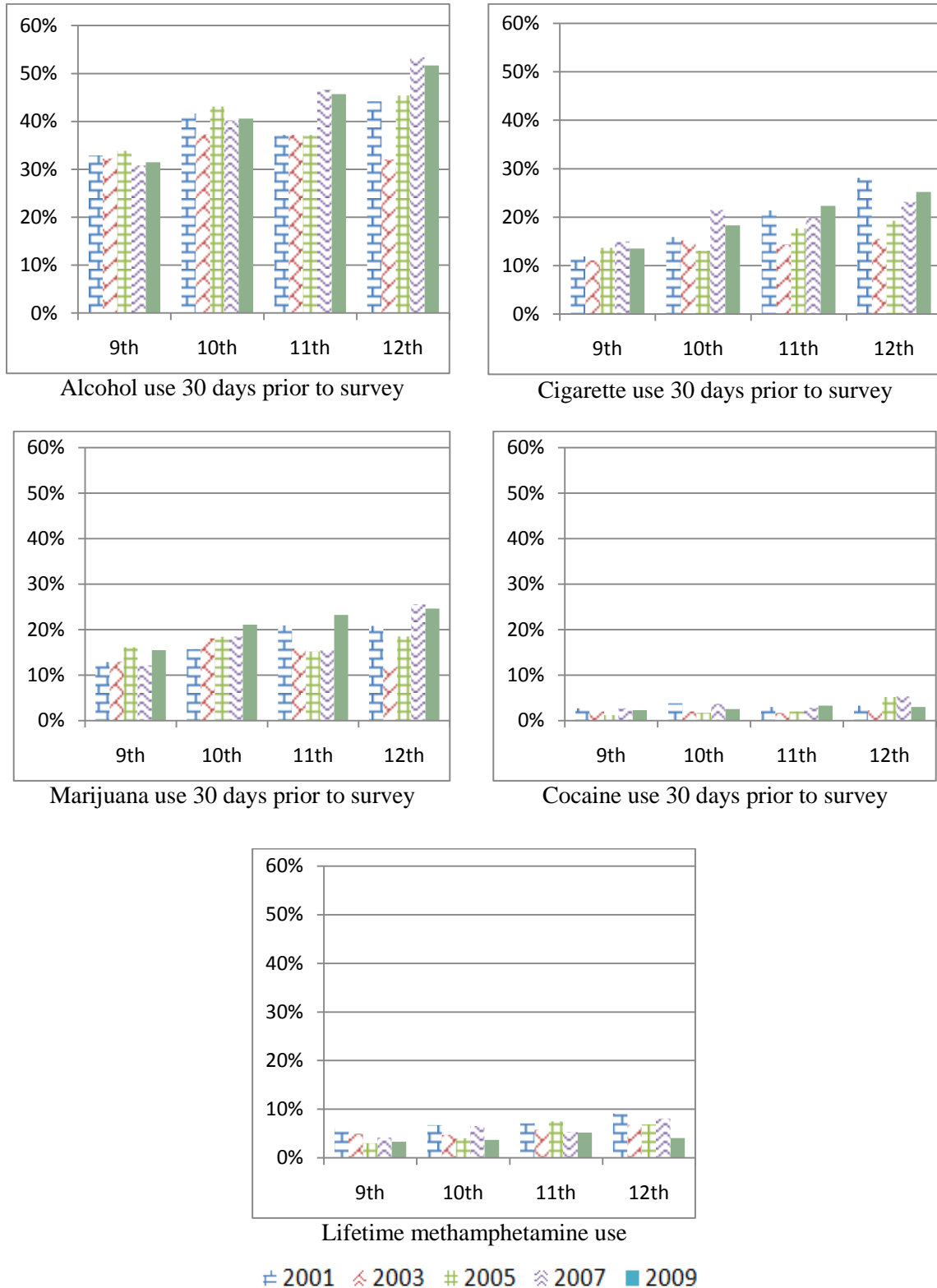


### YRBS Use Rates by Substance and Grade

Figure 2 shows current use of alcohol, cigarettes, marijuana, and cocaine for 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade Idaho students as measured by the YRBS for odd years between 2001 and 2009. The final graph shows lifetime use of methamphetamines. The pattern of use since 2003 is generally consistent for the first four substances, use increases for the higher grades. For alcohol, reported alcohol use by 9<sup>th</sup> and 10<sup>th</sup> graders has remained relatively constant across the four reporting years. For 11<sup>th</sup> and 12<sup>th</sup> graders, however, there was a marked increase in alcohol use in 2007 which diminished only slightly in 2009. Since a low mark in 2003, cigarette use among 11<sup>th</sup> and 12<sup>th</sup> graders has steadily increased. Cigarette use has also increased in the last two survey years for 10<sup>th</sup> graders.

Marijuana use for 11<sup>th</sup> and 12<sup>th</sup> graders in the 2009 survey shows increased use. For 11<sup>th</sup> graders, marijuana use has increased over 5 percent between 2007 and 2009, a trend worth monitoring as marijuana use overall makes greater inroads into general society. Use of cocaine and methamphetamine decreased slowly in the 2009 survey.

Figure 2. Current use of alcohol, cigarettes, marijuana, and cocaine for 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> Idaho students as measured by the YRBS.



## Idaho Substance Use, Safety, and School Climate Survey

The SUSSCS has been administered by the Idaho Department of Education every other year since 1996. As with other substance use surveys, the SUSSCS asks respondents to report their use of substances in the 30 days prior to the survey. Similar to other surveys, alcohol use reported on the SUSSCS co-occurs with and overshadows other substances. Figure 3 shows the percentage of respondents in 2008 who reported alcohol, cigarette, marijuana, cocaine, methamphetamine, and ecstasy use at least once in the 30 days prior to completing the survey (i.e., current users). The graph shows these data for grades 6, 8, 10, and 12 for the last four survey years.

Figure 3. Past 30-day use of alcohol, cigarettes, marijuana, cocaine, methamphetamine and ecstasy for 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> Idaho students as measured by the SUSSCS.

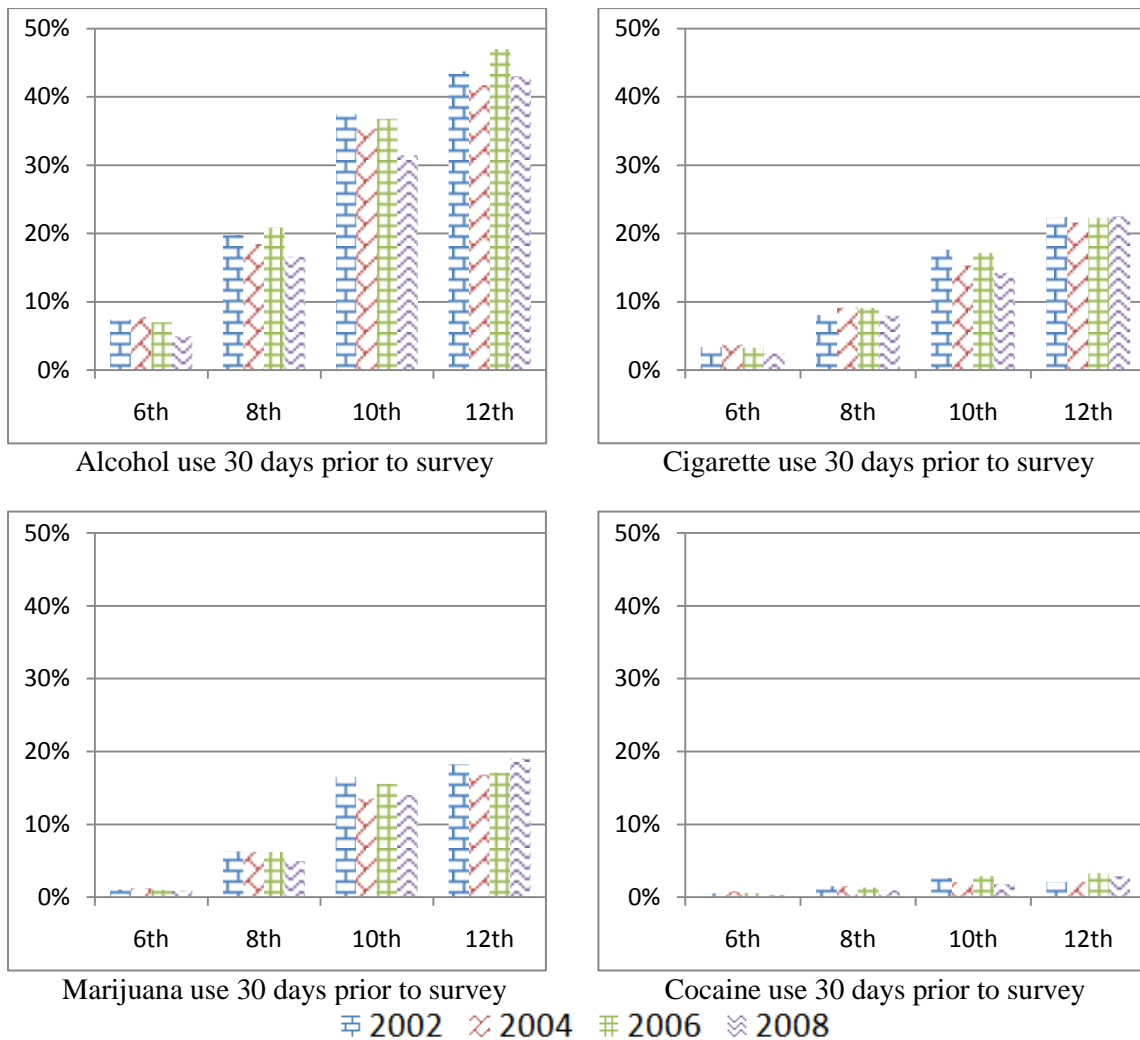
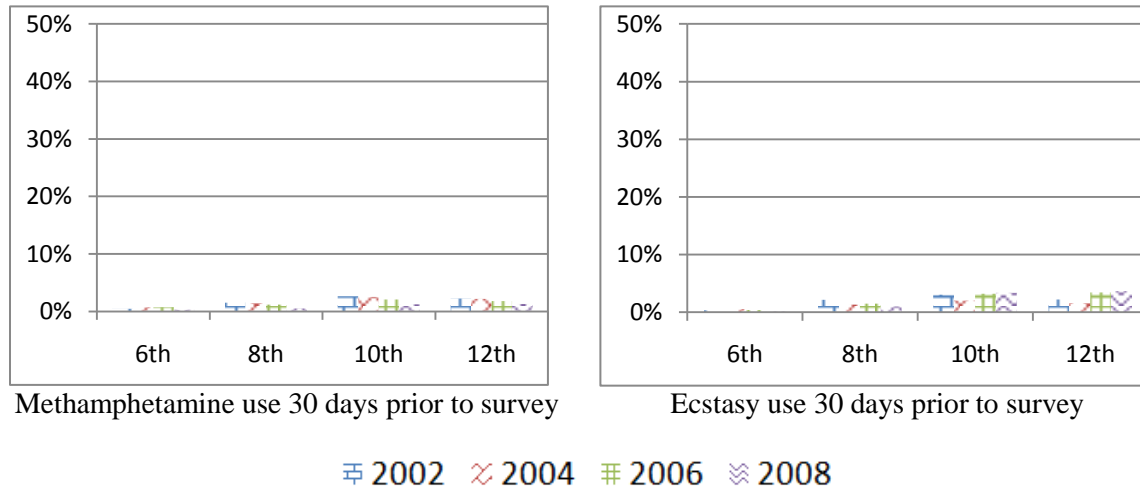


Figure 3, continued.



Looking at the data across grades and survey years, three general conclusions can be drawn: 1) there is a distinct age effect for alcohol, cigarettes, and marijuana. Older students consistently report higher levels of use. 2) Rates across survey years vary, but the two-year averages change little. The absence of differences in averages of two survey years suggests that observed differences in one survey to another might be the result of variability in the data, not to systematic changes in use. 3) Use rates for cocaine, methamphetamine, and Ecstasy remain low and relatively stable.

## Alcohol Use by County

None of the statewide surveys discussed above were designed to provide county level data. Although the SUSSCS surveys a large number of students, its sampling method is not focused at the county level. Another characteristic of the SUSSCS is that it does not consistently sample grades across schools. Although the survey was not specifically designed for a county level analysis, it is the single best source of county level information concerning substance use by Idaho minors. Data from the SUSSCS are used as the basis for county level estimates of alcohol use. This process, however, comes with notable limitations.

### Caveats

Given the repurposing of the SUSSCS data from a school district to a county level, any interpretation must be carefully weighed by the methods used. School district data were averaged into county level estimates of substance use. When viewed at a county level, there were instances of missing data or small sample sizes. When a county datum was missing, it was replaced with the statewide average for that grade. When a sample size was thought to be prohibitively small it was compared to an estimated sample size based upon a predetermined confidence interval. If the sample size did not exceed the estimated sample size, a judgment was made to replace it with the statewide average for that variable. These substitutions were made at the grade and county level. Regrettably, no single method of data substitution was completely satisfactory.

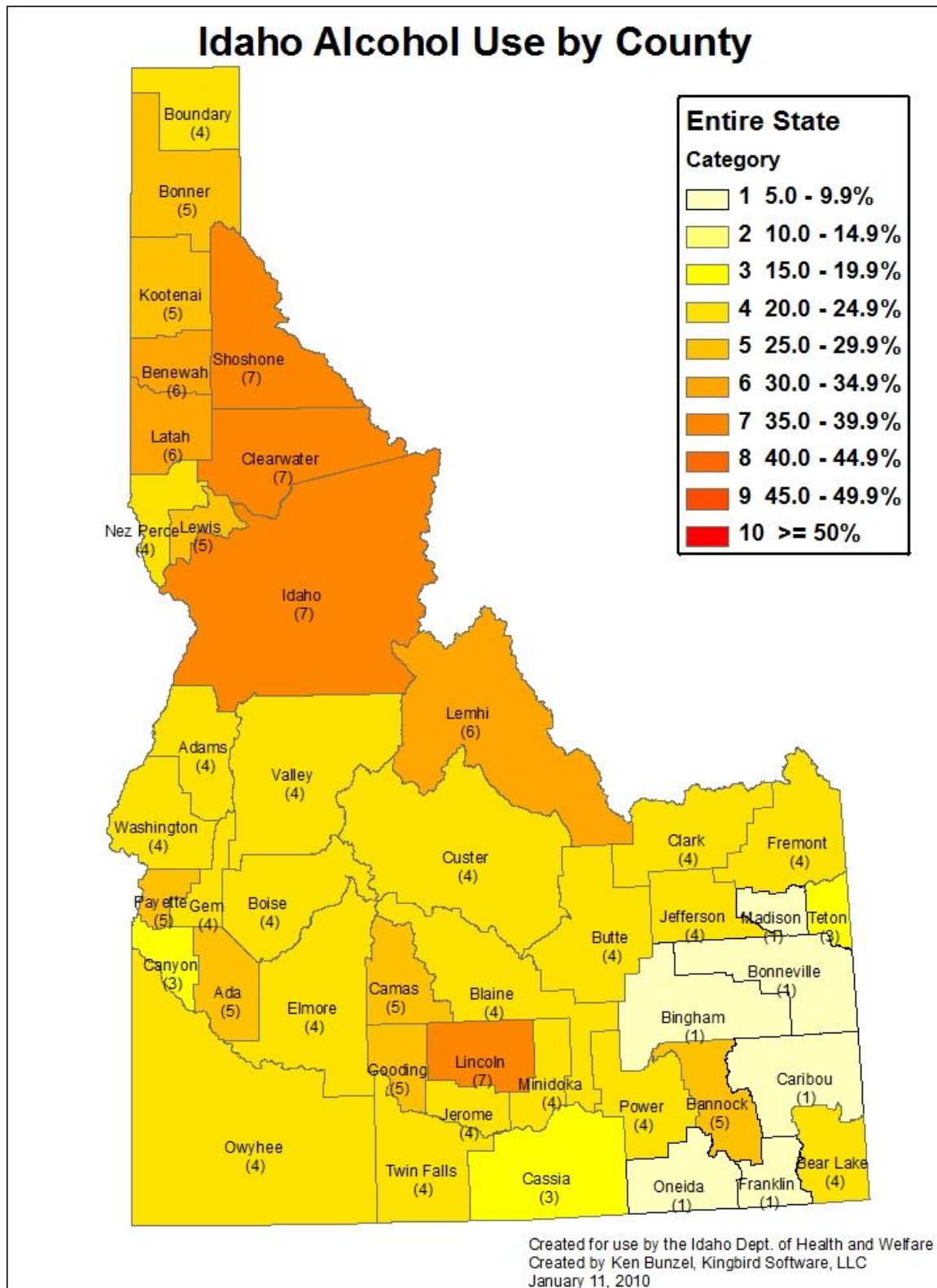
### **SUSSCS Current Alcohol Users**

Responses to the SUSSCS regarding 30-day alcohol use were used to create a statewide metric of substance use (i.e., current alcohol users). A weighted 30-day alcohol use metric was calculated using SUSSCS data and school population data. The resulting variable combined data from all grades surveyed into one measure of alcohol use for each county. It can best be interpreted as the percentage of current alcohol users in the 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grades. As was the case with the YRBS, this weighted 30-day alcohol use variable will be referred to as “current alcohol users.” Not all county and grade combinations were surveyed by the SUSSCS. When missing grade data were encountered, the appropriate statewide average for that grade was used. The data were then summarized by county (see Table 3 and Figure 4). At best, these values should be viewed as rough rankings.

Table 3. Estimated youth alcohol use by county for 2008 SUSSCS survey data sorted from highest to lowest. The statewide average represents the unweighted average of the county use rates.

<i>County</i>	<i>Percent</i>	<i>County</i>	<i>Percent</i>	<i>County</i>	<i>Percent</i>	<i>Count</i>	<i>Percent</i>
Lincoln	39.1%	Camas	26.9%	Power	24.2%	Elmore	22.2%
Clearwater	39.0%	Lewis	26.2%	Boise	24.1%	Fremont	20.8%
Shoshone	36.8%	Ada	25.3%	Nez Perce	23.8%	Canyon	19.3%
Idaho	35.3%	Bannock	25.3%	Blaine	23.5%	Teton	18.8%
Benewah	32.4%	Twin Falls	24.8%	Gem	23.5%	Cassia	16.3%
Latah	31.8%	Adams	24.7%	Minidoka	23.4%	Bingham	14.8%
Lemhi	31.3%	Jerome	24.5%	Boundary	23.2%	Caribou	11.3%
Kootenai	29.7%	Bear Lake	24.3%	Custer	23.2%	Bonneville	10.8%
Bonner	29.1%	Valley	24.3%	Washington	22.8%	Madison	9.1%
Gooding	28.9%	Clark	24.2%	Jefferson	22.7%	Franklin	8.6%
Payette	27.0%	Owyhee	24.2%	Butte	22.5%	Oneida	7.7%
						Statewide Average	23.9%

Figure 4. Percentage of current youth alcohol users by county as derived from the 2008 SUSSCS. The statewide average was 23.9%. Numbers in parentheses indicate the category in the legend.



## **Substance Use Correlates**

Research on adolescent substance use has focused on the relationship between characteristics of individuals and the environments where they live. David Hawkins, Richard Catalano, and Janet Miller reviewed the research literature to identify what they called risk and protective factors. This work was later described in a 1992 book entitled, *Communities that Care: Action for Drug Abuse Prevention*. These factors are divided into four separate categories: Individual/Peer, Family, School, and Community.

A variety of individual/peer, family, school, and community factors were found to be related to substance use by Idaho minors. Variables representing each category of risk and protective factors were obtained and summarized by county. The data were then correlated with current alcohol use. As has been shown in prior research, many of the variables displayed significant correlations.

## **Caveats**

Researchers use a variety of methods to study the relationships between substance use and risk and protective factors. In the ideal cross-sectional study, data from a single point in time would be gathered and analyzed. Although gathering data from a common timeframe is getting easier with time, differences occur. For example, most housing related data were gathered during the 2000 census. Differences in when data are collected should always be considered when interpreting correlations. This consideration goes beyond the inherent limits in correlational research.

As with all correlations, a relationship between two variables does not imply causation. Just because measures of economic deprivation are correlated with current alcohol use, it is not possible to conclude that economic deprivation causes alcohol use. If economic deprivation caused alcohol use among minors, underage drinking should be virtually absent in economically prosperous areas. This however, is not the case. It is also important to consider that the risk and protective factors are not mutually exclusive. It is likely that variables within any category will themselves be highly correlated. Although several community variables are correlated with current alcohol use, one should not conclude that these variables represent unique aspects of the community.

The risk and protective factor model common in the prevention literature was used to identify potential individual/peer, family, school and community data that might be correlated and therefore shed light on alcohol use by Idaho minors. Every reasonable effort was taken to find data representing the separate risk and protective factors categories. In some instances the available data matched a category well. In others, however, the categorization was not as clear. In these cases, the researchers placed the data in the category where it had the greatest consistency and meaning.

Finally, a variety of risk and protective factor variables, although correlated with youth reported alcohol use, cannot be readily influenced by substance abuse prevention services. The county birth rate is a prime example. For Idaho counties, county birth rates are significantly correlated with current alcohol use among respondents to the SUSSCS: as the birth rate in a county rises, youth reported alcohol use decreases. Substance abuse prevention services cannot directly influence the birth rate. However, the correlation between these two variables may reflect characteristics that might be amenable to prevention services.

## **Analysis Method**

The SUSSCS contains many survey items regarding school climate and substance use. In an effort to reduce the number of individual data points, data from related or similar survey items were combined using factor analysis. Factor analysis is a data reduction technique that groups related survey items into common factors. The resulting factors are then interpreted and factor scores are created. For example, multiple survey items looking at student perception of drug availability would naturally cluster together because they examine different aspects of the same underlying factor.

The risk and protective factor data and the newly created factors from the SUSSCS were correlated with the current alcohol use data created from the SUSSCS at the county level. The data were not correlated at the region level because of the small number of counties in each region. The correlations are presented without considering how one risk or protective factor might be related to any of the others. A positive correlation shows a relationship where as one measure increases, the other measure also increases. For example, in Table 4, Trouble or Arrests Caused by Substance Use has a positive correlation with current alcohol use: as youth alcohol use increases, so does the trouble caused by teen substance use. A negative correlation shows a relationship where as one measure increases, the other measure decreases. In Table 4, Student Perception of Substance Use Harm is negatively correlated with current alcohol use. As student perception of harm increases, alcohol use goes down.

## **Factor Correlates**

### **Individual/Peer Factors**

Ten variables within this category were significantly correlated with the 2008 current youth alcohol use measure. Table 4 shows the correlations between individual/peer factors and current alcohol use.

Table 4. Correlations between individual/peer factors and current alcohol use.

County Level Variables	Correlation	County Level Variables	Correlation
Disapproval of substance use by others	-.74	Substance Use by Friends	.79
Trouble or Arrests Caused by Substance Use	.55	Driving While Impaired or Riding With an Impaired Driver	.62
Drug prevention education	-.48	Student perception of substance use harm	-.50
Likelihood of college graduation	-.31	Approval of psychological and physical violence	.40
Stroke rate per 1,000	.33	Syphilis infection rate per 1,000	.32

### **Family Factors**

Four family related variables were significantly correlated with the 2008 current youth alcohol use measure. The significantly correlated variables and the direction and strength of the correlations are shown in the Table 5.

Table 5. Correlations between family factors and 2008 current alcohol use.

County Level Variables	Correlation	County Level Variables	Correlation
Parental Disapproval of Substance Use	-.78	Out of Wedlock Live Births	.48
Parental awareness of student location	-.50	Maltreatment of a child per 1,000	.48

### School Factors

Three school related variables were related to the 2008 current youth alcohol use rates. The significantly correlated variables and the direction and strength of the correlations are shown in the Table 6.

Table 6. Correlations between school factors and 2008 current alcohol use.

County Level Variables	Correlation	County Level Variables	Correlation
School Respect	.41	Property related damage or crime	.31
Alcohol/drug use or problem at school	.38		

### Community Factors

Of the many community-related variables examined, seven had significant correlations with reported 2008 current youth alcohol use rates. The significantly correlated variables and the direction and strength of the correlations are shown in the Table 7.

Table 7. Correlations between community factors and 2008 current alcohol use.

County Level Variables	Correlation	County Level Variables	Correlation
Alcohol/drugs present at attended parties	.82	Unemployment Rate	.54
Access to drugs	.44	Presence of Retail Alcohol	.38
Total deaths per 1,000	.32	Poverty among individuals <18 years of age per 1,000	.40
Aid to aged, blind and disabled per 1,000	.37		

## Region 7 Current Alcohol Use

Figure 1 shows reported and estimated youth current alcohol use as derived from the 2008 SUSSCS and Table 1 outlines the sources of the estimates. “Current Youth Alcohol Use” is a weighted estimate that reflects the proportion of survey respondents reporting alcohol use 30 days prior to completing the survey. Based on the 2008 SUSSCS, the state average percentage of current youth alcohol users among 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grade students was 23.9%. While it is encouraging to see that a given county or region has lower reported youth alcohol use than the state average, it is important to remember that any alcohol use by minors under the age of 21 is illegal, and that efforts to prevent the use of alcohol and other drugs should continue. Table 1 shows how data were estimated when a grade or an entire county was not included in the survey.

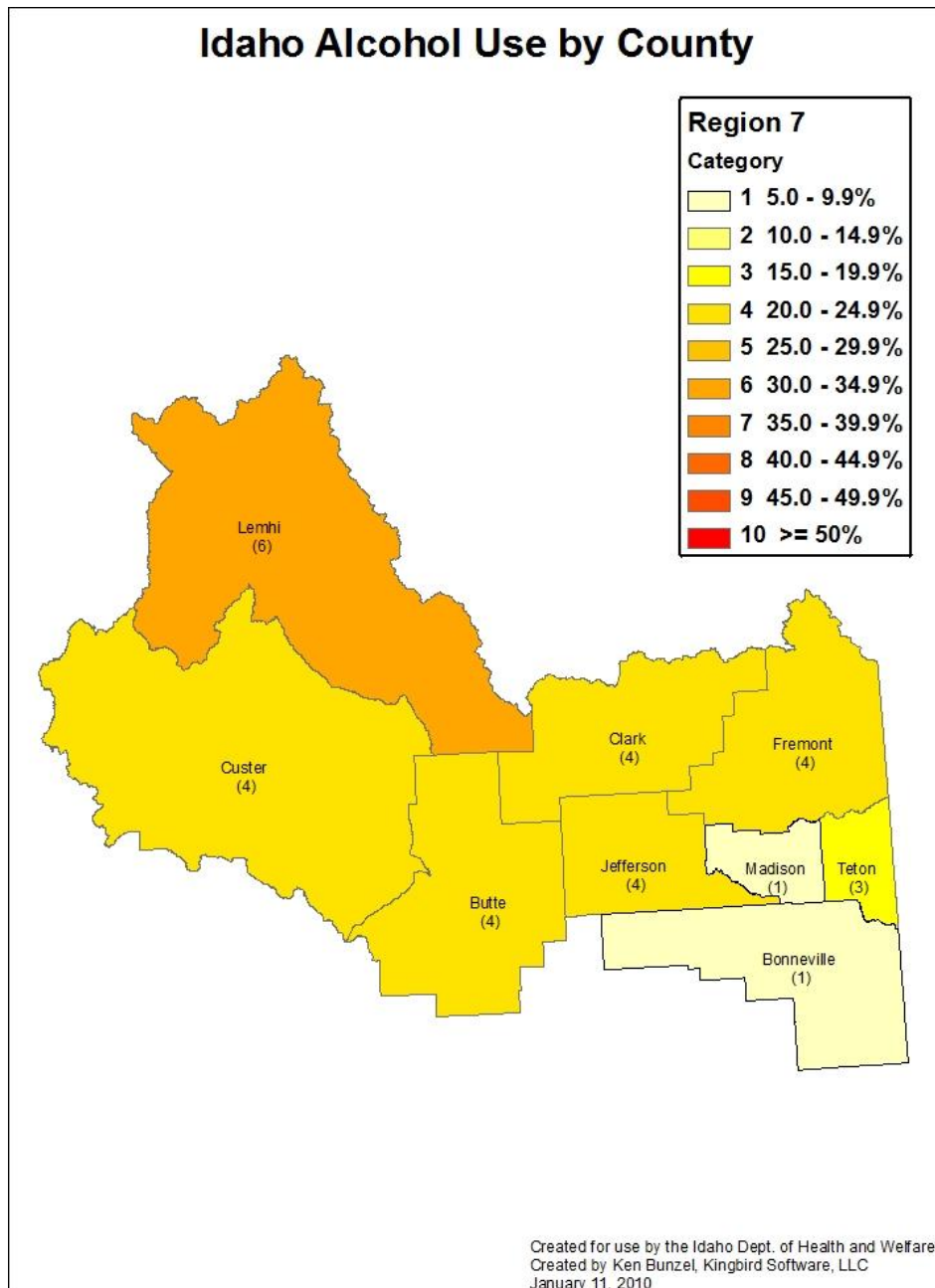


Figure 1. Youth alcohol use 30 days prior to delivery of SUSSCS by county. The state average for current alcohol use by youth was 23.9%.

Grade				
County	6th	8th	10th	12th
Bonneville	R	R	R	R
Butte	S	R	S	R
Clark	R	S	S	S
Custer	R	S	R	R
Fremont	S	R	S	S
Jefferson	S	R	S	S
Lemhi	R	R	S	R
Madison	R	S	R	R
Teton	S	R	R	R

In the table, R indicates that survey data were used for the grade and county; S indicates that the state average was used because local data were not available. County estimates are weighted by the number of school age people surveyed during the year of the survey for each county. Differences in the number of students can change the overall estimate of alcohol use between counties where all grade levels are estimated.

Table 1. Sources of alcohol use by county and grade. An “R” indicates that reported data from the 2008 SUSSCS were used. An “S” indicates that a statewide average for that grade was used as the estimate.

## R7 Substance Use Correlates

A number of individual/peer, family, school and community factors were found to be significantly correlated with current alcohol use (see Table 6-Table 9 in the state portion of the needs assessment for individual factor correlations). The distribution of each of these archival variables is shown for the individual counties within the region. In each graph, the state average has been rescaled to 100 with a standard deviation of 15.

### *Individual/Peer Factors*

A variety of individual/peer factors were significantly correlated with substance use. Many of these relationships are consistent with what might be expected. For example, students who report that alcohol and drugs are available at the parties they attend report higher levels of alcohol use. Similarly, students who report that they disapprove of substance use by their peers report lower levels of alcohol use themselves. The individual/peer factors include:

- Student Disapproval of Substance Use by Others
- Substance Use by Friends
- Trouble or Arrests Caused by Substance Use
- Driving While Impaired or Riding With an Impaired Driver
- Drug and Alcohol Prevention Education in Schools
- Student Perception of Substance Use Harm
- Likelihood of graduating college
- Approval of psychological and physical violence
- Stroke Rate
- Syphilis Infection

**Student Disapproval of Substance Use by Others** – Youth who disapprove of substance use by their peers are less likely to use alcohol and other substances themselves. Substance abuse prevention programs that teach healthy decision making and critical thinking skills, especially those that target elementary and middle school youth before experimentation has begun, can foster the disapproval of substance use.

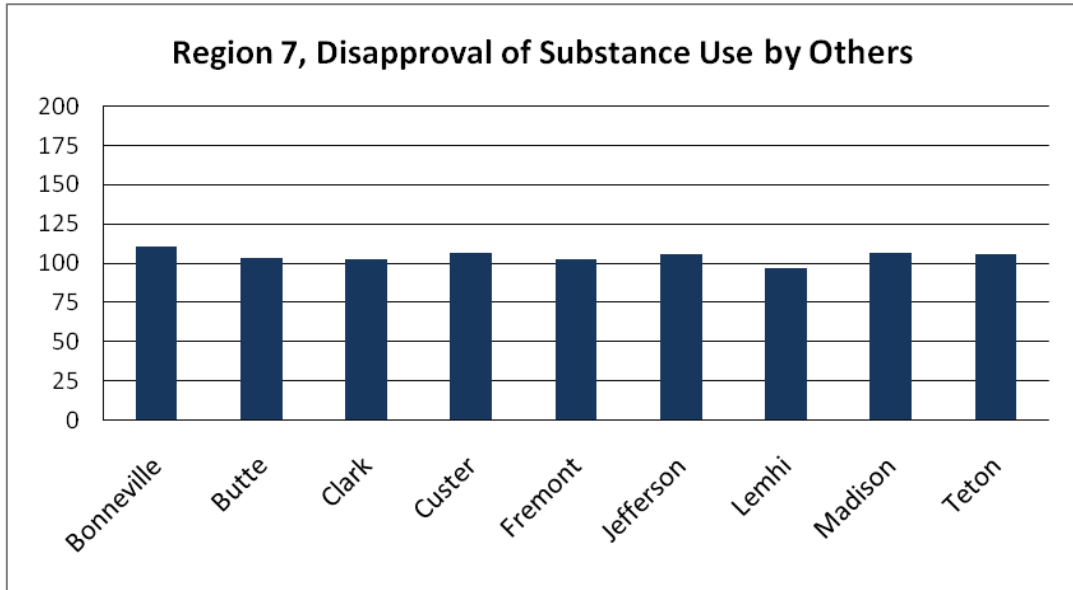


Figure 2. Student disapproval of substance use by their peers. The data have been transformed so that the state average is 100.

**Substance Use By Friends** – The influence of the peer group on adolescent decision making, including the decision to use substances, is one of the most powerful forces parents and teachers have to contend with. Parenting programs that stress the importance of being actively involved in the child’s life, knowing where and whom the child is with at all times, and clear communication and enforcement of rules regarding acceptable friends and substance use can mitigate the influence of a negative peer group. Additionally, school and community programs that provide safe havens and pro-social activities can increase exposure to positive peer groups and adult role models and can lessen the influence of the negative peer group.

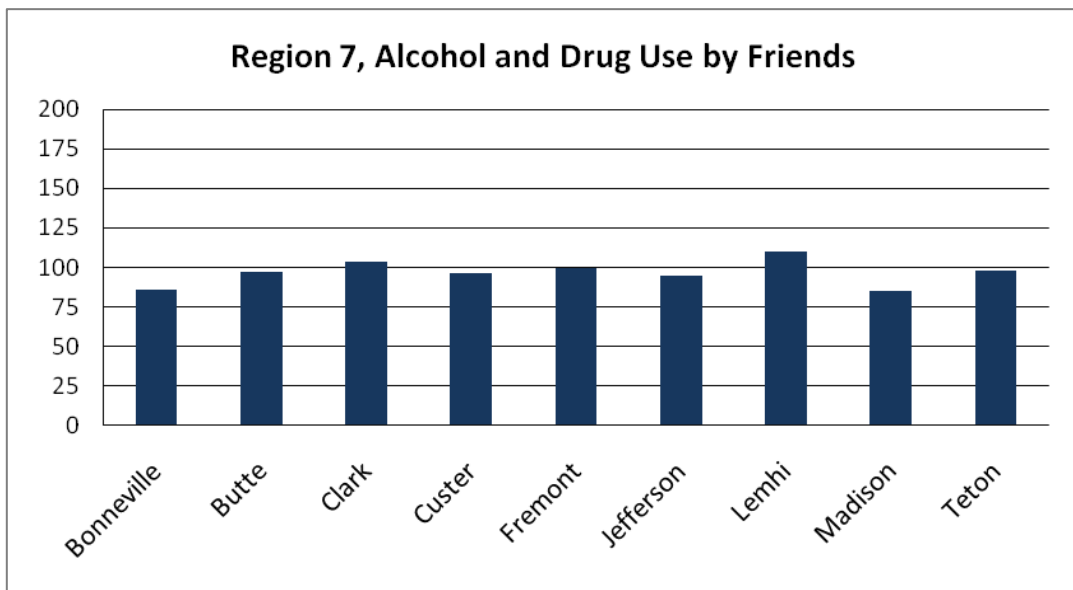


Figure 3. Student reports of substance use by their friends. The data have been transformed so that the state average is 100.

**Trouble or Arrests Caused by Substance Use** – Because judgment is impaired by alcohol and other substance use, intoxicated people have a higher risk of behavior that brings scrutiny by parents, school, community and law enforcement personnel. Quality, evidence-based substance abuse prevention programs delivered before adolescence can reduce the risk of arrest or other trouble by reducing the likelihood of substance use in general, and by increasing protective factors that include respect for self and others.

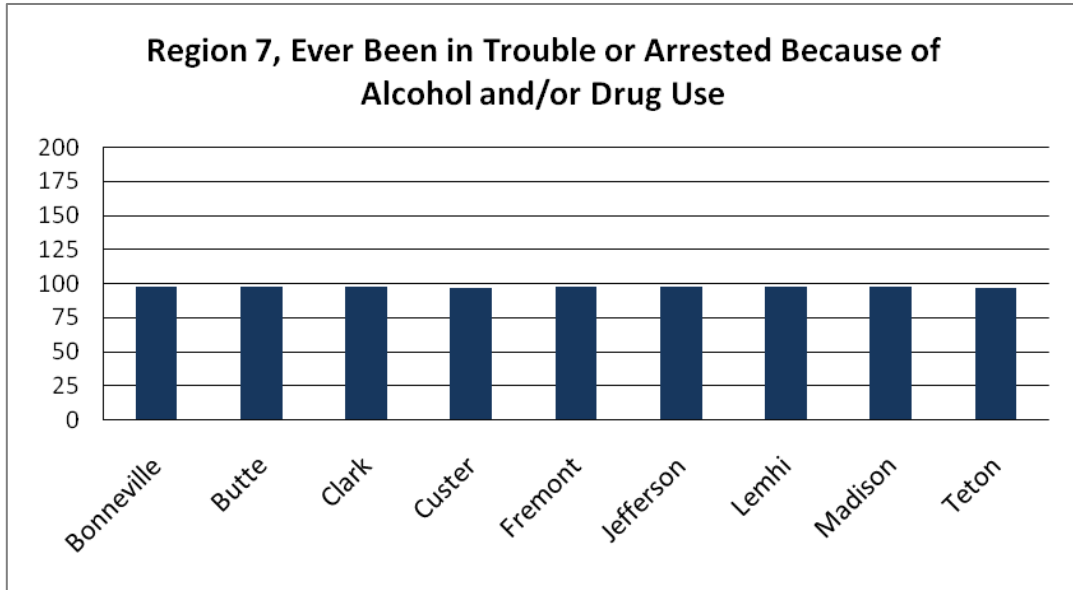


Figure 4. Instances of substance use related troubles or arrests. The data have been transformed so that the state average is 100.

**Driving While Impaired or Riding With an Impaired Driver** – Although substance use in itself contains hazards for youth, alcohol and other drugs played a role in nearly 8% of all vehicle collisions and just over 41% of vehicle related fatalities according to 2006 Idaho Transportation Department data. This is an avoidable risk. Substance abuse prevention programs, as well as community, health, law enforcement, and transportation agencies can all communicate this message. School, church and community programs can work to reduce alcohol availability and exposure and reduce the opportunity for driving while impaired or riding with an impaired driver. Community coalitions can also play a role by working with local law enforcement and civic bodies to promote the message about the risks and costs of impaired driving and implement alcohol control strategies such as alcoholic beverage server training, sobriety check points, etc.

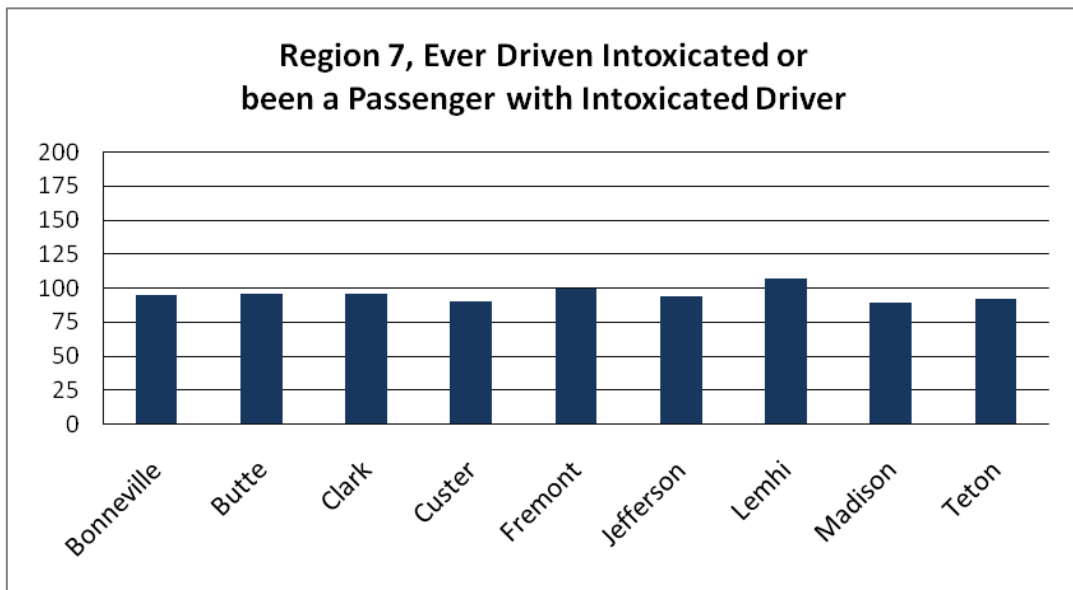


Figure 5. Driving while impaired or riding with an impaired driver. The data have been transformed so that the state average is 100.

**Drug and Alcohol Prevention Education in Schools** – Students who report learning about drug and alcohol use in school report lower levels of 30-day alcohol consumption. Substance abuse prevention programs that contain clear and honest information on the effects and harms of specific drugs, that teach or enhance refusal and decision making skills, and that promote healthy alternatives lead to lowered substance use in middle and high school age youth.

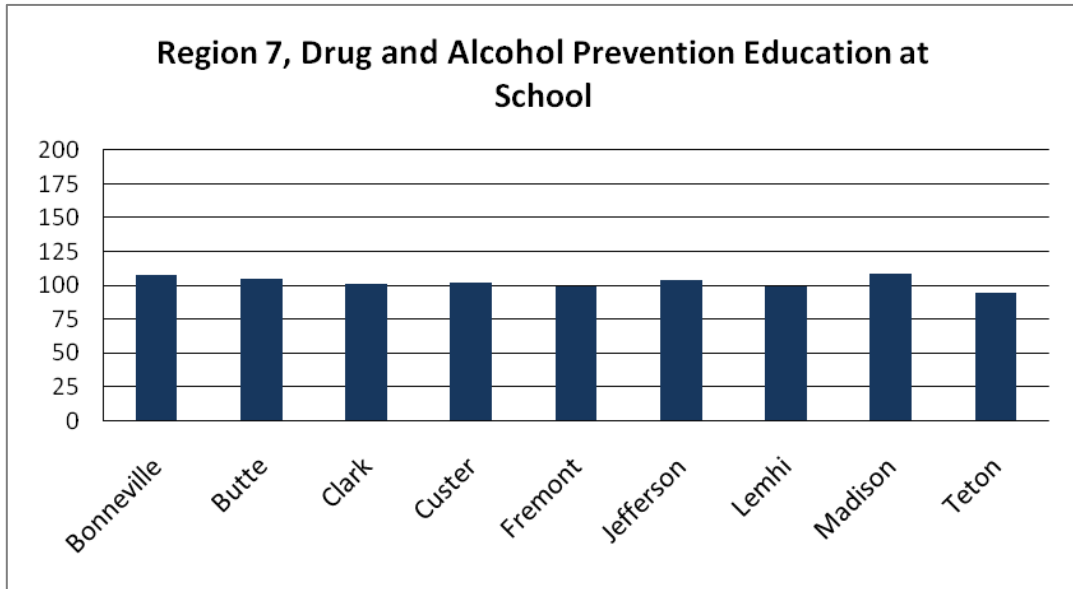


Figure 6. Student-reported levels of drug and alcohol prevention education. The data have been transformed so that the state average is 100.

**Student Perceived Harm of Substance Use** – Youth who believe that substance use carries unacceptable risks or is harmful are less likely to use alcohol and other substances. Substance abuse prevention programs that teach healthy decision making and convey accurate risk information, especially those that target middle and early high school youth, can increase youth understanding of the risks of substance use and should result in lower use rates.

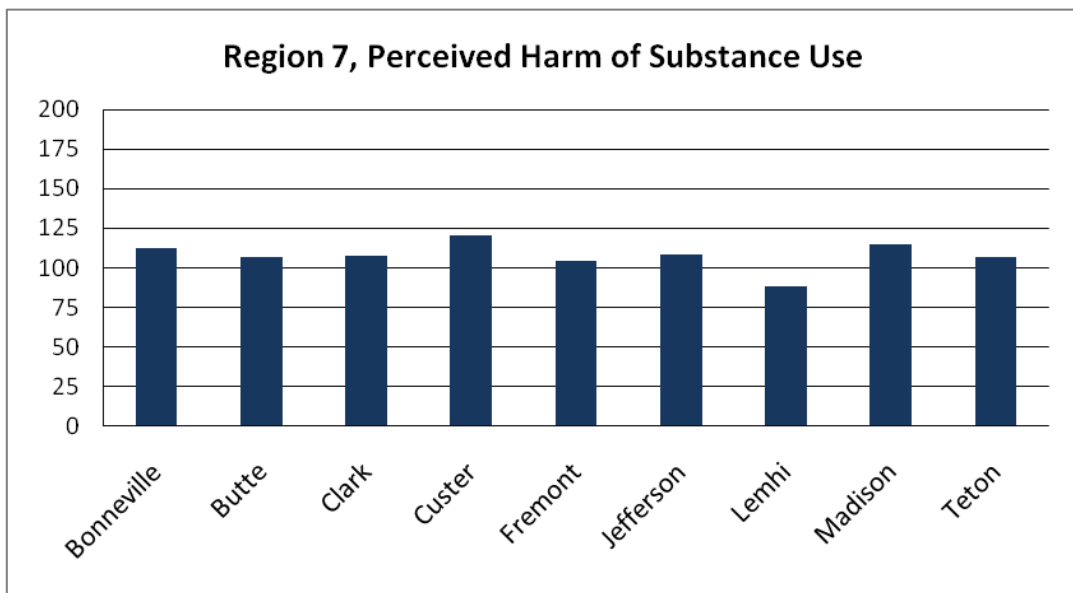


Figure 7. Student perceived harm of substance use. The data have been transformed so that the state average is 100.

**Likelihood to Graduate College** – School attachment and valuing good performance in school are protective factors for substance use. Students who excel in the academic world can organize, plan, complete tasks and manage their lives effectively. Students who cannot or will not function well in the school environment have a higher risk of drop-

out, discipline problems, rebelliousness, substance use and other undesired behaviors. Prevention programs that instill, maintain or strengthen scholastic abilities and perceived value in education can increase the proportion of students who stay in the protective environment of the school, ultimately seeking a college education

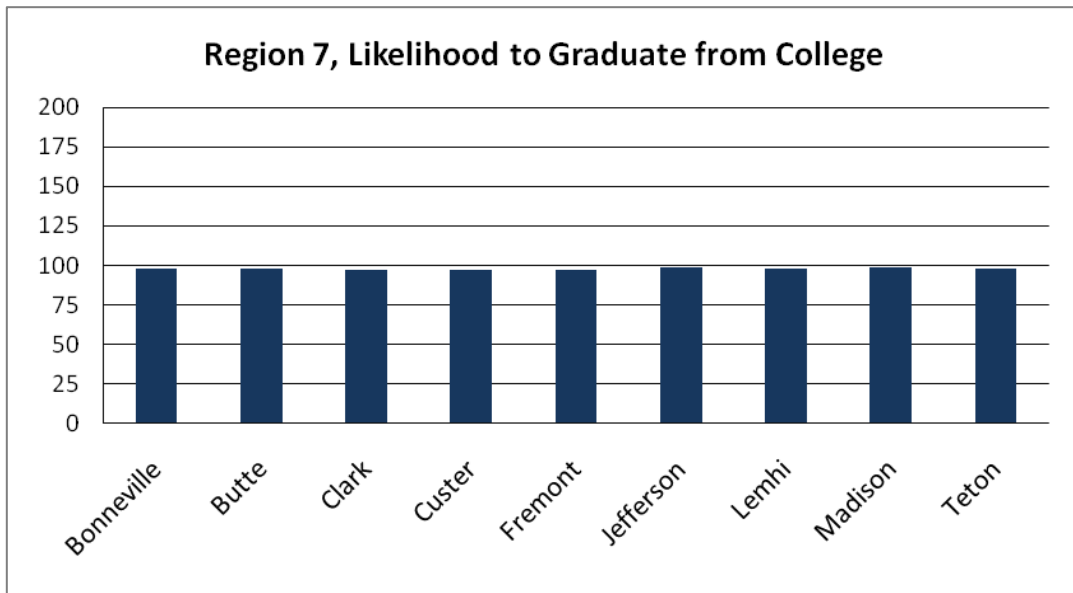


Figure 8. Likely to graduate from college as reported by students. The data have been transformed so that the state average is 100.

**Approval of Psychological and Physical Violence** – Many risk factors for youth substance use relate to an underlying factor that is reflected in rebelliousness, defiance, deviance and other uncivilized conduct. All refer to a lack of regard for society’s rules, the youth’s own well-being and for the well-being and sensitivities of others. The tendency towards thrill-seeking, risky behavior and other forms of deviance also includes a higher risk of substance use and interpersonal violence. That is to say, substance use and approval of interpersonal violence are “co – related” because they are both related to a third, underlying factor: an anti-social disposition. Prevention programs that include anti-bullying and gang involvement components, lessons on civility and respect of self and others could reduce substance use and the approval and incidence of interpersonal violence.

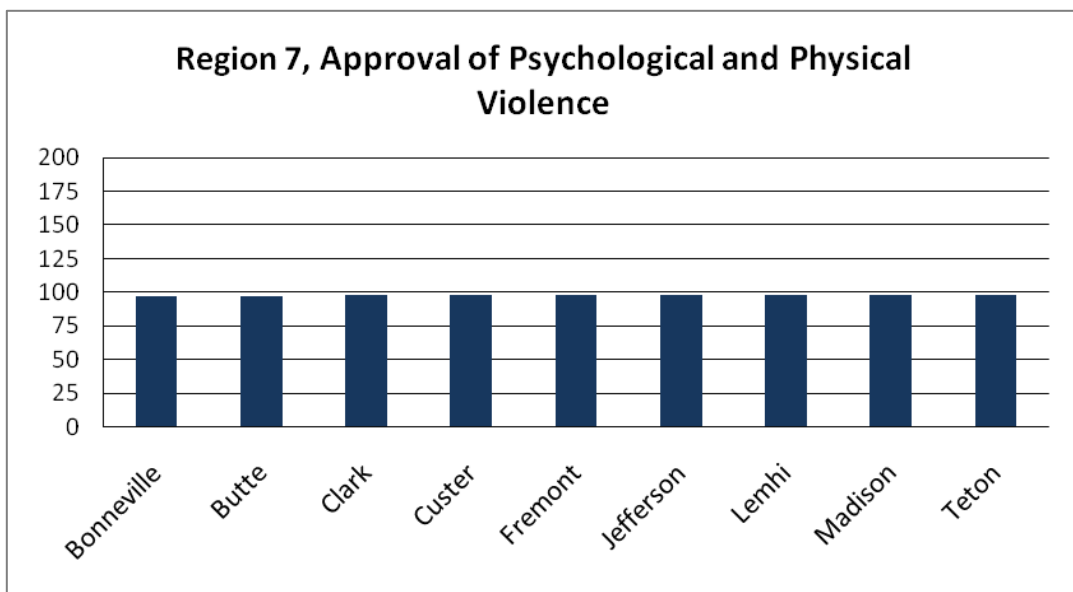


Figure 9. Approving or possessing attitudes favorable to interpersonal violence reported by students. The data have been transformed so that the state average is 100.

**Rate of Strokes** – Youth alcohol use was found to have a moderate correlation ( $r = .33$ ) with the overall county rate of strokes. While it is tempting to offer hypotheses about how this factor may be related to youth alcohol use, it is more likely that there are other, unknown factors underlying this relationship. Similar to the County Death rate described in Community Factors, further research is needed to identify the underlying patterns and determine if they are amenable to change from a substance abuse prevention model.

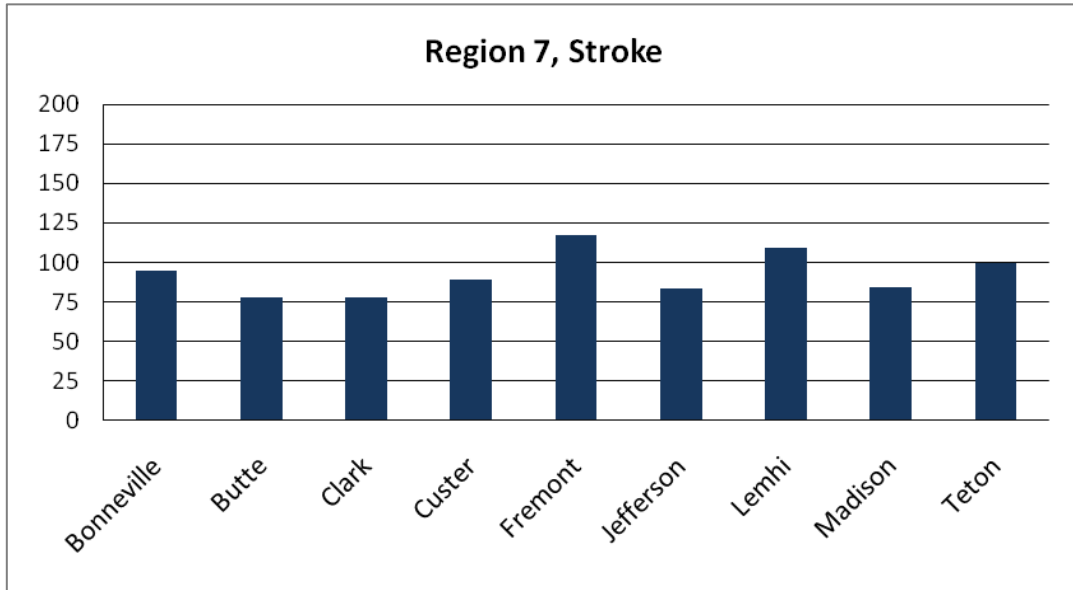


Figure 10. Rate of Strokes (Cerebrovascular diseases). The data have been transformed so that the state average is 100.

**Syphilis Infection** – Similar to Out of Wedlock Live Births, the county rate of sexually transmitted diseases such as syphilis can be construed as a measure of increased risky behavior by youth due to the use of alcohol and/or drugs. However, the relationship between youth alcohol use and syphilis is moderate ( $r=.32$ ) and is only present in 11 of Idaho’s 44 counties. Additional information and further research would be necessary to understand the relationship between STDs and youth alcohol use.

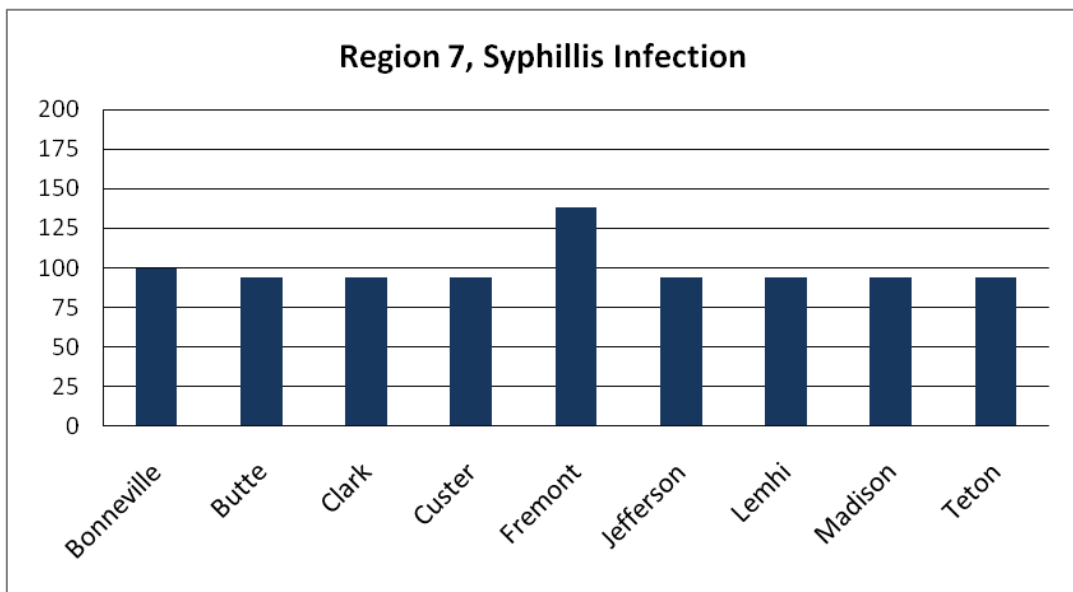


Figure 11. Rate of Syphilis infections. The data have been transformed so that the state average is 100.

## Family Factors

Of the variety of possible family factors related to current youth alcohol use, the following were found to be significantly correlated. In the risk and protective factor literature, parental attitudes opposed to substance use are considered protective factors. Having children out of wedlock, on the other hand, is associated with increased alcohol use. Both of these relationships were observed in the Idaho SUSSCS data.

- Parental Disapproval of Substance Use
- Out of Wedlock Live Births
- Parental Awareness of Student Location
- Child Maltreatment and Neglect

**Parental Disapproval of Substance Use** – The impact of parental attitudes about teen substance use *and the communication of that disapproval* is one of the strongest protective factors that research has identified. Parenting programs that enhance family communications in general and conversations about substance use in particular can reduce the likelihood of youth substance use. In prevention, activities intended to raise community awareness and social norming programs can make parents aware of the importance of their roles and responsibilities as substance abuse prevention educators.

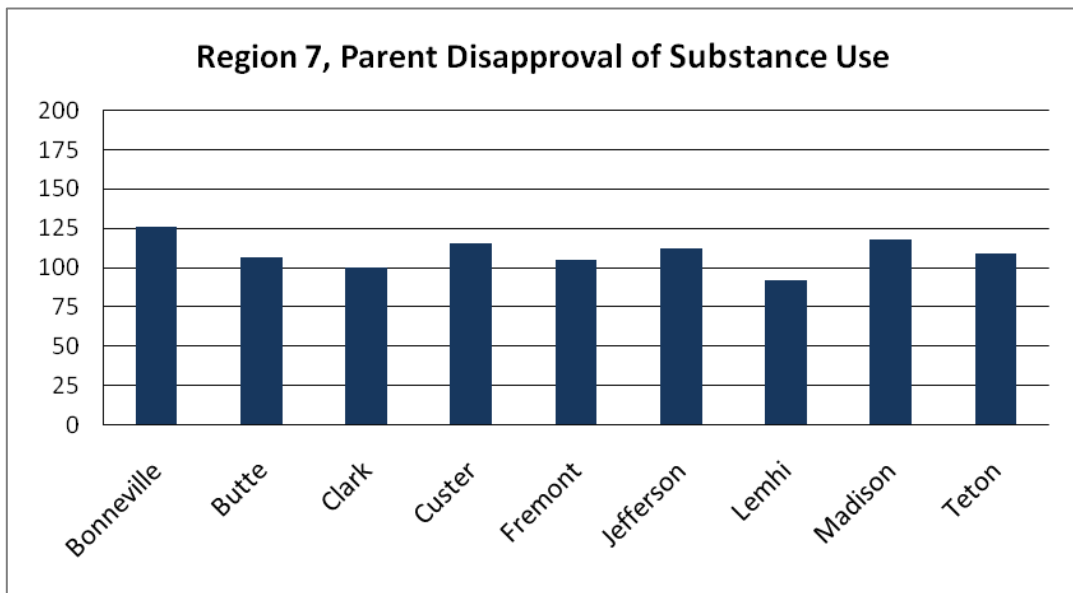


Figure 12. Student perception of parental disapproval of substance use. The data have been transformed so that the state average is 100.

**Out of Wedlock Live Births** – The use of alcohol and other drugs lead to reduced judgment and decision making skills with a number of consequences, including unintended pregnancies. Counties with greater youth alcohol use have more out of wedlock live births, on average, than counties with lesser youth alcohol use. Substance abuse prevention programs that address healthy choices, good decision making and abstinence from alcohol and substance use can all reduce the likelihood of unplanned pregnancies that occur due to the lapses in judgment that often occur during intoxication.

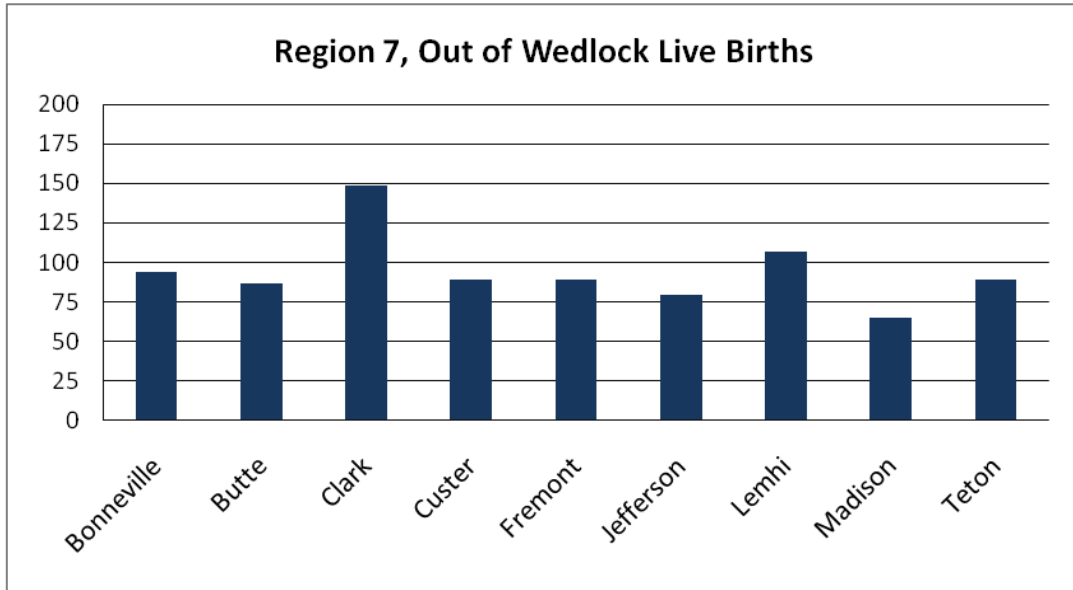


Figure 13. Out of wedlock live births for women of child bearing years. The data have been transformed so that the state average is 100.

**Parental Awareness of Student Location** – The strongest protective factor is parents who openly disapprove of substance use, who have clearly stated rules and consistently enforced consequences for substance use and are who involved in their children’s lives. Although it is part of normal maturation that teens begin to resent close parental monitoring, the protective value of knowing who their child is with, where they are and what they are doing should remain in place until the teen has demonstrated they can be trusted to make good decisions. Prevention programs that remind, teach, and empower parents to maintain their protective influence as long as possible can reduce opportunities for their teen to engage in a variety of risky behaviors, including substance use.

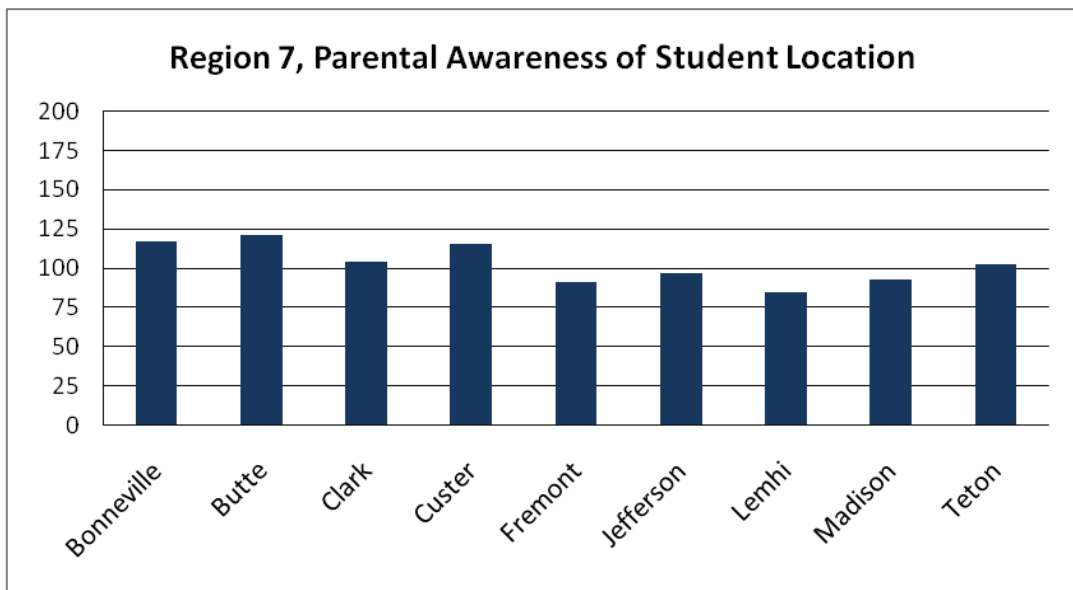


Figure 14. Parental awareness of student location as reported by students. The data have been transformed so that the state average is 100.

**Child Maltreatment and Neglect** – Children who experience physical, mental or sexual abuse, and neglect have an increased exposure to family violence, victimization and early onset of aggression and violence. Initiating substance abuse and use is not uncommon as well as decreased social skills and healthy coping strategies. Clustering of other childhood conduct problems has also been found to be significantly associated with childhood abuse and neglect. Utilizing evidence-based parenting programs can be an effective means to help parents manage children and be a

component of a larger effort to address family problems. Prevention programs that teach social skills, impulse management, and social norming can help to intervene the propensity for conduct problems, including substance use.

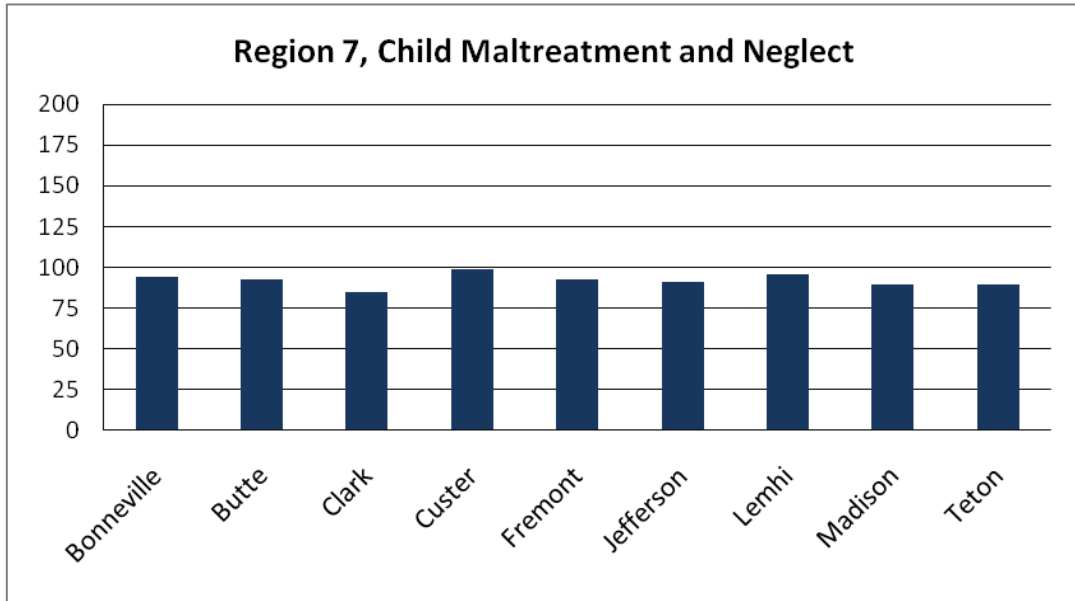


Figure 15. Substantiated cases of child maltreatment and neglect. The data have been transformed so that the state average is 100.

## School Factors

At the state level, the following school related variables correlated significantly with youth reported alcohol use based on the 2006 SUSSCS data. The following figures show the relative standings of each county in the region for these factors, compared to the state average of 100 and to the other counties in the region.

- Perceived School Safety/Respect
- School Related Property Crime
- Alcohol/Drug Problems at School

**Perceived School Safety/Respect** – Students who feel that their school is a safe and respectful environment report lower 30-day alcohol usage. Low racial tension, receptivity to student input, fair and consistently enforced rules and caring, respectful teachers and disaster preparedness plans all contribute to perceived school safety. Prevention programs that promote social skill development, emotional reasoning, and anti-bullying all contribute to a safe learning climate. Programs that work to keep kids motivated and successful in school should also contribute to the overall quality of a safe school environment by reducing acting out and other forms of disruption associated with an aversion to education.

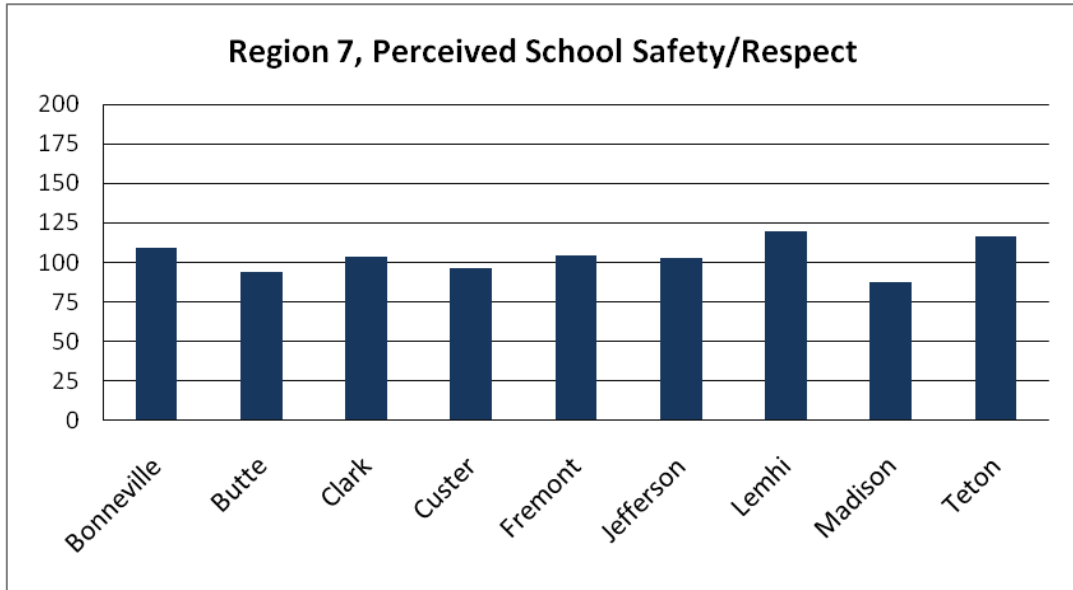


Figure 16. Student perception of school safety and respect. The data have been transformed so that the state average is 100.

**School Related Property Crime** – Similar to Approval of Psychological or Physical Violence, both 30-day alcohol use and school related property crime are likely aspects of deeper issues in a community and school, such as approval of deviance and a disrespect for law, order and the rules and expectations of polite society. When there is a high level of acceptance of unlawful behavior in a community, then related aspects such as teen alcohol use and petty vandalism will also have higher levels. Community based prevention approaches that raise awareness of the problems and costs of alcohol and drug abuse can work to lower the background level of approval of these behaviors. Similarly, school based prevention programs that promote character and social skill building can reduce the individual perception that anti-social behaviors are acceptable.

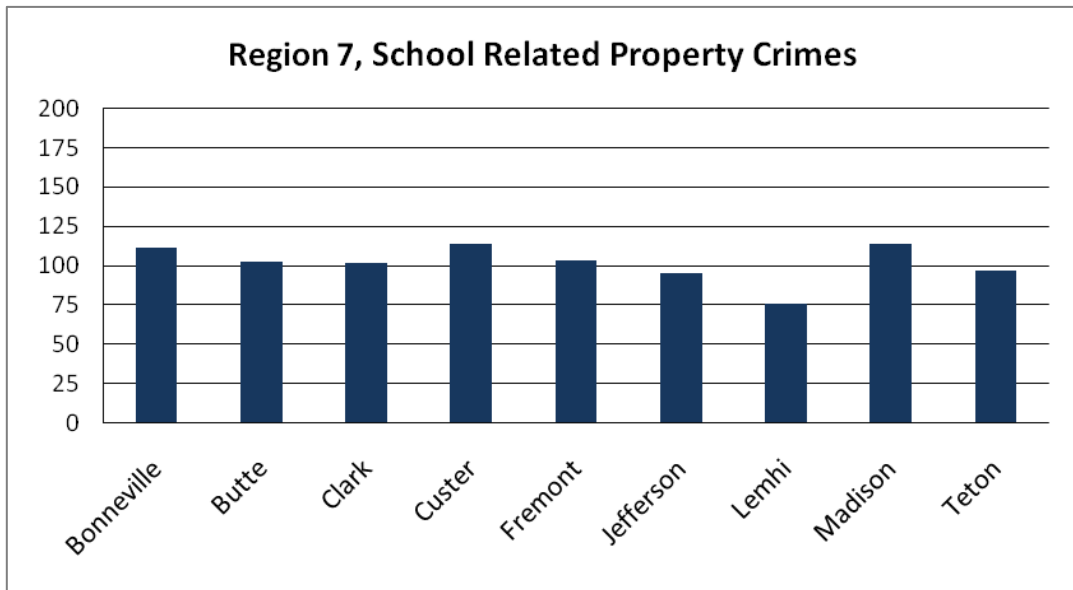


Figure 17. Student reported school related property crime. The data have been transformed so that the state average is 100.

**Alcohol/Drug Problems At School** – Perceived presence of drug and alcohol use among peers, both in and outside of school, are associated with community permissiveness and approval of teen substance use. When parents, schools and communities clearly disapprove of teen use of alcohol and other drugs, students report lower 30-day alcohol use. School and community prevention programs that use social marketing methods to reduce the perception that

substance use by teens is normal, a rite of passage and that ‘everybody does it’ contribute to lowered acceptability and higher harm caused by alcohol and other drugs. Parenting programs that enable and provide parents with tools to clearly communicate and enforce their disapproval of teen substance and alcohol use complement the school and community message.

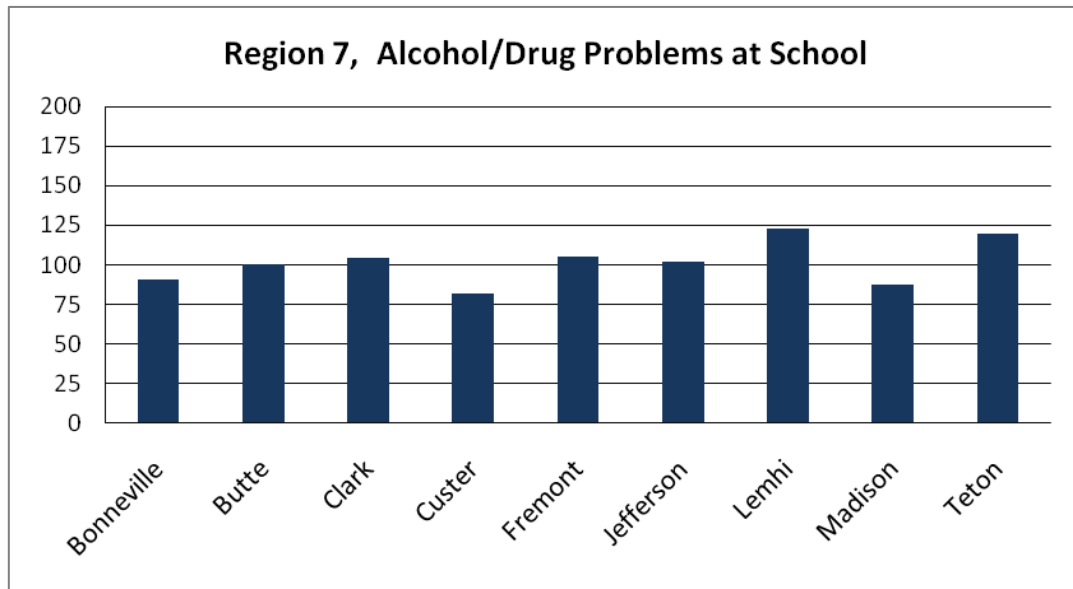


Figure 18. Perceived alcohol or drug use problems at school. The data have been transformed so that the state average is 100.

## Community Factors

At the state level, the community based factors below were found to be correlated with current youth alcohol use. The following figures show the relative position of each county in the region for these factors, compared to the state average of 100 and to each other. The following pages show the position of the counties for each of the community factors below.

- Alcohol and Drug Use at Parties
- Unemployment
- Access to Drugs
- Number of Alcohol Licenses
- Children Under 18 Years Old Living in Families in Poverty
- County Death Rate
- Aid to the Aged, Blind and Disabled

**Alcohol and Drug Use at Parties** – Youth who attend parties where drugs and alcohol use are common are more likely to use themselves. In addition to readily available means, opportunity, encouragement, the influence of the peer group and desire to belong are very high at such parties. Prevention efforts that emphasize healthy choices, drug avoidance and refusal skills and thinking through consequences of their actions could all help counter the desirability and pressure to imbibe at parties. But the best method to reduce the risk of consumption at parties is to avoid attending them in the first place. Parenting prevention programs that increase parental monitoring of their teens’ activities, their peers and firm, clearly-stated and consistently enforced family rules on alcohol and drug use can help reduce party attendance in the first place, and risk of indulging or overindulging if the teen is exposed to this sort of party influence.

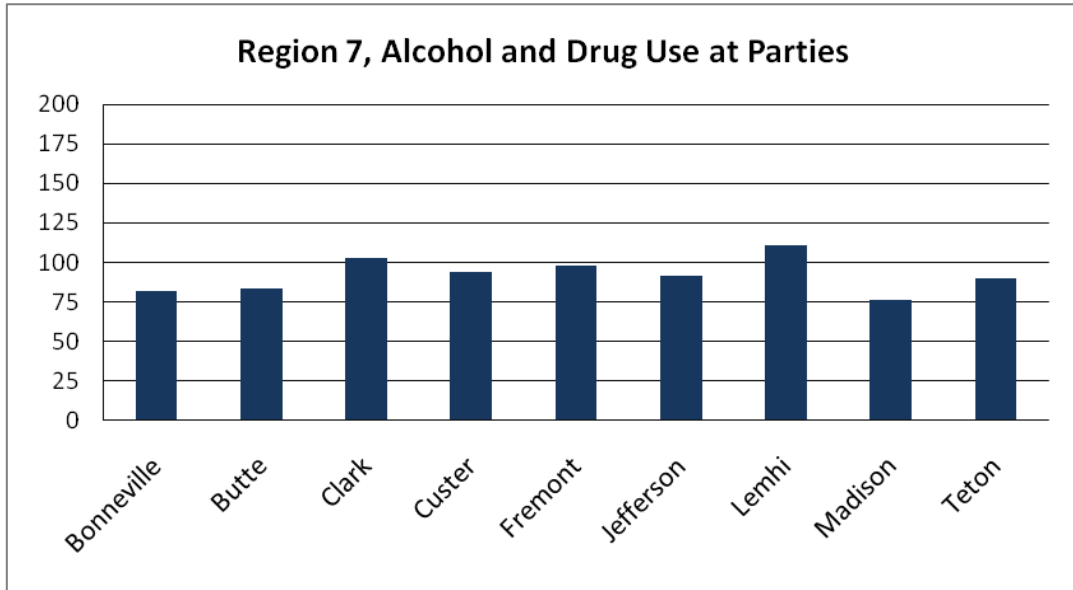


Figure 19. Attendance at parties where alcohol and/or drugs were present by county. The data have been transformed so that the state average is 100.

**Unemployment**– Financial stressors such as recent loss of income and a sudden descent into poverty have been strong historical predictors of alcohol use. Students from Idaho counties with higher unemployment rates report more alcohol use than students from less impacted counties. While substance abuse programs cannot generally impact local economic factors, after school programs and teen centers can support community and societal attachment, provide a safe haven, offer tutoring, mentoring, supervision and supplement or provide good nutrition.

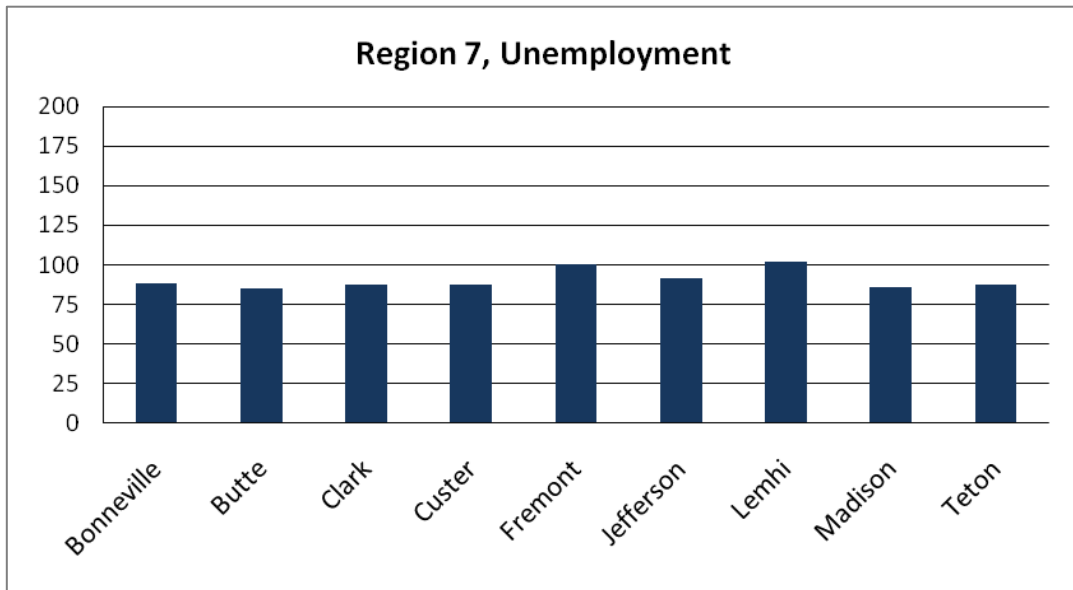


Figure 20. Unemployment for 2009 by county. The data have been transformed so that the state average is 100.

**Access to Drugs** – Drug availability is related to the rate of youth-reported drug use. Where there is little access to intoxicating drugs, lower use rates are reported. The impact of drug availability can be addressed by prevention programs that increase the perception of the harms of drug use and social marketing approaches that counter the idea that teen drug use is acceptable, a rite of passage and that ‘everybody does it.’

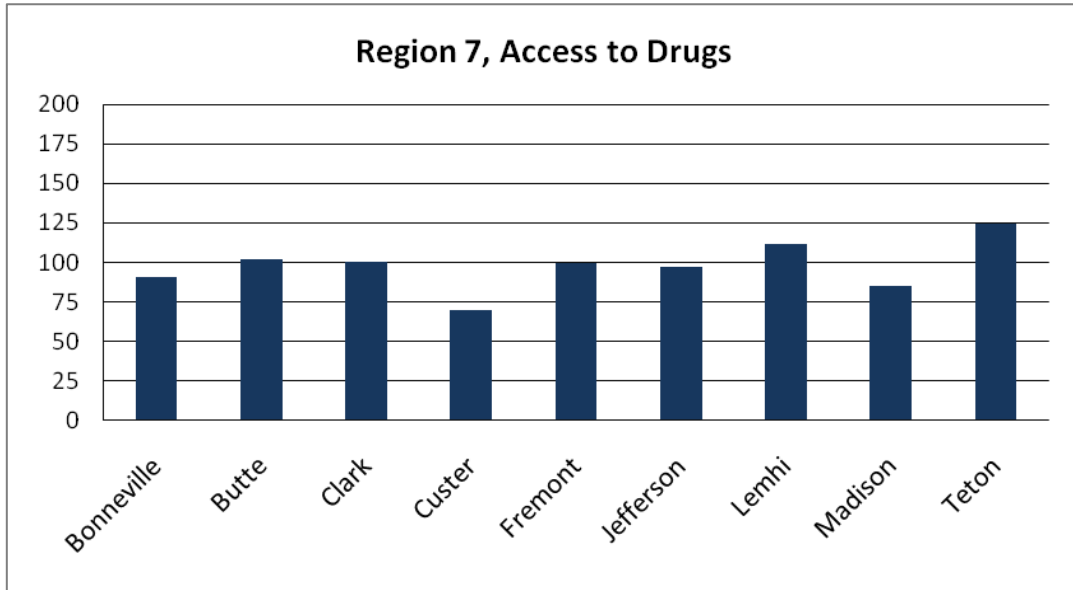


Figure 21. Accessibility of drugs as reported by students. The data have been transformed so that the state average is 100.

**Number of Alcohol Licenses**– Alcohol availability is related to the rate of youth-reported alcohol use. Where there is little access to alcohol, lower use rates are reported. The impact of alcohol availability can be addressed through social norming with youth and parents, server training and monitoring of sales to minors.

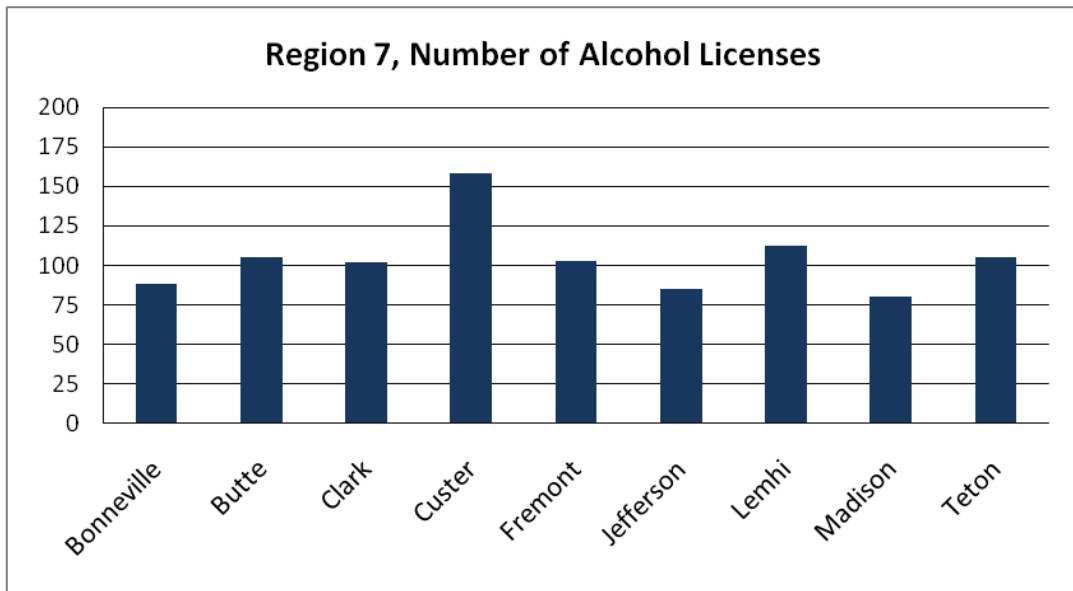


Figure 22. The number of alcohol licenses per county. The data have been transformed so that the state average is 100.

**Children under 18 years old living in families in poverty** – Similar to a high unemployment rate, Idaho counties with higher numbers of youth living in poverty report more alcohol use than students from less stricken counties. While substance abuse programs cannot generally impact local economic factors, after school programs and teen centers can support community and societal attachment, provide a safe haven, offer tutoring, mentoring, supervision and supplement or provide good nutrition.

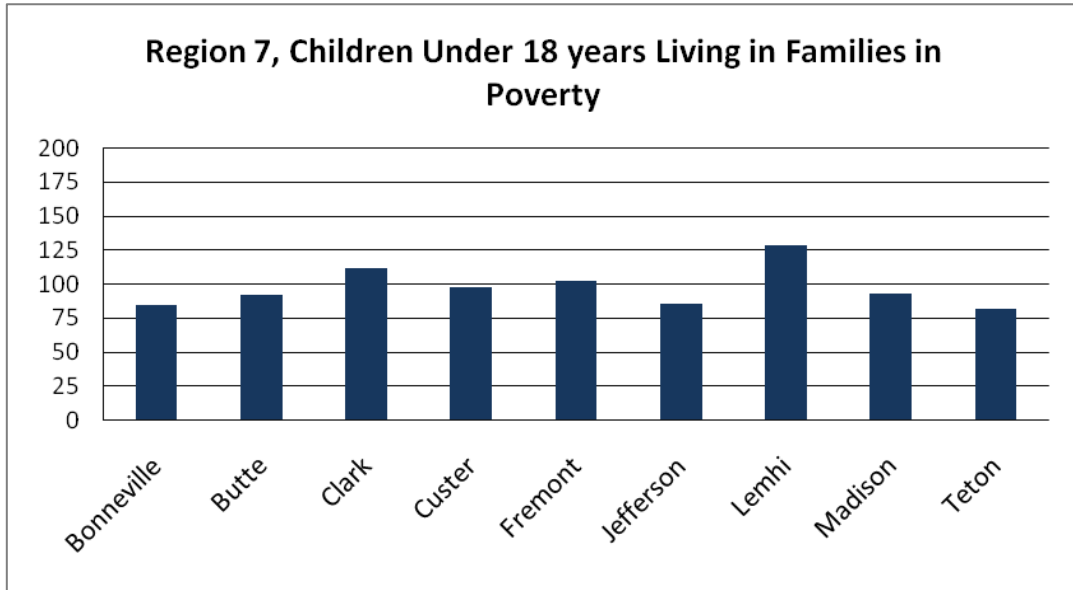


Figure 23. Children under 18 years old living in families that are living in poverty by county. The data have been transformed so that the state average is 100.

**County Death Rate and Aid to aged, blind & disabled** – These two factors were both found to have strong relationships to current youth alcohol use. While it is tempting to offer hypotheses about how these factors are related to youth alcohol use, it is more likely that there are other, unknown factors that shape those relationships. Further research is needed to identify the underlying patterns and determine if they are amenable to change from a substance abuse prevention model.

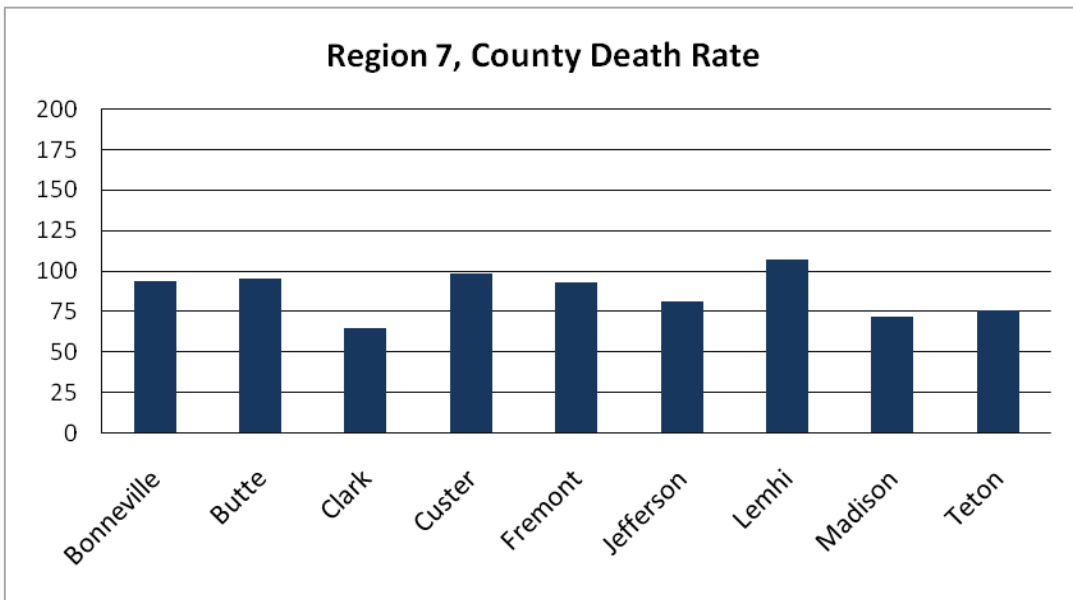


Figure 24. Deaths for 2009 per county. The data have been transformed so that the state average is 100.

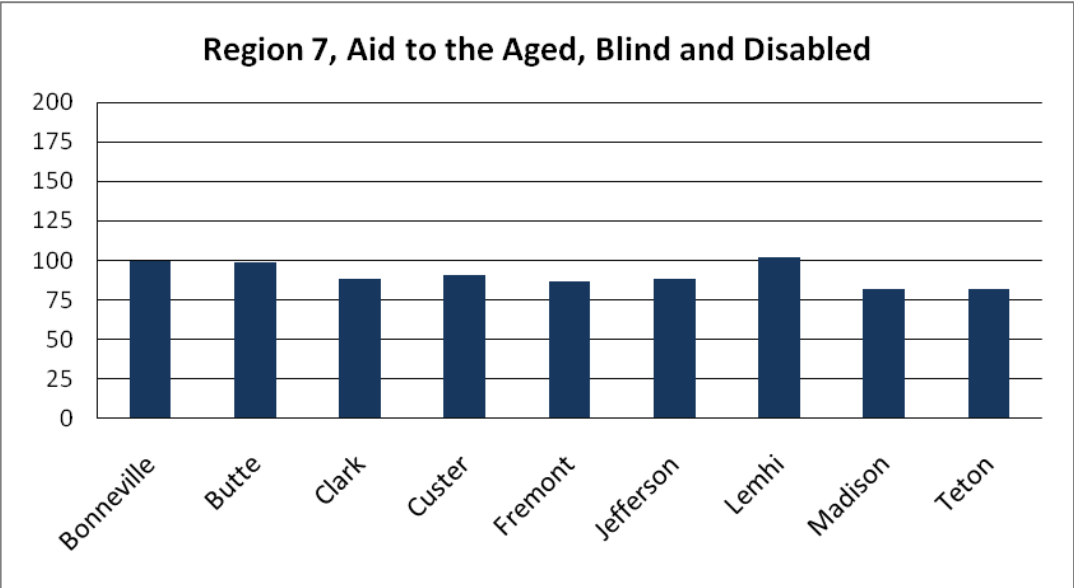


Figure 25. Aid to the Aged, Blind and Disabled by county. The data have been transformed so that the state average is 100.