Late Backup

REPORT CARD **2013**

YOUTH SUBSTANCE ABUSE ISSUES: RESEARCH AND LEGISLATION

Where it all comes together...

Texans Standing Tall

Together creating healthier
and safer communities.

Table of Contents / About the Report Card

TABLE OF CONTENTS

About Texans Standing Tall

Texans Standing Tall is the statewide coalition dedicated to creating healthier and safer communities by making alcohol, tobacco, and other drugs irrelevant in the lives of youth. Beginning in 1997, Texans Standing Tall was initially one of twelve statewide coalitions funded by Robert Wood Johnson Foundation to address underage and risky drinking. Since then, Texans Standing Tall has expanded its prevention efforts to include alcohol, tobacco, and other drugs. Texans Standing Tall maintains strong partnerships with local coalitions, institutions of higher education, state agencies, individuals, statewide non-profits, and other health and prevention agencies across the state and is a leader in promoting evidence-based, environmental prevention strategies in Texas.

About the Report Card

This year, 2013, marks the eighth year for Texans Standing Tall (TST) to create an annual Report Card. Since the first in 2006, Texans Standing Tall Report Cards have been a reliable source of data and information on youth substance use and prevention in Texas for coalitions, legislators, advocates, campuses, youth, prevention organizations, and individuals. All TST Report Cards can be found at www.TexansStandingTall.org.

In this Report Card, we first describe Texans Standing Tall's Screening and Brief Intervention program with college campuses and the results of a program evaluation. Next, we examine substance use rates and trends among youth and college students for alcohol, tobacco, prescription drugs, and marijuana. We then discuss relevant bills that passed during the 83rd Texas Legislative Session and describe how they impact youth prevention. In the next section we describe emerging issues in youth substance use, specifically youth exposure to alcohol marketing and e-cigarettes. Lastly, we highlight recommended environmental prevention strategies to reduce youth substance use.

Report on CSAP Service to Science Evaluation Enhancement

In 2013 Texans Standing Tall (TST) received funding from the Substance Abuse and Mental Health Services Administration's Center for Substance Abuse Prevention's (CSAP) Service to Science Evaluation Enhancement Program to implement and evaluate TST's Screening and Brief Intervention (SBI) project. TST is translating research on SBI for risky alcohol use into practice as a primary prevention tool on college campuses. SBI for alcohol use is an evidence-based intervention to reduce risky drinking and related behaviors and is a recommended strategy by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the National Highway Traffic Safety Administration (NHTSA). TST's project is innovative in that SBI is implemented as a primary prevention tool prior to an alcohol-related injury or violation.

TST partners with colleges and universities to implement the project on 4-year and 2-year, public and private campuses. A higher-risk population, typically first-year students, Greek students, or athletes, is selected and invited to participate. Students complete an alcohol use screening tool, specifically the World Health Organization's AUDIT, receive a score sheet with information about alcohol use, and then have the option to meet with an interviewer who has been trained in motivational interviewing. The interviewer and the student discuss contributing factors and consequences of their alcohol use. The student identifies any problems that occur because of his/her drinking and considers options for change.

On one college campus, 253 students participated in SBI and, of these, 43 completed the post-test six weeks later. Evaluation results showed that, among students who initially screened positive for risky drinking, most (85%) explored options for change during the intervention and, of these, most (79%) committed to try to make these changes. Additionally, although a larger percentage of students reported no alcohol use at baseline (72%) compared to post-test (42%), a smaller percentage of students screened positive for risky or underage drinking at post-test (23%) compared to baseline (36%), suggesting that participating in SBI may help to prevent risky drinking even if students decide to initiate or continue alcohol use.

Screening and Brief Intervention Program for Colleges and Universities

Screening and Brief Intervention Evaluation Results

Alcohol Use Behavior	Baseline (n=253)	Post-Test (n=43*)
Risky/Underage Drinking	36%	23%
No Alcohol Use	72%	42%

*Response rate = 17%

Originally funded by one of nine initial grants awarded by the U.S. Department of Education for Statewide Coalitions to Prevent and Reduce Alcohol Abuse at Institutions of Higher Education, TST will continue to implement and evaluate this SBI project on college campuses in 2014 through a grant from the Texas Department of Transportation. Colleges and universities interested in learning more should contact TST to learn how they can be involved.

Overview of Youth Substance Abuse

Alcohol remains the most commonly used substance among youth with use rates far exceeding that of other substances. Tobacco and marijuana are the second most commonly used substances followed by prescription drug use, which has crept up over the past several years. Below is a graph comparing the use of alcohol, tobacco, and marijuana among middle and high school students in Texas from 1988 to 2012 using data from the Department of State Health Services' Texas School Survey of Substance Use Among Students, Grades 7 -12. Prescription drug use rates are not included in the chart because those questions were only added recently and long-term trends are not yet available. You can see that overall substance use among youth has been decreasing over the years but prevention efforts are still greatly needed.

Past Month Use: All 7th-12th Grade Students from 1988-2012

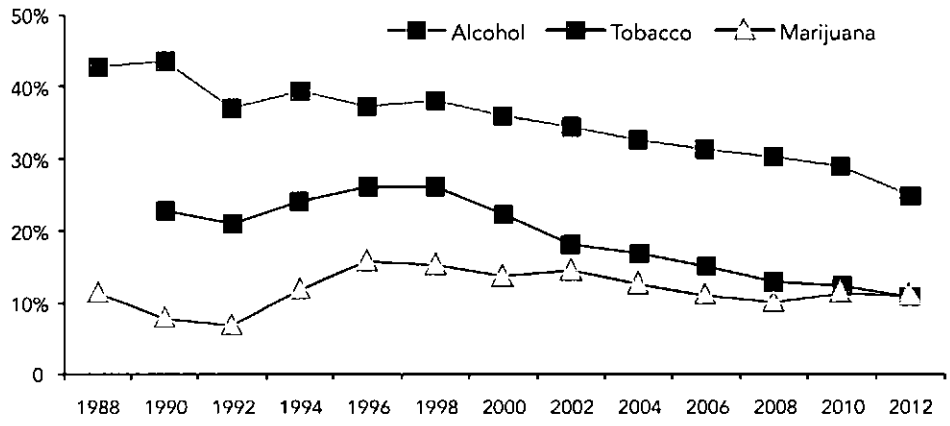


Chart was adapted from Department of State Health Services, Executive Summary Charts: 2010 Texas School Survey, Grades 7-12.

Texans Standing Tall gathers statewide data on youth substance use and trends largely from two sources: Texas School Survey of Substance Use Among Students and the Youth Risk Behavior Surveillance System. The Texas School Survey of Substance Use Among Students (TSS) has been conducted by the Department of State Health Services (DSHS) among middle and high school students in Texas every two years since 1988. The Youth Risk Behavior Survey (YRBS) led by Centers for Disease Control and Prevention (CDC) is conducted every two years among high school students statewide and nationally. The

High School Students

Center for Health Statistics at DSHS conducts the YRBS in Texas. Although the chart on the previous page shows trend data from the TSS, this Report Card will primarily report on data from the YRBS because it offers the most recent data as it was conducted in the spring of 2013. To review more data from the TSS, most recently conducted in 2012, see the Texans Standing Tall 2012 Report Card available on our website: **www.TexansStandingTall.org/Home/WhatWeDo/ReportCards.aspx**

Alcohol Use

According to the 2013 YRBS, **67% of Texas high school students have used alcohol at least once in their lifetime and 36% drank alcohol in the past month.** Both of these percentages are lower than previous years and the rate is trending downwards. Nonetheless, these rates are still high and are linked with many negative consequences as described later in the Public Health and Safety section of this Report Card.

Looking at long-term trends over the last eight years, past 30 day alcohol use among students has decreased by 24%. The percentage of youth who had their first drink of alcohol before age 13 has decreased as well – from 29.7% in 2005 to 18.1% in 2013.

Alcohol Use Trends Among High School Students

	2005	2013	% CHANGE
Lifetime Alcohol Use	**80.2%**	**67.2%**	**-16%**
Past 30 day Alcohol Use	**47.3%**	**36.1%**	**-24%**
First Drink Before Age 13	**29.7%**	**18.1%**	**-39%**

Teen girls are drinking just as commonly as teen boys. The chart on the following page shows that in 2013, 35.9% of male students and 36.3% of female students drank in the past 30 days. **Drinking rates have been decreasing for both boys and girls since 2005 but the decrease among boys has been greater.** Drinking rates among girls is not declining as swiftly probably due in part to the increase in alcohol marketing that appeals to women and girls. Another reason may be the increase in popularity of alcopops, particularly among girls, in the early 2000s. Alcopops are sweetened alcoholic

malt beverages, such as Smirnoff Ice, Skyy Blue, and Bacardi Silver, that resemble soda in look and taste.

Past 30 Day Alcohol Use by Gender

	2005	2007	2009	2011	2013	% CHANGE FROM 2005-2013
Male	**49.1%**	**47.3%**	**44.2%**	**40.2%**	**35.9%**	**-27%**
Female	**45.5%**	**49.3%**	**45.5%**	**39.3%**	**36.2%**	**-20%**

Binge Drinking

Binge drinking, defined in the YRBS as drinking five or more drinks within a couple of hours, is especially concerning because binge drinking results in high levels of alcohol in the body and is more likely to cause injury, overdose, and death. Binge drinking raises blood alcohol levels above the legal limit within two hours, if not sooner (NIAAA, Moderate and Binge Drinking). According to the 2013 YRBS, **21% or about one in five high school students report binge drinking in the past 30 days.** The rate in Texas, which is about the same as the national average, is lower than previous years but still alarmingly high.

Binge drinking is slightly higher among male students (22.2%) than female students (19.9%) but this gender difference has narrowed over the years because binge drinking among girls is decreasing more slowly.

Past 30 Day Binge Drinking

	2005	2007	2009	2011	2013	2005-2013
Male	**33.1%**	**29.9%**	**26.9%**	**25.2%**	**22.2%**	**-33%**
Female	**26.2%**	**28.0%**	**24.2%**	**21.6%**	**19.9%**	**-24%**
All Students	**29.6%**	**29.0%**	**25.6%**	**23.5%**	**21.0%**	**-29%**

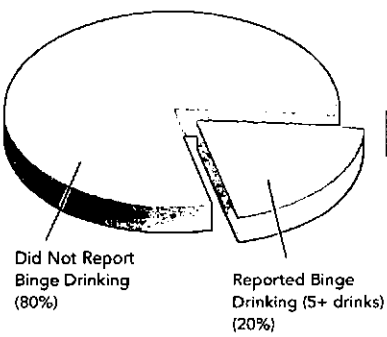
High School Students

An exceedingly risky form of binge drinking, called extreme binge drinking, is consuming 10 or more drinks within a couple of hours. This dangerously high level of alcohol consumption has gained attention recently because, although rates of binge drinking have been declining in national studies, rates of extreme binge drinking have remained relatively stable (Monitoring the Future, 2011).

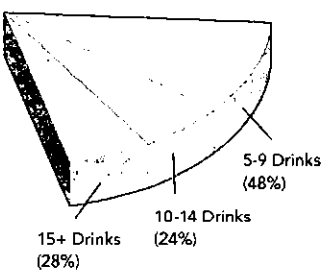
Texas only recently began measuring extreme binge drinking at a statewide level so we are unable to report any changes over time. **In 2013, 6.3% of high school students reported that they had 10 or more drinks of alcohol in the past 30 days, with the rate even higher among 12th grade students at 10.1%.**

Nationally, 20% of high school seniors report binge drinking in the past two weeks and, of these students, half report drinking 10 or more drinks in a row with some reporting drinking as much as 15 or more drinks in a row as shown in the figure below (Monitoring the Future, 2011).

One Fifth of U.S. 12th Graders Reported Binge Drinking in the Past Two Weeks



And 52% of These Binge Drinkers Reported Drinking Ten or More Drinks in a Row (2005-2011 data combined).



Source: CESAR, *More than Half of 12th Grade Binge Drinkers Drink Ten or More Drinks in a Row,* CESAR Fax, Vol. 22, Issue 45, Nov. 11 2013. Data from Monitoring the Future, 2001-2011.

The rate of extreme binge drinking among high school seniors in Texas is lower than the national average (10.1% vs. 20%) but extreme binge drinking among 10% of high school seniors—or about 1 in 10—calls for intervention. We must also continue to collect data on extreme binge drinking rates to determine if they are not declining, as we have seen

nationally. Strategies to reduce underage and risky drinking behaviors like these are discussed later in this Report Card in sections named Strategies that Work.

Tobacco Use

Tobacco use among youth continues to decline. In 2013, **14.1% of youth smoked cigarettes in the past 30 days**, a decrease from previous years (DSHS, YRBS, 2013). With regards to smokeless tobacco, 8.1% of youth reported using chewing tobacco, snuff, or dip during the past 30 days. **Despite large decreases in youth cigarette use, youth use of smokeless tobacco has remained relatively constant over the past 10 years.** Smokeless tobacco also remains mainly used by teen boys (13.9%) rather than teen girls (2.0%).

Tobacco Use Trends Among High School Students

	2005	2013	% CHANGE
Lifetime Cigarette Use	**58.5%**	**42.1%**	**-28%**
Past 30 day Cigarette Use	**24.2%**	**14.1%**	**-42%**
First Cigarette Before Age 13	**16.4%**	**8.5%**	**-48%**
Past 30 day Chewing Tobacco, Snuff, or Dip Use	**7.6%**	**8.1%**	**No change**

E-cigarettes are another tobacco product that entered the market in recent years and remains relatively unstudied and unregulated. No studies currently measure youth use of e-cigarettes in Texas but will hopefully be added to statewide surveys in order to effectively monitor trends and design strategies to prevent youth initiation of e-cigarettes. More information on e-cigarettes is included later in this Report Card in the section named News in the Field of Prevention.

Marijuana Use

According to the 2013 YRBS, **20.5% of high school students in Texas have used marijuana in the past 30 days.** This rate has remained relatively constant over the past 10 years, yet because cigarette use has been steadily declining, marijuana is now

High School Students

reported to be used more commonly than cigarettes among high school students: 20.5% reported past 30 day marijuana use vs. 14.1% reported past 30 day cigarette use (DSHS, YRBS, 2013). Moreover, in the last eight years, past 30 day cigarette use has decreased by 43% but past 30 day use of marijuana has not changed.

Marijuana Use Trends Among High School Students

	2005	2013	% CHANGE
Lifetime Marijuana Use	**42.2%**	**37.5%**	**-11%**
Past 30 day Marijuana Use	**21.7%**	**20.5%**	**No change**
First Marijuana Use Before Age 13	**10.3%**	**8.2%**	**-20%**

The larger decreases in cigarette use compared to marijuana use mirrors the tobacco and marijuana prevention efforts. Successful prevention efforts have targeted tobacco use through education, enforcement, and policy change for many years resulting in lower use and changed social norms. On the other hand, marijuana has become a common topic in public discourse as medical marijuana use increases and states vote to legalize marijuana. Also, whereas cigarette use on TV has become relatively scarce, marijuana use on TV and movies is not only becoming more common but is often portrayed as trendy or cool. Social norms and risk perceptions of marijuana are shifting as a result. For example, **middle and high school students are more aware of the harms of tobacco than marijuana:** when asked how dangerous it is for kids to use marijuana and tobacco, 12% said marijuana was not at all dangerous whereas only 2.9% think tobacco is not at all dangerous (DSHS, TSS, 2012). Perceptions of risk, along with social norms, policies, and ease of access, correlate with youth use rates. If marijuana continues to be presented in the media and public discourse as a substance with little risk and laws change to allow its use, either medically or recreationally, youth use is likely to increase as well.

Prescription Drug Abuse

Prescription drug abuse is defined as the non-medical use of prescription drugs, including using prescription drugs that were prescribed to someone else or using

High School Students

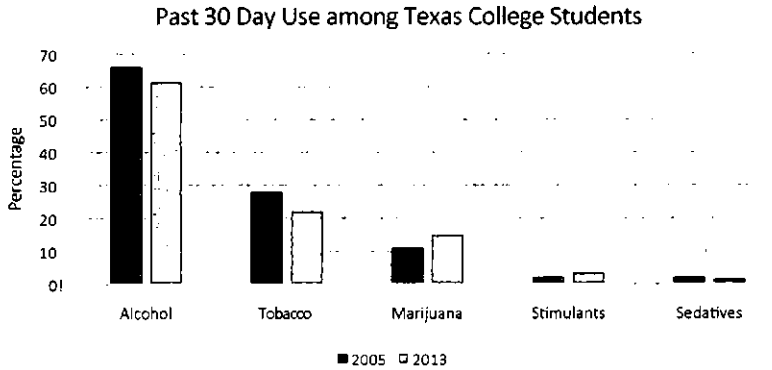
prescription drugs for the feelings they cause rather than for medical reasons. Prescription drug abuse has also gained more attention in recent years because abuse rates have increased nationwide.

In Texas the rates are slightly lower than the national average with **19% of high school students reporting they took a prescription drug without a doctor's prescription at least once,** representing a decrease from 22.1% in 2011 (YRBS, 2011; YRBS 2013). Based on the 2012 Texas School Survey youth use rates for specific medications are slightly lower: 10.8% of students reported non-medical lifetime use of codeine cough syrup, 7.5% of hydrocodone, 3.6% of oxycodone, 3.9% of Xanax, and 2.0% of Valium.

Prescription drug abuse has gained national attention in recent years due to increasing use rates as well as the shock of the serious harm caused by abusing drugs that many consider to be relatively safe because they are medicine. **Prescription drug abuse among groups with high rates of binge or risky drinking, such as youth and college students, is especially concerning due to the increased risk of overdose when prescription drugs are combined with alcohol.** In Texas there were 8.6 drug overdose deaths per 100,000 people in 2008, according to the CDC's Policy Impact: Prescription Drug Overdose State Rates. The CDC also reports that drug overdose death rates in the U.S. have more than tripled since 1990 and are increasingly due to prescription drugs. **In fact, since 1999, the amount of opioid painkillers prescribed in the U.S. increased by 300%, mirroring the increase in overdose deaths (CDC, 2011).**

Substance Use Among Texas College Students

The Department of State Health Services (DSHS) and Texas A&M Public Policy Research Institute conducted the Texas School Survey of Substance Use Among College Students (TSSCS) in 2012. A total of 11,283 students at 45 institutions of higher education across Texas participated in the survey. The sample consisted of ten large four-year universities, twelve small four-year universities, and twenty-three two-year colleges. A similar survey of college students was most recently conducted by DSHS in 2005. Overall, among college students, alcohol is the most commonly used substance followed by tobacco then marijuana. The survey did not assess prescription drug use as a whole but rather by specific substance such as stimulant, sedative, and other narcotic. The chart below shows substance use rates among Texas college students in 2013 compared to 2005. Alcohol, tobacco, and sedative use have decreased but marijuana and stimulant use have increased.



Source: DSHS Texas School Survey of Substance Use among College Students, 2005 & 2013

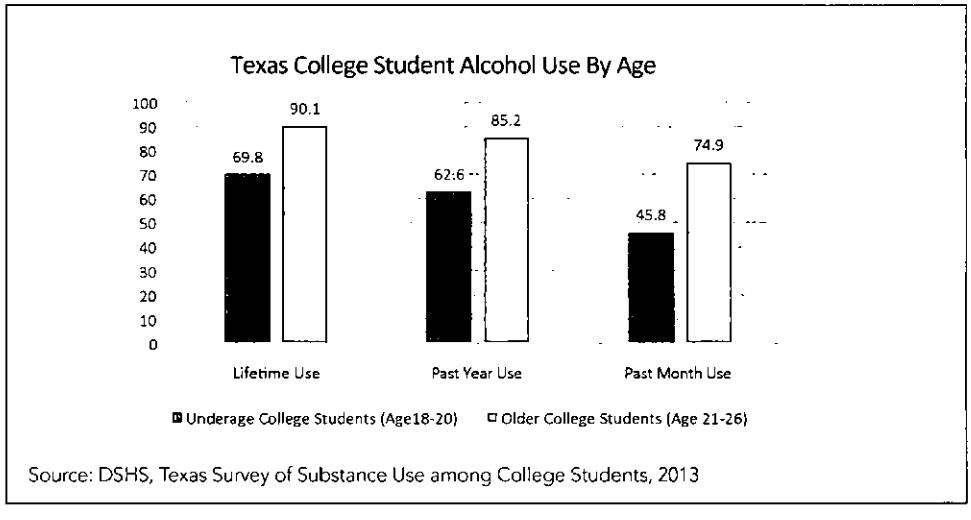
Alcohol Use

Alcohol remains the substance of choice among college students and rates of alcohol use and binge drinking among Texas college students is similar to national rates. Based on findings from the 2013 Texas School Survey of Substance Use Among College Students (TSSCS), 81% of students report using alcohol in their lifetime and **62% of students report using alcohol in the past month.** Beer is the most common

College Students

alcoholic beverage, followed closely by liquor. **Past-month binge drinking is reported among 43% of male college students and 38% of female college students in Texas.** The rate of binge drinking among female college students is higher in Texas than the national rate (35%) but this is likely due to differences in measurement; the Texas survey defines binge drinking among females as four or more drinks in a single sitting whereas the national survey defines it as five or more drinks in a single sitting (SAMHSA, 2012).

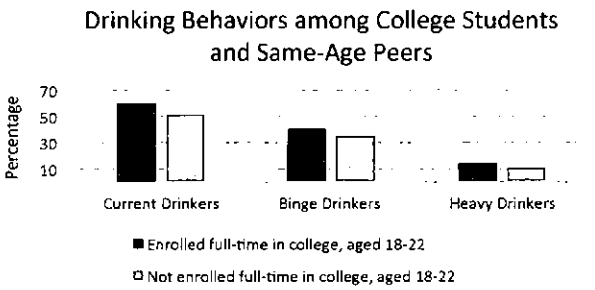
Drinking rates among underage college students, age 18-20, are lower than overall rates. **Just under half of underage college students (46%) report drinking in the past month** compared to about 75% of older college students, age 21-26 (DSHS, TSSCS, 2013).



Source: DSHS, Texas Survey of Substance Use among College Students, 2013

According to the most recent National Survey on Drug Use and Health in 2012, **young adults ages 18-22 who were enrolled in college full-time were more likely to drink than same-age peers who were not full-time college students.** Among full-time college students, 60.3% reported current drinking whereas 51.9% of young adults who are not full-time college students reported current drinking. Similarly, 40.1% of full-time college students reported binge-drinking and 14.4% reported heavy drinking (defined as binge-drinking at least 5 time in the past 30 days), which are both higher than rates among same-age peers not in college, as shown on the chart in the next page (SAMHSA, 2013). These trends highlight the importance of interventions and prevention strategies that focus on college students.

College Students



Source: National Survey on Drug Use and Health, 2012

Tobacco Use

Fewer Texas college students reported using tobacco in the 2013 TSSCS compared to 2005. About 48% of students reported lifetime use and 34% reported past-year use, which is down from 39% in 2005. Past-month use of tobacco is about 22%, similar to the rate of adult use in Texas of about 18% in 2010 (DSHS, Texas BRFSS, 2010). Tobacco use is twice as prevalent among male college students than female college students with about 32% of men reporting tobacco use compared to only 16% of women.

Marijuana Use

About 42% of Texas college students reported using marijuana in their lifetime and 15% reported using marijuana in the past month. Both percentages are higher than the 2005 percentages which were 37% and 11%, respectively. Among students who reported that they have used drugs in the past, the majority (86%) of those who continue to use drugs indicated they typically use marijuana (DSHS, TSSCS, 2013).

Prescription Drug Abuse

Using prescription drugs to get high was reported by 17% of Texas college students. The most commonly abused prescription drugs are painkillers with about 11% of students reporting that they used a painkiller, such as OxyContin, Codeine, or Vicodin, to get high at least once in their lives. Stimulants, such as Ritalin or Adderall, are the second most commonly abused prescription drug with about 9% of students reporting lifetime use,

College Students

followed by sedatives, such as Ambien or Soma, with 7% of students reporting lifetime use. Use rates of painkillers cannot be compared between 2005 and 2013 due to a change in question wording on the survey but, for stimulants, use rates have increased since 2005 and, for sedatives, use rates have decreased since 2005 (DSHS, TSSCS, 2013).

Prescription Drug Abuse among Texas College Students by Drug Type

	LIFETIME USE	PAST-MONTH USE
Painkillers	**11%**	**2%**
Stimulants	**9%**	**3%**
Sedatives	**7%**	**1.5%**

Source: DSHS, Texas Survey of Substance Use Among College Students, 2013

Students appear to be fairly infrequent prescription drug users because past-month use rates are relatively low compared to lifetime use rates with about 2% reporting past-month use of painkillers, 3% reporting past month use of stimulants, and 1.5% reporting past-month use of sedatives. Prescription drugs are most commonly obtained from a medicine cabinet at home (about 10%) followed by a doctor's prescription (9%) and buying from someone else who has a prescription (9%) (DSHS, TSSCS, 2013). This is similar to national findings from the 2012 National Survey on Drug Use and Health showing that the majority (69%) of adults and youth who abuse prescription drugs get the drugs from a friend or relative (SAMHSA, 2013).

Because alcohol is the most commonly used substance among youth and causes the most harm, the physical, social, and economic consequences related to underage and risky drinking are highlighted here.

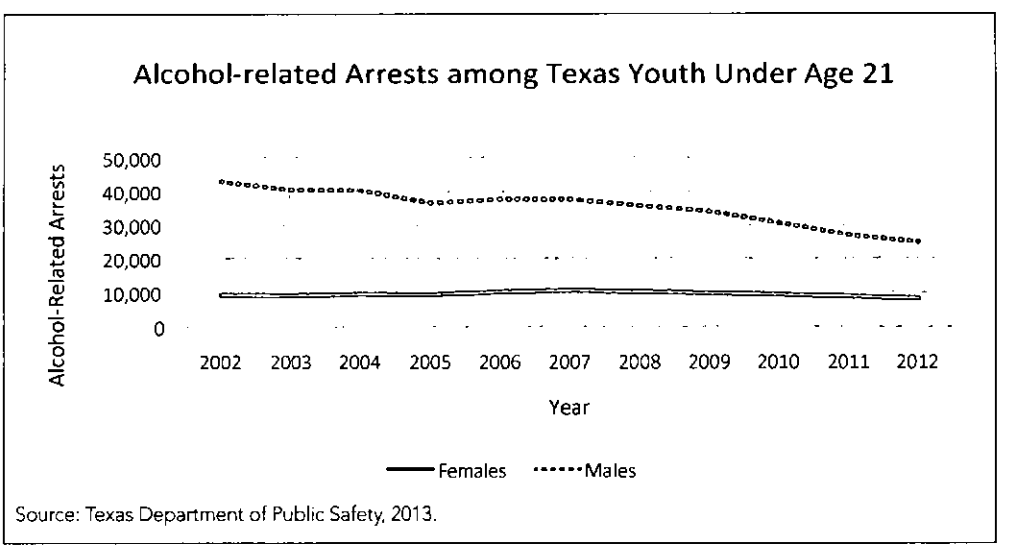
Alcohol-Related Arrests

In 2012, a total of 33,059 youth in Texas not yet the legal drinking age of 21 were arrested for alcohol-related violations, specifically driving under the influence (DUI), liquor law violations, and drunkenness. Young men are more likely to be arrested than young women with 24,889 arrests among young men compared to 8,170 arrests among young women. However, although the arrests among young men are decreasing, the arrests among young women are relatively unchanged.

Alcohol-Related Arrests Among Youth Under 21 in 2012

ARREST TYPE	FEMALES	MALES
DUI	**1,649**	**5,789**
Liquor Law Violation	**4,106**	**9,434**
Drunkenness	**2,415**	**9,666**
TOTAL	**8,170**	**24,889**

Source: Texas Department of Public Safety, 2013.

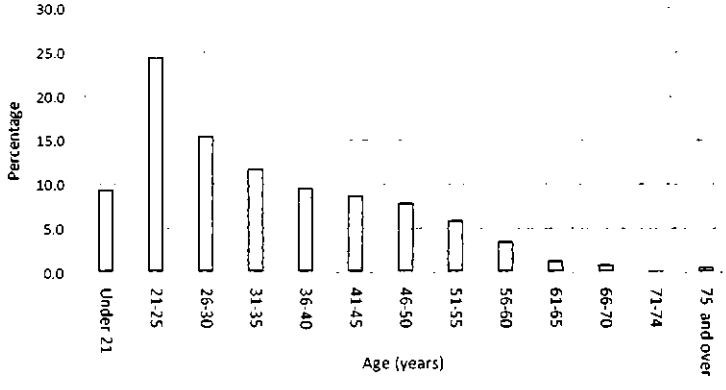


Source: Texas Department of Public Safety, 2013.

Drunk Driving and Fatal Car Crashes

On Texas roads in 2012, 3,398 people were killed in traffic crashes and, of those, 1,498, or 44%, were killed in alcohol-related crashes, which far exceeds the nationwide percentage of 36% (NHTSA, 2013).

A total of 942 drunk drivers were killed in fatal car crashes in Texas in 2012. Nearly half (49.3%) were age 30 years and under with 21-25 year olds making up the largest percentage, about one-fourth (24.4%). Additionally, 9% were under 21 years old (TXDOT, 2013). Prevention strategies to reduce risky drinking among young people would likely greatly impact the number of drunk driving and fatal car crashes in our state.



Source: Texas Department of Transportation, 2013

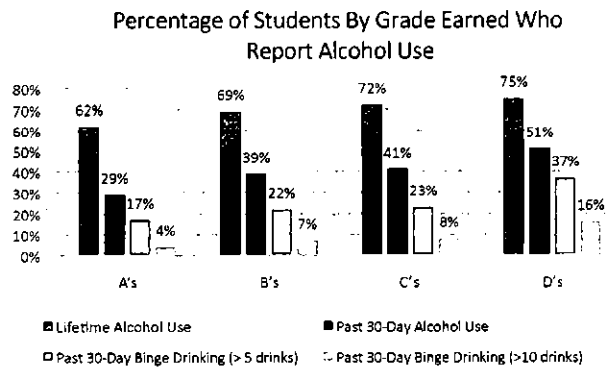
Drinking and driving rates are concerning among college and high school students in Texas. Among high school students, 11.2% report driving after they had been drinking in the past 30 days and, among college students, 25% report driving after drinking at least once per month. Older high school students have rates similar to the higher rates among college students with 17.5% of high school seniors reporting past-month drinking and driving. There is a gender difference in drinking and driving also with more male high school students (13.4%) reporting drinking and driving than female high school students (8.6%). Not all high school students drive but they may still be putting themselves at risk by riding with a drunk driver; about 30% of high school students said

they rode with someone in the past 30 days who had been drinking alcohol (DSHS, YRBS, 2013).

Young people who binge drink are more likely to drive while impaired. According to a 2012 report from the Centers for Disease Control, nationwide, **85% of teens in high school who report drinking and driving in the past month also report binge drinking.** In the 2012 DSHS Texas Secondary School Survey (TSS), 31.2% of 12th graders reported binge drinking in the last month, compared to 20.2% nationwide (Patrick et al., 2013). Strategies to reduce binge-drinking, particularly among individuals under age 30, would likely make Texas roads safer and reduce fatal DUI crashes.

Academic Performance

Alcohol use is linked to lower school performance. Among Texas high school students, more students with lower grades drink compared to students with higher grades. Specifically, among students who earned mostly A's, 29% reported drinking in the past 30 days, whereas, among those who earned mostly D's/F's, 51% reported drinking in the past 30 days (see table below). Although we cannot infer that alcohol causes students to earn lower grades, we can see that they are directly related.



Source: CDC, Youth Risk Behavior Survey, 2013

Alcohol is also linked to academic performance in college. Compared to college students who drink lightly or not at all, college students who drink heavily are more likely to miss class and report that drinking causes them to get behind on school work (DSHS, TSSCS, 2013).

Teen Pregnancy

Texas has one of the highest rates of teen pregnancies in the country, ranking 3rd among all states in 2008. In 2008 the teen pregnancy rate among 15-19 year olds in Texas was 85 per 1,000 compared to the lower U.S. average of 68 per 1,000 (Guttmacher Institute, 2013). Teens who drink or use other drugs tend to have more sexual partners and start having sex at younger ages, and are more likely to be sexually active and less likely to use contraception compared to teens who do not drink or use other drugs (National Campaign to Prevent Teen Pregnancy, 2007).

Texas colleges students who drink heavily were more likely than light drinkers to report risky sexual behaviors: 56% reported they engaged in unprotected sex and 47% reported they have engaged in unplanned sex at least once during the school year due to alcohol consumption (DSHS, TSSCS, 2013). Among high school students who are sexually active, 23.8% or about 1 in 4 said they used alcohol or other drugs before last sexual intercourse (DSHS, YRBS, 2013). It stands to reason that strategies to reduce drinking among youth in Texas would likely lower teen pregnancy rates as well by preventing risky sexual behaviors.

Sexually Transmitted Diseases

Alcohol use is related to sexually transmitted diseases (STDs) due to the association between alcohol and unsafe sex. SAMHSA's National Survey on Drug Use and Health shows that the likelihood of having an STD is linked to frequency of alcohol use; that is, STDs are more common among individuals who report binge drinking or drinking heavily than people who do not drink (SAMHSA, 2007).

In Texas, rates of STDs have either increased or remained stable based on the type of STD over the past 7 years, from 2005 to 2012. Specifically, cases of syphilis have increased and cases of gonorrhea and chlamydia, which are most common among youth

and young adults ages 15-24 years old, are stable and have not decreased. Policies and strategies that reduce alcohol consumption, such as raising alcohol excise taxes and zero tolerance laws, have been shown to also reduce rates of sexually transmitted diseases, particularly among young men and women (National Bureau of Economic Research, 2005; SAMHSA, 2007).

Personal and Social Harm

The National College Health Assessment from 2012 reports that, while drinking, 27.1% of college students did something they later regretted, 23.1% forgot where they were or what they did, 15.4% had unprotected sex, and 11.2% physically injured themselves (American College Health Association, 2013). In Texas, almost half of college students who are heavy drinkers report that alcohol has caused them to argue with friends and roommates and nearly 30% report they have blacked out four or more times during the school year (DSHS, TSSCS, 2013). When an individual blacks out, he or she has no memory of what happened during that time period and may engage in risky behaviors with no memory of them later.

Economic Burden on the State

This past year, in 2013, alcohol researchers produced a new report estimating national and state level costs of excessive drinking. In this study by Sacks and colleagues (2013) excessive drinking included binge-drinking, heavy drinking, underage drinking, and any alcohol consumption by pregnant women. Binge drinking was defined as 4 or more drinks per occasion for women and 5 or more drinks per occasion for men. Heavy drinking was defined as more than 1 drink per day on average for women and more than 2 drinks per day on average for men.

Researchers found that **excessive drinking cost Texas $16.5 billion in 2006, which is about $1.89 per drink**. Of this total cost, the Texas government paid 40.7% or $6.7 billion, which is about $2 of every $5. **Underage drinking alone cost Texas $1.8 billion, 11% of total costs.** Binge drinking is responsible for the majority of the costs, costing Texas $13.0 billion, 77% of total cost. The chart on the following page shos these costs and total costs of excessive drinking in Texas.

Consequences of Underage and Risky Alcohol Use in Texas

Cost of Excessive Drinking in Texas in 2006	
Cost of binge drinking	**$13.0 billion**
Cost of underage drinking	**$1.8 billion**
TOTAL COST	**$16.5 BILLION**

Source: Sacks et al. (2013). *State Costs of Excessive Alcohol Consumption, 2006.*

The costs of excessive drinking in Texas in 2006 ($16.5 billion) exceeded that of smoking ($12.3 billion) and neared that of Medicaid spending ($18.1 billion).

For this study, economic cost was estimated based on costs from healthcare (e.g. ER visits, ambulatory care), productivity losses (e.g. missed days of work, incarceration rates), motor vehicle crashes, fire response, and the criminal justice system. The majority of the economic burden from excessive alcohol use in Texas is due to lost productivity costs (72%) followed by healthcare costs (8%) (Sacks et al., 2013).

Overview of Legislative Session

The Texas Legislature held the 83rd Legislative Regular Session January 8, 2013 to May 27, 2013, and there were three additional special sessions held in May, June, and July, 2013. Overall, the 83rd Legislature filed a total of 6,142 House and Senate bills and, of these, 1,443 bills were passed and signed into law (Legislative Reference Library of Texas, 2013).

We have selected six bills to highlight that directly relate to youth substance use and prevention. To review these and other bills in more detail, visit Texas Legislature Online at www.capitol.state.tx.us.

HB 232: Alcohol Awareness Classes

Author: Rep. Ryan Guillen (D-Rio Grande City)
Committee: House Committee on Licensing and Administrative Procedures

- Allows a defendant residing in a county of 75,000 or less that does not have an alcohol awareness class to instead take a DSHS-approved online course or to perform at least eight hours of community service related to alcohol abuse prevention or treatment. If the defendant is enrolled in an institution of higher education located in a county in which access to an alcohol awareness program is readily available the court may consider the defendant to be a resident of that county.

- Implications: Ensures there is a meaningful deterrent in counties where alcohol awareness classes were not previously available and where defendants were not being required to complete any alternatives.

HB 1020: Drug and Alcohol Driving Awareness Programs

Author: Rep. Ron Reynolds (D-Missouri City)
Committee: House Committee on Licensing and Administrative Proceduress

- Clarifies authorization of Texas Education Agency-regulated Drug and Alcohol Driving Awareness Programs to be state-approved.

- Implications: Strengthens Drug and Alcohol Driving Awareness Programs by ensuring they meet state requirements.

Overview of Legislative Session

HB 3105: Limitations in Health Benefit Plans and Health Insurance Policies

Author: Rep. Geanie Morrison (R-Victoria)

Committee: House Committee on Insurance

- Repealed a section of the Insurance Code that required individual accident and health policies to contain the following statement: "The insurer is not liable for any loss sustained or contracted in consequence of the insured's being intoxicated or under the influence of any narcotic unless the narcotic is administered on the advice of a physician." This clause is also referred to as an "Alcohol Exclusion Law." It is found under the Uniform Accident and Sickness Policy Provision (UPPL) in the Texas Insurance Code. Inclusion of this clause and subsequent coverage of injuries sustained while intoxicated is now optional.

- Implications: Insurers can choose to remove this statement from their policies. In doing so, insurers will cover costs associated with accidents that occurred while an individual was intoxicated. If insurance companies make this change, health care providers will be able to ask patients about their alcohol use when admitted into the emergency room, implement screening and brief intervention, and collect data about alcohol consumption without concern that insurance reimbursement will be denied.

HB 3536: Fee on Cigarette and Tobacco Sales

Author: Rep. John Otto (R-Dayton)

Committee: House Committee on Ways and Means

- Imposes a fee on the sale of cigarettes and tobacco products manufactured by companies who were not a part of the tobacco settlement agreement and changes the tax rate on chewing tobacco. For 2013, the fee is imposed at the rate of 2.75 cents for each non-settling manufacturer cigarette and each 0.09 ounces of non-settling manufacturer tobacco product. Beginning in January 2014 and each subsequent year, the Comptroller will increase the rate by the greater of 3% or the actual total percentage change in the Consumer Price Index.

- Implications: Recovers health care costs to the state imposed by non-settling manufacturers, prevents undermining of state policy to reduce underage

smoking by offering lower price cigarettes, protects the tobacco settlement agreement and funding, and ensures even treatment of manufacturers.

HB 3572: Mixed Beverages Tax

Author: Rep. Harvey Hilderbran (R-Kerrville)

Committee: House Committee on Ways and Means

- Went into effect on January 1, 2014. This law reduced the mixed beverage gross receipts tax to 6.7% but then added an 8.25% mixed beverage sales tax that can be passed on to the customer to pay. Previously restaurants and bars that serve mixed drinks had a mixed beverage gross receipts tax of 14% which was imbedded into the cost of the drink.

- Implications: Restaurants and bars now have three options. They can leave the price the same but add the 8.25% sales tax to the bill. They can lower their prices since they now have to give less money to the state. Or they can build the sales tax into the price. Restaurants and bars will save money and may increase profit by passing on the extra cost to the customer. It will be up to each business to determine if this law will increase the overall cost of a mixed beverage or not.

SB 831: School-Based Mental Health and Substance Abuse Programs

Author: Sen. Larry Taylor (R-League City)

Committee: Senate Committee on Education

- Requires Department of State Health Services and Texas Education Agency to annually update a list of recommended best practice-based programs on early mental health intervention, culturally competent mental health promotion and positive youth development, substance abuse prevention, substance abuse intervention, and suicide prevention. Must make programs available on website.

- Implications: Enables school districts to easily identify best practice school-based mental health and substance abuse programs rather than having to search through hundreds of different programs across different websites. Focuses on prevention and mental health promotion rather than more costly interventions after onset of problems.

New Research and Emerging Issues

Research consistently shows that alcohol advertising impacts young people's decisions to drink alcohol. Studies have found that the more advertisements a young person sees, the more likely he or she is to be drinking alcohol a few years later (Anderson, et al., 2009; Grenard, et al., 2013), and youth are more likely to consume a specific brand when exposed to its advertising (Jernigan, 2014).

New research by the Center on Alcohol Marketing and Youth (CAMY) published in the CDC's Morbidity and Mortality Weekly Report (MMWR) shows that alcohol advertising is reaching too many young people in the U.S. The alcohol industry has voluntary standards to not place any alcohol ads on television shows in which 30% or more of the audience is likely to be younger than 21. However, in 25 of the largest television markets in the U.S., including markets in Dallas and Houston, 1 in 4 alcohol advertisements exceeded the industry's voluntary standards. **In Texas, 31.5% of alcohol ads in Houston and 29.7% of alcohol ads in Dallas exceeded the industry's standard.** The report shows that the alcohol industry's self-regulation could be improved and, if these alcohol ads that exceeded the standard were removed and not replaced in the television programming, youth exposure to alcohol advertising on these programs could decrease by as much as 30% (CDC, MMWR, 2013).

Youth exposure to alcohol ads on television has increased more so than adult exposure in recent years. Another study from CAMY shows that, from 2001 to 2009, youth exposure to alcohol advertising on television in the U.S. increased by 71%. This increase was largely due to increases in liquor advertisements. **Youth see about 366 alcohol ads on TV per year or about 1 per day** (CAMY, 2012). Additionally, youth are 22 times more likely to see an ad for an alcohol product than an industry responsibility ad that warns about underage drinking or drinking and driving.

Television commercials are not the only way youth are exposed to alcohol. Popular songs often reference or promote alcohol. **In fact, nearly 1 in 4 of Billboard's most popular songs from 2009 to 2011 mention alcohol.** These songs almost always portrayed alcohol positively and almost never included mention of the harms of excessive drinking. Among genres, rap, hip-hop, and R&B had the most songs with alcohol references (38%) followed by country (22%). The alcohol references in the songs often glamorize partying, sex, and underage drinking. Four specific brands — Jack Daniel's whiskey, Hennessy

New Research and Emerging Issues

cognac, Grey Goose vodka, and Patron tequila—represent over half of the alcohol mentions in the popular songs.

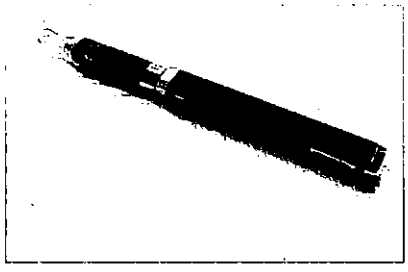
Branding is an important element of advertising, and the alcohol industry is promoting certain messages about their brands through their mentions in pop songs and television advertisements. **Certain alcohol brands are more appealing to younger ages and, as such, young people are more likely to drink certain brands than are adults.** This is apparent because youth are not drinking the alcohol that is the cheapest and most available but instead are drinking specific alcohol brands.

Parents and peers have an influence on a young person's drinking behaviors but research clearly shows that alcohol advertising influences young people's decisions as well as community expectations, norms, and environment. With the prevalence of alcohol marketing—through television, pop songs, and other media—it is a struggle to compete with the alcohol industry's messaging.

The Institute of Medicine, in their 2003 report *Reducing Underage Drinking, A Collective Responsibility,* recommends that "the alcohol industry trade associations, as well as individual companies, should strengthen their advertising codes to preclude placement of commercial messages in venues where a significant proportion of the expected audience is underage, to prohibit the use of commercial messages that have substantial underage appeal, and to establish independent external review boards to investigate complaints and enforce the codes" (Institute of Medicine, 2003).

For more information on alcohol advertising and youth and to identify prevention strategies for your community, visit the Center on Alcohol Marketing and Youth website at **www.camy.org.**

E-cigarettes



Electronic cigarettes, or e-cigarettes, became available in U.S. markets in 2007 and quickly grew into a billion dollar industry. E-cigarettes are battery-operated devices that provide doses of nicotine and other chemicals to the user in an aerosol. E-cigarettes typically contain nicotine, chemicals to produce the aerosol, and flavoring.

E-cigarettes are not currently regulated by the Food and Drug Administration (FDA), aside from the few that are marketed for therapeutic purposes. The FDA announced in April 2011 that it would expand its definition of tobacco products to include e-cigarettes but the FDA has not yet made any changes. As such, **e-cigarettes remain unregulated and the potential harms of e-cigarette use and exposure to e-cigarette vapors remain unknown.**

Federal law prohibits the sale of tobacco products to minors but this law currently does not include e-cigarettes. As of December 2013, over 20 states and many communities banned selling e-cigarettes to minors but, **in most states including Texas, there are no restrictions on the sale of e-cigarettes to minors** (Counter Tobacco, n.d.; Global Advisors on Smokefree Policy, 2014). Selling to minors is at the discretion of the business owner and their policies.

One community in Texas, San Marcos, addressed e-cigarettes by specifically including them in their comprehensive citywide smoke-free ordinance that was passed in 2013. In other communities with smoke-free ordinances that do not specifically list e-cigarettes, the ban of e-cigarettes is at the discretion of business owners and employers.

Because e-cigarettes are not regulated federally, they are not subject to federal tobacco taxes and can be sold at much lower prices than cigarettes. Also, **promotion and advertising of e-cigarettes is not strictly regulated** so tobacco companies are resorting to marketing strategies they previously used to market cigarettes, such as cartoon characters, celebrity endorsements, and flavors that appeal to children (Global Advisors on Smokefree Policy, 2014).

New Research and Emerging Issues

Little data has been collected about youth use of e-cigarettes. However, the CDC's National Youth Tobacco Survey collected data on e-cigarette use among middle and high school students in 2011 and 2012 and found that **e-cigarette use among youth in the U.S. doubled between 2011 and 2012.** In 2012, about 1.6% of students reported current use and 6.8% of students reported they had used e-cigarettes at least once in their lifetime as shown in the table below (CDC, 2013).

E-Cigarette Use Among Middle and High School Students in U.S.

	2011	2012	% INCREASE
E-Cigarette Lifetime Use	**3.3%**	**6.8%**	**106%**
E-Cigarette Current Use	**0.8%**	**1.6%**	**100%**

Source: CDC, National Youth Tobacco Survey, 2011-2012

In 2012, an estimated 1.78 million students had ever used e-cigarettes, and 160,000 students who had ever used e-cigarettes had never used traditional cigarettes. **E-cigarettes are cheaper and easier for youth to obtain than traditional cigarettes and, because they contain nicotine, could lead to addiction and future cigarette use. The increase in youth use of e-cigarettes is concerning because of the lack of research on health and long-term impact of use.** More data collection is needed nationally and in Texas to monitor youth use of e-cigarettes, and focused prevention strategies are essential to prevent e-cigarette use, sales, and marketing among youth.

Environmental Prevention

Environmental prevention, rooted in the public health model, is an essential part of a comprehensive approach to preventing alcohol, tobacco, and other drug use. These community-based strategies act to create change and enforce policies. When targeting youth substance use and abuse, environmental prevention strategies address reducing access and availability, changing perceptions and norms of substance use, and strengthening enforcement of substance use prevention laws. Rather than focusing on changing an individual's behaviors, environmental prevention strategies create effective and lasting change for an entire community.

Evidence-based environmental prevention strategies to combat youth alcohol and tobacco use are highly recommended by multiple reputable sources including the Institute of Medicine, Centers for Disease Control and Prevention (CDC), and the U.S. Surgeons General, and in the respected publication *Alcohol: No Ordinary Commodity - Research and Public Policy*, Second Edition.

The following paragraphs highlight environmental strategies effective at preventing youth tobacco and alcohol use. More attention is given to strategies that prevent youth alcohol use because it is the most used substance by youth in Texas. While other organizations focus on preventing youth tobacco use, no statewide organization in Texas other than Texans Standing Tall has youth alcohol use prevention as its primary area of focus.

Recommended Strategies to Prevent Tobacco Use

To reduce tobacco use initiation and restrict minors' access to tobacco, the CDC's online tool The Community Guide recommends the following strategies:

- Increasing tobacco prices through excise tax
- Smoke-free policies, ordinances, and laws
- Mass media campaigns in conjunction with other strategies to encourage individuals to remain tobacco free
- Community mobilization in conjunction with other interventions

Environmental Prevention

SMOKE-FREE ORDINANCES AND LAWS

Smoke-free ordinances prohibit smoking in certain public places and protect nonsmokers from exposure to secondhand smoke. There is currently no statewide smoke-free law in Texas but efforts to reduce secondhand smoke exposure are occurring on the local level. As of January 2014, 35 Texas cities have comprehensive smoke-free ordinances.

A smoke-free ordinance is considered comprehensive if it prohibits smoking in municipal worksites, private worksites, restaurants, bars in restaurants, and bars not in restaurants. In 2012, 43% of the Texas population was covered by a comprehensive smoke-free ordinance, meaning these Texans are protected from secondhand smoke exposure. Smoke-free coverage in Texas has been steadily increasing since 2000 when no cities had a comprehensive smoke-free ordinance. Local communities continue to work toward passing smoke-free ordinances or modifying existing ordinances to increase protection. **However, even if every city in Texas passed a comprehensive ordinance, 25% of Texans would remain unprotected because they live in rural or unincorporated areas that are unable to pass a local ordinance. As such, a statewide smoke-free law is needed in order to protect all Texans.**

Research continually shows that there is no safe level of exposure to secondhand smoke. Secondhand smoke causes heart diseases, heart attacks, lung cancer, chronic obstructive pulmonary diseases, and asthma, and about 3,600 nonsmokers die each year from secondhand smoke exposure (Campaign for Tobacco Free Kids, 2013). Comprehensive smoke-free ordinances are a proven way to reduce exposure to secondhand smoke and save lives. Smoke-free ordinances also save money. **If Texas were to pass a statewide smoke-free law, it is estimated to result in biennial savings of $404 million due to health care and productive costs averted** (Texas Health Institute, 2011).

Smoke-free ordinances are recommended by the Institute of Medicine, the World Health Organization, the Centers for Disease Control and Prevention, and the U.S. Surgeons General among others.

Recommended Strategies to Prevent Excessive Alcohol Use and Associated Harms

The following five strategies are recommended by both *Alcohol: No Ordinary Commodity* and the CDC's Community Guide:

1) Increase alcohol taxes
2) Regulate hours and days of alcohol sales
3) Regulate alcohol outlet density
4) Enhanced enforcement of laws regarding selling alcohol
5) Provide brief interventions for at-risk drinkers

Increase Alcohol Taxes

Alcohol consumption rates are directly related to alcohol prices. Raising alcohol taxes is a way to raise alcohol prices. This strategy is recommended by the National Institute on Alcohol Abuse and Alcoholism, in addition to The Community Guide and by the authors of *Alcohol: No Ordinary Commodity*, as a way to prevent excessive drinking and reduce harms associated with drinking, such as alcohol-related crashes, violence, and suicide.

A systematic review of 73 research studies performed by The Community Preventive Services Task Force and reported in The Community Guide shows that higher alcohol prices and taxes are associated with fewer motor vehicle crashes and deaths, fewer incidents of alcohol-impaired driving, fewer deaths from liver cirrhosis, and fewer deaths overall (Guide to Community Preventive Services, 2013). In a 2010 meta-analysis of 50 studies, the researchers found similar results. **Specifically, they found that raising the price of alcohol reduced alcohol-related mortality, traffic crash mortality, sexually transmitted diseases, violence, and crime** (Wagenaar et al., 2010). Furthermore, a long-term study in Alaska by the same researchers showed that each time Alaska increased its alcohol excise tax, there was a significant reduction in deaths from alcohol related diseases. These reductions were sustained over the course of the 20-year study (Wagenaar et al., 2009).

Although a positive impact can be seen among all age groups, youth and young adults are especially sensitive to increases in alcohol price (Cook & Moore, 1993; Grossman

Environmental Prevention

et al., 1994). Youth alcohol consumption decreases as the price of alcohol increases (NIAAA, 2006). Additionally, Grossman & Markowitz (2000) found that **the price of beer in the state where a student attends college is negatively associated with students getting in trouble with the police or other college authorities, damaging property, getting into a fight or argument, and taking advantage of another person sexually or being taken advantage of sexually.**

Alcohol excise tax is a tax imposed per quantity of alcohol as the alcohol is sold from wholesalers/distributers to retailers. State excise taxes can be adjusted in order to impact alcohol consumption and generate state revenue.

In Texas, alcohol excise tax rates have not been raised since 1984 and are not indexed for inflation so they have lost more than half their value.

Texas Alcohol Excise Tax Rates

ALCOHOL TYPE	CURRENT TAX RATE (VALUE SET IN 1984	TAX RATE IF INDEXED FOR INFLATION
Beer	**$0.19/gallon**	**$0.43/gallon**
Wine (< 14% alcohol)	**$0.20/gallon**	**$0.45/gallon**
Distilled spirits	**$2.40/gallon**	**$5.38/gallon**

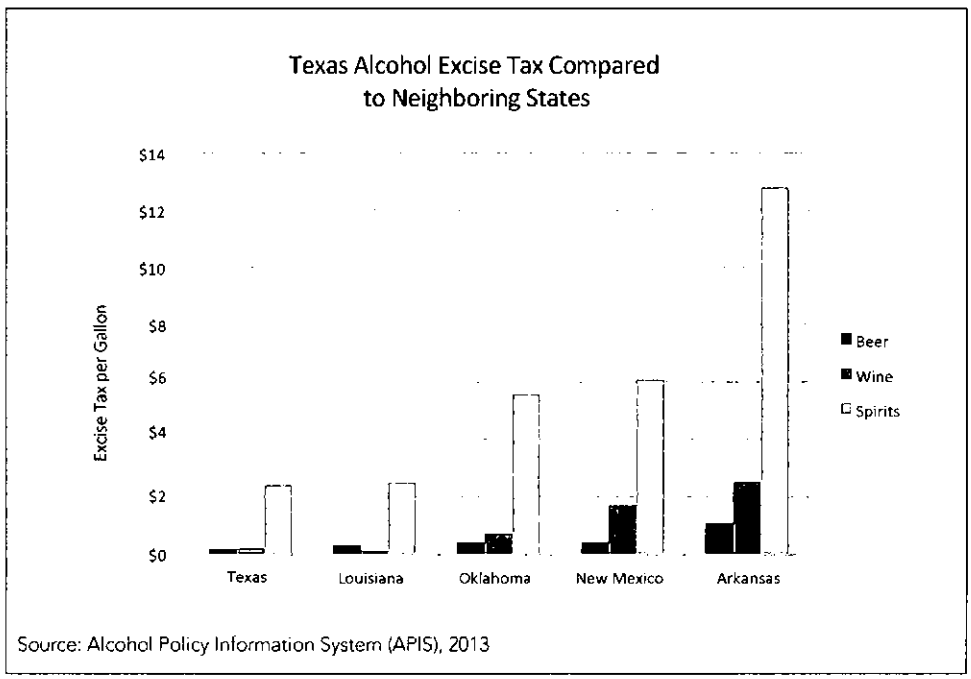
Source: Alcohol Policy Information System (APIS); Bureau of Labor Statistics CPI Inflation Calculator.

Texas excise taxes are low compared to the average U.S. state tax rate and the federal tax rate. The table below shows that Texans pay less excise tax per serving than other states. All states pay the same federal excise tax.

Texas Alcohol Excise Tax Rates

RATE	BEER (12 OZ.)	WINE (5 OZ.)	DISTILLED SPIRITS (1.5 OZ.)
Texas	**1.8 cents**	**0.8 cents**	**2.8 cents**
U.S. State Average	**2.6 cents**	**3.1 cents**	**7.8 cents**
Federal	**5 cents**	**4 cents**	**12 cents**

The following graph shows that Texas has lower alcohol excise taxes than its four neighboring states - New Mexico, Oklahoma, Arkansas, and Louisiana. Excise tax rates are higher in each state for each type of alcohol except for wine in Louisiana, which is only slightly lower than in Texas.



Source: Alcohol Policy Information System (APIS), 2013

When Texas alcohol excise taxes are compared to those of states of a similar population size — California, New York, Illinois, and Florida — Texas has the lowest excise tax for distilled spirits, shares the lowest excise tax for wine with California, and has the second lowest excise tax for beer (New York's is $.05 lower). The highest excise taxes among these states are Florida's excise tax on beer ($0.48/gallon), Florida's excise tax on wine ($2.25/gallon), and Illinois's excise tax on distilled spirits ($8.55/gallon) (APIS, 2013).

Regulate Hours and Days of Sale

Maintaining limits on hours and days when alcohol can be sold is a recommended strategy by The Community Guide and *Alcohol: No Ordinary Commodity.* In the United States, states can regulate the days when alcohol can be sold for on-premise consumption, such as at restaurants and bars, and for off-premise consumption, such as

at liquor stores and convenience stores. Policies may vary throughout a state because local governments have authority to repeal or implement regulations. Currently, 14 states maintain bans on Sunday sales of alcohol. Other states, like Texas, maintain limits on hours alcohol can be sold on Sunday and restrict Sunday sales to only beer and wine (APIS, 2013).

Hours and days of sale vary based on the type of location (on-premise vs. off-premise) and the type of alcohol being sold. According to the Texas Alcoholic Beverage Commission, Texas state laws allow sales of beer and wine at off-premise sites each day of the week except beer and wine cannot be sold until 12:00 noon on Sundays. Liquor stores cannot sell liquor all day on Sundays nor on Thanksgiving, Christmas, and New Year's Day. For on-premise sites, alcohol cannot be sold until noon on Sunday unless it is sold in conjunction with food, in which case it can be sold starting at 10:00 AM. According to the recommended strategies, **Texas should maintain its limits on the days and hours that alcohol can be sold because repealing the restrictions could lead to increases in alcohol consumption and associated harms.**

The Community Guide reports that, across several studies outside of the U.S., increasing the hours in which alcohol could be sold by just two additional hours resulted in increased alcohol consumption, increased motor vehicle crash injuries, and a shift in time of motor vehicle crashes to the time that alcohol sales stopped (Guide to Community Preventive Services, 2013). **When our neighboring state New Mexico repealed its Sunday ban on alcohol sales at off-premise locations statewide, the daily rate of alcohol-related crashes increased by 29% and deaths from alcohol-related crashes increased by 43%** (McMillan & Lapham, 2006). Moreover, when several New Mexico counties reinstituted the ban, these counties saw decreases in rates of alcohol-related crashes (McMillan & Lapham, 2007). To provide another example, in Virginia, when Sunday alcohol sales were allowed starting in 2004, the state saw a 5% increase in minor crime and a 10% increase in alcohol-involved serious crime (Heaton, 2012).

Regulate Alcohol Outlet Density

Alcohol outlet density refers to the number of places where alcohol is sold within a given area. Alcohol outlets include places that sell alcohol for on-premise and

off-premise consumption. **Numerous social and public health issues are associated with alcohol outlet density, such as alcohol consumption, alcohol-related injuries, alcohol-related motor vehicle crashes and deaths, and violence** (NASADAD, 2006). The authors of *Alcohol: No Ordinary Commodity* report that there is strong evidence indicating increases in alcohol outlet density over time were associated with increases in rates of violence, child abuse, drunk driving, and car crashes (Babor, et al., 2012). The Community Guide reviewed studies in which policies were changed to allow for higher alcohol outlet density and the results show that, when alcohol outlet density increased, alcohol consumption and related consequences also increased (Guide to Community Preventive Services, 2013). Zoning or licensing is commonly used in the U.S. to regulate alcohol outlet density.

Enhanced Enforcement of Laws Regarding Selling Alcohol

Enhanced enforcement of alcohol-serving laws is recommended by both *Alcohol: No Ordinary Commodity* and The Community Guide. *Alcohol: No Ordinary Commodity* recommends enhanced enforcement of laws restricting on-premise sales to intoxicated patrons, and The Community Guide recommends enhanced enforcement of laws preventing the sale of alcohol to minors. **Enhanced enforcement programs include increased compliance checks at alcohol outlets, increased enforcement, and promotion of increased enforcement to increase the retailers' perceived risk of legal or administrative sanctions. Evidence indicates that enhanced enforcement of alcohol laws are successful in reducing underage alcohol purchases and reducing the likelihood that alcohol will be served to intoxicated patrons (Babor et al, 2010; Guide to Community Preventive Services, 2013). Increased enforcement of these laws has even led to reductions in DWIs during the period in which enforcement was increased** (Babor et al., 2010).

The Texas Alcoholic Beverage Commission (TABC) is responsible for conducting enforcement efforts in Texas. Additionally, local law enforcement can conduct compliance checks regarding sales to minors. However, **there is no law that requires compliance checks nor server/seller training** although there is a "Safe Harbor" incentive to retailers to ensure all their employees are certified within 30 days of hire.

TABC focuses on initiatives to reduce sales to minors and over-consumption by ensuring licensed alcohol outlets receive administrative sanctions when the law is broken and by providing training to permit holders upon request or after a violation.

Provide Brief Interventions for Excessive Drinking

Typical screening and brief interventions for alcohol involve a short screen to determine the severity of an individual's alcohol use and any associated harms. The screening is followed by an intervention in which the individual is provided with information about the dangers of alcohol and motivational interviewing to recognize the potential consequences of drinking behaviors and change his or her behavior. These interventions often occur in a hospital, judicial, or college setting. Gentilello and colleagues (1998) report that screening and brief interventions delivered in a hospital after an alcohol-related injury are associated with fewer return alcohol-related emergency room visits and injuries as well as fewer alcohol-related traffic violations and arrests.

Studies of brief interventions with motivational interviewing delivered on college campuses have shown that these interventions are effective in reducing alcohol use among college students as well (Babor et al., 2010). Texans Standing Tall recently completed a partnership with Dr. Craig Field and Texas A&M University-Corpus Christi on a Center for Substance Abuse Prevention Service to Science Evaluation Enhancement project to implement screening and brief intervention (SBI) with college students and evaluate impact on student alcohol use and behavior. You can learn more about this project by contacting Texans Standing Tall. Texans Standing Tall is now funded by a grant through the Texas Department of Transportation to continue the implementation of this SBI project at colleges and universities.

The Community Guide recommends electronic Screening and Brief Interventions (eSBI), which differ from traditional SBI in that it can be conducted entirely through an interactive electronic application. The interactive program is able to provide individualized feedback to each participant. Based on a systematic review of 35 studies, The Community Guide reports that eSBI is effective in reducing alcohol consumption and binge drinking (Guide to Community Preventive Services, 2013).

APPENDIX

References

1) Alcohol Policy Information System (APIS). (2013). *Alcohol Beverage Taxes.* Policies as of 1/1/2013. Retrieved from http://alcoholpolicy.niaaa.nih.gov

2) American College Health Association. (2013). National College Health Assessment. Spring 2013 Reference Group Executive Summary.

3) Anderson, P., De Bruijn, A., Angus, K., Gordon, R., Hastings, G. (2009). Impact of alcohol advertising and media exposure on adolescent alcohol use: A systematic review of longitudinal studies. *Alcohol & Alcoholism,* 44(3), 229-243.

4) Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., Hill, L., Holder, H., Homel, R., Livingston, M., Osterberg, E., Rehm, J., Room, R., & Rossow, I. (2010). Alcohol: No Ordinary Commodity. (2nd ed.) New York, NY: Oxford University Press.

5) Bureau of Labor Statistics. CPI Inflation Calculator. Retrieved Feb. 2013 from http://www.bls.gov/data/inflation_calculator.htm.

6) Campaign for Tobacco Free Kids. (2013). *The Toll of Tobacco in Texas.* Last updated: 06/20/2013.

7) Center for Health Statistics (CHS). Texas Youth Risk Behavior Surveillance System Survey Data. Austin, TX: Texas Department of State Health Services, CHS, [2011].

8) Center for Health Statistics (CHS). Texas Youth Risk Behavior Surveillance System Survey Data. Austin, TX: Texas Department of State Health Services, CHS, [2013].

9) Center on Alcohol Marketing and Youth. (2010). *Youth Exposure to Alcohol Advertising on Television,* 2001-2009. Revised July 23, 2012.

10) Centers for Disease Control and Prevention. (2013). National Vital Statistics System. Hyattsville, MD: National Center for Health Statistics.

11) Centers for Disease Control and Prevention. (2011). Morbidity and Mortality Weekly Report. Vital Signs: Overdoses of Prescription Opioid Pain Relievers – United States, 1999-2008. Nov. 1, 2011. Vol. 60, No. 43.

12) Centers for Disease Control and Prevention. (2013). Morbidity and Mortality Weekly Report. Youth Exposure to Alcohol Advertising on Television – 25 Markets, United States, 2010. Nov. 8, 2013. Vol. 62., No. 44.

13) Centers for Disease Control and Prevention. National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention. (2013). Policy Impact: Prescription Painkiller Overdoses. Last updated: 07/02/2013.

14) Centers for Disease Control and Prevention. (2014). National Youth Tobacco Survey. Retrieved Feb. 2014 from http://www.cdc.gov/tobacco/data_statistics/surveys/nyts/

15) CESAR. (2013). More than Half of 12th Grade Binge Drinkers Drink Ten or More Drinks in a Row. CESAR Fax, Vol. 22, Issue 45, Nov. 11 2013. Data from Monitoring the Future, 2001-2011.

16) Cook, P.J. & Moore, M.J. (1993). Drinking and schooling. *Journal of Health Economics.* 12:411-429.

17) Counter Tobacco. (n.d.). E-cigarettes at the point of sale. Retrieved from http://countertobacco.org/e-cigarettes-point-sale.

18) Department of State Health Services. (2013). Texas School Survey of Substance Use among College Students.

19) Department of State Health Services. (2012). Texas School Survey of Substance Use among Students, Grades 7-12.

20) Gentilello, L. M., Ebel, B. E., Wickizer, T. M., Salkever, D. S., Rivara, F. P. et al. (2005). Alcohol interventions for trauma patients treated in emergency departments and hospitals. *Annals of Surgery,* (241(4), 541-550.

21) Global Advisors on Smokefree Policy. White Paper: Electronic Smoking Devices. Retrieved from http://www.njgasp.org/E-Cigs_White_Paper.pdf.

22) Grenard, J. L., Dent, C. W., Stacy, A. W. (2013). Exposure to alcohol advertisements and teenage alcohol-related problems. *Pediatrics,* 131,(2), e369-e379.

23) Grossman, M., & Markowitz, S. (2000). Alcohol regulation and violence on college campuses. National Bureau of Economic Research.

24) Grossman, M., Chaloupka, F.J., Saffer, H., & Laixuthai, A. (1994). Effects of alcohol price policy on youth: A summary of economic research. *Journal of Research on Adolescence.* 4(2): 347-364.

25) Guide to Community Preventive Services. Preventing excessive alcohol consumption: Regulation of alcohol outlet density. Last updated: 09/24/2013. Retrieved Feb. 2014 from: www.thecommunityguide.org/alcohol/outletdensity.html.

26) Guttmacher Institute. 2013. U.S. Teenage Pregnancies, Births, and Abortions, 2008: State Trends by Age, Race and Ethnicity. March 2013.

27) Heaton, P. (2012). Sunday liquor laws and crime. *Journal of Public Economics.* 96(1): 42-52.

APPENDIX

References

28) Institute of Medicine & National Research Council. (2003). Reducing Underage Drinking: A Collective Responsibility.

29) Jernigan, D. *Alcohol marketing and youth: Latest research and community action*. Presentation at Community Anti-Drug Coalitions of America's National Leadership Forum, Feb. 6, 2014.

30) Legislative Reference Library of Texas. (2013). Retrieved Feb. 2014 from http://www.lrl.state.tx.us/index.cfm

31) McMillan G.P. and Lapham S. (2006). Effectiveness of bans and laws in reducing traffic deaths: Legalized Sunday packaged alcohol sales and alcohol-related traffic crashes and crash fatalities in New Mexico. *American Journal of Public Health*, 96: 1944-1948 as cited in *Alcohol: No Ordinary Commodity*

32) McMillan, G.P., Hanson. T.E., and Lapham S.C. (2007) Geographic variability in alcohol-related crashes in response to legalized Sunday packaged alcohol sales in New Mexico. *Accident Analysis and Prevention*, 39: 252-257 as cited in *Alcohol: No Ordinary Commodity*.

33) National Association of State Alcohol and Drug Abuse Directors (NASADAD). (2006). State Issue Brief: Current Research on Alcohol Policies and State Alcohol and Other Drug (AOD) Systems.

34) National Bureau of Economic Research. (2005). Alcohol Policies and Sexually Transmitted Disease Among Youth. *National Bureau of Economic Research Digest, July 2005*.

35) National Highway Traffic Safety Administration. (2013). Fatality Analysis Reporting System.

36) National Institute on Alcohol Abuse and Alcoholism. (2006). "Underage drinking: Why do adolescents drink, what are the risks, and how can underage drinking be prevented?" Alcohol Alert 67, January 2006.

37) National Institute on Alcohol Abuse and Alcoholism. (n.d.). Moderate and Binge Drinking. Retrieved from http://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

38) Nelson, T. F., Xuan, Z., Babor, T. F., Brewer, R. D., Chaloupka, F. J., Gruenewald, P. J., Holder, H., Klitzner, M., Mosher, J. F., Ramirez, R. L., Reynolds, R., Toomey, T. L., Churchill, V., & Naimi, T. S. (2013). Efficacy and the strength of evidence of U.S. alcohol control policies. *American Journal of Preventive Medicine*, 45(1), 19-28.

39) Patrick, M. E., Schulenberg, J. E., Martz, M. E., Maggs, J. L., O'Malley, P. M., & Johnston, L. D. (2013). Extreme binge drinking among 12th-grade students in the United States: prevalence and predictors. *Journal of the American Medical Association Pediatrics*, 167(12): 1019-1025.

40) Sacks, J. J., Roeber, J., Bouchery, E. E., Gonzales, K., Chaloupka, F. J., & Brewer, R. D. (2013). State costs of excessive alcohol consumption, 2006. *American Journal of Preventive Medicine*, 45(4), 474-485.

41) Substance Abuse and Mental Health Association. (2013). Results from the 2012 National Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-46, HHS Publication No. (SMA) 13-4795. Rockville, MD: Substance Abuse and Mental Health Services Administration.

42) Texas Department of Transportation. (2013). DUI (Alcohol) Drivers in Fatal Crashes by Age, 2012.

43) Texas Department of Transportation. (2013). Texas Motor Vehicle Crash Highlights, Calendar Year 2012.

44) Texas Health Institute, The University of Texas School of Public Health Austin Regional Campus, Texas A&M Health Science Center School of Rural Public Health. (2011). *Smoke-Free Workplace Environments. The Benefits to Texans And Their Communities*.

45) The National Campaign to Prevent Teen Pregnancy. (2007). *Why it Matters: Teen Pregnancy and Overall Child Well-being*. Washington, DC: Author

46) University of Michigan. (2013). Monitoring the Future, National Survey Results on Drug Use, 2013 Overview.

47) Wagenaar, A. C., Maldonando-Molina, M. M., & Wagenaar, B. H. (2009). Effects of alcohol tax increases on alcohol-related disease mortality in Alaska: time-series analyses from 1976 to 2004. *American Journal of Public Health*. Aug; 99(8);1464-70.

48) Wagenaar, A. C., Tobler, A. L., & Komro, K. A. (2010). Effects of alcohol tax and price policies on morbidity and mortality: a systematic review. *American Journal of Public Health*. Nov; 11; 2270-78.