**Report to Congress:** A Comprehensive Plan for Preventing and Reducing Underage Drinking

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# REPORT TO CONGRESS ON THE PREVENTION AND REDUCTION OF UNDERAGE DRINKING

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## MESSAGE FROM THE SECRETARY

The personal, social, and economic costs of underage alcohol consumption in the United States make it a leading public health and safety problem. As a result, the Federal Government plays a significant role in the national effort to prevent and reduce underage drinking.

This Report to Congress summarizes the status of Federal efforts in this area. The Report discusses the latest scientific research and its disturbing indication of the potential for brain impairment in adolescents who use alcohol. The Report describes national goals and defines a set of targets for making progress in reducing underage drinking. It further explains how the various agencies of the Federal Government are cooperating in a comprehensive effort with the States and other interested parties to prevent and reduce underage drinking in America.

As Secretary of the Department of Health and Human Services, I am gratified by Congress's continued concern about underage drinking and its support in this area. Each of us in the Department shares the common aim of helping Americans live longer, healthier lives, which includes the prevention and reduction of underage alcohol use and the sometimes-tragic consequences that accompany it.

Underage drinking is embedded in American culture, which means that this aspect of our culture must be transformed into one that emphasizes wellness. Such a change will require a national effort among the Federal Government, the States, organizations, parents and other caregivers, and concerned individuals throughout America. This Report describes the strides these stakeholders are making in pursuing that national goal.

As part of our collective and individual responsibility to prevent and reduce underage drinking in our nation, we Americans have an opportunity to encourage good choices and to create a culture of wellness. Discipline and determination will be required. The many individual programs described in this Report confirm the commitment we all share in protecting our adolescents from the dangers of alcohol use and the progress we are making in doing so.

Michael O. Leavitt Secretary Department of Health and Human Services

### MESSAGE FROM THE SURGEON GENERAL

In March 2007, *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking* was released. The Office of the Surgeon General worked closely with the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Institute on Alcohol Abuse and Alcoholism (NIAAA), and other Federal agencies that are members of the Interagency Coordinating Committee on the Prevention of Underage Drinking to develop this historic document, which was announced at the 2006 National Meeting of the States on Underage Drinking. This Report to Congress details the six goals of this *Call to Action* and describes the various ways in which the Federal Government is cooperating among its various agencies and collaborating with the States and parties in the private sector to address underage alcohol use.

Since the release of the *Call to Action*, I have worked closely with the Leadership to Keep Children Alcohol Free, a group of governors' spouses who are addressing the problem of childhood drinking; SAMHSA; and NIAAA to bring the *Call to Action* to State capitals across the country through a series of presentations. Both the release of the *Call to Action* and its national rollout have been important steps in raising public awareness of the adverse consequences of underage drinking. They also have allowed us to make progress toward achieving the first goal of the *Call to Action*: to "foster changes in American society that facilitate healthy adolescent development and that help prevent and reduce underage drinking."

Emerging research tells us that adolescent alcohol use is best understood as a developmental issue and that the potential for brain impairment can be added to the adverse consequences that burden adolescents, their parents, and the Nation. Despite continued efforts, underage drinking remains a serious public health and safety problem, but it is not inevitable. Schools, parents, and other adults are not powerless to stop adolescent alcohol consumption. Underage drinking is everybody's problem, and its solution is everybody's responsibility. By working together, we can prevent and reduce both underage drinking and the personal, social, and economic costs it brings.

A committed national effort involving the government and the public can make a significant change to a culture that often facilitates underage drinking and discounts the threat it poses to America's youth. I am personally committed to continuing the good work of my predecessors in the prevention and reduction of underage alcohol consumption. I applaud the Congress and the Department of Health and Human Services for their continued commitment to the prevention and reduction of underage the support of the Office of the Surgeon General to this important national work.

Rear Admiral Steven K. Galson, M.D., M.P.H. Acting Surgeon General

### **FOREWORD**

Alcohol continues to be the most widely abused substance among America's youth, with a higher percentage of youth aged 12 to 20 reporting the use of alcohol in the last 30 days than the use of tobacco or illicit drugs. The extent of alcohol consumption by persons under the legal drinking age of 21 makes underage drinking in the United States a leading public health problem and a serious threat to public safety. It has proven to be a complex, persistent social problem, one that has defied an easy solution even as new research over the past decade has increased the public's understanding of how underage alcohol use threatens the immediate and long-term wellbeing of adolescents and those around them.

In recognition of the seriousness of the underage drinking problem, the Department of Health and Human Services (HHS), in collaboration with the Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD), convened a national meeting of States on the issue, held Town Hall meetings across the country, developed a public education campaign (including award winning public service announcements), issued *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*, and expanded research on the subject. In 2006, Congress passed, and the President signed, the Sober Truth on Preventing (STOP) Underage Drinking Act, or Public Law 109-422. Among other provisions, the STOP Act formally establishes the ICCPUD and calls for an annual Report to Congress to be submitted by the HHS Secretary on behalf of that committee. This is the second such Report to Congress, the first having been submitted in 2006 in response to the conference report accompanying the Consolidated Appropriations Act of 2004.

Although we in the Federal Government and other interested parties have been working diligently to prevent and reduce underage drinking, it remains a serious public health and safety problem. If our efforts to reduce underage alcohol consumption and its negative consequences are to succeed, each of us has a role to play. The ultimate responsibility for success falls on all levels of government, on communities throughout America, and on parents, other caring adults, and, finally, on those under the age of 21 who make the decision to drink or not to drink. The Substance Abuse and Mental Health Services Administration (SAMHSA), as a public health agency, as a part of HHS, and as part of the broader ICCPUD partnership, is committed to its role to ensure a collaborative, dedicated, and effective Federal effort.

Eric B. Broderick, D.D.S., M.P.H. Acting Administrator Substance Abuse and Mental Health Services Administration Assistant Surgeon General

## **EXECUTIVE SUMMARY**

Alcohol continues to be the most widely abused substance among America's youth, with a higher percentage of youth aged 12 to 20 reporting the use of alcohol in the last 30 days (27.9%) than the use of tobacco (21.6%) or illicit drugs (13.7%) (SAMHSA, 2008). The extent of alcohol consumption by persons under the legal drinking age of 21 makes underage drinking a leading public health problem in the United States and a serious threat to public safety. It is illegal in all 50 States to sell alcohol to youth under the age of 21; however, in some States it may be legally provided to youth in special circumstances such as religious ceremonies, in private residences, or in the presence of a parent or guardian. Nevertheless, underage youth find it relatively easy to acquire alcohol, often from adults (Johnston et al., 2007a; Wagenaar et al., 1996). Underage drinking has proven to be a complex, persistent social problem, one that has defied an easy solution even as new research over the past decade has increased the public's understanding of how underage alcohol use threatens the immediate and long-term well-being of adolescents and those around them.

### THE NATURE AND EXTENT OF UNDERAGE DRINKING IN AMERICA

The problem of underage alcohol use in America is extensive and daunting. Data from the major national surveys conducted by the Federal Government as well as from other sources reveal the following characteristics of underage drinking in America:

#### 1. Underage Alcohol Use is Widespread

Underage alcohol use in America is a widespread and serious problem, as evidenced by the following data:

- 27.9% of Americans aged 12 to 20 (or about 10.7 million) reported drinking alcohol in the past 30 days according to the 2007 National Survey on Drug Use and Health (NSDUH)<sup>1</sup>;
- 72.2% of 12<sup>th</sup> graders, 61.7% of 10<sup>th</sup> graders, and 38.9% of 8<sup>th</sup> graders have consumed alcohol at some point in their lives (Johnston et al., 2007a);
- 4.5% of 14-year-olds, 15.1% of 16-year-olds, 28.9% of 18-year-olds, and 40.3% of 20-year-olds had engaged in binge drinking within the past 30 days (SAMHSA, 2008)<sup>2</sup>;
- 3.8% of 16-year-olds, 9.6% of 18-year-olds, and 15.8% of 20-year-olds had engaged in heavy alcohol consumption within the past 30 days<sup>3</sup>;

<sup>&</sup>lt;sup>1</sup> At least one drink in the past 30 days (includes binge and heavy use).

<sup>&</sup>lt;sup>2</sup> Binge alcohol use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days prior to being surveyed. Data from the 2007 NSDUH.

<sup>&</sup>lt;sup>3</sup> Heavy alcohol use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days prior to being surveyed. By definition, all heavy alcohol users are also binge alcohol users. Data from the 2007 NSDUH.

- 55.1% of 12<sup>th</sup> graders, 41.2% of 10<sup>th</sup> graders, and 17.9% of 8<sup>th</sup> graders reported having been drunk at least once in their lives (Johnston et al., 2007a); and
- 28.7% of 12<sup>th</sup> graders, 18.1% of 10<sup>th</sup> graders, and 5.5% of 8<sup>th</sup> graders reported having been drunk in the past month (Johnston et al., 2007a).
- 2. Youth Start Drinking at an Early Age

Studies show that drinking often begins at very young ages in America. Data from recent surveys indicate that:

- 10% of 9- to 10-year-olds have already started drinking<sup>4</sup> (Donovan et al., 2004);
- More than one-fifth of underage drinkers begin before age 13 (Eaton et al., 2008); and
- The peak years of initiation are 7<sup>th</sup> through 11<sup>th</sup> grades, based on data from high school seniors (Johnston et al., 2005a).

Data from the NSDUH indicate that the average age of first-time users of alcohol declined from 17.3 years to 16.2 years between 1965 and 2003. However, data from the Monitoring the Future (MTF) survey show that the proportion of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders who had ever used alcohol and the proportion of those who started using alcohol prior to 7<sup>th</sup> grade declined from 1995 to 2006, which suggests a possible increase in age of first use. Using a new methodology, data from the NSDUH indicate that the average age of first alcohol use among those who initiated use prior to age 21 remained constant at 15.6 years between 2003 and 2005 but increased to 15.8 years in 2006—a statistically significant change (SAMHSA, 2007a)—yet remained the same (15.8 years) in 2007 (SAMHSA 2008). The average age of first use for those who first used before age 21 was 15.8 years in both 2006 and 2007, while the average age of first use for all drinkers, including those who started drinking at 21 or older, was 16.6 years in 2006 and 17.0 in 2007.

- 3. <u>Among Underage Drinkers, Alcohol Use and Binge Drinking Increase with Age</u> The 2007 NSDUH reports that underage alcohol consumption in the past month increased in a steady progression from 2.2% at age 12 to 57.8% at age 20. Alcohol use peaked at 71.8% for 21-year-olds (SAMHSA, 2008). Rates of binge alcohol use increased steadily between the ages of 12 and 20, from 0.9% at age 12 to 40.3% at age 20. The rate of binge drinking peaked at age 21 (50.1%) (SAMHSA, 2008).
- 4. Youth Binge More and Drink More Than Adults When They Drink

When young people drink, they tend to drink less often than adults do; however, youth drink more heavily than adults do when they do drink. Underage drinkers consume on average about five drinks per occasion about six times per month (SAMHSA, 2008). By comparison, adult drinkers aged 26 and older consume on average about three drinks per occasion about nine times per month (SAMHSA, 2008). When asked about the number of drinks consumed on their last occasion of alcohol use in the past month, 21.0% of underage drinkers reported one drink, 17.1% reported two drinks, 23.4% reported three or four drinks, 25.7% reported five to eight drinks, and 12.8% reported nine or more drinks for 2006 and 2007 combined (SAMHSA, 2008). In 2007, 10.3% of 8<sup>th</sup> graders, 21.9% of 10<sup>th</sup> graders, and 25.9% of 12<sup>th</sup>

<sup>&</sup>lt;sup>4</sup> "Drinking" is defined as "having more than a few sips."

graders reported engaging in heavy episodic drinking (i.e., consumption of five or more drinks in a row in the past two weeks) (Johnston et al., 2007a).

## 5. Underage Drinking Differs According to Gender, Race, and Ethnicity

In general, underage males report more alcohol use during the past month than underage females. They also tend to start drinking at an earlier age, drink more frequently, and are more likely to binge drink than females. In the 2007 NSDUH, 56.6% of males aged 12 and older were current drinkers as compared to 46.0% of females. Whites aged 12 to 20 were more likely to report current use of alcohol in 2007 than any other racial or ethnic group. An estimated 32.0% of Whites reported past month use, whereas the rates were 28.3% for American Indians and Alaska Natives, 24.7% for Hispanics, 18.3% for Blacks, and 16.8% for Asian Americans (SAMHSA, 2008). Although fewer Hispanics and Blacks report current drinking, data from the 2007 Youth Risk Behavior Survey (YRBS) suggest that the prevalence of alcohol use before the age of 13 is greater among Black (26.7%) and Hispanic (29.0%) students than among White (21.5.7%) students (Eaton et al., 2008).

## 6. <u>Underage Drinking is a Group Activity</u>

For 2006 and 2007 combined, 80.9% of persons aged 12 to 20 who had consumed alcohol in the past month were with two or more people the last time they drank alcohol; 14.2% were with one other person the last time they drank and 4.9% were alone. Underage persons who drank with two or more others on the last occasion in the past month had more drinks on the last occasion on average (4.9 drinks) than those who drank with one other person (3.2 drinks) or those who drank alone (2.9 drinks) (SAMHSA, 2008).

7. Youth Most Often Drink in Their Own or Someone Else's Home

For 2006 and 2007 combined, a majority of underage current drinkers reported that when they last used alcohol, they were either in someone else's home (54.9%) or in their own home (29.8%) (SAMHSA, 2008). Drinkers aged 12 to 14 were more likely to have been in their own homes the last time they drank (40.0%) and less likely to have been in someone else's home (45.8%) as compared with underage drinkers in older age groups (24.6% and 62.0%, respectively, for those aged 15 to 17; and 31.4% and 52.3% respectively, for those aged 18 to 20).

8. Alcohol Use in College is Pervasive and Heavy

Approximately 4 in 5 college students drink alcohol, about 2 in 5 engage in binge drinking (5 or more drinks in a row for men and 4 or more in a row for women within the past 2 weeks or 30 days, depending upon the survey), and about 1 in 5 engages in frequent binging (3 or more times in the past 2 weeks) (NIAAA, 2002a). Underage college students consume about 48% of the alcohol consumed by students attending 4-year colleges (Wechsler et al., 2002b).

## 9. Alcohol is Perceived as Readily Available by the Underage Population

The most recent data on the *perception* of availability suggest that the great majority of teens see alcohol as readily available. In 2007, 62.0% of 8<sup>th</sup> graders, 82.6% of 10<sup>th</sup> graders, and 92.2% of 12<sup>th</sup> graders said it would be "fairly easy" or "very easy" for them to obtain alcohol (Johnston et al., 2007a). The most frequent means of acquisition are parties, friends, adult purchasers (Harrison et al., 2000; Preusser et al., 1995; Schwartz et al., 1998; Wagenaar et

al., 1996), and, in the case of younger adolescents, family members (National Research Council and Institute of Medicine, 2004).

#### 10. Alcohol is Available from a Variety of Sources

According to 2006-2007 NSDUH data, among all underage drinkers, 69.4% did not pay for the alcohol the last time they drank. More than 40% were provided free alcohol by adults 21 and older. About a quarter (26. 4%) indicated that they were given alcohol for free by an unrelated individual aged 21 or older. One in 17 (5.9%) got the alcohol from a parent or guardian, 8.5% got it from another family member aged 21 or older, and 3.9% took it from their own home (SAMHSA, 2008). Among all underage current drinkers, 30.6% paid for the alcohol the last time they drank, including 8.8% who purchased the alcohol themselves, and 21.7% who gave money to someone else to purchase it. The most common sources of alcohol varied substantially by age. For youths aged 12 to 14, the most common sources were receiving it free from someone under the age of 21 (18.6%), receiving it from a parent or guardian (16.6%), or taking it from their own home (14.0%). For youths aged 15 to 17, the most common sources of alcohol were receiving it free from someone under the age of 21 (20.9%), receiving it from an unrelated person aged 21 or older (20.3%), and giving someone else money to purchase the alcohol (18.3%). For persons aged 18 to 20, the majority of current drinkers either received the alcohol for free from an unrelated person aged 21 or older (30.5%) or gave somebody else money to purchase the alcohol (25.0%) (SAMHSA, 2008).

### 11. Despite Some Progress, Underage Drinking Remains Unacceptably High

Data available from 1975 to 2006 document that the prevalence of drinking among 12<sup>th</sup> graders peaked in 1978 for lifetime use and past-year use (Johnston et al., 2003; Johnston et al., 2007a; Johnston et al., 2007b). Lifetime alcohol use among 12<sup>th</sup> graders in 2006 showed a statistically significant decline from 2005—dropping from 75.1% to 72.7% (Johnston et al., 2007b). In 2007, a slight further decline to 72.2% occurred (Johnston et al., 2007a). Past month use among 12<sup>th</sup> graders increased between 1975 and 1979, decreased slightly between 1979 and 1988, decreased between 1988 and 1993, increased between 1993 and 1997, and decreased between 1997 and 2002 (Faden & Fay, 2004). The percentage of high school seniors who reported drinking within the last 30 days was the same in 1993 as in 2002 (48.6%). Although a modest reduction has occurred in the 30-day and annual usage rates over the past several years, current rates are not significantly different from 1993, and they remain high (Johnston et al., 2006).

Binge drinking peaked in 1981 among 12<sup>th</sup> graders, held steady for a year, and then declined from 41% in 1983 to a low of 28% in 1992. This drop of almost one-third in binge drinking marked a significant improvement (Johnston et al., 2006); however, between 1992 and 1998, binge drinking rose by about 4 percentage points among 12<sup>th</sup> graders. An upward drift in binge drinking also occurred among 8<sup>th</sup> graders between 1991 (13%) and 1996 (16%) and among 10<sup>th</sup> graders between 1992 (21%) and 1999 (26%). After those peaks, a slight decline in binge drinking occurred in all three grades until 2002, when the rate dropped appreciably. Since 2002, binge drinking generally has continued to decline but only slightly (Johnston et al., 2007a). Although the declines in underage binge drinking are encouraging, the current rates remain alarmingly high.

### **CONSEQUENCES OF UNDERAGE DRINKING**

The adverse consequences of underage drinking include alcohol-related motor vehicle crashes, the greatest single mortality risk for underage drinkers; increased risk for suicide and homicide; assault and rapes on college campuses, where it is estimated that alcohol is involved in 90% of college rapes and 95% of all violent crime on college campuses (Commission on Substance Abuse at Colleges and Universities, 1994); unintentional injuries such as burns, falls, and drownings; potential brain impairment; an increased risk for developing an alcohol use disorder later in life; inappropriate and/or risky sexual activity; academic problems; various social problems; and physical problems such as alcohol poisoning or medical illnesses. It is estimated that more than 600,000 college students were assaulted by another student who had been drinking, and another 500,000 students were unintentionally injured while under the influence of alcohol (Hingson et al., 2005).

Another consequence of underage drinking is an increased risk of violence. Individuals under the age of 21 committed 45% of rapes, 44% of robberies, and 37% of other assaults (Levy et al., 1999). For the population as a whole, an estimated 50% of violent crime is related to alcohol use (Harwood et al., 1998). The degree to which violent crime committed by persons under 21 is alcohol-related remains to be determined. One study estimated the social costs of underage drinking to be \$53 billion, including \$19 billion from traffic crashes and \$29 billion from violent crime (Pacific Institute for Research and Evaluation [PIRE], 1999).

## THE NATIONAL EFFORT TO PREVENT AND REDUCE UNDERAGE DRINKING

The Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD) was created in 2004 and made permanent in 2006 by the Sober Truth on Preventing (STOP) Underage Drinking Act, or Public Law 109-422, popularly known as the STOP Act. The ICCPUD serves as a mechanism for coordinating Federal efforts aimed at reducing underage drinking and as a resource for the development of a "Comprehensive Plan to Prevent and Reduce Underage Drinking." The Plan was delivered to Congress in 2006. In 2007, the Surgeon General issued a call to action to address this challenge, the first such major Federal report on that subject. Based on the latest and most authoritative research, particularly with regard to underage drinking as a developmental issue, The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking outlines a comprehensive national effort to prevent and reduce underage alcohol consumption and proposes six goals for the Nation. For each goal, the Call to Action describes the rationale, challenges, and strategies of the goal, including specific actions for parents and other caregivers, communities, schools, colleges and universities, the criminal and juvenile justice systems, law enforcement, the alcohol industry, and the entertainment and media industries. The Call to Action incorporates and supersedes the goals of the Comprehensive Plan outlined in the 2006 Report to Congress.

The ICCPUD agencies worked together to coordinate the expertise and develop the data required to create the Comprehensive Plan for the 2006 *Report to Congress*. In a similar fashion, they collaborated to provide information and data for *The Surgeon General's Call to Action*. The comprehensive Federal plan contained in the 2006 *Report to Congress* set forth three goals: (1) strengthening a national commitment to address the problem of underage drinking; (2) reducing demand for, the availability of, and access to alcohol by persons under the age of 21; and (3)

utilizing research, evaluation, and scientific surveillance to improve the effectiveness of policies and programs designed to prevent and reduce underage drinking. The six goals and associated strategies described in *The Surgeon General's Call to Action* build upon the three goals of the 2006 *Report to Congress*.

As was the case with the Comprehensive Plan, the ICCPUD agencies are implementing a variety of Federal programs designed to support the goals of *The Surgeon General's Call to Action*. These goals and their associated strategies involve all levels of government as well as individuals and private-sector organizations and institutions, including faith-based organizations. Prevention, education; efforts to increase public awareness of underage drinking and its consequences; the provision of treatment opportunities and school and workplace prevention programs; research; and legal enforcement are all components of this multipronged approach. Verifiable data, based on scientific investigation and developed through rigorous research, are additional essential elements.

Underage drinking is deeply imbedded in the American culture. It often is viewed as a rite of passage, frequently is facilitated by adults (Wagenaar et al., 1996), and has proven stubbornly resistant to change. The solution to this complex public health and safety problem lies in a committed effort by the Nation as a whole. The Federal Government collaborates with the States, local communities, individuals, and nongovernmental institutions and organizations as part of this effort. The specific numerical targets established by the Comprehensive Plan developed for Congress in 2006 remain the focus of this collaboration so that progress can be measured from year-to-year through performance measurements developed specifically for that purpose.

## GOALS AND TARGETS

*The Surgeon General's Call to Action* proposes a vision for the future in which each child in America is free to develop his or her potential without the impairment of alcohol's negative consequences. The fulfillment of that vision rests on the achievement of six goals that the *Call to Action* sets for the Nation. These goals are:

- Goal 1: Foster changes in American society that facilitate healthy adolescent development and that help prevent and reduce underage drinking.
- Goal 2: Engage parents and other caregivers, schools, communities, all levels of government, all social systems that interface with youth, and youth themselves in a coordinated national effort to prevent and reduce underage drinking and its consequences.
- Goal 3: Promote an understanding of underage alcohol consumption in the context of human development and maturation that takes into account individual adolescent characteristics as well as ethnic, cultural, and gender differences.
- Goal 4: Conduct additional research on adolescent alcohol use and its relationship to development.
- Goal 5: Work to improve public health surveillance of underage drinking and population-based risk factors for this behavior.
- Goal 6: Work to ensure that laws and policies at all levels are consistent with the national goal of preventing and reducing underage alcohol consumption.

The Comprehensive Plan developed for the 2006 *Report to Congress* proposed 5-year performance measures in the form of numerical targets that would be used to evaluate the Nation's progress in preventing and reducing underage drinking. These targets also assist in evaluating National progress toward meeting the goals identified in *The Surgeon General's Call to Action*. However, they are national rather than Federal targets because they cannot be met without the committed involvement of government at all levels as well as individuals, organizations, and institutions in the private sector. Progress in meeting the targets will be measured using data from the NSDUH. The following targets have been identified:

- Target 1: By 2009, reduce the prevalence of past-month alcohol use by those aged 12 to 20 by 10% to 25.8%, as measured against the 2004 baseline of 28.7%.
- Target 2: By 2009, reduce the prevalence of binge alcohol use in the past 30 days by those aged 12 through 20 by 10% to 17.6%, as measured against the 2004 baseline of 19.6%.
- Target 3: By 2009, achieve an increase of average age of first use<sup>5</sup> to 16.5 years of age, as compared to the 2004 baseline of 15.6 years.

### EXTENT OF PROGRESS

Generally, it is not advisable to draw conclusions based on data changes from one year to the next, as opposed to looking at trends over a multi-year period, because of natural fluctuations in the targeted behavior. Nonetheless, data from the NSDUH support an assessment of modest progress in the right direction. Although the majority of NSDUH results are not statistically significant, most of the results across a wide range of underage drinking-related measurements are moving in the desired direction–or at least not in the wrong direction. Further, data relating to underage drinking from the MTF and YRBS surveys suggest movement in the same direction. This alignment within and across surveys, even without statistical significance, is a positive sign. However, it is too early to project a definite downward trend in underage alcohol consumption.

<sup>&</sup>lt;sup>5</sup> The ultimate goal is to increase the age of initiation to the minimum legal drinking age of 21; however, underage drinking is so strongly embedded in the Nation's culture that the more realistic goal of increasing the average age of initiation to 16.5 by 2009 is being proposed.

### LOOKING FORWARD

ICCPUD member agencies are committed to the goals and strategies described in *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*. ICCPUD will continue to serve as an ongoing mechanism for guiding policy and program development across the Federal Government and for planning and coordinating Federal efforts in this area. Future programming will be aligned with these goals and strategies to address gaps in programming, ensure development and support of effective programs, and eliminate duplication. Member agencies also will continue to place a high priority on fostering changes in American society that help prevent and reduce underage drinking and on strengthening our Nation's commitment to addressing the underage drinking problem through the various programs described in this report and through others yet to be developed.

In addition to the efforts of the Federal agencies, the Committee believes that the *Call to Action*, the Town Hall meetings held in communities across the country in March 2006 and 2008, and the trainings conducted in those communities in 2007 have helped to raise the visibility of underage drinking as a national problem and to motivate individuals and communities to take action to address it. Further, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) initiated two new Enforcing the Underage Drinking Laws (EUDL) projects in 2007 that respond to the *Call to Action* by seeking to inform, train, and engage more effectively the judiciary and probation systems in ways that will enhance appropriate action on behalf of underage persons involved with the consumption of alcohol. Additionally, an Ad Council campaign has helped to increase the visibility of the issue nationally and to motivate parents to address the issue in their families and communities. Efforts to reduce the demand for, access to, and availability of alcohol by those under 21 will continue to be improved by ongoing research and surveillance.

Despite all these various efforts, preventing and reducing underage alcohol use remain challenging, so it is not surprising that progress in achieving these aims has been slow. Such modest improvement is further evidence of the difficulties inherent in efforts to change entrenched attitudes and behaviors related to underage alcohol use, which the Surgeon General and other credible sources have described. With continued dissemination of the Surgeon General's *Call to Action* and the new framework for understanding underage alcohol use as a developmental phenomenon, along with a sustained effort from the Federal Government and other interested parties and the increased national media attention paid to underage drinking in recent years, it is highly likely that the positive trends will continue or accelerate.

## CHAPTER I

## PREVENTING AND REDUCING UNDERAGE DRINKING: AN OVERVIEW

#### **INTRODUCTION**

Alcohol continues to be the most widely abused substance among America's youth. A higher percentage of youth aged 12 to 20 use alcohol (27.9%) than use tobacco (21.6%) or illicit drugs (13.7%) (SAMHSA, 2008). The extent of alcohol consumption by those under the legal drinking age of 21 constitutes a serious threat to both public health and public safety. In response, governments at the Federal, State, and local levels have sought to develop effective approaches to reduce underage drinking and its associated costs and consequences that burden individuals and society. The actions of government alone, however, cannot solve this serious problem. Only a broad and committed collaboration among governments, the parents of underage youth, other caregivers and adults, and organizations and institutions in the private sector can achieve an effective solution to this national challenge.

It is illegal in all 50 States to sell alcohol to youth under the age of 21, although some States make it legal to provide alcohol to youth under special circumstances such as at religious ceremonies, in private residences, or in the presence of a parent or guardian. Despite such broad restrictions, underage youth find it relatively easy to acquire alcohol, often from adults. For decades, underage drinking has proven to be a complex and challenging social problem that has defied an easy solution. It often begins at a young age with the average age of first use presently at about 15.6 years old and with 10% of 9- to 10-year-olds already having started drinking (Donovan et al., 2004). Alcohol use increases with each year of high school, and by the 12<sup>th</sup> grade, more than half (54.2%) of the students surveyed reported having had one or more drinks within the past 30 days (Eaton et al., 2008). Underage drinkers are much more likely than adults to drink heavily and recklessly. Studies consistently indicate that about 80% of college students engage in binge drinking, which is defined as consuming 5 or more drinks in a row for men and 4 or more drinks in a row for women (NIAAA, 2002a).

New scientific research over the past decade has broadened our understanding of the ways in which, and the extent to which, underage alcohol use threatens the immediate and long-term development and well-being and future mental development of young people. The potential consequences of underage drinking include increased risk of suicide and homicide, alcohol-related crashes and fatalities, other unintentional injuries such as burns and drownings, physical and sexual assault, academic and social problems, inappropriate and/or risky sexual activity, and adverse effects on the developing brain (NIAAA, 2005a). Alcohol is a leading contributor to injuries that result in fatalities, the major cause of death for people under 21 years of age.

The consequences of underage alcohol use extend far beyond the underage drinker; society also pays. For example, half of all persons who die in traffic crashes involving drinking drivers under the age of 21 are people other than the drinking driver (NHTSA, 2003). One study estimated the social costs of underage drinking to be \$53 billion, including \$19 billion from traffic crashes and \$29 billion from violent crime (PIRE, 1999).

### THE NATIONAL EFFORT TO REDUCE UNDERAGE DRINKING

Underage drinking has been a public health problem for many years. Recently, however, the national effort to prevent alcohol use by America's young people has intensified as the multifaceted consequences associated with underage drinking have become more apparent.

After Prohibition ended in 1933, States assumed authority for alcohol control, including the enactment of laws restricting youth access to alcohol. The majority of States designated 21 as the minimum legal drinking age (MLDA) for the "purchase or public possession" of alcohol. Other than establishing a minimum drinking age, the Nation's alcohol problems were largely ignored through the 1960s (NIAAA, 2005b). However, on December 31, 1970, Congress established the National Institute on Alcohol Abuse and Alcoholism (NIAAA) "to provide leadership in the national effort to reduce alcohol problems through research."

Between 1970 and 1976, twenty-nine States lowered their MLDA to 18, 19, or 20 years of age, in part because the voting age had been lowered (Wagenaar, 1981). However, studies conducted in the 1970s found that motor vehicle crashes increased significantly among teens, resulting in more traffic injuries and fatalities (Cucchiaro et al., 1974; Douglas et al., 1974; Wagenaar, 1983, 1993; Whitehead, 1977; Whitehead et al., 1975; Williams et al., 1974). As a result, 24 of the 29 States raised their MLDA between 1976 and 1984, although to different minimum ages. Some placed restrictions on the type of alcohol that could be consumed by persons under 21 years of age. Only 22 States set their minimum legal drinking age at 21 years of age. In response, the Federal Government enacted the National Minimum Drinking Age Act of 1984, which mandated reduced Federal highway funds to States that did not raise their MLDA to 21 years of age. Thereafter, all the remaining States raised their MLDA to 21 years of age.

In 1992, Congress created SAMHSA, the Substance Abuse and Mental Health Services Administration, "to focus attention, programs, and funding on improving the lives of people with or at risk for mental and substance abuse disorders." In 1998, Congress mandated that the Department of Justice, through the Office of Justice Programs' Office of Juvenile Justice and Delinquency Prevention (OJJDP), establish and implement the Enforcing the Underage Drinking Laws (EUDL) program, a State- and community-based initiative.

### **Current Efforts**

As national concern over underage drinking grew, partly because of advances in science that increasingly revealed adverse consequences, Congress appropriated funds for a study by The National Academies to examine the relevant literature and "review existing Federal, State, and nongovernmental programs, including media-based programs, designed to change the attitudes

and health behaviors of youth." That report was issued in 2004 by the National Research Council (NRC) and the Institute of Medicine (IOM). Since then, a number of programs aimed at preventing and reducing underage drinking have been initiated at the Federal, State, and local levels. Appendix A ("Inventory of Federal Programs by Agency") describes the major programs at the Federal level.

The conference report accompanying H.R. 2673, the "Consolidated Appropriations Act of 2004," directed the Secretary of HHS to establish the ICCPUD and to issue an annual report summarizing all Federal agency activities related to the problem. The Secretary of HHS directed SAMHSA's Administrator to convene ICCPUD in 2004. That Committee is composed of representatives from HHS's Office of the Surgeon General (OSG), Centers for Disease Control and Prevention (CDC), Administration for Children and Families (ACF), and Office of the Assistant Secretary for Planning and Evaluation (ASPE); the National Institutes of Health's National Institute on Alcohol Abuse and Alcoholism (NIAAA) and National Institute on Drug Abuse (NIDA); the Department of Justice's Office of Juvenile Justice and Delinquency Prevention (OJJDP); the Department of Education's Office of Safe and Drug-Free Schools (OSDFS); the White House Office of National Drug Control Policy (ONDCP); the Department of the Treasury; the Department of Defense; and the Federal Trade Commission (FTC).

ICCPUD was intended to serve as a mechanism for coordinating Federal efforts aimed at reducing underage drinking and to serve as a resource for the development of a "Comprehensive Plan to Prevent and Reduce Underage Drinking," which Congress called for in 2004. ICCPUD received input from experts and organizations representing the views of a wide range of parties, including public health advocacy groups, the alcohol industry, ICCPUD member agencies, and the United States Congress. The latest research available at the time was analyzed and incorporated into the required Comprehensive Plan, which HHS reported to Congress in January 2006. The Plan included three goals, along with a series of Federal action steps and three measurable performance targets that could be used to evaluate the Nation's progress in preventing and reducing underage drinking.

In December 2006, Congress passed the Sober Truth on Preventing (STOP) Underage Drinking Act, Public Law 109-422, popularly known as the STOP Act. The Act states that

"...a multi-faceted effort is needed to more successfully address the problem of underage drinking in the United States. A coordinated approach to prevention, intervention, treatment, enforcement, and research is key to making progress. This Act recognizes the need for a focused national effort, and addresses particulars of the Federal portion of that effort as well as Federal support for State activities."

The STOP Act requires the Secretary of HHS, in collaboration with other Federal officials enumerated in the Act, to "formally establish and enhance the efforts of the interagency coordinating committee [ICCPUD] that began operating in 2004." The STOP Act also calls for an Annual Report from the Secretary of HHS that "summarizes (I) all programs and policies of Federal agencies designed to prevent and reduce underage drinking; (II) the extent of progress in preventing and reducing underage drinking nationally; (III) data that the Secretary shall collect with respect to the information specified in clause (ii); and (IV) such other information regarding underage drinking as the Secretary determines to be appropriate." In addition, the Act requires information related to patterns and consequences of underage drinking, measures of the exposure of underage populations to messages regarding alcohol in advertising and the entertainment media as reported by the FTC; surveillance data, including information on the onset and prevalence of underage drinking, consumption patterns and the means of underage access; and certain other data included in this *Report to Congress*.

In fall 2005, ICCPUD sponsored a national meeting of the States to prevent and reduce underage alcohol use. At that meeting, the Surgeon General announced his intent to issue a call to action on the prevention and reduction of underage drinking. Subsequently, the OSG worked closely with SAMHSA and NIAAA to develop the Surgeon General's report. In 2007, the OSG issued *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*, the first significant treatise on that subject. Based on the latest and most authoritative research, particularly with regard to underage drinking as a developmental issue, the *Call to Action* outlines a comprehensive national effort to prevent and reduce underage alcohol consumption. It proposes that the Nation set its sights on achieving six goals. For each goal, the *Call to Action* describes a set of rationales, challenges, and strategies, including specific actions for parents and other caregivers, communities, schools, colleges and universities, the criminal and juvenile justice systems, law enforcement, the alcohol industry, and the entertainment and media industries.

Just as the ICCPUD agencies worked together to coordinate the expertise and develop the data required to create the Comprehensive Plan for the 2006 *Report to Congress*, they collaborated to provide information and data for the Surgeon General's *Call to Action*. The comprehensive Federal plan contained in the 2006 report set forth three goals: strengthening the national commitment to address the problem of underage drinking; reducing demand for, availability of, and access to, alcohol by persons under the age of 21; and utilizing research, evaluation, and scientific surveillance to improve the effectiveness of policies and programs designed to prevent and reduce underage drinking. The six goals and their associated strategies described in the *Call to Action* build upon the three goals of the 2006 report.

As the Nation's leading medical spokesperson, the Surgeon General is in a unique position to call attention to national health problems. By issuing a *Call to Action* to the general public—one that contains a comprehensive approach to preventing and reducing underage drinking with specific strategies for various segments of society, including the Federal Government—the Surgeon General sought to raise public awareness and foster changes in American society. His goals are very similar to those described to Congress in the 2006 Comprehensive Plan. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*, with its well-defined goals and recommended strategies, incorporates and supersedes the Comprehensive Plan described in the 2006 *Report to Congress*.

As was the case with the Comprehensive Plan, ICCPUD member agencies presently are implementing a variety of Federal programs designed to support the goals of the Surgeon General's *Call to Action*. These programs are described in more detail in Chapter Three ("A Coordinated Approach to Preventing and Reducing Underage Drinking") and Appendix A ("Inventory of Federal Programs by Agency").

## PRINCIPLES AND GOALS OF THE SURGEON GENERAL'S CALL TO ACTION TO PREVENT AND REDUCE UNDERAGE DRINKING

The national effort to prevent and reduce underage drinking outlined in the *Call to Action* is based on the several overarching principles from which its goals were derived. These principles are:

- 1. Underage alcohol use is a phenomenon that is directly related to human *development*. Given the very nature of adolescence, alcohol poses a powerful attraction to young people in this demographic, with unpredictable outcomes that put every child at risk.
- 2. The factors that protect adolescents from alcohol use, like those that put them at greater risk, change during the course of adolescence. Internal characteristics, developmental issues, and shifting factors in the adolescent's environment all play a role in protecting adolescents or putting them at risk.
- 3. Protecting adolescents from alcohol use requires a comprehensive, developmentally based approach that must be initiated prior to puberty and must continue throughout adolescence with support from families, schools, colleges, communities, the healthcare system, and government.
- 4. *The prevention and reduction of underage drinking is the collective responsibility of the Nation.* The responsibility for "scaffolding the Nation's youth"<sup>6</sup> belongs to everyone in all of the social systems in which adolescents operate, including family, schools, communities, healthcare systems, religious institutions, criminal and juvenile justice systems, all levels of government, and society as a whole. Each social system has a potential impact on the adolescent, and the active involvement of all systems is necessary to fully maximize existing resources to prevent underage drinking and its related problems. When all the social systems work together toward the common goal of preventing and reducing underage drinking, they create a powerful synergy that is critical to realize that goal.
- 5. *Underage alcohol use is not inevitable*, and parents and society are not helpless to prevent it.

<sup>&</sup>lt;sup>6</sup> "Scaffolding the Nation's youth" is a term used by the Surgeon General to refer to a structured process through which positive adolescent development is facilitated by parents and society, and risk is minimized by providing protection from the natural risk-taking, sensation-seeking tendencies of adolescents. It is a fitting metaphor for the support and protection that parents and society provide children and youth to help them function in a more mature way until they are ready to function without that extra support. This external support system, or scaffold, around adolescents promotes healthy development and provides protection from alcohol use and other risky behaviors by facilitating good decision making, mitigating risk factors, and buffering against potentially destructive outside influences that draw adolescents to alcohol use.

*The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking* proposes a vision for the future in which each child is free to develop his or her potential without the impairment of alcohol's negative consequences. The fulfillment of that vision rests on the achievement of six goals that the *Call to Action* sets for the Nation. These goals are:

- Goal 1: Foster changes in American society that facilitate healthy adolescent development and that help prevent and reduce underage drinking.
- Goal 2: Engage parents and other caregivers, schools, communities, all levels of government, all social systems that interface with youth, and youth themselves in a coordinated national effort to prevent and reduce underage drinking and its consequences.
- Goal 3: Promote an understanding of underage alcohol consumption in the context of human development and maturation that takes into account individual adolescent characteristics as well as ethnic, cultural, and gender differences.
- Goal 4: Conduct additional research on adolescent alcohol use and its relationship to development.
- Goal 5: Work to improve public health surveillance on underage drinking and on population-based risk factors for this behavior.
- Goal 6: Work to ensure that laws and policies at all levels are consistent with the national goal of preventing and reducing underage alcohol consumption.

The Surgeon General's proposed strategies for implementing these goals, with specific recommendations for parents, other caregivers, communities, schools, colleges and universities, the health care system, juvenile justice and law enforcement, and the alcohol and entertainment industries are described in Appendix D ("Strategies from *The Surgeon General's Call to Action*").

## **TARGETS**

The Comprehensive Plan developed for the 2006 *Report to Congress* proposed 5-year performance measures in the form of numerical targets that would be used to evaluate the Nation's progress in preventing and reducing underage drinking. Those targets remain valid for evaluating progress toward meeting the goals identified in *The Surgeon General's Call to Action*. Moreover, they are National rather than Federal targets because they cannot be met without the committed involvement of government at all levels, as well as individuals, organizations, and institutions in the private sector. Progress in meeting the targets will be measured using data from the National Survey on Drug Use and Health (NSDUH). The targets are:

- Target 1: By 2009, reduce the prevalence of past-month alcohol use<sup>7</sup> by those aged 12-20 by 10% to 25.8%, as measured against the 2004 baseline of 28.7%<sup>8</sup>.
- Target 2: By 2009, reduce the prevalence of those aged 12-20 reporting binge alcohol use<sup>9</sup> in the past 30 days by 10% to 17.6%, as measured against the 2004 baseline of 19.6%.
- Target 3: By 2009, achieve an increase of average age of first use<sup>10</sup> of alcohol to 16.5 years of age, as compared to the 2004 baseline of 15.6 years.

## EXTENT OF PROGRESS

The 2006 STOP Act requires the HHS Secretary to report to Congress on "the extent of progress in preventing and reducing underage drinking nationally." Subsequently, the 2006 Report to Congress: A Comprehensive Plan for Preventing and Reducing Underage Drinking contained 5-year numerical targets based on NSDUH data designed to measure the effectiveness of the Comprehensive Plan in producing its intended results.

Given natural fluctuations in targeted behaviors, it generally is not advisable to draw conclusions based on changes from one year to the next; examining trends over a multiyear period is the preferred approach. Nonetheless, the NSDUH data supports an assessment of modest progress, with most of the results across a wide range of underage drinking-related measurements assessed in this survey moving in the desired direction, or at least not in the wrong direction. Data from the Monitoring the Future (MTF) and Youth Risk Behavior Survey (YRBS) surveys related to underage drinking also suggest movement in the same direction. This alignment within and across surveys, even without statistical significance, is a positive sign; but it is too early to project a definite downward trend in underage alcohol consumption.

The following charts provide more detailed data on alcohol use in the United States in the past year. Of particular interest are three age groupings: 12 to 17, 18 to 20, and 12 to 20. Of the three, the 12- to 17-year-old age group showed decreases in both past-month alcohol use and binge alcohol use that are statistically significant. Additionally, in 2006, compared to both 2004 and 2005, a statistically significant increase was noted in average age at first use among those under age 21 who initiated alcohol use in the past 12 months; however, average age of initiation of alcohol use remained the same in 2007 (SAMHSA, 2008).

<sup>&</sup>lt;sup>7</sup> For purposes of this target, "alcohol use" is defined as "other than a few sips."

<sup>&</sup>lt;sup>8</sup> The 2004 baseline came from the NSDUH, the results of which were published in 2005.

<sup>&</sup>lt;sup>9</sup> For purposes of this target, "binge alcohol use" is defined as "drinking 5 or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days."

<sup>&</sup>lt;sup>10</sup> The ultimate goal is to increase the age of initiation to the minimum legal drinking age of 21; however, underage drinking is embedded so strongly in the Nation's culture that the more realistic goal of increasing the average age of initiation of those under the age of 21 to 16.5 by 2009 is being proposed.

### Alcohol Use in the Past Month Among Persons Aged 12 to 20—2004 - 2007 NSDUH Target: 25.8% by 2009

Age	2004	2005	2006	2007
12-13	4.3%	4.2%	3.9%	3.5% †
14-15	16.4%	15.1%	15.6%	14.7% †
16-17	32.5%	30.1%†	29.7%†	29.0%†
12-17	17.6%	16.5%†	16.6%†	15.9%†
18-20	51.1%	51.1%	51.6%	50.7%
12-20	28.7%	28.2%	28.3%	27.9%

<sup>†</sup> The difference between the 2004 estimate and this estimate is statistically significant at the 0.05 level. Note: Statistical tests were also done for 2005 versus 2006, 2005 versus 2007, and 2006 versus 2007. None reached statistical significance.

#### Binge Alcohol Use in the Past Month Among Persons Aged 12 to 20—2004 - 2007 NSDUH Target: 17.6% by 2009

Age	2004	2005	2006	2007
12-13	2.0%	2.0%	1.5%	1.5%
14-15	9.1%	8.0%	8.9%	7.8%†
16-17	22.4%	19.7%†	20.0%†	19.4%†
12-17	11.1%	9.9%†	10.3%†	9.7%†
18-20	36.8%	36.1%	36.2%	35.7%
12-20	19.6%	18.8%	19.0%	18.6%

<sup>†</sup> The difference between the 2004 estimate and this estimate is statistically significant at the 0.05 level. Note: Statistical tests were also done for 2005 versus 2006, 2005 versus 2007, and 2006 versus 2007. None reached statistical significance.

#### Average Age at First Use Among Past-Year Initiates of Alcohol Use Who Were Age 20 or Younger—2004 - 2007 NSDUH Target: 16.5 Years by 2009

Year	2004	2005	2006	2007
Average Age at First Use	15.6	15.6	15.8†*	15.8†*

† The difference between the 2004 estimate and this estimate is statistically significant at the 0.05 level.

\* The difference between the 2005 estimate and this estimate is statistically significant at the 0.05 level.

Note: A statistical test was also done for 2006 versus 2007 and was not statistically significant.

Despite various efforts to date, underage alcohol use has proven resistant to change, and it is not surprising that progress has been slow. Although it is disappointing that the NSDUH data did not show continued statistically significant declines in either past-month or binge alcohol use from 2005 to 2006, it is encouraging that the declines seen between 2004 and 2005 have been maintained. Also encouraging is the small but statistically significant increase in age of initiation of alcohol use that occurred between 2005 and 2006. That overall progress has been modest

underscores the difficulty inherent in changing entrenched attitudes and behaviors related to underage alcohol use, as noted by the Surgeon General and other credible sources. However, with continued dissemination of *The Surgeon General's Call to Action*, the new framework for understanding underage alcohol use as a developmental phenomenon (which emerged from NIAAA's Underage Drinking Research Initiative), sustained effort from the Federal Government and other interested parties, and the increase in national attention to underage drinking paid by the media in recent years, the prognosis for continued progress in the future is bright.

## CHAPTER II

## THE NATURE AND EXTENT OF UNDERAGE DRINKING IN AMERICA

Despite laws against underage drinking in all 50 States; the efforts of Federal, State, and local governments spanning decades; and the dedicated work of many private groups and organizations, alcohol is the most widely consumed and abused substance among America's youth. It is used more often than tobacco or marijuana. Underage alcohol use remains a challenging public health and public safety problem, with severe consequences for youth, their families, communities, and society. Alcohol accounts for more deaths than all other illicit drugs combined for persons under 21 years of age. Yet, a lack of public recognition of the sometimes devastating consequences of underage alcohol use and its personal, economic, and social costs hampers implementation of a comprehensive prevention effort.

The Federal Government funds three major national surveys that include the collection of data on underage drinking and its consequences: the annual National Survey on Drug Use and Health (NSDUH), formerly called the National Household Survey of Drug Abuse (NHSDA); the Monitoring the Future (MTF) survey, also conducted annually; and the biennial Youth Risk Behavior Survey (YRBS), a component of the Youth Risk Behavior Surveillance System (YRBSS). Each of these surveys makes a unique contribution to an understanding of the nature of alcohol use in America.

Three additional surveys used by the Federal government to obtain data on underage drinkers aged 18 and older are the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), the National Health Interview Survey (NHIS), and the Survey of Health Related Behaviors Among Active Duty Military Personnel, formerly called the Worldwide Surveys of Substance Abuse and Health Behaviors Among Military Personnel. A more detailed description of each of these surveys and its unique contribution to research can be found in Appendix B ("Data Tables"). Data from these and other surveys and research efforts continue to provide a troubling picture of underage alcohol use in America.

### CHARACTERISTICS OF UNDERAGE DRINKING IN AMERICA

Underage alcohol use in America is a public health problem because of the number of children and adolescents who drink, when and how much they drink, and the negative consequences that result from their drinking. Some of the principal findings of governmental surveys and other research related to underage alcohol use in the United States are described in the following paragraphs.

## 1. Underage Alcohol Use is Widespread.

Underage alcohol use is a widespread and serious problem in America, as indicated by the following data:

- *Current Use:* The 2007 NSDUH reported that approximately 27.9% of Americans aged 12 through 20 (or about 10.7 million in that age group) reported having at least one drink in the 30 days prior to the survey. Of this age group, 18.6% (or 7.2 million) were binge drinkers, meaning that they had drunk 5 or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day within the past 30 days. Of those in the 12- to 20-year old age group, 6.0% (or 2.3 million) were heavy drinkers, meaning that they had drunk 5 or more drinks on the same occasion on each of 5 or more days in the past 30 days. By definition, all heavy alcohol users are also binge alcohol users.
- *Lifetime Use*: Data from the 2007 MTF survey of American youth show that 72.2% of 12<sup>th</sup> graders, 61.7% of 10<sup>th</sup> graders, and 38.9% of 8<sup>th</sup> graders have drunk alcohol at some point in their lives<sup>11</sup> (Johnston et al., 2007a).
- *Binge Use:* According to data from the 2007 NSDUH, 4.5% of 14-year-olds, 15.1% of 16-year-olds, 28.9% of 18-year-olds, and 40.3% of 20-year-olds had engaged in binge drinking within the past 30 days (SAMHSA, 2008).
- *Heavy Use:* Data from the 2007 NSDUH survey show that 3.8% of 16-year-olds, 9.6% of 18-year-olds, and 15.8% of 20-year-olds had engaged in heavy alcohol consumption within the past 30 days.
- Use to Intoxication: According to data from the 2006 MTF survey, 55.1% of 12<sup>th</sup> graders, 41.2% of 10<sup>th</sup> graders, and 17.9% of 8<sup>th</sup> graders reported having been drunk at least once in their lives (Johnston et al., 2007a).
- Use to Intoxication Within the Last Month: Data from the 2007 MTF survey indicate that 28.7% of 12<sup>th</sup> graders, 18.1% of 10<sup>th</sup> graders, and 5.5% of 8<sup>th</sup> graders reported having been drunk in the past month (Johnston et al., 2007a).

<sup>&</sup>lt;sup>11</sup> Lifetime alcohol use is defined in this survey as "having more than a few sips."

#### Figure 2.1 Lifetime Alcohol Use, Use to Intoxication, and Use to Intoxication Within the Past Month Among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> Graders Source: 2007 Monitoring the Future Survey



### 2. Alcohol is the Most Widely Abused Substance Among America's Youth.

As indicated in Figure 2.2, a higher percentage of youth in 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grades used alcohol in the month prior to being surveyed than used marijuana—the illicit drug most commonly used by adolescents—or tobacco (Johnston et al., 2007a).



Figure 2.2 Past-Month Adolescent Alcohol, Cigarette, and Marijuana Use by Grade Source: Johnston et al., 2007 (data from the Monitoring the Future survey)

### 3. Youth Start Drinking at an Early Age.

Studies show that drinking often begins at very young ages in America.<sup>12</sup> Data from recent surveys indicate that approximately:

- 10% of 9- to 10-year-olds have already started drinking<sup>13</sup> (Donovan et al., 2004).
- More than one-fifth of underage drinkers begin before age 13 (Eaton et al., 2008).
- The peak years of initiation are 7<sup>th</sup> through 11<sup>th</sup> grades, based on data from high school seniors (Johnston et al., 2005a).

Youth who report drinking prior to the age of 15 are more likely to develop substance abuse problems, engage in risky sexual behavior, be involved in alcohol-related traffic crashes, and experience other negative consequences as compared to those who begin drinking at a later age. Early onset of drinking, therefore, is an important indicator of future problems, including heavier use of alcohol and other drugs during adolescence (Hawkins et al., 1997; Robins & Przybeck, 1985) and the likelihood of an alcohol-dependence diagnosis in adulthood (Grant & Dawson, 1998). Delaying the age of onset of first alcohol use as long as possible can ameliorate some of the negative consequences associated with underage alcohol consumption. Therefore, it is important to follow trends in age of initiation of alcohol use.

Data from the NSDUH indicate that the average age of first-time users of alcohol declined from 17.3 years to 16.2 years between 1965 and 2003. However, data from the MTF study show that the proportion of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders who had never used alcohol and the proportion of those who started using alcohol prior to 7<sup>th</sup> grade declined from 1995 to 2006. This latter finding suggests a possible increase in age at first use nationally.

To improve the utility of these estimates, SAMHSA has developed a new methodology that will provide more timely and more accurate assessments of trends in average age at first use of alcohol and other measures of initiation such as incidence rates. This new methodology calculates the average age at first use based on NSDUH data from those who initiated use within the past 12 months. Using this method, no difference was found in the average age at first alcohol use among those who initiated use prior to age 21 between 2003 and 2005; however, the average age at first use increased to 15.8 years in 2006, a statistically significant difference from 2004 and 2005 (SAMHSA, 2007a) and remained the same (15.8 years) in 2007 (SAMHSA 2008). The average age at first use for all drinkers, including those who started drinking at age 21 or over, was 16.6 in 2006 and 17.0 in 2007 (SAMHSA, 2008). See Appendix B for a discussion of methodological issues associated with measuring age at first use and other indicators of alcohol use initiation.

<sup>&</sup>lt;sup>12</sup> "Age at first use" refers to the age at which drinking begins. Drinking is defined as the consumption of at least one drink (e.g., a bottle of beer, glass of wine, shot of liquor, or mixed drink) rather than having had "a sip or two from a drink."

<sup>&</sup>lt;sup>13</sup> "Drinking" is defined as "having more than a few sips."

### 4. Among Underage Drinkers, Alcohol Use and Binge Drinking Increase With Age.

The 2007 NSDUH reports that underage alcohol consumption increased in a steady progression from 2.2% for 12-year-olds to 57.8% for 20-year-olds and peaked at 71.8% for 21-year-olds (SAMHSA, 2008). As shown in Figure 2.3, the rates of binge drinking also increased steadily between the ages of 12 and 20, peaked at age 21 (50.1%), and then decreased beyond young adulthood (data not shown) (SAMHSA, 2008).



Figure 2.3 Current and Binge Alcohol Use Among Persons Aged 12 to 20, by Age Source: 2007 National Survey on Drug Use and Health

Researchers have documented that drinking becomes increasingly common through the teenage years (O'Malley et al., 1998). Moreover, frequent, heavy alcohol use by underage drinkers increases each year from the age of 12 to the age of 20 (Flewelling et al., 2004).

## 5. Youth Binge<sup>14</sup> More and Drink More Than Adults When They Drink.

Young people who drink tend to drink less often than adults, but they drink more heavily when they do drink. For example, 92% of the alcohol consumed by 12- to 14-year-olds is consumed in the form of binge drinking (PIRE, 2002). Underage drinkers consume on average about 5 drinks per occasion about 6 times per month (SAMHSA, 2008). By comparison, adult drinkers age 26 and older consume on average about 3 drinks per occasion about 9 times per month (SAMHSA, 2008).



Figure 2.4 Number of Drinking Days Per Month and Usual Number of Drinks Per Occasion for Youth (12–20), Young Adults (21–25), and Adults (26 and Older) Source: SAMHSA data from 2007 NSDUH

When asked about the number of drinks consumed on their last occasion of alcohol use in the past month, 21.0% of underage drinkers reported 1 drink, 17.1% reported 2 drinks, 23.4% reported 3 or 4 drinks, 25.7% reported 5 to 8 drinks, and 12.8% reported 9 or more drinks for 2006 and 2007 combined (SAMHSA, 2008). As indicated in Figure 2.5, the number of drinks consumed differs by gender, with females being more likely to report consuming 1, 2, or 3 or 4 drinks while males were more likely to report consuming 5 to 8 or 9 or more drinks. Additionally, the number of drinks reported on the last occasion tends to increase with increasing age.

<sup>&</sup>lt;sup>14</sup> No common terminology has been established to describe different drinking patterns. On the basis of NHSDA/NSDUH data, however, SAMHSA defines "binge drinking" as 5 or more drinks on one occasion and "heavy drinking" as 5 or more drinks on at least 5 different days in the past 30 days. Some studies, including Weschler's survey of college students, define binge drinking as 5 or more drinks in a row for men and 4 or more for women. Other sources use "frequent heavy drinking" to refer to 5 or more drinks on at least 5 occasions in the last 30 days.



Figure 2.5 Number of Drinks Consumed on Last Occasion of Alcohol Use in the Past Month among Past Month Alcohol Users Aged 12 to 20, by Gender and Age Group: 2006-2007

A particularly worrisome aspect of underage drinking is the high prevalence of heavy episodic drinking, defined in the MTF as drinking 5 or more drinks in a row in the past 2 weeks. In 2007, 10.3% of 8<sup>th</sup> graders, 21.9% of 10<sup>th</sup> graders, and 25.9% of 12<sup>th</sup> graders reported engaging in heavy episodic drinking (Johnston et al., 2007a). In 2005, about 2.3 million youth ages 12 through 20 (or 6.0% of this age group) drank 5 or more drinks on a single occasion<sup>15</sup> 5 or more times per month (SAMHSA, 2006).

In 2004, trends in underage drinking were examined applying sophisticated statistical methods for trend analysis to data from 1975 to 2002 (Faden & Fay, 2004). The researchers reported that among 12<sup>th</sup> graders, the prevalence of drinking 5 or more drinks in a row in the past 2 weeks declined from 36.8% in 1975 to 29.2% in 2004, a decrease of 7.6%. Analysis of data for the intervening years reveals that this behavior increased between 1975 and 1980, decreased between 1980 and 1987, decreased more steeply between 1987 and 1993, increased between 1993 and 1997, and decreased between 1997 and 2002 (Faden & Fay, 2004). Information on the prevalence of this behavior among 8<sup>th</sup> and 10<sup>th</sup> graders first became available in 1991. That year, 12.9% of 8<sup>th</sup> graders reported engaging in this behavior compared to 11.4% in 2004, with marked oscillation of rates in the intervening years. Also in 1991, 22.9% of 10<sup>th</sup> graders reported having 5 or more drinks in a row in the past 2 weeks compared to 22.0% in 2004. In the intervening years, rates of this behavior among 10<sup>th</sup> graders steadily increased, peaking in 2000 and

<sup>&</sup>lt;sup>15</sup> If a typical 160-pound male drinks 5 standard drinks over a 2-hour period, he would reach a blood-alcohol concentration (BAC) of .08, making him legally intoxicated in all 50 States.

decreasing gradually since then (MTF Table 16; Faden & Fay, 2004). Visual examination of data for ensuing years suggests that these trends are continuing to move in the same direction.

## 6. Binge Drinking by Teens is Not Limited to the United States.

As shown in Figure 2.5, in many European countries a significant proportion of young people ages 15 to 16 report binge drinking. In all of the countries listed, the minimum legal drinking age is lower than in the United States. These data call into question the suggestion that having a lower minimum legal drinking age, as they do in many European countries, results in less problem drinking by adolescents.





## 7. A High Prevalence of Alcohol-Use Disorders is Common Among the Young.

Early alcohol consumption by some young people will result in an alcohol-use disorder that is, they will meet diagnostic criteria for either alcohol abuse or dependence (see Appendix E). Two large, nationally representative data sets provide information on the prevalence of alcohol abuse and dependence among persons under 21 years of age. The NSDUH provides information for youth ages 12 to 20, and the NESARC provides information for youth ages 18 to 20. Both surveys indicate that the prevalence of alcohol abuse or dependence among 18- to 20year-olds is quite high: 16.7% according to the NSDUH, and 18.3% according to the NESARC. For those youth ages 12 to 17, the NSDUH indicates the prevalence of alcohol abuse or dependence is 5.5%.

As indicated in Figures 2.6 and 2.7, some differences in findings exist between the two surveys, particularly for dependence among 18- to 24-year-olds. These differences are likely due, in part,

to the differing methodologies employed by the two surveys. Another contributing factor is the application of criteria developed to measure alcohol abuse and dependence in adults to younger drinkers. Since the *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV)* criteria for abuse and dependence originally were developed for use with adults, using them to assess abuse and dependence in adolescents may lead to inconsistencies.<sup>16</sup>



Figure 2.7 Prevalence of Past-Year DSM-IV Alcohol Dependence, by Age Source: SAMHSA Office of Applied Studies, Special Analyses of the 2001-2002 NESARC and 2005-2006 NSDUH

<sup>&</sup>lt;sup>16</sup> A number of researchers are actively investigating this important issue (Caetano & Babor, 2006; Chung & Martin, 2005; Martin et al., 2006; Wagner, Lloyd, & Gil, 2002). Additionally, NIAAA's Underage Drinking Research Initiative convened a meeting of experts to discuss the diagnosis of alcohol abuse and dependence among adolescents in April 2006. The American Psychiatric Association is also addressing the appropriateness of the current *DSM-IV* criteria for measuring alcohol abuse and dependence in the young as it prepares to publish a fifth edition of that manual (*DSM-V*).





### 8. Underage Drinking Differs by Gender.

Though underage males and females tend to start drinking at about the same age and have approximately the same prevalence of past-month alcohol use, males are more likely to drink with greater frequency and to engage in binge and heavy drinking. In the 2007 NSDUH, 56.6% of males aged 12 and older were current drinkers compared to 46.0% of females in that age group. Among underage drinkers, however, gender differences vary with age. Among younger underage individuals, females are slightly more likely to be drinkers; among older underage drinkers, males are more likely to be drinkers. Among individuals aged 12 to13, rates of current drinking were 4.4% for females compared to 2.6% for males. Among 14- and 15-year-olds, 16.5% of females reported current use compared to 12.9% of males. Among those aged 16 to 17, the pattern changes, with 31.1% of males and 26.7% of females being current drinkers. By ages 18 to 20, 52.1% of males and 49.2% of females report past-month alcohol use (NSDUH, 2007; data in tables 8-12 in Appendix B).

The data on binge drinking yielded the most significant gender difference. In 2007, 30.7% of 12<sup>th</sup>-grade males reported binge drinking (consumption of 5 or more drinks in a row) at least once in the prior 2-week period compared to 21.5% of 12<sup>th</sup>-grade females (Johnston et al., 2007c); however, that gap is closing. In 1975, for example, a 23% spread was found between the rates for males and females. By 2007, that difference was only 9.2% (Johnston, 2007c).

## 9. Underage Drinking Varies by Race and Ethnicity.

Whites aged 12 to 20 were more likely to report current use of alcohol in 2007 than any other racial or ethnic group in America. An estimated 32.0% of White Americans reported past-month use, followed closely by American Indians and Alaska Natives at 28.3%, Hispanic Americans at 24.7%, Black Americans at 18.3%, and Asian Americans at 16.8 (SAMHSA, 2008). Though fewer Hispanic and Black Americans reported current drinking, data from the 2007 YRBS suggest that the prevalence of alcohol use before the age of 13 is greater among Black (26.7%) and Hispanic (29.0%) students than among White (21.5%) American students (Eaton et al., 2008). It is important to note that sample sizes from the MTF and the YRBS do not allow estimates of alcohol consumption by American Indian/Alaska Native youth. The 2006 NSDUH data show that Whites, American Indians, and Alaskan Natives aged 12 to 20 were also more likely to report binge alcohol use in the past month. An estimated 23.6% of American Indians and Alaskan Natives, and 22.7% of Whites reported having 5 or more drinks on the same occasion in the past month compared to 16.5% of Hispanics, 11.8% of Asians, and 8.6% of Blacks (SAMHSA, 2007a). The 2007 NSDUH data show nearly identical patterns for binge alcohol use except that no estimate was reported for American Indians and Alaska Natives due to low precision based on small sample size (SAMHSA, 2008).

#### Figure 2.9 Alcohol Use and Binge Drinking in the Past Month Among Persons Aged 12 to 20, by Gender and Race/Ethnicity, Annual Averages Based on 2002-2007 Data Source: SAMHSA Office of Applied Studies, NSDUH (special data analysis)



# **10. Alcohol Use has a Social Context.**

NSDUH began to collect data on social context of last alcohol use in 2006. In this report, NSDUH data for 2006 and 2007 have been combined for this item. Accordingly, the majority

(80.9%) of persons aged 12 to 20 who had consumed alcohol in the past month were with two or more people the last time they drank alcohol, while 14.2% were with one other person the last time they drank, and 4.9% were alone. Underage persons who drank with two or more others on the last occasion in the past month had more drinks on the last occasion on average (4.9 drinks) than those who drank with one other person (3.2 drinks) or those who drank alone (2.9 drinks) (Pemberton et al., 2008; SAMHSA, 2008). Among current drinkers, youths aged 12 to 14 were more likely to have been alone (10.3%) or with one other person (22.4%) the last time they drank compared to youths aged 15 to 17 (5.3% alone and 14.4% with one other person) or 18- to 20year olds (4.1% alone and 13.3% with one other person) (SAMHSA, 2008). In all three age groups, underage current drinkers who drank with two or more other people averaged more drinks on the last occasion that those who drank with one other person or alone. Among underage drinkers, the majority of both males and females were with two or more other people on their last drinking occasions. However, female drinkers were more likely to be with two or more people the last time they drank (83.5%) than were male drinkers (78.5%). On the other hand, male drinkers were more likely to have been alone the last time they drank (6.4%) than were female drinkers (3.3%). For both males and females, underage persons who drank with two or more other people consumed more drinks on average than those who drank alone or with one other person (see Table 23 in Appendix B). Males and females who drank alone on the last occasion reported a similar number of drinks (3.2 drinks for males and 2.3 drinks for females) as did those who drank with one other person (3.6 drinks for males and 2.8 drinks for females). However, males consumed more drinks than females when the last drinking occasion was with two or more other people (5.9 drinks for males and 3.9 drinks for females) (SAMHSA, 2008).



Figure 2.10 Drinks Consumed on Last Occasion of Alcohol Use in the Past Month among Past Month Alcohol User Aged 12 to 20, by Social Context and Age Group: 2006-2007
#### **<u>11. The Location of Alcohol Use Influences Consumption.</u>**

NSDUH also began to collect data on location of last alcohol use in 2006. In this report, NSDUH data for 2006 and 2007 have been combined for this item. Accordingly, the majority of underage drinkers reported that when they last used alcohol they were either in someone else's home (54.9%) or their own home (29.8%). Underage drinkers whose last drinking occasion was at someone else's home consumed an average of 5.0 drinks while those whose last drinking occasion was at their own home consumed an average of 4.0 drinks. The next most popular drinking locations for this age group were at a restaurant, bar, or club (9.4%); in a car or other vehicle (5.2%); or at a park, beach, or parking lot (4.6%) (SAMHSA, 2008). Underage current drinkers whose last alcohol use was at a restaurant, bar, or club averaged 4.7 drinks; those who last drank in a car or other vehicle averaged 5.1 drinks; and those who last drank at a park, beach, or parking lot averaged 5.2 drinks. Current drinkers aged 12 to 20 who last drank at a concert or sporting event (1.5% of all underage drinkers) consumed an average of 6.1 drinks (SAMHSA, 2008).

According to the NSDUH data, drinking location varies substantially by age. For example, drinkers aged 12 to 14 were more likely to have been in their own homes the last time they drank (40.0%) and less likely to have been in someone else's home (45.8%) compared with underage drinkers in older age groups (24.6% and 62.0%, respectively, for those aged 15 to 17; and 31.4% and 52.3%, respectively, for those aged 18 to 20). Drinkers aged 18 to 20 were more likely than those in younger age groups to have been in a restaurant, bar, or club on their last drinking occasion (12.7% for those aged 18 to 20 compared to 4.4% for those aged 12 to 14, and 3.7% for those aged 15 to 17) (SAMHSA, 2008).

#### **12. The Types of Alcohol Consumed by Underage Drinkers Varies by Age.**

The following table, based on 2007 MTF data, indicates the type of alcohol consumed by underage drinkers in the 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grades within the last 30 days. The 5 alcohol categories listed are beer, wine, wine coolers, spirits, and flavored malt beverages (FMB), the latter of which are sometimes called "alcopops" or "malternatives." Alcopops are ready-to-drink, flavored alcoholic beverages that tend to be sweet and have between 4% and 6% alcohol content by volume or about the same as beer, which typically varies between 3% and 6%.

Grade Level	Beer	Wine	Wine Coolers	Spirits	Flavored Malt Beverages
$8^{th}$	12.2%	n/c	n/c	n/c	12.2%
$10^{\text{th}}$	24.4%	n/c	n/c	n/c	21.8%
$12^{\text{th}}$	36.6%	14.1%	12.7%	34.1%	29.1%

#### UNDERAGE ALCOHOL USE WITHIN THE PAST 30 DAYS BY ALCOHOL CATEGORY

Note: "n/c" indicates that no data were collected.

Source: Johnston et al., 2007c.

In some cases, the same adolescents reported drinking more than one type of alcohol, which is why the percentage of adolescents for a given grade who have drunk alcohol may total more than 100% in the table above. For example, of the 12<sup>th</sup> graders who drank alcohol within the 30 days prior to the survey, some may have consumed, for example, both beer and wine. Of those 12<sup>th</sup>-grade adolescents, 36.6% had consumed beer, 14.1% had consumed wine, 34.1% had consumed spirits, and 29.1% had consumed flavored malt beverages. Therefore, some of the adolescents must have consumed alcohol from more than one of these categories.

#### 13. Alcohol Use in College is Pervasive and Heavy.

Approximately 4 in 5 college students drink alcohol. About 2 in 5 engage in binge drinking (5 or more drinks in a row for men and 4 or more in a row for women within the past 2 weeks or 30 days, depending upon the survey). About 1 in 5 engages in frequent binging 3 or more times in the past 2 weeks (NIAAA, 2002a). Underage college students consume about 48% of the alcohol consumed by students attending four-year colleges (Wechsler et al., 2002b). The consequences of underage drinking in college are widespread and serious and are discussed in a later subsection.

#### 14. Alcohol is Perceived as Readily Available by the Underage Population.

The most recent data on the perception of availability suggest that the great majority of teens see alcohol as readily available. In 2007, for example, 62.0% of 8<sup>th</sup> graders, 82.6% of 10<sup>th</sup> graders, and 92.2% of 12<sup>th</sup> graders reported that alcohol was "fairly easy" or "very easy" to get (Johnston et al., 2007a). Some declines in the perception of availability have been noted. In 1992, 76.2% of 8<sup>th</sup> graders perceived alcohol as easily available compared to 62.0% in 2007. For 10<sup>th</sup> graders, perception of availability peaked in 1996 at 90.4% compared to 82.6% in 2007. Data for 12<sup>th</sup> graders were first collected in 1999, at which time 95.0% perceived alcohol as readily available. Perception of availability among 12<sup>th</sup> graders has remained relatively stable since then.

#### 15. Alcohol is Available From a Variety of Sources.

The STOP Act requires the Secretary of HHS to report to Congress on measures of "the availability of alcohol from commercial and noncommercial sources to underage populations." The Act also calls for surveillance data on "the means of underage access" to alcohol. The few studies that have been conducted, despite having relatively small sample sizes, provide evidence that the most frequent means of underage access are parties, friends, adult purchasers (Harrison et al., 2000; Preusser et al., 1995; Schwartz et al., 1998; Wagenaar et al., 1996), and, in the case of younger adolescents, family members (National Research Council and Institute of Medicine, 2004). As noted in the National Research Council and Institute of Medicine report:

Use of friends under 21 and adult strangers as sources for alcohol appears to increase with age while reports of parents or other family members as sources decrease with

age....Use of commercial sources appears to be much higher among college students, in urban settings, and where possession and purchase laws are relatively weak or unenforced.

Prior to 2006, only data on the perception of such availability by those under the age of 21 were available from the NSDUH. New items were added in 2006 to gather information on the actual source from which underage drinkers obtained the alcohol they used. In the NSDUH, the sources of last alcohol use are divided into two categories: the underage drinker paid (he or she purchased it or gave someone else money to purchase it) and the underage drinker did not pay



(he or she received it for free from someone or took it from his or her own home or someone else's home). For 2006 and 2007 combined, among all underage current drinkers, 30.6% paid for the alcohol the last time they drank, including 8.8% who purchased the alcohol themselves and 21.7% who gave money to someone else to purchase it. Underage persons who paid for alcohol themselves consumed more drinks on their last drinking occasion (average of 6.0 drinks) than did those who did not pay for the alcohol themselves (average of 3.9 drinks). This difference between the average number of drinks consumed by those who paid compared to those who did not pay is at least partially explained by the fact that older underage drinkers are both more likely to pay for alcohol and more likely to drink more.

Among all underage drinkers, 69.4% did not pay for the alcohol the last time they drank. More than a quarter (26.4%) indicated that they were given alcohol for free by an unrelated individual

aged 21 or older. One in 17 (5.9%) got the alcohol from a parent or guardian, 8.5% got it from another family member aged 21 or older, and 3.9% took it from their own home.

The most common sources of alcohol varied substantially by age. For youths aged 12 to 14, the most common sources were receiving it for free from someone under the age of 21 (18.6%), receiving it from a parent or guardian (16.6%), or taking it from their own home (14.0%). For youths aged 15 to17, the most common sources were receiving it for free from someone under the age of 21 (20.9%), receiving it from an unrelated person aged 21 or older (20.3%), and giving somebody else money to purchase the alcohol (18.3%). For persons aged 18 to 20, the majority of current drinkers either received alcohol for free from an unrelated person aged 21 or older (30.5%) or gave someone else money to purchase the alcohol (25.0%).

Underage persons in older age groups were more likely to have paid for alcohol themselves on their last drinking occasion, with 36.5% of 18- to 20-year olds paying for it themselves compared to 23.5% of 15- to 17-year olds and 7.5% of 12- to 14-year olds. Among underage drinkers, males were more likely to have paid for alcohol themselves on their last drinking occasion (36.8%) than were females (23.6%).

More detailed information can be found in Tables 21 and 22 in Appendix B and in the special report by Pemberton et al. entitled *Underage Alcohol Use: Findings from the 2002-2006 National Surveys on Drug Use and Health*, which was released in July 2008 and is available at ://www.oas.samhsa.gov/underage2k8/underage.pdf.

# <u>16. Exposure of Underage Populations to Messages Regarding Alcohol in Advertising and the Entertainment Media has an Impact on Alcohol Use.</u>

The STOP Act requires the Secretary of HHS to report to Congress on the extent of "the exposure of underage populations to messages regarding alcohol in advertising and the entertainment media as reported by the Federal Trade Commission (FTC)." FTC has not yet conducted any studies that measure alcohol depictions in entertainment media. To date, however, the FTC has conducted three formal studies to determine the extent to which those under 21 are exposed to alcohol advertising, as set forth below.

A. *The 1999 FTC Alcohol Report*. In 1999, the FTC reported that the voluntary codes of the alcohol industry permitted alcohol advertising in media where as few as 50% or more of the audience was of legal age. Only half of the companies studied were able to show that nearly all of their ads were shown to a majority-legal-age audience; the other half either provided data showing that a substantial portion of their ads did not comply with the 50% guideline or that they failed to obtain the data needed to evaluate their code compliance. Noting that the 50% standard permitted alcohol advertising to reach large numbers of underage consumers, the FTC recommended that the industry raise the placement standard and measure compliance against reliable, up-to-date audience composition data. For more information, see the FTC's September 1999 report, *Self-Regulation in the Alcohol Industry*, available online at <u>.ftc.gov/reports/alcohol/alcoholreport.htm</u>.

B. The 2003 FTC Alcohol Report. The FTC's 2003 review reported that over 99% of the radio, television, and magazine advertising budgets for alcohol brands whose target audience included 21-year-olds were expended in compliance with the 50% placement standard. The FTC also announced that, upon its recommendation, the alcohol industry had agreed to amend the voluntary codes to require that adults over 21 constitute at least 70% of the audience for television, magazine, and radio ads, based upon reliable data—thus reducing permissible underage audience composition from 50% to 30%. To facilitate compliance, the revised codes for the beer and spirits industries required members to conduct periodic post-placement audits and promptly remedy any identified problems. For more information, contact the FTC to obtain a copy of its September 2003 report, *Alcohol Marketing and Advertising*.

C. *The 2008 FTC Alcohol Report*. In June 2008, the FTC published its third study of alcohol advertising, in which it evaluated compliance with the 70% placement standard as well as other matters relating to underage exposure to alcohol advertising. The 2008 data showed that 92.5% of advertising placements complied with the 70% standard; further, because placements that missed the target were concentrated in smaller media, more than 97% of total alcohol advertising "impressions" (individual exposures to advertising) met the 70% standard. When the advertising exposure data were aggregated across companies and measured media, about 86% of the alcohol advertising audience consisted of legal age adults. For more information, see the FTC's June 2008 report, *Self-Regulation in the Alcohol Industry*, available online at ://www.ftc.gov/os/2008/06/080626alcoholreport.pdf.

# **17. Despite Some Progress, Underage Drinking Remains Unacceptably High.**

Data available from 1975 to 2007 document that the prevalence of drinking among American 12<sup>th</sup> graders peaked in 1978 for lifetime use and past-year use (Johnston et al., 2003, Johnston et al., 2007a; Johnston et al., 2007b). Lifetime alcohol use among 12<sup>th</sup> graders in 2006 showed a statistically significant decline from 2005, dropping from 75.1% to 72.7% (Johnston et al., 2006). A further slight decline to 72.2% occurred in 2007 (Johnston et al., 2007a). Past-month use among 12<sup>th</sup> graders increased between 1975 and 1978, decreased slightly between 1978 and 1988, decreased between 1988 and 1993, increased between 1993 and 1997, and decreased between 1997 and 2002 (Faden & Fay, 2004). The percentage of high school seniors who reported drinking within the last 30 days was the same in 1993 as in 2002 (48.6%). Although a modest reduction has occurred in the 30-day and annual usage rates over the past several years, current rates are not significantly different from 1993, and they remain high (Johnston et al., 2007a).



Figure 2.12 Trends in 30-Day Prevalence of Alcohol Use for 12<sup>th</sup> Graders, 1975-2007 Source: 2006 MTF

Binge drinking in the past two weeks among 12<sup>th</sup> graders peaked in 1981, held steady, and then declined from 41% in 1983 to a low of 28% in 1992. This drop of almost one-third in binge

drinking was a significant improvement (Johnston et al., 2006). Between 1992 and 1998, binge drinking rose by about 4% among 12<sup>th</sup> graders. An upward drift in binge drinking among 8<sup>th</sup> graders occurred between 1991 (13%) and 1996 (16%) and among 10<sup>th</sup> graders between 1992 (21%) and 1999 (26%). After those peaks, a slight decline in binge drinking occurred in all three grades until 2002, when the rate dropped appreciably. Since 2002, binge use generally has continued to decline but only slightly (Johnston et al., 2007a).

Faden and Fay (2004) examined multiple years of similar data on underage drinking from the NSDUH, MTF, and YRBS surveys for the years 1990 to 2002. They reported that their trend analyses "show a pattern of relative stability or decreases in the late 1990s and early 2000s for all groups on all measures with the exception of daily drinking by 10<sup>th</sup> graders in MTF and drinking five or more drinks in a row by 10<sup>th</sup> graders in YRBS." As they further noted, "These results considered together offer stronger support for the finding of stability or decrease in youth drinking prevalence in the past 10 years or so than results from any one survey do by themselves", yet the prevalence of alcohol consumption by persons under the age of 21 was and remains unacceptably high.

# CONSEQUENCES AND ASSOCIATED RISKS OF UNDERAGE DRINKING

Underage drinking is a problem for individuals and society. It is a matter of public health and safety with profound consequences for youth, their families, and their communities. It is also a complex problem that has plagued society for generations and that results in a range of adverse short- and long-term consequences. Some of these negative consequences are described below. They include the negative effects of alcohol consumption on underage drinkers as well as the consequences to those around them, which are referred to as secondary effects of underage alcohol use.

## 1. Alcohol-Related Motor Vehicle Crashes

According to *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*, about 5,000 people under age 21 die annually from alcohol-related injuries involving underage drinking (CDC, 2004; Hingson & Kenkel, 2004; Levy et al., 1999; NHTSA, 2003; Smith et al., 1999). The greatest single mortality risk for underage drinkers is motor vehicle crashes. In 2007, of the 3,174 young drivers in the 15- to 20-year-old age group killed in motor vehicle traffic crashes, 979 (31%) had a BAC (blood-alcohol concentration) of .01 g/dL or higher. Of these, 165 (5%) had a BAC of .01 to .07 g/dL, and 813 (26%) had a BAC of .08 g/dL or higher (NHTSA, 2008). In 2007, of the 407 non-occupants (pedestrians and pedal cyclists) in the 15- to 20-year age group killed in motor vehicle traffic crashes, 112 (27%) had a BAC of .01 g/dL or higher. Of these, 20 (5%) had a BAC of .01 to .07 g/dL, and 92 (23%) had a BAC of .08 g/dL or higher (NHTSA, 2008).

Relative to adults, young people who drink and drive have an increased risk of alcohol-related crashes because of their relative inexperience behind the wheel and their increased impairment from alcohol. According to survey data, about 4.5% of 16-year-olds, 11.2% of 17-year-olds,

13.8% of 18-year-olds, 19.2% of 19-year-olds, and 22.5% of 20-year-olds reported driving under the influence of alcohol in 2007 (SAMHSA, 2008). In general, the reported prevalence of driving under the influence of alcohol increases with age until about 25, although some variation has been noted among survey years. For example, in the 2007 NSDUH, reported prevalence peaked at age 22 then declined for older individuals. Overall, 29.1% of high school students reported in the 2007 YRBS that, within the past 30 days, they had ridden with a driver who had been drinking. For seniors, that figure rose to 31.5% (Eaton et al., 2008).

# 2. Other Unintentional Injuries Such As Burns, Falls, and Drownings

In 2005, 2,185 individuals ages 16 to 20 died from unintentional injuries other than motor vehicle crashes such as poisonings, drownings, falls, burns, and so forth (CDC, 2008). Research suggests that approximately 40% of these deaths were alcohol-related (Smith et al., 1999).

# 3. Suicide, Homicide, and Violence

In 2005, 2,919 young people ages 12 to 20 died from homicide and 2,327 from suicide (CDC, 2008). At present, we do not know exactly how many of these deaths were alcohol-related. One study (Smith et al., 1999) estimated that for all ages combined, nearly half of the homicides and almost a third of the suicides were alcohol-related (i.e., any level of alcohol was present). Another study of deaths among those under 21 reported that over a third of the homicides were alcohol-related, as were 12% of male suicides and 8% of female suicides (Levy et al., 1999).

Levy et al. (1999) report that individuals under the age of 21 commit 45% of rapes, 44% of robberies, and 37% of other assaults. It is also estimated that for the population as a whole, 50% of violent crime is related to alcohol use by the perpetrator (Harwood et al., 1998). The degree to which violent crimes committed by those under 21 are alcohol-related remains to be determined.

# 4. Years of Potential Life Lost Due to Alcohol

Approximately 30 years of potential life are lost for persons with an alcohol-attributable death (CDC, 2004). By comparison, each person who dies from cancer loses an average of 15 years of life, and each person who dies from heart disease loses an average of 11 years of life (Ries, 2003). Persons under age 21 who die as a result of alcohol use lose an average of 60 years of potential life (CDC, 2007a).

# 5. Assault and Rapes on College Campuses

It is estimated that 90% of college rapes involve the use of alcohol by the assailant, the victim, or both (Commission on Substance Abuse at Colleges and Universities, 1994). About 97,000 college students are victims of sexual assault or date rape related to alcohol use each year

(Hingson et al., 2005). Alcohol use is involved in 95% of all violent crime on college campuses (Commission on Substance Abuse at Colleges and Universities, 1994).

It is estimated that more than 600,000 college students were assaulted by another student who had been drinking and another 500,000 students were unintentionally injured while under the influence of alcohol (Hingson et al., 2005).

## 6. Other Risky Behaviors

A variety of other risky behaviors are associated with underage alcohol use. Some of these behaviors include riding with a driver who has been drinking, engaging in inappropriate and/or risky sexual activity, using tobacco and/or illicit drugs, attempting suicide, and carrying a weapon to school (Eaton et al., 2008; Miller, 2007; NIAAA, 2002b). Although the data indicate that alcohol use is correlated with these risky behaviors, the data cannot prove causation between alcohol use and the behavior. Nevertheless, it is known that alcohol can impair an individual's decision-making capacity and that it reduces inhibitions. Therefore, drinking may be related to the decision to engage in risky behavior, particularly in adolescents whose judgment, self-regulation, and decision-making capabilities are still developing.

# 7. Potential Brain Impairment

Adverse effects on normal brain development are a potential long-term risk of underage alcohol consumption. Neurobiological research suggests that adolescence may be a period of unique vulnerability to the effects of alcohol. For example, early heavy alcohol use may have negative effects on the physical development of the adolescent brain structure (Brown & Tapert, 2004) as well as on adolescent brain functioning. Negative effects for this age group indicated by neurological studies include decreased ability in planning, executive functioning, memory, spatial operations, and attention, all of which play an important role in academic performance and future levels of functioning (Brown et al., 2000; Giancola & Mezzich, 2000; Tapert & Brown, 1999; Tapert et al., 2001).

## 8. Increased Risk of Developing an Alcohol-Use Disorder Later in Life

The early onset of alcohol use (at age 14 or younger) in combination with an escalation of drinking during adolescence have both been documented in a number of studies as risk factors for the development of alcohol-related problems in adulthood (e.g., Grant & Dawson, 1997; Gruber et al., 1996; Hawkins et al., 1997; Schulenburg et al., 1996; York et al., 2004). The onset of alcohol consumption in childhood or early adolescence is a marker for later alcohol-related problems, including heavier adolescent use of alcohol and other drugs (Hawkins, et al., 1997; Robins & Przybeck, 1985), the development of alcohol abuse or dependence in adulthood (Grant & Dawson, 1997; York et al., 2004), and involvement in alcohol-related traffic crashes (NCSA, FARS 2005 – ARF). Persons aged 21 or older who reported first use of alcohol before age 14

were more than six times more likely to report past-year alcohol dependence or abuse than were persons who first used alcohol at age 21 or older (Grant & Dawson, 1997).

# 9. Other Negative Consequences of Underage Drinking

Other consequences of underage drinking include death from alcohol poisoning, academic problems, various social problems, and physical problems such as medical illnesses. Underage drinking also may result in fetal alcohol spectrum disorders (FASDs). FASDs can cause serious disabilities that last a lifetime; however, they are preventable if a woman or adolescent girl does not drink during pregnancy. The social costs of underage drinking are estimated conservatively at \$53 billion, including \$19 billion from traffic crashes and \$29 billion from violent crime (PIRE, 1999).

The social, individual, and economic consequences of underage drinking make it a leading health problem in the United States, one that has remained stubbornly resistant to a variety of measures initiated to prevent and reduce it over the past three decades. The primary preventive issue in underage drinking is to delay onset of alcohol use for as long as possible, preferably until age 21, yet that delay must be achieved within an environment in which adult alcohol use is an accepted part of American life and alcohol is attractive to most underage youth and readily available to them. The goals and strategies proposed by the Surgeon General in his *Call to Action* and incorporated into this *Report to Congress* recognize that the involvement of Federal, State, and local governments; organizations and institutions in the private sector; concerned individuals; and parents of underage youth as well as youth themselves is critical if progress is to be made against this challenging national health problem.

# UNDERAGE DRINKING AS A DEVELOPMENTAL PHENOMENON

As the Surgeon General wrote in his introduction to the *Call to Action*:

...the latest research also offers hopeful new possibilities for prevention and intervention by furthering our understanding of underage alcohol use as a developmental phenomenon—as a behavior directly related to maturational processes in adolescence. New research explains why adolescents use alcohol differently from adults, why they react uniquely to it, and why alcohol can pose such a powerful attraction to adolescents, with unpredictable and potentially devastating outcomes.

This understanding of underage alcohol use as a developmental phenomenon is one of the major themes of the *Call to Action* and is an important new concept in this *Report to Congress*.

Adolescence is the period between the onset of puberty<sup>17</sup> and the assumption of adult roles. It is a time of particular vulnerability to alcohol use and its consequences for a variety of developmental reasons, some specific to the individual and others related to the biological and behavioral changes accompanying adolescence. Additionally, alcohol can present a special allure to some adolescents for social, genetic, psychological, and cultural reasons. Recent advances in the fields of epidemiology, developmental psychopathology, human brain development, and behavioral genetics have provided new insights into adolescent development and its relationship to underage alcohol use.

Adolescent alcohol consumption is a complex behavior influenced by multiple factors, including the normal maturational changes that all adolescents experience; the various social and cultural contexts in which adolescents live (e.g., family, peers, and school); genetic, psychological, and social factors specific to each adolescent; and environmental factors that influence the availability and appeal of alcohol (e.g., enforcement of underage alcohol policies, marketing practices, media exposure, etc.). Biological factors internal to the adolescent (e.g., genes and hormones) interact with factors external to the adolescent (e.g., peers, school, and cultural influences) in determining whether or not an adolescent will use alcohol. These internal and external factors influence each other in reciprocal ways as the adolescent's development unfolds over time; however, youth are not at uniform risk for alcohol consumption nor are they uniformly at risk over the span of their own adolescence.

An important aspect of understanding the adolescent attraction to alcohol, as well as the means by which its use can be prevented or reduced, is appreciating the significant influence of the social systems in which adolescents operate. These many different social systems both influence adolescents and are, in turn, influenced by them (Bronfenbrenner, 1979). As shown in Figure 2.13, these systems include the adolescent's family, peers, school, extracurricular and community activities, sports teams and clubs, religious institutions, other diverse organizations with which the adolescent interacts, part-time work, the adolescent's community, his or her culture, and even influences from around the world (e.g., those accessed through the Internet and other electronic resources). Each social system exposes the adolescent to both positive and negative influences, potentially increasing or decreasing his or her risk of alcohol use. These multiple systems interact and may reinforce or contradict each other, and each may affect an adolescent's decision to use alcohol.

To protect America's adolescents properly from alcohol use, parents and other adults must be involved in multiple social systems as individuals, citizens, and voters. By understanding the role these systems play in adolescents' lives and by acting strategically on the basis of established and emerging research, parents, other adults, and the Nation can reduce the risk and consequences of underage alcohol use.

> Figure 2.13 Systems That Influence Adolescent Behavior This schematic represents the multiple systems in which adolescents are embedded.

<sup>&</sup>lt;sup>17</sup> For the purpose of this Report, puberty is defined as a sequence of events by which a child becomes a young adult, as characterized by secretions of hormones, development of secondary sexual characteristics, reproductive functions, and growth spurts.

Their relative influences vary across development. Source: The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking (2007)



## **Developmental Issues**

An understanding of underage alcohol use as a developmental phenomenon sheds significant light on the particular vulnerabilities of adolescents to alcohol use as well as protective measures likely to prevent and reduce underage drinking. Among the most important developmental findings included in the Surgeon General's *Call to Action* are the following:

<u>The Developing Adolescent Brain</u>: During adolescence, dramatic changes take place in the brain's structure, neuron connectivity or "wiring," and physiology (Restak, 2001). These changes affect everything from emerging sexuality to emotionality and judgment; however, not all parts of the adolescent brain mature at the same time. The result of this difference in maturational timing can be impulsive decisions or actions, a disregard for consequences, and emotional reactions that can lead to alcohol use or otherwise put adolescents at serious risk.

<u>Stress and Adolescent Transitions</u>: The physical effects of puberty create dramatic changes in the sexual and social experience of maturing adolescents that require significant psychological and social adaptation. They further create stress that may contribute to increased consumption of alcohol during the adolescent period (Tschann et al., 1994). Upon graduating from elementary to middle school, from middle school to high school, and from high school to college or the workplace, adolescents are exposed to new stressors. Research shows a link between stress and alcohol consumption. For example, research on nonhuman primates shows that adolescent monkeys double their alcohol intake under stress and that excessive alcohol consumption is related to changes in stress hormones and serotonin (reviewed in Barr et al., 2004).

<u>Personality Traits</u>: Research studies on adolescent drinking have failed repeatedly to find specific sets of personality traits that predict alcohol use in adolescents. Nonetheless, research does show that adolescents who are heavy alcohol users or who have alcohol-use disorders (AUDs) do exhibit certain personality traits. These traits, however, are also shared by some adolescents who do not abuse alcohol. For example, high levels of impulsiveness, aggression, conduct problems, and novelty seeking (Gabel et al., 1999) as well as low harm avoidance (Jones & Heaven, 1998) and other risky behaviors in childhood and early adolescence may be associated with future heavy alcohol use and AUDs (Soloff et al., 2000).

<u>Mental Disorders</u>: Depression and anxiety are risk factors for alcohol problems because some people use drinking as a coping strategy to deal with internal distress. Adolescents with defined mental disorders have significantly elevated rates of alcohol and other drug use problems. Given that many young people are involved not only with alcohol but also with other substances and may also have a co-occurring mental disorder, interventions should be designed to address this complexity.

<u>Adolescents From Families With a History of Alcohol Dependence</u>: Children from families of alcoholics are at increased risk for alcohol dependence throughout their lives. Genes account for over half of the risk for alcohol dependence, with environmental factors accounting for the rest. However, no single gene accounts for the majority of risk. The development of a complex behavioral disorder such as alcohol dependence likely depends on specific genetic factors interacting with one another, multiple environmental factors, and the interaction between genetic and environmental factors. Research suggests that genes have a stronger influence over the development of problem use, whereas environment seems to play a greater role in the initiation of alcohol use (Rhee et al., 2003).

<u>Sensitivity to the Effects of Alcohol Use</u>: Animal research indicates that adolescents generally are more sensitive than adults to the stimulating effects of alcohol and less sensitive to some of the aversive effects of acute alcohol intoxication such as sedation, hangover, and ataxia or loss of muscular coordination (Doremus et al., 2003; Little et al., 1996; Silveri & Spear, 1998; Varlinskaya & Spear, 2004; White et al., 2002) (for review, see Spear, 2000; Spear & Varlinskaya, 2005). This difference in sensitivity between adolescents and adults may make adolescents more vulnerable to certain harmful effects of alcohol use. For example, adolescents are able to drink more than adults, who might pass out or be inclined to go to sleep, and therefore are more likely than adults to initiate activities such as driving when they are too impaired to perform them competently. Adolescents also are more likely to drink to the point of coma. Furthermore, in the case of driving, each drink increases impairment more for adolescents than adults (Hingson & Winter, 2003). Children with alcoholic parents may be at even greater risk for excessive drinking resulting from a combination of genetic and developmental factors that lower their sensitivity to alcohol.

#### **INTERVENING AMIDST COMPLEXITY**

Underage alcohol use is a highly complex phenomenon driven by a variety of interacting factors. A developmental approach to preventing and reducing underage alcohol use takes into account the complex forces and factors that determine an adolescent's decision to use or not use alcohol. Complex interactions among biological, social, cultural, and environmental factors evolve as maturation proceeds; thus, the same adolescent at age 13 and later at age 17 will have different developmental needs and require different protective structures and skills to avoid the use of alcohol. To further complicate matters, periods of rapid transition, reorganization, and growth spurts alternate with periods of quiet and consolidation—all within a constantly changing social context. A developmental approach to the prevention and reduction of underage drinking recognizes the importance of all the environmental and social systems that affect adolescents as well as adolescents' own maturational processes and individual characteristics.

One of the advantages of understanding underage alcohol use as a developmental phenomenon is the unique insight it provides into risk and protective factors. Though the problem of underage drinking is complex, it is not insurmountable. What a developmental approach makes clear is the need for a coordinated national effort to prevent and reduce underage drinking and the need for the active involvement of both of the public and private sectors as well as parents, other caregivers, and other adults. Success in solving a public health and safety problem as complex as underage drinking will require the engagement of every American in what the *Call to Action* calls "a national effort to address underage drinking early, continuously, and in the context of human development." As the *Call to Action* further states: "Underage alcohol use is everybody's problem—and its solution is everybody's responsibility."

## **CHAPTER III**

## A COORDINATED FEDERAL APPROACH TO PREVENTING AND REDUCING UNDERAGE DRINKING

The 2006 STOP Act records the sense of Congress that "a multi-faceted effort is needed to more successfully address the problem of underage drinking in the United States. A coordinated approach to prevention, intervention, treatment, enforcement, and research is key to making progress. This Act recognizes the need for a focused national effort, and addresses particulars of the Federal portion of that effort as well as Federal support for State activities."

#### A COORDINATED APPROACH

The Congressional mandate to develop a coordinated approach to prevent and reduce underage drinking and its adverse consequences recognizes that alcohol consumption by those under 21 is a serious, complex, and persistent societal problem with significant financial, social, and personal costs. Congress also recognizes that a long-term solution will require a broad, deep, and sustained national commitment to reducing the demand for, and access to, alcohol among young people. That solution will have to address not only the youth themselves but also the larger society, which provides a context for alcohol consumption and, within which, images of alcohol use are pervasive and that use is seen as normative.

The national responsibility for preventing and reducing underage drinking involves government at every level, institutions and organizations in the private sector, colleges and universities, public health and consumer groups, the alcohol and entertainment industries, schools, parents and other caregivers, other adults, and adolescents themselves. The proposed course of action outlined in the Surgeon General's *Call to Action* includes all these elements of society, reflecting the Surgeon General's view that "Underage alcohol use is everybody's problem—and its solution is everybody's responsibility."

This *Report to Congress*, while equally inclusive, nonetheless focuses on the activities of the Federal Government and the unique role it has to play in preventing and reducing underage drinking. Through leadership and financial support, the Federal Government can influence public opinion and increase public knowledge about underage drinking; enact and enforce relevant laws; fund programs and research that increases understanding of the causes and consequences of underage alcohol use; monitor trends in underage drinking and the effectiveness of efforts designed to reduce demand, availability, and consumption; lead the national effort; and support, coordinate, and monitor implementation of the various components of the *Call to Action*.

All the ICCPUD agencies will contribute their leadership and vision to the national effort to prevent and reduce underage alcohol use described in the *Call to Action*. Each participating agency has a specific role to play according to its mission and mandate. NIAAA supports biomedical and behavioral research on the prevalence and patterns of alcohol use across the

lifespan and of alcohol-related consequences including alcohol abuse and dependence; alcoholrelated injuries; and alcohol's effects on prenatal, child and adolescent development. This body of research includes studies on alcohol epidemiology, metabolism, genetics, neuroscience, prevention, and treatment. NIAAA and CDC provide the research that facilitates understanding of the serious nature of underage drinking and its consequences. SAMHSA, NHTSA, and the Department of Education conduct programs that aim to reduce underage demand for alcohol; and the Department of Justice, through its OJJDP, works to reduce underage consumption of and access to alcohol, including its availability. SAMHSA, CDC, and NIAAA conduct the surveillance that gathers the latest data on underage alcohol use and on the effectiveness of programs designed to prevent and reduce it. Collectively, NHTSA, CDC, SAMHSA, NIDA, and NIAAA gather data on adverse consequences. As these various agencies interact with one another, the activities and expertise of each inform and complement the others, thus creating a synergistic, integrated Federal program for addressing underage drinking in all its complexity.

The Surgeon General, as the Nation's medical spokesperson, has taken a major leadership role through the issuance of *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*. This *Call to Action*, with its goals and recommended strategies, presents a comprehensive approach to preventing and reducing underage drinking. The following five themes provide a convenient means of understanding the role the Federal Government plays in implementing the Surgeon General's vision of the future:

- Fostering changes in American society that help prevent and reduce underage drinking though a coordinated national effort;
- Reducing underage demand for alcohol;
- Reducing underage access to alcohol, including availability;
- Conducting and supporting research to provide the scientific data needed to create effective prevention and reduction programs and interventions, including the fostering of evidence-based practices; and
- Improving public health surveillance data on underage drinking, including data on alcohol usage and attitudes.

All the member agencies of ICCPUD address some aspect of the Surgeon General's *Call to Action* and so relate to one or more of these five themes and to each other in supportive, integrated, or complementary ways. As these themes and existing programs indicate, the Federal Government already has taken a highly collaborative and coordinated approach to addressing the problem of underage alcohol use, but more can be done. The national plan described in the *Call to Action* enhances current governmental efforts by increasing collaboration, coordination, and integration among agencies and programs. It further calls for the establishment of measures of progress by setting specific targets and by carefully monitoring a variety of survey and other data related to underage drinking and its consequences. Appendix B ("Data Tables") contains a more detailed description of these measures and targets.

#### FEDERAL AGENCIES INVOLVED IN PREVENTING AND REDUCING UNDERAGE DRINKING

Multiple Federal agencies are involved directly or indirectly in preventing and reducing underage drinking. Each of these agencies currently sponsors programs that address one or more aspect of underage alcohol consumption, and each is a member of ICCPUD. The ICCPUD agencies are listed below, and their primary and specific roles related to underage drinking are summarized:

- 1. Department of Health and Human Services/Administration for Children and Families (ACF): ACF is responsible for Federal programs that promote the economic and social well-being of families, children, individuals, and communities. Many of these programs strengthen protective factors and reduce risk factors associated with underage drinking.
- 2. Department of Health and Human Services/Centers for Disease Control and Prevention (CDC): CDC's mission is to promote health and quality of life by preventing and controlling disease, injury, and disability. Consistent with that mission, CDC is involved in strengthening the scientific foundation for the prevention of underage and binge drinking. This includes assessing the problem through public health surveillance activities and through epidemiological research studies of underage drinking and its consequences. CDC also evaluates the effectiveness of prevention policies and programs and addresses underage drinking as a risk factor in programs designed to address specific health problems such as injury and violence, sexually transmitted diseases, and fetal alcohol spectrum disorders. CDC also works to train new researchers in alcohol epidemiology and to build State public health capacity in alcohol epidemiology.
- 3. Department of Health and Human Services/National Institutes of Health/National Institute on Alcohol Abuse and Alcoholism (NIAAA): The mission of NIAAA is to "conduct research focused on improving the treatment and prevention of alcoholism and alcohol-related problems to reduce the enormous health, social, and economic consequences of this disease." NIAAA has expanded its focus on underage drinking based on recent research findings from several different disciplines, including those from NIAAA's epidemiological survey, NESARC, and studies on brain development during adolescence that suggest increased vulnerability to consequences of alcohol exposure.
- 4. **Department of Health and Human Services/National Institutes of Health/National Institute on Drug Abuse (NIDA)**: NIDA's mission is "to lead the Nation in bringing the power of science to bear on drug abuse and addiction." NIDA supports most of the world's research on the health aspects of drug abuse and addiction. It also carries out a large variety of programs to ensure the rapid dissemination of research information to inform policy and improve practice.
- 5. **Department of Health and Human Services/Office of the Surgeon General (OSG)**: Under the direction of the Surgeon General, OSG oversees the 6,000-member Commissioned Corps of the U.S. Public Health Service and provides support for the Surgeon General in the accomplishment of his or her other duties, which include educating the American public about health issues.

- 6. Department of Health and Human Services/Substance Abuse and Mental Health Services Administration (SAMHSA): SAMHSA's mission "is to build resilience and facilitate recovery for people with or at risk for substance abuse and mental illness." SAMHSA works to reduce underage drinking by supporting underage drinking prevention activities in States and communities, promoting the use of evidence-based practices, educating the public, and collaborating with other agencies and interested parties.
- 7. **Department of Defense (DoD)**: DoD is charged with coordinating and supervising all agencies and functions of the government relating directly to national security and military affairs. Its alcohol-specific role involves the administration of programs designed to prevent and reduce alcohol consumption by underage military personnel and improve the health of the families of the Nation's service members by strengthening protective factors and reducing risks factors relating to underage alcohol consumption.
- 8. **Department of Education/Office of Safe and Drug-Free Schools (OSDFS)**: The OSDFS administers, coordinates, and recommends policy for improving the quality of programs and activities designed to provide financial assistance for drug- and violence-prevention activities and activities that promote the health and well-being of students in elementary and secondary schools as well as institutions of higher education. These activities may be carried out by State and local educational agencies and by other public and private nonprofit organizations. OSDFS supports programs that prevent violence in and around schools; prevent illegal use of alcohol, tobacco, and drugs; involve parents and communities; and are coordinated with related Federal, State, school, and community efforts and resources to foster safe and drug-free learning environments that support student academic achievement.
- 9. Department of Justice/Office of Juvenile Justice and Delinquency Prevention (OJJDP): OJJDP provides national leadership, coordination, and resources to prevent and respond to juvenile delinquency and victimization. OJJDP supports States and communities in their efforts to develop and implement effective and coordinated prevention and intervention programs and to improve the juvenile justice system so that it protects public safety, holds offenders accountable, and provides treatment and rehabilitative services tailored to the needs of juveniles and their families. Since 1998, OJJDP's central underage drinking prevention initiative, Enforcing the Underage Drinking Laws, has been a nationwide, State- and community-based, multidisciplinary effort that seeks to prevent access to and consumption of alcohol by those under the age of 21, with a special emphasis on enforcement of underage drinking laws and implementation of best and most-promising practices programming.
- 10. **Department of the Treasury/Alcohol and Tobacco Tax and Trade Bureau (TTB)**: TTB's mission "is to collect taxes owed, and to ensure that alcohol beverages are produced, labeled, advertised and marketed in accordance with Federal law."

- 11. **Department of Transportation/National Highway Traffic Safety Administration** (**NHTSA**): NHTSA's mission is to save lives, prevent injuries, and reduce traffic-related health care and other economic costs. It develops, promotes, and implements effective educational, engineering, and enforcement programs to end preventable tragedies and reduce economic costs associated with vehicle use and highway travel, including underage drinking.
- 12. **Federal Trade Commission (FTC)**: The FTC works to ensure that the Nation's markets are vigorous, efficient, and free of restrictions that harm consumers. The Commission has enforcement and administrative responsibilities under 46 laws relating to competition and consumer protection. As the enforcer of Federal truth-in-advertising laws, the FTC monitors alcohol advertising for unfair practices and deceptive claims and reports on these matters to Congress when appropriate.
- 13. **Office of National Drug Control Policy (ONDCP)**: The principal purpose of the ONDCP is to establish overarching policies, priorities, and objectives for the Nation's drug control program. The goals of this program are to reduce illicit drug use, manufacturing, and trafficking, drug-related crime and violence, and drug-related health consequences in the United States. Part of ONDCP's efforts relate to underage alcohol use.

The following section of this *Report to Congress* highlights the major initiatives currently underway to prevent and reduce underage drinking and its consequences, categorized according to the five themes of the National Plan. More detailed information about departmental and agency programs to prevent and reduce underage drinking appears in Appendix A ("Inventory of Federal Programs by Agency").

## HOW FEDERAL AGENCIES AND PROGRAMS WORK TOGETHER

The 2006 STOP Act required that the Secretary of HHS, on behalf of the ICCPUD, submit an annual report to Congress summarizing "all programs and policies of Federal agencies designed to prevent and reduce underage drinking." One of the functions of the ICCPUD is to increase coordination and collaboration in program development among the member agencies so that the resulting programs and interventions are complementary and synergistic. An example of how these programs and services support each another is the Town Hall meetings ICCPUD has convened in various parts of the country to focus communities and parents on the issue of underage drinking.

Planning for the Town Hall meetings began in fall 2005 at a National Meeting of the States supported by SAMHSA in collaboration with the ICCPUD. At that meeting, NIAAA presented information on the latest scientific research on underage drinking and other ICCPUD agencies provided information on their programs. In spring 2006, SAMHSA, in collaboration with the ICCPUD, supported over 1,200 Town Hall meetings in all 50 States. Local communities in the States were encouraged to use a number of ICCPUD agency resources, available on the <u>.stopalcoholabuse.gov</u> Federal Web site, for these meetings. For example, in many meetings,

communities used the NHTSA-developed video presentation "SMASHED" and the SAMHSAdeveloped "Start Talking Before They Start Drinking" media spots. Other communities engaged current and former First Spouses in their media events and Town Hall meetings as part of the Leadership to Keep Children Alcohol Free initiative. Others supported Reach Out Now Teach-Ins in local fifth- and sixth-grade classes. Many Town Hall meetings utilized training materials developed by OJJDP through its Enforcing the Underage Drinking Laws program, which supports the development of comprehensive action plans for community change. A substantial number of OSDFS prevention program grantees also participated in the Town Hall initiative. In spring 2008, SAMHSA and the ICCPUD collaborated again, supporting over 1,600 Town Hall Meetings across the country.

#### INITIATIVES FOR STRENGTHENING THE NATIONAL COMMITMENT TO PREVENT AND REDUCE UNDERAGE DRINKING

The initiatives described in the following section highlight the efforts of multiple agencies to strengthen the national commitment to prevent and reduce underage alcohol consumption.

#### <u>The Interagency Coordinating Committee on the Prevention of Underage Drinking</u> (ICCPUD)

Mandated by Congress in 2004, the ICCPUD is a mechanism for guiding policy and program development across the Federal Government with respect to underage drinking. The ICCPUD coordinates the engagement of various governmental Departments and agencies in programs and initiatives aimed at preventing and reducing underage drinking in America. It further assists and encourages governmental departments and agencies to align their individual programs with the goals of *The Surgeon General's Call to Action to Reduce and Prevent Underage Drinking*, identifying opportunities to address gaps in programming by objective and target age, and facilitating collaboration on projects that are more likely to succeed when supported by multiple departments or agencies. To provide continuing, high-level leadership, HHS established the ICCPUD as a permanent committee in 2006.

A key element in strengthening the national commitment to address underage drinking is to ensure that all appropriate Federal departments and agencies convey the same messages at the same time and that they seek opportunities to do so. Therefore, ICCPUD agencies continually strive to increase their efforts in the following areas:

- To highlight the need to prevent underage drinking and its negative consequences through speeches and meetings across the country;
- To ensure that all Federal agencies speak with a common voice on underage drinking and its consequences;
- To reinforce the messages developed by the ICCPUD;
- To publicize programs, events, research data, and other information about underage drinking and its consequences; and
- To support the minimum drinking age of 21 through speeches and message points.

The ICCPUD also supports a Federal Web site dedicated to providing information about underage drinking: <u>.stopalcoholabuse.gov</u>. The Web site is a comprehensive portal to all Federal programs and resources related to the prevention of underage drinking and contains sections on core messaging, resources, materials, and college drinking. The Web site also provides information on enforcement/ adjudication, prevention, and treatment for communities, parents, youth, educators, and other interested parties, with links to community- and faith-based organizations, coalitions, and initiatives.

#### The Office of the Surgeon General (OSG)

In March 2007, the OSG highlighted the importance of underage drinking to the health of the Nation by issuing *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*. The OSG worked closely with NIAAA, SAMHSA, and other Federal agencies to develop this document, the first major Federal treatise on the subject. The Acting Surgeon General continues to refer to the *Call to Action* in his speeches and at meetings he attends across the country, at which he consistently presents underage drinking as a major public health problem.

## Leadership to Keep Children Alcohol Free

Since the release of the *Call to Action*, the Acting Surgeon General has worked with members of the Leadership to Keep Children Alcohol Free to "roll out" the *Call to Action*'s proposals in various States. Founded by NIAAA and launched in March 2000, the Leadership to Keep Children Alcohol Free initiative is a unique coalition of Governors' spouses, Federal agencies, and seven public and private funding organizations that have launched an initiative to prevent the use of alcohol by children 9- to 15-years-old. Thus far, it is the only national effort that focuses on alcohol use in this age group.

The initiative has four goals: (1) to make prevention of alcohol use among minors a national health priority; (2) to focus State and national policymakers and opinion leaders on the seriousness of early-onset alcohol use; (3) to educate the public about the incidence and impact of alcohol use by 9- to 15-year-olds; and (4) to mobilize the public to address these issues in a sustained manner and work for change within their families, schools and communities. In addition, Leadership to Keep Children Alcohol Free members convene policy forums in their respective States, bringing together policymakers, law enforcement officials, substance abuse officials, educators and other stakeholders to discuss effective measures for addressing this serious problem.

#### A COMMITMENT TO EVIDENCE-BASED PRACTICES

At the heart of any effective national effort to prevent and reduce underage drinking are reliable data on the effectiveness of specific prevention and reduction efforts. With limited resources available and human lives at stake, it is critical that the approaches employed by professionals be the most time- and cost-effective known to the field. The traditional means of ensuring this required efficacy has been to rely on practices that research has proven to be effective instead of those based upon convention, tradition, folklore, personal experience, belief, intuition, or anecdotal evidence. The term used to describe practices validated by some form of documented scientific evidence is "evidence-based practices" (EBPs).

Although broad agreement exists regarding the need for EBPs, consensus has not yet been achieved regarding their precise definition. Disagreement in defining the term arises not from the need for evidence but from the kind and amount of evidence that is required for validation. The gold standard of scientific evidence is the randomized trial, but it is not always possible to conduct such trials. Many strong, widely used quasi-experimental designs currently are available that have and will continue to produce credible, valid, and reliable evidence—and these should be relied upon when randomized trials are not possible. Practitioner input is a crucial part of this process, and it should be carefully considered as evidence is compiled, summarized, and disseminated to the field for implementation.

The Institute of Medicine (IOM; 2001), for example, defines evidence-based practice as one that combines the best research evidence with the best clinical experience and that is consistent with patient values. A slight variation of this definition has been adopted for the field of psychology by the American Psychological Association (2002), which asserts that EBP "is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences."<sup>18</sup>

The Federal Government does not attempt to offer a single, authoritative definition of EBPs, yet the general Federal concept is clear: that some form of scientific evidence must support a proposed practice, that the practice itself must be practical and appropriate given the population to which it will be applied, and that the practice has a significant effect on the outcome to be measured. For example, the OSDFS requires that its grantees use EBPs in the programs it funds, and NHTSA has produced a publication titled *Countermeasures That Work* for use by State Highway Safety Offices (SHSO) to encourage those offices to select countermeasure strategies that either have been proven effective or that have shown promise.

#### National Registry of Evidence-Based Programs and Practices

SAMHSA has developed the National Registry of Evidence-Based Programs and Practices (NREPP), a searchable database of interventions for the prevention and treatment of mental and substance-use disorders that have been reviewed and rated by independent reviewers. The purpose of this registry is to assist the public in identifying approaches to preventing and treating mental and/or substance-use disorders that have been scientifically tested and that can be readily

<sup>&</sup>lt;sup>18</sup> American Psychological Association. (2002). Criteria for evaluating treatment guidelines. *American Psychologist*, 57, 1052-1059.

disseminated to the field. NREPP is one way that SAMHSA is working to improve access to information on tested interventions and thereby reduce the lag time between the creation of scientific knowledge and its practical application in the field. In addition to assisting the public in identifying evidence-based interventions, SAMHSA and some other Federal agencies use NREPP to inform grantees about EBPs and to encourage their use. OSDFS, for example, requires that grantees under its Grants to Reduce Alcohol Abuse in Secondary Schools Program (GRAAP) utilize NREPP in choosing programs to implement.

The NREPP database is not an authoritative list of effective interventions because SAMHSA does not approve, recommend, or endorse specific interventions. Policymakers, in particular, are cautioned to avoid relying solely on NREPP ratings as a basis for funding or approving interventions. Nevertheless, NREPP provides useful information and ratings of interventions to assist individuals and organizations in identifying those practices that may address their particular needs and match their specific capacities and resources. As such, the information and ratings provided through NREPP are best viewed as a starting point for further investigation regarding interventions that may work well and produce positive outcomes for a variety of stakeholders. Additionally, a number of programs have been more rigorously evaluated by independent research funded by various Institutes of the National Institutes of Health.

## **Centers for Disease Control and Prevention**

The Centers for Disease Control and Prevention (CDC) supports the use of an evidence-informed approach for its broad range of recommendations, guidelines, and communications. This approach calls for transparency in reporting the evidence that was considered and requires that the path leading from the evidence to the recommendations or guidelines be clear and well-described, regardless of the strength or uncertainty of the underlying evidence or the process used in their development. The CDC's Guide to Community Preventive Services (more widely known as the Community Guide; www.thecommunityguide.org) provides the model for its evidence-informed approach. Under the auspices of the independent, non-Federal Task Force on Community Preventive Services (Task Force), with funding and scientific staff support from CDC, Community Guide reviewers systematically assess all available scientific evidence to determine the effective interventions. The Task Force reviews the combined evidence; makes recommendations for practice and policy; and identifies gaps in the existing research to ensure that practice, policy, and research funding decisions are informed by the highest quality evidence.

CDC's Alcohol Program is continuing to work with the Community Guide as well as with SAMHSA, NIAAA, and other partner organizations on systematic reviews of population-based interventions to prevent excessive alcohol consumption, including underage and binge drinking, and related harms. To date, the Community Guide has reviewed the effectiveness of various community-based strategies for preventing underage and binge drinking, including enhanced enforcement of minimum legal drinking age laws, lower blood-alcohol concentration laws for younger drivers, and school-based instructional programs for preventing drinking and driving and for preventing riding with drinking drivers. CDC's Alcohol Program plans to continue working collaboratively with the Community Guide, SAMHSA, NIAAA, and other partners on

systematic reviews of other population-based strategies to prevent excessive alcohol consumption and related harms, including the impact of restrictions on days and hours of alcohol sales. It further intends to continue working collaboratively with these partners to disseminate the results of these reviews so that they can help inform the selection of evidence-based strategies to prevent excessive drinking in States and communities. CDC is also working to adapt evidence-based interventions to reduce the risk of alcohol-exposed pregnancies in high-risk community settings, including college populations.

## **INITIATIVES FOR REDUCING UNDERAGE DEMAND FOR ALCOHOL**

The initiatives described in this section were designed to reduce the underage demand for alcohol. They may be specific to alcohol in their subject matter or they may relate to other factors that have a bearing on underage alcohol demand.

# Safe and Drug-Free Schools Prevention Programs

The Office of Safe and Drug-Free Schools (OSDFS) in the U.S. Department of Education (ED) provides grants to local educational agencies (LEAs) to develop and implement effective, innovative alcohol abuse prevention programs for secondary school students. Under this grant program, LEAs develop prevention programs that include one or more proven SAMHSA strategies or model programs for reducing underage alcohol abuse. Since 2002, one hundred-forty-six (146) school districts across 44 States have received grants to implement these programs.

In response to high-risk drinking among college students, OSDFS has supported campus and community-based prevention programs for more than a decade. Through a discretionary grant competition, OSDFS funds projects for the development or enhancement, implementation, and evaluation of campus-and/or community-based prevention and early intervention strategies to prevent high-risk drinking among college students. Furthermore, since 1993, OSDFS has supported its Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention. The Center's mission is to assist ED in serving institutions of higher education in developing and implementing policies and programs that will foster students' academic and social development and promote campus and community safety by preventing the harmful effects of alcohol and other drug use and violence among college students. The Center achieves this by providing technical assistance; training; publication and dissemination of prevention materials; and assessment, evaluation, and analysis activities.

# Strategic Prevention Framework State Incentive Grant Program

SAMHSA's Strategic Prevention Framework State Incentive Grant (SPF SIG) program builds on the successful State Incentive Cooperative Agreements, which have given the Governors of 42 States and Territories the opportunity to enhance their jurisdictions' substance abuse prevention systems and fill gaps in programs with evidence-based services to address the widespread problems related to substance abuse. The program's grants, or SPF SIGs, give States and communities the opportunity to focus resources on critical needs identified through an epidemiologically based State Needs Assessment and subsequently to target populations and ages across the lifespan with evidence-based prevention and early intervention policies, programs, and practices. SPF SIGs are intended to fulfill SAMHSA's overall goal of increasing the capacity and effectiveness of States and communities as they respond to critical problems and needs by implementing SAMHSA's SPF. They also support States by providing prevention resources and facilitating systems improvement to help ensure that Substance Abuse Prevention and Treatment (SAPT) Block Grants increasingly utilize performance outcomes. SPF SIG recipients receive support for up to five years, subject to availability of funding.

The SPF SIG program offers an excellent vehicle for supporting the goals of the OSF's underage drinking initiative. State applicants must include the prevention of underage alcohol consumption in their SPF SIG programs and provide a comprehensive strategy that addresses this problem in addition to other SPF SIG priorities. All tasks, including needs assessment, consensus building, planning, funding allocations, implementation, and evaluation must be carried out with a consideration for the issue of underage drinking.

# NHTSA State Highway Safety Grants, Including 402 and 410 Funds

Through Sections 402 and 410 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, or SAFETEA-LU, NHTSA provides a source of funds to States that can be used to implement proven countermeasures to address impaired driving in teens. Section 402 State and Community Highway Safety grant funds, which are provided to 50 States plus the District of Columbia, Puerto Rico, the United States Virgin Islands, and the Northern Mariana Islands are used to develop strategies that address NHTSA- and State-identified traffic safety priorities. Alcohol-related driving, particularly in teens, is a top priority area. One of the qualifying criteria for receiving Section 410 Alcohol-Impaired Driving Countermeasures Incentive grants is an Underage Drinking Prevention Program designed to prevent persons under the age of 21 from obtaining alcoholic beverages and to prevent persons from selling alcohol to anyone under 21. States are given an incentive to develop and implement underage drinking prevention programs. States may also use Section 410 funding to develop programs that address impaired drivers under age 34. States must meet three criteria for Section 410 in fiscal year (FY) 2006, four criteria in FY 2007, and five criteria in FY 2008 and FY 2009. Additional funds are available to the 10 States with the highest fatality rates, as determined by Fatality Analysis Reporting System (FARSA) data. In FY 2006, the first year that Section 410 funds were distributed under SAFETEA-LU, 50 States plus the District of Columbia and Puerto Rico received funding.

# "SMASHED": Toxic Tales of Teens and Alcohol

NHTSA, SAMHSA, and OSDFS have collaborated to work with Recording Artists, Actors and Athletes Against Drunk Driving (RADD) and its partner, HBO Family, to develop and disseminate an educational package that includes a documentary on underage drinking and alcohol-related driving to thousands of schools and communities across the country. HBO

Family granted a license to RADD and the Federal partners to use its documentary, "SMASHED"; and RADD collaborated with the Federal partners to develop a lesson plan for teachers, a community guide, and pre- and post-tests for collection of data and evaluation. Two other major national youth organizations, Students Against Destructive Decisions (SADD) and Family, Career and Community Leaders of America (FCCLA), provided an initial distribution network. Schools and youth and community groups using "SMASHED" to initiate dialogue about underage drinking and alcohol-related driving are then directed to model programs that can be implemented effectively by individual communities to combat the problem in a way that fits their unique needs.

#### Enforcing Underage Drinking Laws Program

OJJDP's Enforcing Underage Drinking Laws (EUDL) program encourages partnerships between law enforcement agencies and underage drinking prevention advocates in all 50 States and the District of Columbia for the purpose of reducing access to and consumption of alcohol by persons under the legal drinking age. The central design element of the EUDL program is the use of enforcement and the justice system to uphold the underage drinking laws and to work within the State and community through coalitions and community-based effective programming. The EUDL program promotes many effective strategies that can be adopted to prevent underage alcohol use and related problems. These strategies can be applied in all sectors of the Nation, State, and community—in all areas of the social systems that produce, distribute, promote, and consume alcohol. They include important roles for governmental and nongovernmental agencies and organizations as well as concerned individuals and youth. The strategies are of several types, including those that place limitations on access, utilize expressions of community norms, focus on prevention of impaired driving, and employ strategies based in schools. Although the level of research evidence regarding the effectiveness of each strategy varies, the EUDL program recognizes the importance of emphasizing those strategies that offer the greatest evidence of the most powerful effects on underage drinking and related problems.

## **EUDL Annual Leadership Conference**

Since 1999, the EUDL program has convened an Annual Leadership Conference focused solely on the prevention of underage drinking. The conference attendees include State coordinators, enforcement officers and executives, youth, government officials such as ICCPUD members, staff of community-based organizations, and other individuals concerned with underage drinking. The goal of the conference is to provide attendees with detailed information about enforcement and other environmental initiatives aimed at reducing the social availability of alcohol to youth. Attendance has grown from 250 in the first year to nearly 1,700 in 2007, indicating the increasing role of this program in strengthening the national commitment to prevent and reduce underage drinking. In 2007, the OJJDP-supported Underage Drinking Enforcement Training Center's ninth National Leadership Conference, with the theme, Empowering Leadership to Enhance What Works, highlighted communities, programs, and other initiatives that have successfully implemented science-, performance-, and data-driven strategies to support the reduction of youth access to alcohol. This conference served, as an "incubator of new ideas." It was truly a meeting where colleagues converged to be inspired by creative and unique ways of thinking. Conference attendees, who included ICCPUD member agency representatives greatly benefited from the Acting Surgeon General's keynote address, during which he introduced his *Call to Action to Prevent and Reduce Underage Drinking* to the public for the first time.

#### Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention

The mission of the ED's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention is to help colleges and universities in their efforts to prevent alcohol abuse, drug abuse, and violence on their campuses and in their surrounding communities using comprehensive prevention strategies. The Center achieves this goal by providing technical assistance; training; prevention materials; and assessment, evaluation, and analysis activities.

#### **Substance Abuse Prevention and Treatment Block Grant**

SAMHSA's Substance Abuse Prevention and Treatment (SAPT) Block Grant program is a primary funding source for alcohol prevention and treatment services in the United States. States have the option of using this resource to prevent and treat alcohol use disorders among adolescents; however, SAPT Block Grants contain a prevention set-aside that reserves a minimum of 20% of each State's grant allocation for prevention activities. Although the majority of SAPT Block Grant programs are designed to prevent substance abuse in general, many will have an impact on underage drinking. The grant application asks States to report voluntarily on underage drinking strategies such as implementation of public education and/or media campaigns; laws against alcohol consumption on college campuses; policies and enforcement of laws that reduce access to alcohol by those under the age of 21, including event restrictions, product price increases, and penalties for sales to youth under the legal drinking age; data for estimated age of drinking onset; and statutes restricting alcohol promotions to underage audiences.

## **Reach Out Now: Fifth- and Sixth-Grade Scholastic, Inc., Supplements**

SAMHSA and Scholastic, Inc., have developed special supplementary materials devoted to underage drinking that target 10- to 12-year-olds and their parents. Titled *Reach Out Now: Talk with Your Fifth Graders About Underage Drinking* and *Reach Out Now: Prevent Underage Alcohol Use by Talking With Your Sixth Grader*, these materials have been focus group-tested with parents and teachers. They include a classroom discussion guide for teachers, an activity sheet for students, and a take-home packet for parents. *Reach Out Now* is in its sixth year. In March 2007, a package of *Reach Out Now* materials was mailed to every fifth- and sixth-grade class in America, including those in States participating in the Leadership to Keep Children Alcohol Free initiative. As an add-on to *Reach Out Now*, over 1,400 Reach Out Now Teach-Ins were conducted nationwide to reinforce the message to the Nation's youth to reject alcohol. The teach-ins used the *Reach Out Now* supplements and other SAMHSA materials to teach students and the community about the dangers of underage alcohol use and to encourage young people to make healthy choices.

According to a study of the *Reach Out Now* program conducted by Scholastic, educators who responded to the survey reported that 80% of those in the sixth grade had used or planned to use the *Reach Out Now* materials and 83% had distributed or planned to distribute the "Family Resource Guide" for their students to take home. In the sixth grade, 81% of the educators had used or planned to use the *Reach Out Now* materials, and 76% had distributed or planned to distribute the "Family Resource Guide" for their students to take home.

# Ad Council PSA Campaign

This HHS project, with contributions from several ICCPUD agencies, supports the nonprofit Ad Council in developing an underage drinking campaign targeting parents of youth between the ages of 9 and 15 years old. The resulting public service announcements (PSAs) reach a variety of audiences beyond parents because of their broad distribution and thus constitute yet another initiative aimed at reducing underage demand for alcohol use. In developing this campaign, the Ad Council consulted with a number of interested parties, including public health advocacy groups and the alcoholic beverage industry. Since its launch during the first quarter of 2007, the campaign's PSAs have aired from coast to coast and received more than \$60 million in donated media support for television, radio, PR/alternative and interactive media, and print ads.

Web site activity (<u>.family.samhsa.gov</u>) to date has been very heavy, with an average of 66,499 monthly visitors to the site for a total of 965,577 visitors. The campaign's *Start Taking Before They Start Drinking* brochure has been downloaded almost 80,000 times since the program launched. An additional satellite media tour during the summer resulted in 109 PSA airings and campaign-related interviews that reached more than 15 million additional listeners nationwide. Awareness of the campaign is very strong. Four in 10 parents surveyed reported that they recalled seeing or hearing the campaign PSA. Those parents who recalled the campaign ads indicated that they were more likely to report talking to their 10- to 15-year-old children about underage drinking, be extremely or very concerned about their child engaging in underage drinking, talk to other parents or friends about the issue of underage drinking, and visit the campaign's Web site for more information about talking to their children about underage drinking.

# Too SMART to START

The Too SMART to START (TSTS) youth underage drinking prevention campaign, supported by SAMHSA, is a national community education program targeting children and youth ages 9to 13-years-old as well as their parents and caregivers. TSTS provides professionals, volunteers, and parents with tools and materials to help shape healthy behaviors regarding alcohol use over the lifespan. Campaign materials include a Web page, technical assistance, and a community action kit designed to help communities plan, develop, promote, and support local underage alcohol use prevention. The TSTS program, which has been tested in nine communities nationwide, includes materials and strategies for use in communities of all sizes and actively involves entire communities in sending clear, consistent messages about why children should reject underage drinking.

## **Drug-Free Communities Program**

ONDCP's Drug-Free Communities Program, which is administered by SAMHSA, provides resources to local coalitions through coalition and mentoring grants. The purposes of the program are to: (1) reduce substance abuse (including alcohol) among youth and, over time, among adults by addressing factors in communities that can increase the risk of substance abuse and by promoting factors that decrease the risk of substance abuse; and (2) establish and strengthen collaboration among communities; private nonprofit agencies; and Federal, State, local, and Tribal governments in support of community coalitions to prevent and reduce substance abuse among youth. Recipients of the program's nearly 750 grants in communities across the Nation currently are required to apply SAMHSA's Strategic Prevention Framework (SPF) to their grant projects to better link local needs with programs and services that have proven effective in addressing substance abuse problems.

#### Federal Trade Commission (FTC) Monitoring of Alcohol Advertising

The FTC continues to monitor alcohol ads and marketing campaigns to ensure that they are not, through either content or placement, directed toward persons under the age of 21 in violation of the FTC Act. The FTC will conduct inquiries, as needed, to verify industry compliance with existing alcohol industry code provisions that limit the underage audience composition for alcohol advertising to 30% and that call for post-placement audits. Further, the Commission will persist in advocating improved industry self-regulation, including an industry-wide, third-party review system as an external check on compliance with code standards, particularly as a means of addressing complaints about the underage appeal of alcohol advertising.

#### FTC Consumer Education Programs

The FTC's We Don't Serve Teens program spreads the message that serving alcohol to youth is unsafe, illegal, and irresponsible. It provides information in English and Spanish on stopping teens' easy access to alcohol, the risks of teen drinking, and what to say to friends and neighbors about serving alcohol to teens. The program includes a Web site (<u>.dontserveteens.gov</u>); television, radio, and print ads; and stickers and posters for stores. Program partners—including representatives of Federal and State governments, consumer groups, and the private sector—distribute this program's materials nationwide. The FTC also encourages national, State, and local organizations to use other materials offered on its Web site, including press releases, broadcaster announcements, and camera-ready logos.

## INITIATIVES FOR REDUCING UNDERAGE ACCESS TO ALCOHOL, INCLUDING INITIATIVES THAT REDUCE THE AVAILABILITY OF ALCOHOL TO MINORS

The initiatives described below were designed to prevent and reduce underage access to alcohol and reduce the availability of alcohol to minors.

# The Enforcing Underage Drinking Laws Program

OJJDP's Enforcing Underage Drinking Laws (EUDL) program encourages partnerships between law enforcement agencies and underage drinking prevention advocates in all 50 States and the District of Columbia for the purpose of reducing access to and consumption of alcohol by persons under the age of 21. Congress has directed OJJDP to develop task forces of State and local law enforcement and prosecutorial agencies, encourage innovative programming, and conduct public advertising programs that inform alcohol retailers about underage drinking laws and the consequences of violating them. One element of this initiative's design is the use of multidisciplinary coalitions, including enforcement and other representatives of the justice system.

The program's Underage Drinking Enforcement Training Center publishes documents to help States and local communities enforce retail establishment compliance with underage drinking laws. One of these publications, *The Guide to Responsible Alcohol Sales: Off-Premise Clerk, Licensee, and Manager Training*, offers training tools for sales personnel at establishments that sell alcohol. These tools stress support of management policies to prevent sales of alcohol to those under the legal drinking age. Another Center publication, *Preventing Sales of Alcohol to Minors: What You Should Know About Merchant Education Programs*, describes these programs and their role in comprehensive community strategies aimed at reducing underage drinking and identifies program components and additional resources. A third document, *Strategies for Reducing Third-Party Transactions of Alcohol to Underage Youth*, seeks to dissuade adults from providing alcohol to underage persons by discussing the problem of non-retail source availability of alcohol for underage drinkers, the essential elements of "shoulder-tap" operations (undercover sting operations targeting adults who purchase alcohol for underage drinkers), and other techniques designed to deter adults from buying or providing alcohol to minors.

Utilizing a community trials evaluation design, Wake Forest University conducted an evaluation from 2003 to 2007 of EUDL discretionary programming in selected communities within five States: California, Connecticut, Florida, Missouri, and New York. This systematic and rigorous evaluation studied the implementation of research-based "best" and "most-promising" practices to enforce underage drinking laws and prevent and reduce underage drinking. Reports of the evaluation findings will be released in 2008.

## **Evaluation of the EUDL Program**

OJJDP is directed by Congress to focus on developing Statewide task forces of State and local law enforcement and prosecutorial agencies, conducting public advertising programs that include informing alcohol retailers about laws pertaining to underage drinking and their consequences, and encouraging innovative programming. The EUDL program design encourages partnerships between law enforcement and those interested in underage drinking prevention. One design element required in the discretionary program component is the utilization of multidisciplinary coalitions to promote a comprehensive approach to underage drinking prevention at the local level.

NIAAA is conducting an evaluation of EUDL program components that target youth under 21 years old, focusing specifically on those programs in rural communities of approximately 20,000 people or fewer. Currently, the NIAAA supported evaluation is underway in seven States (New Mexico, Nevada, Pennsylvania, Illinois, California, Oregon and Washington). NIAAA also serves as evaluator for the partnership between selected EUDL program communities and five United States Air Force (USAF) installations in four States: Arizona, California, Hawaii, and Montana. Begun in FY 2006, the purpose of this program is to plan, design, and implement the Enforcing the EUDL Discretionary Program: Initiative to Reduce Underage Drinking, which seeks to reduce the availability of alcoholic beverages to and the consumption of alcoholic beverages by persons who are serving in the USAF and are under the age of 21. To that end, this initiative provides funds to local communities to implement research-based and promising practices to enforce underage drinking laws and prevent consumption of alcohol by underage service personnel in collaboration with active-duty installations implementing the underage component of USAF's Culture of Responsible Choices program.

# **NHTSA Underage Drinking Enforcement**

NHTSA and the National Liquor Law Enforcement Association are developing materials and testing strategies to assist State and local alcohol beverage control and law enforcement agencies in enforcing underage drinking laws. This effort is targeted toward adults.

## 21 Minimum Drinking Age and Zero-Tolerance Laws

NHTSA implemented Congressionally mandated programs to encourage States to enact 21 minimum drinking age and zero-tolerance laws. Minimum drinking age laws make it unlawful for persons under age 21 to purchase or publicly possess alcohol. Zero-tolerance laws make it unlawful for persons under age 21 to drive with any detectable level of alcohol in their system. All 50 States and the District of Columbia have enacted such laws, and NHTSA continues to monitor their compliance. A failure to comply results in financial sanctions against the States and the District of Columbia.

#### **Techniques for Effective Alcohol Management Coalition**

NHTSA provides support to the Techniques for Effective Alcohol Management Coalition

(TEAM), which is comprised of public- and private-sector organizations that support the development of effective alcohol service training in public assembly facilities (primarily sports arenas) and promote responsible alcohol consumption (including deterrence of underage drinking) to reduce alcohol-related instances both in facilities and on surrounding roadways. This effort is targeted toward adults.

## **Youth Courts**

Youth courts (also called teen, peer, and student courts) are programs in which youthful offenders are sentenced for minor delinquent and status offenses or problem behaviors by their peers. As a result of a Federal initiative by the OJJDP, the past several years have seen over a 1,000% increase in the number of youth court programs nationwide. The Federal Youth Court Program is sponsored by four Federal agencies: the U.S. Departments of Transportation (NHTSA), Education (OSDFS), Health and Human Services (Family and Youth Services Bureau), and Justice (OJJDP). Federal funding supports training, technical assistance, program development guides, operational materials for adults and youth, data collection, research, and other efforts to support the national infrastructure of local youth court programs.

A recent national data collection survey indicated that of the 1,019 youth courts operating in 48 States and the District of Columbia, 73% now handle alcohol-related crimes and offenses by minors. Online training is available at <u>www.youthcourt.net</u> to support those who work within the youth court system and provide youth court administrators with options to help them teach the young people in their courts about the effects of underage drinking. The majority of this training is geared toward middle school and high school students.

#### Rapid Response to College Drinking Problems

The consequences of excessive and underage drinking affect virtually all college campuses and all college students, whether or not they choose to drink. Drunk driving, unsafe sex, and vandalism are among the serious alcohol-related problems that college campuses face. In December 2002, NIAAA issued a Request for Applications for Research Partnership Awards for Rapid Response to College Drinking Problems (RFA AA-03-008), aimed at established alcohol researchers with expertise in research on drinking by college students who could serve as resources for college and university administrators. A companion Program Announcement, Rapid Response to College Drinking Problems (PAR-03-133), was issued by NIAAA in June 2003 to provide a rapid-funding mechanism for timely research on interventions targeting the prevention or reduction of alcohol-related problems among college students. Each of the 15 PAR awardees is partnering with one of the 5 Research Partnership awardees. The goal of these companion solicitations was to capitalize on natural experiments (e.g., unanticipated adverse events, policy changes, new media campaigns, campus-community coalitions) to support rapidly developed, high-quality evaluations of services or interventions. All projects are nearing completion. NHTSA also provided support for this effort.

#### INITIATIVES FOR SCIENTIFIC RESEARCH TO CREATE AND DISSEMINATE EFFECTIVE PREVENTION AND REDUCTION PROGRAMS AND INTERVENTIONS

The research initiatives described below were designed to provide the scientific data necessary to create more effective drinking prevention and reduction programs and interventions for underage youth and to foster evidence-based practices.

#### <u>Research Studies to Examine the Effects of Adolescent Alcohol Abuse and Alcoholism on</u> <u>the Developing Brain</u>

Consistent with the 2006 STOP Act, which requires the Secretary of HHS to "continue to conduct research and collect data on the short and long-range impact of alcohol use and abuse upon adolescent brain development and other organ systems", the Federal Government maintains an active research program in this area. It is now widely recognized that adolescence is a time of powerful developmental forces that include significant changes to the brain and nervous system. These changes include increased myelination of neural cells and "pruning" of synapses and neural pathways that are infrequently used in specific regions of the brain. A key research question is the extent to which adolescent drinking affects the developing human brain. Research with rodents and studies with alcohol- dependent youth suggest that alcohol use during adolescence, particularly heavy use, can have deleterious short- and long-term effects on the developing brain.

To address this central scientific question further, NIAAA released a Funding Opportunity Announcement for two-year pilot studies in this area entitled "The Impact of Adolescent Drinking on the Developing Brain." Five applications were funded by the end of FY 2007. These initial studies are expected to inform a larger longitudinal initiative.

#### **Underage Drinking Research Initiative**

NIAAA has undertaken a major effort to analyze the evidence base related to underage drinking using a developmental approach. The overarching goal of this broad, interdisciplinary initiative is a more complete and integrated scientific understanding of the environmental, biobehavioral, and genetic factors that promote initiation, maintenance, and acceleration of alcohol use, along with those factors that influence the transition into harmful alcohol use/abuse and dependence. This understanding can only come about by placing the determinants of drinking within a developmental context.

#### **Underage Drinking: Building Health Care System Responses**

The overarching goal of the two-phase NIAAA "Underage Drinking: Building Health Care System Responses" RFA is to stimulate the primary care health delivery system in rural and small urban areas in the United States such that they more adequately address the critical public health issue of underage drinking. More specifically, this RFA seeks to fund such systems: (1) to evaluate and upgrade their capacity so that they can become platforms for research that assesses the extent of underage drinking in the areas they serve and better evaluate their capacity to intervene to reduce underage drinking (Phase I), and (2) to study prospectively the development of alcohol use and alcohol-related problems among the youth in the areas served and to implement and evaluate interventions designed to address underage drinking (Phase II). Four Phase I projects have been funded to date.

#### Initiative on Research Designs for Complex, Multilevel Health Interventions and Programs

The goals of this initiative, developed in cooperation with NIH, the Agency for Healthcare Research and Quality (AHRQ), and the Robert Wood Johnson Foundation are: (1) to build a broad-based consensus on the strengths and limitations of experimental, quasi-experimental, and natural experiment research designs for studying complex interventions, programs, or policies implemented at the community level; and (2) to encourage an enhanced understanding of the strengths and weaknesses of alternative designs for evaluating the effectiveness of community-based interventions. One of the specific topics addressed by this initiative is the evaluation of interventions to prevent the purchase and use of alcohol by adolescents.

#### Task Force on Community Preventive Services Systematic Reviews and Recommendations

The independent, non-Federal, HHS-chartered Task Force on Community Preventive Services (the Task Force) oversees systematic reviews of the effectiveness of several programs and policies aimed at reducing excessive alcohol consumption and its related harms. These reviews are conducted by CDC staff in conjunction with team members from several other Federal agencies (e.g., SAMHSA and NIAAA) and from academic institutions. To date, the Task Force has reviewed the scientific evidence on the effectiveness of population-based interventions to prevent underage and binge drinking, including enhanced enforcement of minimum drinking age laws, lower blood-alcohol concentration laws for younger drivers, and school-based instructional programs for preventing drinking and driving and preventing riding with drinking drivers. Results and recommendations will be disseminated to key audiences through multiple channels.

#### INITIATIVES FOR SURVEILLANCE TO GATHER DATA ON UNDERAGE ALCOHOL USAGE AND ATTITUDES

The surveillance initiatives described below were designed to gather data on underage alcohol use and attitudes.

#### Youth Risk Behavior Survey

The CDC's Youth Risk Behavior Survey (YRBS) collects data on the risk behaviors of students in grades 9 through 12, including information on lifetime alcohol use, frequency of drinking, frequency of binge drinking, age of first drink, alcohol use on school property, and source of alcohol. Additionally, the survey includes an optional list of questions for States to consider adding such as items that inquire about the types of beverage youth usually consume and the usual location where youth drink.

#### National Violent Death Reporting System

The National Violent Death Report System (NVDRS) is a public health surveillance system that collects and links detailed information from multiple sources on violent deaths to provide data that can help inform violence prevention efforts. The primary sources are death certificates, coroner and medical examiner records, police documents, and crime lab data. Violent deaths refer to suicides, homicides, and legal intervention deaths, including terrorism-related incidents. The system also collects data on deaths due to undetermined intent or unintentional firearms. NVDRS is an incident-based system that includes information on victims of violence, alleged assailants for homicides and legal interventions, and the relationships between victims and suspects as well as the relationships between the persons involved in an incident and the mechanisms that inflicted injury. The system also collects information on circumstances of the violent deaths, including a decedent's history of alcohol problems and lab results that include alcohol testing. Currently, 17 States receive NVDRS funds: Alaska, California, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Virginia, Utah, and Wisconsin.

#### **Monitoring the Future Survey**

The Monitoring the Future (MTF) Survey is an ongoing, NIDA-funded study of the behaviors, attitudes, and values of American secondary school students, college students, and young adults. Each year, approximately fifty thousand 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students are surveyed (12<sup>th</sup> graders since 1975, and 8<sup>th</sup> and 10<sup>th</sup> graders since 1991). Additionally, annual follow-up questionnaires are mailed to a sample of each graduating class for a number of years after their initial participation. Data from NIDA's Monitoring the Future Survey is available at www.monitoringthefuture.org.

## National Survey on Drug Use and Health

Conducted by SAMHSA's Office of Applied Studies (OAS), the National Survey on Drug Use and Health (NSDUH), formerly called the National Household Survey on Drug Abuse, is a primary source of information on the prevalence, patterns, and consequences of alcohol, tobacco, and illegal drug use, abuse, and dependence in the non-institutionalized U.S. civilian population aged 12 and older. Although the NSDUH is not alcohol-specific, it tracks a variety of data on underage alcohol use and provides a database for studies on alcohol use and related disorders. In 2006, questions were added to the survey related to the quantity and source of alcohol used by those under 21 and the locations where they use it.

#### Drug and Alcohol Services Information System

SAMHSA's Drug and Alcohol Services Information System (DASIS) is the primary source of national data on substance abuse treatment. Though not specific to youth, it provides information on treatment facilities with special programs for adolescents and on the demographic and substance abuse characteristics of adolescent treatment admissions. DASIS has three components: (1) the Inventory of Substance Abuse Treatment Services (I-SATS), a listing of all known public and private substance abuse treatment facilities in the United States and its territories; (2) the National Survey of Substance Abuse Treatment Services (N-SSATS), an annual survey of all facilities in the I-SATS system that collects information on location, characteristics, services offered, and utilization of substance abuse treatment programs; and (3) the Treatment Episode Data Set (TEDS), a compilation of data on the demographic and substance abuse characteristics of admissions to substance abuse treatment.

#### Longitudinal and Genetic Epidemiology Studies and the National Epidemiological Survey on Alcohol-Related Conditions

A number of longitudinal studies begun when the subjects were adolescents, genetic epidemiology studies, and the NIAAA's National Epidemiological Survey of Alcohol-Related Conditions (NESARC) are particularly pertinent to the question of underage drinking. These studies all have the potential to enhance current and future understandings of the etiology, extent, and consequences of underage alcohol consumption. Analysis of data from the NESARC indicates that 18- to 24-year-olds have the highest prevalence of alcohol dependence of any age group in the general population. This finding underscores the need for enhanced early prevention efforts.

## **Fatality Analysis Reporting System**

The Fatality Analysis Reporting System, or FARS, a project within the State Data Systems Division of NHTSA's National Center for Statistics and Analysis (NCSA), is a nationwide census providing NHTSA, Congress, and the American public yearly data regarding fatal injuries suffered in motor vehicle traffic crashes. Fatality information derived from the FARS includes motor vehicle traffic crashes that result in the death of an occupant of a vehicle or a non-motorist within 30 days of the crash within the 50 States, the District of Columbia, and Puerto Rico. Its data assist the traffic safety community in identifying traffic safety problems, developing and implementing vehicle and driver countermeasures, and evaluating motor vehicle safety standards and highway safety initiatives. The FARS database contains descriptions, in standardized
formats, of over 125 different coded data elements that characterize the crash, vehicles, and people involved in each fatal crash reported.

## **National Roadside Survey of Impaired Driving**

NHTSA's Office of Research and Technology currently is planning to undertake a National Roadside Survey of Impaired Driving. This groundbreaking research initiative will provide crucial data on the incidence of impaired driving, including much needed data on impaired drivers' over-the-counter, prescription, and illegal drug use. Many previous roadside surveys have obtained blood-alcohol concentration (BAC) data from apprehended drivers at roadside, but this proposed study will attempt additionally to obtain saliva samples to determine whether those drivers were using drugs. The roadside survey will be conducted in 60 sites across the country and is expected to involve at least 6,000 subjects. Previous roadside studies have provided critical information regarding the proportion of drivers on the road across years at various BACs. For example, the 1973 survey indicated that 36% of nighttime weekend drivers had a positive BAC, compared to 26% in 1986 and 17% in 1996. A significant decrease was noted in drivers under the age of 21 who had been drinking in 1996 compared to those in previous surveys (4.0% in 1973 and 0.3% in 1996). This type of information is needed to determine with greater accuracy the extent of the Nation's drinking and driving problem, including the involvement of underage drinkers, to develop and allocate appropriate countermeasures.

## LOOKING FORWARD

ICCPUD agencies are committed to the goals and strategies for preventing and reducing underage drinking described in this *Report to Congress* and in *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*. That commitment will be expressed partly by their continued use of the interagency process as a mechanism for guiding policy and program development across the Federal Government and for planning and coordinating Federal efforts. The goals of the *Call to Action* will continue to inform and align the development of future programming. Supporting effective programs, eliminating duplication, and addressing gaps in programming will be the ICCPUD's priorities.

Additionally, ICCPUD agencies will continue to place a high priority on fostering changes in American society that help prevent and reduce underage drinking. Beyond the participating agencies' individual efforts, members of this Committee believe that documents such as the Surgeon General's *Call to Action*; programs such as ICCPUD's Town Hall meetings, which were held in communities across the country in March of 2006 and 2008; and the subsequent trainings held in those communities in 2007 have helped raise the visibility of the problem of underage drinking and have motivated individuals and communities to take action in addressing it. In concert with these activities, OJJDP initiated two new EUDL projects in 2007 that respond to the *Call to Action* by seeking to inform, train, and engage more effectively the judiciary and probation systems in ways that will enhance appropriate action on behalf of underage persons involved in the consumption of alcohol. The Ad Council campaign has also helped to increase

the visibility of the issue of underage drinking nationally and to motivate parents to address that issue in their families and communities. Efforts to reduce the demand for, access to, and availability of alcohol by those under 21 will continue to be improved by ongoing research and surveillance. The comprehensive approach described in this *Report to Congress* is anticipated to continue to reduce underage drinking and the associated costs and consequences that burden both society and individuals.

## **APPENDICES**

## APPENDIX A

## INVENTORY OF FEDERAL PROGRAMS FOR UNDERAGE DRINKING, BY AGENCY

This appendix summarizes the major initiatives that currently are underway throughout the Federal Government and their relationship to the goals iterated in *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*.

## **ICCPUD ACTIVITIES**

Activities Specific to Underage Drinking

- Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD): This Committee, established in 2004 at the request of the Secretary of HHS and made permanent in 2006 by the STOP Act, is intended to serve as a mechanism for guiding policy and program development across the Federal Government with respect to underage drinking. The Committee is composed of representatives from DoD; ED/OSDFS; FTC; HHS/OSG, ACF, ASPE, CDC, NIAAA, NIDA, SAMHSA; DOJ/OJJDP; ONDCP; DOT/NHTSA; and Treasury/TTB. (A list of ICCPUD members is contained in Appendix C.) (Goals 1, 2, 3, 4, 5, and 6)
- Town Hall Meetings: As part of a national effort to prevent and reduce underage alcohol use and to help educate young people and caring adults about the risks associated with underage drinking, the ICCPUD and SAMHSA supported more than 1,200 community Town Hall Meetings in spring 2006. These meetings were convened nationwide, including U.S. Territories and jurisdictions. They gave people in diverse communities the opportunity to come together to learn more about the research on underage drinking and the impact of the problem of underage drinking on individuals, families, and communities. The Town Hall Meetings were a first step toward moving communities to action in addressing underage alcohol use and beginning a dialogue on how they can prevent or reduce it. In spring 2008, SAMHSA and the ICCPUD collaborated again to support an additional 1,600 Town Hall Meetings across the country. (Goals 1, 2, 3, and 6)

**Messages**: To further strengthen the national commitment to preventing and reducing underage drinking, it is important that Federal agencies convey the same messages at the same time. Therefore, the leadership of the ICCPUD agencies will continue to increase and improve upon their efforts to: (1) highlight the need to prevent underage drinking and its negative consequences in speeches and meetings across the country; (2) ensure that the Administration is speaking with a common voice on the issue; (3) reinforce the messages that the ICCPUD and Acting Surgeon General have developed; and (4) employ a coordinated marketing plan to publicize programs, events, research results, and other means to address the underage drinking issue.

(Goals 1, 2, 3 and 6)

- **Support the Minimum Drinking Age**: Agency leadership will continue to develop and utilize messaging that supports the 21-year-old minimum drinking age, and they will promote this in their speeches and message points. (Goal 2)
- Web site: SAMHSA has created and maintains a Federal Web site (<u>www.stopalcoholabuse.gov</u>) dedicated to the issue of underage drinking. This site is supported by all participating ICCPUD agencies and includes a searchable database of all Federal programs/resources related to the prevention of underage drinking. It also contains sections on core messaging and presents information on and links to available resources and materials as well as information for parents, communities, and youth. (Goals 1, 2, 3, and 6)
- National Meeting of the States on Underage Drinking: In fall 2005, the ICCPUD agencies held a one-and-a-half day national meeting in Washington, DC, on the prevention of underage drinking. The meeting, which included both State teams and Federal leaders, demonstrated the Federal Government's commitment to preventing underage drinking, raised public awareness of the extent and negative consequences of the problem, informed State teams about the most recent research, and provided an opportunity for each State team to start planning how they might build upon their commitments to reducing underage drinking in their States and maximize their participation in a national meeting of communities that followed in 2006. An additional version of this national meeting was held for four States that could not attend due to hurricanes.

(Goals 1, 2, 3, and 6)

Activities *Related to* Underage Drinking None

## DEPARTMENT OF DEFENSE

#### Activities *Specific to* Underage Drinking:

• Youth Program: The Adolescent Substance Abuse Counseling Service (ASACS) program is a comprehensive community-based program that provides prevention and education, identification and referral, and outpatient substance abuse treatment services to active-duty U.S. military family members throughout Europe and the Pacific Rim. The Department of Defense's (DoD) Drug Education for Youth (DEFY) program provides drug education, leadership and character development training, positive role-model mentoring, and community outreach to enhance the quality of life of military personnel and their families.

(Goals 1 and 3)

- **Drug Abuse Resistance Education Program**: Active-duty service members are not the only focus of the DoD's underage drinking prevention efforts. The Department also offers the Drug Abuse Resistance Education (DARE) program for young military family members who attend a Department of Defense Dependents School (DoDDS). This program, which is the adopted drug education program for DoD Education Activity, also addresses alcohol abuse. It is taught as part of the DoDDS health curriculum. DODDS elementary school students currently receive DARE instruction for a period of 17 weeks; those in DODDS middle schools receive 10 weeks. (Goals 1, 2, and 3)
- Law Enforcement: DoD ensures installation-level enforcement of underage drinking laws on all Federal reservations. For active-duty service members who are underage, serious consequences such as productivity loss or negative career impact due to alcohol abuse are tracked via the DoD's Triennial Health-Related Behavior Survey. (Goal 3)

#### Activities Related to Underage Drinking

- Web-based Alcohol Prevention Education Pilot Project: The Triennial Health-Related Behavior Survey led to the development of a pilot web-based alcohol prevention education program to inform service members about the danger of alcohol abuse, misuse, and the need for responsible behavior with regard to alcohol use. The Program for Alcohol Training, Research, and Online Learning (PATROL) targets young, active-duty service members. It utilizes two different interactive, Web-based prevention programs: a primary prevention program aimed at preventing the development of alcohol problems; and a brief, motivational intervention aimed at reducing alcohol use among those who show high-risk of alcohol abuse. Both these programs present information on drinking norms in the military and encourage safe levels of alcohol consumption among those who choose to drink. The pilot design elements include pre- and post-assessments. The program was launched in April 2006. (Goal 3)
- Alcohol Abuse Prevention Marketing Campaign: The DoD's alcohol abuse prevention marketing campaign is expected to effect a reversal of the current alcohol use trends among the 18- to 24-year-old active-duty enlisted population. It further is expected to increase awareness of the deleterious effects of alcohol on health, combat performance, and mission readiness. The campaign stresses that alcohol abuse and dependence are incompatible with readiness, the maintenance of high standards of performance, and military discipline. It relies on comedy and an emphasis on the everyday negative consequences of alcohol abuse to appeal to its target audience, utilizing a humorous, out-of-control popular icon, simply dubbed "That Guy" in the program's media spots, to drive home the campaign's theme. Message dissemination strategies include an interactive Web site (<u>www.thatguy.com</u>), print and outdoor ads, video public service announcements (PSAs), radio promotions, other promotional materials, and a partnership with the Chris Farley Foundation. The campaign, which was launched in December 2006,

has received several accolades including a Webby Award and *Step Inside Design* magazine's Best of Web 2007 selection. (Goal 3 and 4)

- Service-Level Prevention Programs:
  - *Marine Corps Substance Abuse Program* The Marine Corps substance abuse program applies planning, policy, and other resources of the Marine Corps to the task of improving and sustaining Corps commanders' capacities to prevent problems, including alcohol abuse, that might detract from unit performance and readiness. Information about the risks and negative impacts of alcohol abuse, rules and regulations about drinking, and alternatives to drinking are provided as part of this program.
  - Navy Alcohol and Drug Abuse Prevention: The "Right Spirit" Campaign and the Alcohol Prevention Research Initiative - The primary focus of alcohol and drug abuse prevention in the Navy is policy and command-level prevention education. One program implemented to respond to alcohol abuse is the Navy's "Right Spirit" campaign. This initiative focuses on prevention education, de-glamorization of alcohol use, alternatives to drinking, and clear and enforceable policy guidance. It stresses responsibility at all levels—leadership, command, shipmate and individual. Additionally, the Naval Health Research Center has conducted research to develop and evaluate a series of Internet-based distance-learning tools to promote healthy behaviors and reduce health risks in a variety of areas among Naval and Marine Corps personnel. The Center currently is conducting a study to evaluate the effectiveness of an alcohol abuse prevention training program to reduce the level of heavy drinking and alcohol-related negative consequences among Marine Corps aviation personnel. The latter study will develop an enhanced training program tailored for Marines in the aviation community that is based on a successful cognitive-behavioral, alcohol abuse prevention program for young adults. (Goals 1, 3, 4, and 6)
  - Army Center for Substance Abuse's Drug and Alcohol Prevention/Education Program- The Army Center for Substance Abuse supports combat readiness for the operation and management of all elements of the Army Substance Abuse Program (ASAP). The overarching responsibilities of the Center are to develop, administer, and evaluate the ASAP alcohol and drug prevention, training, and education programs. The objectives of these programs are to provide technical support for the ASAP programs; act as the lead agent for drug-demand reduction issues, professional development, and training of all non-medical substance abuse prevention staff worldwide; and to promote the development and distribution of alcohol and drug abuse prevention training curricula and multimedia products to Army installations. (Goals 3 and 6)
  - Air Force 0-0-1-3 Program and Teaching Responsible Alcohol Consumption Programs: The 0-0-1-3 prevention initiative, which began at Warren Air Force Base, encourages healthy, controlled alcohol use behavior and non-alcohol use as the normative lifestyle choice for underage Air Force personnel. It addresses the health threats of both alcohol and tobacco. The Air Force's Teaching Responsible Alcohol

Consumption (TRAC) program provides population screening, identification of highrisk individuals, and universal and targeted prevention interventions. An initial pilot test of the TRAC program was conducted at Sheppard Air Force Base in Wichita Falls, Texas; and the program was rolled out at F. E. Warren Air Force Base in Cheyenne, Wyoming, in 2004. The Wyoming installation subsequently has enacted a zero-tolerance policy for underage drinking, driving under the influence (DUI) of alcohol, having more than one drink per hour, and having more than three drinks in a night. As a result, underage drinking was slashed by 90%, alcohol-related incidents by 72%, and DUI by 52% between years 2004 and 2005. (Goal 2)

• Active-Duty Health-Related Behaviors Survey: The DoD triennially conducts its Health-Related Behavior Survey, which tracks data on trends of alcohol use among all active-duty service members age 18 and above. Survey items address age of first use, prevalence of use, binge use, and heavy use. (Goal 5)

## **DEPARTMENT OF EDUCATION**

## Activities Specific to Underage Drinking

- School-Based Training and Technical Assistance (in Collaboration With SAMHSA): Since 2002, the Department of Education's (ED) Office of Safe and Drug-Free Schools (OSDFS) has provided funds to SAMHSA's Center for Substance Abuse and Prevention (CSAP) to provide training and technical assistance as well as information resources to local education agencies (LEAs) that receive funding under ED's Grants to Reduce Alcohol Abuse Program (GRAAP), which targets secondary schools. (Goal 2)
- Institutes of Higher Education (IHEs) Prevention Programs: In response to drug abuse and violence on college campuses and in their surrounding communities, OSDFS has supported campus- and community-based prevention programs for more than a decade. Through a discretionary grant competition, OSDFS funds programs to individual IHEs; IHE consortia; public and private nonprofit organizations, including faith-based organizations; and individuals to develop or enhance, implement, and evaluate campus-and/or community-based prevention and early intervention strategies. Grantees focus attention on and develop solutions for preventing and reducing high-risk drinking or violent behavior among college students. In FY 2006, OSDFS awarded 12 new awards under the Grant Competition to Prevent High-Risk Drinking or Violent Behavior Among College Students.

(Goal 2)

• Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention: This Center's mission is to help colleges and universities in their efforts to prevent alcohol and other drug abuse and violence on their campuses and in their surrounding communities using comprehensive prevention strategies. The Center achieves this by providing technical assistance; training; prevention materials; and assessment, evaluation, and analysis activities. The target for this effort is college-age youths.

(Goal 2)

- Strategies for Grantees: All GRAAP recipients are required to implement, as part of their overall program, one or more of the proven strategies for reducing underage alcohol abuse as determined by the SAMHSA. Furthermore, they are required, as part of the application process, to explain how other activities to be carried out under the grant will be effective in reducing underage alcohol abuse, including references to the past effectiveness of the activities. In addition to these discretionary grants, ED uses an Interagency Agreement with SAMHSA to provide alcohol abuse resources and start-up assistance to grantees through a technical assistance network operated by CSAP. (Goals 1 and 2)
- Learning Education Agreements and Grants: The major goals of the GRAAP initiative are to implement SAMHSA model programs to reduce underage drinking in secondary schools. GRAAP funding for 10 LEAs was extended in FY 2004, Seventy-one (71) additional LEAs were funded in FY 2005, and a cohort of 47 grantees funded in FY 2002 completed their three-year project period. New programs were funded in FY 2007. Additionally, funds have been appropriated to support GRAAP grants to institutions of higher education and to alcohol and other drug abuse prevention model programs on college campuses. Performance reports for the Safe and Drug-Free Schools and Communities Act (SDFSCA) State Grants Program do not break down expenditures for alcohol-related programming. State and local educational agency and community-based organization recipients of State Grants may elect to use these funds to address alcohol and other drug prevention as well as violence prevention issues; however, most used the funds to address all three. In FY 2002 and FY 2003, ED transferred funds to SAMHSA/CSAP under its Interagency Agreement to support 47 GRAAP grantees implementing 21 model programs, including multiple program implementations. (Goal 2)

## Activities Related to Underage Drinking

- Alcohol and Other Drug Prevention Models on College Campuses Grant Competition: The goals of this funding program are to identify models of effective alcohol and other drug abuse prevention programs at institutions of higher education and to disseminate information about these programs to parents of prospective college students and to other colleges and universities where similar efforts may be adopted. In FY 2006, OSDFS awarded four new grants through this grant competition. (Goal 2)
- National Meeting on Alcohol and Other Drug Abuse and Violence Prevention in Higher Education: Each year, the ED sponsors a national meeting to assist grantees and

other campus communities share information on effective strategies related to drug abuse and violence prevention in higher education. (Goals 1, 2, and 3)

# FEDERAL TRADE COMMISSION

## Activities Specific to Underage Drinking

• **Consumer Education Program**: The We Don't Serve Teens program of the Federal Trade Commission (FTC) spreads the message that serving alcohol to youth is unsafe, illegal, and irresponsible. It provides information in English and Spanish on preventing teens' easy access to alcohol, on the risks of teen drinking, and on what adults should say to their friends and neighbors about serving alcohol to teens. The program includes a Web site (www.dontserveteens.gov); television, radio, and print ads; and stickers and posters for stores. Program partners—including representatives of Federal and State Government, consumer groups, and the private sector—distribute these materials nationwide. The FTC also encourages national, State, and local organizations to use other materials offered on the program's Web site such as press releases, broadcaster announcements, and camera-ready logos. (Goals 1, 2, 3 and 6)

#### Activities Related to Underage Drinking

• Alcohol Advertising Program: In March 2006, the FTC commenced a new study of alcohol industry compliance with self-regulatory guidelines. This study will be completed, and a report issued, in late 2007 or early 2008. (Goal 5)

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

## Activities Specific to Underage Drinking

• **Public Health Strategy**: The leadership of the Department of Health and Human Services (HHS) encourages its Regional Health Administrators and personnel at all relevant HHS agencies to emphasize the prevention of underage drinking as a strategy for improving the public health. (Goal 6)

*Administration for Children and Families (ACF)*: ACF is responsible for all Federal programs that promote the economic and social well-being of families, children, individuals, and communities.

## Activities Specific to Underage Drinking

#### None

#### Activities Related to Underage Drinking

• Mentoring Children of Prisoners: ACF's Family and Youth Services Bureau (FYSB) supports the Mentoring Children of Prisoners (MCP) Program. Nearly 2.2 million children in the United States experience detrimental economic, social, and emotional effects as a consequence of having an incarcerated parent. Empirical data demonstrates that the significant physical absence of a parent has profound effects on a child's development. These children may experience the trauma of multiple changes in caregivers and living arrangements. MCP programs match children of prisoners with compassionate adult mentors to mitigate these risk factors and help the children succeed. Data indicates that youth in long-term mentoring relationships are 27% less likely to begin using alcohol, 46% less likely to begin using illegal drugs, and 52% less likely to skip school.

(Goals 1 and 2)

- Helping America's Youth Initiative: FYSB provides major support for former First Lady Laura Bush's Helping America's Youth (HAY) initiative. HAY works to promote healthy relationships and decisions by youth through activities that engage them in their families, schools, and communities. It also promotes strategies for avoiding risky behaviors such as underage drinking, illegal drug use, and gang activity. (Goal 1)
- Runaway and Homeless Youth Program: FYSB provides funding to local communities to support young people, particularly runaway and homeless youth, and their families. Basic Center Program grants offer assistance to at-risk youth (up to age 18) in need of immediate and temporary shelter. Funded shelters provide family and youth counseling and referrals to services such as substance abuse treatment. Through the Street Outreach Program, FYSB awards grants to private, nonprofit agencies to conduct outreach designed to build relationships between grantee staff and street youth up to age 21, with the goal of helping these young people leave the streets. The Transitional Living Program (TLP) supports projects that provide longer-term residential services to homeless youth ages 16 to 21 for up to 18 months. TLP services are designed to help these youth make a successful transition to independent living. They further enhance youths' abilities to make positive life choices through education, awareness programs, and support, and include services such as substance abuse education and counseling. Grantee sites are alcohol-free, and it is expected that after participating in these programs, youth will be prepared to make better choices regarding alcohol use as well as drug use and other unhealthy behaviors.

(Goal 1 and 2)

• Abstinence Education Programs: FYSB provides support for abstinence education programs through its Community-Based Abstinence Education Program and through the Section 510 State Abstinence Education Program. These two programs focus on educating young people and creating an environment within communities that supports

teen decisions to postpone sexual activity until marriage. They also promote abstinence from other risky behaviors such as underage drinking and illegal drug use. (Goal 1)

## Centers for Disease Control and Prevention (CDC)

CDC's mission is to promote the health and quality of life by preventing and controlling disease, injury, and disability.

## Activities Specific to Underage Drinking

None

## Activities *Related to* Underage Drinking

- Youth Risk Behavior Survey: The Youth Risk Behavior Survey (YRBS) is a schoolbased survey that monitors priority health risk behaviors among students in 9<sup>th</sup> through 12<sup>th</sup> grades. The YRBS is a component of the Youth Risk Behavior Surveillance System (YRBSS), which measures the prevalence of health risk behaviors among high school students through biennial national, state, and local surveys. With regard to alcohol consumption, the survey asks students about lifetime alcohol use, frequency of drinking, frequency of binge drinking, age of first drink of alcohol, alcohol use on school property, and the sources of alcohol obtained by the youth. States can include optional questions to assess the types of alcoholic beverage youth usually consume and the usual locations where youth drink. The YRBS also contains a number of questions on other risky behaviors, including sexual activity and interpersonal violence, which can be assessed in relation to alcohol consumption by high school students. A recent research study based on YRBS data demonstrated that, compared to high school students who did not drink, underage drinkers were more likely to ride with a driver who has been drinking, be sexually active, use tobacco or illicit drugs, experience violence, attempt suicide, and have poorer school performance (Miller, 2007). Another recent study based on YRBS data from four States found that liquor was the most prevalent type of alcoholic beverage usually consumed by high school students (CDC, 2007b). YRBS results are available online at www.cdc.gov/HealthyYouth/yrbs. (Goal 5)
- School Health Policies and Programs Study: The School Health Policies and Programs Study (SHPPS) is a national survey periodically conducted to assess school health policies and programs at the State, district, school, and classroom levels. The survey includes information about school health education on alcohol and other drug use prevention, school health and mental health services related to alcohol and other drug use prevention and treatment, and school policies prohibiting alcohol use. Results from the 2006 SHPPS are available online at <a href="https://www.cdc.gov/HealthyYouth/shpps/index.htm">www.cdc.gov/HealthyYouth/shpps/index.htm</a> and in the *Journal of School Health*, Volume 77, Number 8, December 2007. (Goal 5)

- National Violent Death Reporting System (NVDRS): The National Violent Death Reporting System (NVDRS) is a public health surveillance system that collects and links detailed information from multiple sources on violent deaths to provide data that will inform violence prevention efforts. The primary sources of NVDRS data are death certificates, coroner and medical examiner records, police documents, and crime lab data. Violent deaths refer to suicides, homicides, and legal intervention deaths, including terrorism-related incidents. The system also collects data on deaths due to undetermined intent or unintentional firearms. NVDRS is an incident-based system that includes information on victims of violence, alleged assailants for homicides and legal interventions, the relationships between victims and suspects as well as the relationships between the persons involved in an incident and the mechanisms that inflicted injury. The system also collects information on the circumstances of violent deaths, including a decedent's history of alcohol problems and lab results that include alcohol testing. Currently, 17 States receive NVDRS funds: Alaska, California, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Virginia, Utah, and Wisconsin. (Goals 2, 4, and 5)
- Behavioral Risk Factor Surveillance System: The Behavioral Risk Factor Surveillance System (BRFSS) collects data on its respondents' number of drinking days, average number of drinks per occasion, frequency of binge drinking, and the maximum number of drinks consumed on a drinking occasion in the past 30 days. The CDC Alcohol Team has developed an additional survey module consisting of six questions to obtain more detailed information on respondents' most recent binge drinking episode, including beverage type, location of drinking, source of alcohol, and driving after binge drinking. Although the BRFSS does not focus on the underage population specifically, it includes persons aged 18 to 20 years and can thus be used to assess alcohol consumption in this population.
  - (Goal 5)
- **Pregnancy Risk Assessment Monitoring System**: The Pregnancy Risk Assessment Monitoring System (PRAMS) collects information on females aged 13 years or older who recently had a live birth. The survey asks respondents about weekly alcohol consumption, including binge drinking, in the preconception period and during pregnancy. (Goal 5)
- Alcohol-Related Disease Impact: In September 2004, the Alcohol Team of the CDCbased National Center for Chronic Disease Prevention and Health Promotion released an updated version of its Alcohol-Related Disease Impact (ARDI) software, which is accessible through the CDC's Alcohol and Public Health Web site (<u>www.cdc.gov/alcohol</u>). This software provides national and State-level estimates of alcohol-attributable deaths (AADs) and years of potential life lost (YPLL) due to excessive alcohol consumption. The software also allows users to create custom data sets so that they can generate sub-State (e.g., city or county level) estimates of these measures. For chronic conditions, AADs and YPLLs are calculated for decedents over 20

years of age; for the majority of acute conditions, they are calculated for decedents aged 14 years or younger. The ARDI software also provides estimates of AADs and YPLLs for persons aged 14 years or younger who died from motor vehicle crashes, child maltreatment, and low birth weight. In July 2005, the CDC Alcohol Team released a new version of the ARDI software that allows users to obtain estimates of AADs and YPLL due to excessive alcohol consumption among persons under 21 years, which is also available through the CDC's Alcohol and Public Health Web site. (Goal 5)

- Task Force on Community Preventive Services Systematic Reviews and Recommendations: The CDC Alcohol Team, the CDC Community Guide Branch, SAMHSA, NIAAA, and other partnering organizations systematically evaluate the effectiveness of several programs and policies (e.g., enhanced enforcement of minimum legal drinking age laws) designed to reduce excessive alcohol consumption and related harms. Their reviews are routinely forwarded to the HHS-chartered Task Force on Community Preventive Services, which uses them to assess intervention effectiveness and to make recommendations either for or against specific intervention strategies. The reviews also help the Task Force determine the need for future research on intervention effectiveness. In 2006, the Task Force recommended enhanced enforcement of laws prohibiting the sale of alcohol to youth under the age of 21 on the basis of sufficient evidence of those laws' effectiveness in limiting underage alcohol purchases. (Goal 5)
- **Recommendations on Screening and Brief Interventions for Trauma Patients:** In May 2003, CDC organized a three-day conference to promote the screening of hospitalized trauma patients for alcohol and drug problems along with the use of on-site, brief interventions or facilitated referral for specialized treatment to address alcohol problems identified through the screening process. The conference was co-sponsored by a number of Federal agencies including AHRQ, CMS, HRSA, NHTSA, NIAAA, NIDA, ONDCP, and SAMHSA as well as Join Together, the Robert Wood Johnson Foundation, and the American Association for the Surgery of Trauma. Representatives from these organizations and other interested groups attended and presented at the conference. While there, they devised a set of recommendations for research and practice in this area. Those recommendations and the conference proceedings were published as a special supplement to the Journal of Trauma in 2005 (Dunn, 2005; Field, 2005; Hungerford, 2005). Representatives from the American College of Surgeons Committee on Trauma, SAMHSA, CDC, and NHTSA who attended the conference also developed a 16-page, quick training guide for implementing screening and brief intervention (SBI) in trauma centers. This guide was published by SAMHSA in 2007 (SAMHSA, 2007b). Additional activities underway include the development of a Web site with more detailed information on SBIs and a training curriculum for future workshops to be presented around the country within the next couple of years. (Goal 1)

#### Indian Health Service

The Indian Health Service (IHS) is the primary Federal agency responsible for healthcare for American Indian/Alaska Native (AI/AN) beneficiaries nationally. The IHS Division of Behavioral Health's Alcohol and Substance Abuse Program (ASAP) funds Tribally administered programs through contracts and compacts in accordance with P.L. 93-638. Fully 85% of the ASAP budget goes directly to Tribally administered programs. These programs provide holistic and culturally based alcohol and substance abuse treatment and prevention services to rural and urban communities. ASAP exists as a part of an integrated Behavioral Health Team that works collaboratively to reduce the incidence of alcoholism and other drug dependencies in AI/AN communities. ASAP is designed to provide support and resources to AI/AN communities to help them promote better practices in alcohol and other drug dependency treatment, rehabilitation, and prevention services. ASAP program staffs support the social, cultural, and spiritual values of Tribal communities as a means of promoting overall health among AI/AN populations.

## Activities Related to Underage Drinking

Alcohol abuse in AI/AN communities is a problem that begins with prenatal exposure and continues through the life cycle. ASAP-funded programs are primarily community-based and reflect the needs of the individual Tribes and communities in which they operate. Given that virtually all ASAP programs are Tribally managed and operated, IHS shifted the focus of these initiatives to direct care, supporting Tribal programs and professionals in three principal areas:

- 1. Support for 12 Youth Regional Treatment Centers that provide residential substance abuse treatment for AI/AN youth ages 12 to 18. These Centers offer residential and outpatient programs, including prevention activities, in each of the 12 IHS areas and are used to support the locally based outpatient programs in those areas.
- 2. Support for technology development and infrastructure for clinical programs as well as for trending and data analysis capabilities to bring treatment programs into accordance with the requirements and recommendations of both public and private accrediting agencies. IHS has undertaken a large-scale technology initiative that currently provides a comprehensive treatment documentation, data analysis, and national reporting platform. Access to this platform is free for all ASAP programs.
- 3. Support for ongoing training of ASAP personnel, including support for ASAP certification training for alcohol an substance abuse counselors, primary care provider training for medical staffs, Fetal Alcohol Spectrum Disorders (FASD) identification and treatment training at the University of Washington, and continuing education programs to maintain certification for all alcohol and substance abuse professionals. (Goals 2 and 3)

## National Institute on Alcohol Abuse and Alcoholism

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) provides leadership in the effort to reduce alcohol-related problems by conducting and supporting alcohol-related research; collaborating with international, national, State and local institutions, organizations, agencies and programs; and translating and disseminating research findings to health care providers, researchers, policymakers, and the public.

## Activities *Specific to* Underage Drinking

- Underage Drinking Research Initiative: NIAAA has undertaken a major effort to analyze the evidence base related to underage drinking and its impact on human development. Converging evidence from multiple fields confirms that underage drinking is best addressed and understood within a developmental framework because this behavior is directly related to processes that occur during adolescence. Using such a framework improve the effectiveness of efforts to prevent and reduce underage alcohol use and its associated problems. This paradigm shift—along with recent advances in the fields of epidemiology, developmental psychopathology, human brain development, and behavioral genetics—provided the scientific foundation for *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*, the work of the ICCPUD, and the related work of ICCPUD-member Federal agencies and departments. (Goals 1, 3, and 4)
- **Research Studies on Underage Drinking**: NIAAA supports a broad portfolio of research on underage drinking, including studies on neurobiology, the epidemiology and etiology of underage drinking, the prevention of underage drinking, and the treatment of alcohol-use disorders among youth. Additional NIAAA-supported studies are focused on assessing the short- and long-term consequences of underage drinking. (Goals 3, 4, and 5)
- Research Studies Examining the Effects of Adolescent Alcohol Abuse and Alcoholism on the Developing Brain: Adolescence is a time of powerful developmental forces that include significant changes to the brain and nervous system. These changes include increased myelination of neural cells and "pruning" of synapses and neural pathways that are used infrequently in specific regions of the brain. NIAAA-funded research with rodents and studies involving alcohol-dependent youth suggest that alcohol use during adolescence, particularly heavy use, can have deleterious short- and long-term effects on the developing brain. NIAAA recently released a Funding Opportunity Announcement (FOA) for two-year pilot studies in this critical research area, entitled *The Impact of Adolescent Drinking on the Developing Brain.* Five proposals submitted in response to this FOA were funded at the end of FY 2007. These initial studies are expected to inform a larger longitudinal initiative. (Goals 3 and 4)
- **College Drinking Prevention Initiative**: Launched in FY 2000, this two-year initiative continues to support and stimulate ongoing research into the epidemiology and natural history of college student drinking and related problems. The ultimate goal of such studies is the design and testing of interventions to prevent or reduce alcohol-related problems among college students. NIAAA's current portfolio in this area includes more than 50 projects targeting college-age youths. (Goals 2, 4, and 6)
- Underage Drinking: Building Health Care System Responses—The overarching goal of NIAAA's Underage Drinking: Building Health Care System Responses initiative is to

stimulate primary care health delivery systems in rural and small urban areas in the United States to address the critical public health issue of underage drinking. The initiative has two phases to enable these systems: (1) to evaluate and upgrade their capacity to become platforms for research that assesses the extent of underage drinking in the areas they serve, and to evaluate their capacity to intervene to reduce this underage drinking; and (2) to study prospectively the development of alcohol- use and alcohol-related problems among youth in the areas they serve, and to implement and evaluate interventions designed to address underage drinking. Four Phase I awards were made at the end of FY 2006.

(Goals 1, 3, and 4)

- **Rapid Response to College Drinking Problems**: The consequences of excessive and underage drinking affect virtually all college campuses and all college students, whether or not they choose to drink. Drunk driving, unsafe sex, and vandalism are among the serious alcohol-related problems that college campuses face. In December 2002, the NIAAA issued a Request for Applications (RFA; AA-03-008) for its Research Partnership Awards for Rapid Response to College Drinking Problems. This RFA was aimed at established alcohol researchers with expertise on drinking by college students who could serve as resources for college and university administrators. A companion Program Announcement (PAR-03-133), Rapid Response to College Drinking Problems, was issued by NIAAA in June 2003. Its purpose was to provide a rapid-funding mechanism for timely research on interventions that prevent or reduce alcohol-related problems among college students. Each of the 15 Rapid Response to College Drinking Problems awardees is collaborating with 1 of the 5 Research Partnership Awards recipients. The goal of these companion solicitations was to capitalize on natural experiments (e.g., studies of unanticipated adverse events, policy changes, new media campaigns, and campus-community coalitions) and to support rapidly developed, highquality evaluations of services or interventions. All projects are nearing completion. NHTSA provided additional support for this effort. (Goals 1, 3, 4, and 6)
- Improved Screening and Diagnosis for Alcohol Use and Alcohol-Use Disorders in Children and Adolescents: NIAAA is planning to convene several meetings that will bring experts together to address the broad range of issues involved in identifying youth at risk for alcohol-related problems. (Goals 1, 3, 4, and 5)
- **Brief Intervention Research**: Research in this area is providing the evidence base for the effectiveness of brief interventions with adolescents who find themselves in the emergency room following an alcohol-related event. In such situations, health care providers have the opportunity to take advantage of a "teachable moment" and deliver a brief intervention aimed at reducing problem drinking and associated problems. This approach complements other efforts that rely on school-based primary prevention programs, do not address cessation/reduction issues for adolescents who are already drinking, rarely address motivational issues related to use and abuse, and cannot target school dropouts.

(Goals 2 and 4)

- Adolescent Treatment Research Program: NIAAA initiated an adolescent treatment research program in 1998. Since then, 34 clinical projects have been funded, the majority of which are clinical trials. Thirty of these projects are behavioral intervention trials, 3 are pharmacotherapy trials, and 1 is a health services research study. The objective of the NIAAA's research program is to design and test innovative, developmentally tailored interventions that provide evidence-based knowledge to improve alcohol treatment outcomes in adolescents. Results from many of its funded projects will be forthcoming over the next few years and are expected to yield a broad range of findings on the potential efficacy of family-based, cognitive-behavioral, brief motivational, and guided self-change interventions in a range of settings. (Goals 3 and 4)
- Evaluation of the Enforcing Underage Drinking Laws Program: NIAAA is conducting an evaluation of OJJDP's Enforcing Underage Drinking Laws (EUDL) program that targets youth under 21 years old. This evaluation is focused specifically on EUDL programs in rural communities of approximately 20,000 people or fewer. The EUDL program design encourages partnerships between law enforcement and those interested in underage drinking prevention. One design element required in the discretionary program component is the utilization of multidisciplinary coalitions to promote a comprehensive approach to underage drinking prevention at the local level. OJJDP is directed by Congress to focus on developing statewide task forces of State and local law enforcement and prosecutorial agencies, conducting public advertising programs that include informing alcohol retailers about laws pertaining to underage drinking and their consequences, and encouraging innovative programming. Currently, the NIAAA-supported evaluation process is underway in 7 States: New Mexico, Nevada, Pennsylvania, Illinois, California, Oregon, and Washington.

In 2006, the OJJDP issued an RFA for its EUDL Discretionary Grants Program. Grants awarded under this program support efforts to reduce the availability of alcoholic beverages to, and the consumption of alcoholic beverages by, persons serving in the United States Air Force who are under the age of 21. The specific goals of the program are to: (1) decrease the number of first-time alcohol-related incidents among underage Air Force personnel, (2) decrease the incidence of unintentional injuries related to alcohol consumption among underage Air Force personnel, and (3) reduce alcohol-related traffic injuries or fatalities among underage Air Force personnel. OJJDP has awarded grants to four States in response to this solicitation: Arizona, California, Hawaii, and Montana. Each State has identified one or more Air Force base (AFB) that will participate in the EUDL grant project and form a coalition with their surrounding communities. The participating bases are Davis-Monthan and Luke AFBs (Arizona); Beale AFB (California); Hickam AFB (Hawaii); and Malmstrom AFB (Montana). NIAAA will provide evaluation support for these projects through a 48-month contract mechanism that will include an evaluation of all activities developed at each AFB/community site. (Goal 6)

• **Iowa Strengthening Families Program**: NIAAA supported the Iowa Strengthening Families Program (ISFP), targeted toward families with a sixth-grade student, as part of its research portfolio. ISFP participants were given instruction on various communication, problem-solving, and perspective-taking skills. The first hour of each program session consisted of separate parent and adolescent training. Among other issues, parents were taught limit-setting, communication, encouraging good behavior, and using community resources skills. Adolescents received training on goal-setting, appreciating parents, dealing with stress, and dealing with peer pressure. The subsequent hour of joint training focused on appreciating others, understanding family values, resolving conflict, and various communication skills.

Delivered when students were in grade six, ISFP has shown long-lasting preventive effects on adolescent alcohol use, suggesting that the intervention succeeded in changing the normative environment of the schools in which the program was offered. Even students whose families did not participate benefited. The increase in effect size over time and the duration of effects into high school also compares favorably with school-based interventions.

(Goals 1, 2, 3, and 4)

- **Project Northland**: Project Northland, completed prior to FY 2004, is a comprehensive, universal prevention program that was tested in 22 school districts in northeastern Minnesota via a randomized trial. Delivered to a single cohort in grades 6 through 12, this intervention included innovative social-behavioral school curricula, peer leadership exercises, parental involvement programs, and community-wide task force activities to address community norms and alcohol availability. Significant differences were observed between the intervention and comparison communities during each project period for "tendency to use alcohol" (a composite measure that combined items about intentions to use alcohol and actual use) and "five or more in a row." Growth rates were lower in the intervention communities during the first phase of the project, higher during the interim period (suggesting a "catch-up" effect while intervention activities were minimal), and lower again during the second phase when intervention activities resumed. Project Northland was most effective with youth who had not initiated alcohol use prior to the start of the program. Based on its success, the project currently is included in SAMHSA's National Registry of Evidence-based Programs and Practices, and its materials have been adapted for general audiences. (Goals 1 and 2)
- **Project Northland for Urban Youth**: Project Northland has since been replicated in ethnically diverse urban neighborhoods. Similar to the original project, the urban-focused Project Northland includes parental involvement programs and community-wide task force activities and targets youth in 6<sup>th</sup> through 12<sup>th</sup> grades. Its purpose, however, is to adapt, enhance, implement, and evaluate the Project Northland approach in racially diverse and economically disadvantaged urban neighborhoods of Chicago. Based on the original project plan, the design of the urban intervention builds on recent results from other large-scale randomized trials on youth alcohol, tobacco, and other drug use. In

addition to the cultural adaptations, the original strategies are enhanced, particularly those outside of the classroom setting.. (Goals 1, 2, 3, and 4)

Leadership to Keep Children Alcohol Free: Launched in March 2000, this nationwide organization, spearheaded by 59 spouses of current and former Governors (including 2 Governor's representatives), has been supported by seven public and private funding organizations. The four goals of the Leadership to Keep Children Alcohol Free ("the Leadership") coalition are to: (1) make prevention of alcohol use among minors a national health priority; (2) focus State and national policymakers and opinion leaders on the seriousness of early-onset alcohol use; (3) educate the public about the incidence and impact of alcohol use by children 9 to 15 years of age; and (4) mobilize the public to address these issues in a sustained manner and work for change within their families, schools, and communities. Leadership members produce television PSAs directed at parents and other adults in their respective States and support youth-centered events such as the Maine Youth Empowerment and Policy Group (YEP), the New Mexico Sticker Shock program, and Oregon's Face it Parents campaign. In 2006, Leadership members actively supported a number of Town Hall Meetings in their States to discuss underage drinking, and they participated in national programs such as the Reach Out Now Teach-In. Additionally, Leadership members have convened policy forums in their respective States that have brought together policymakers, law enforcement officials, substance abuse officials, educators and other stakeholders to discuss effective measures for reducing and preventing underage drinking, especially by 9- to 15-year-olds. Governors' spouses who are members of the Leadership to Keep Children Alcohol Free helped the Acting Surgeon General to "roll out" The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking in various States. With support from NIAAA and SAMHSA, Leadership members have since worked closely with the Office of the Surgeon General to ensure that *Call to Action* is disseminated broadly.

To educate and raise awareness, the Leadership disseminates information for adults about prevention of childhood drinking through publications such as *How Does Alcohol Affect the World of a Child?* (also available in Spanish), *Keep Kids Alcohol Free: Strategies for Action* (also available in Spanish) and *Science, Kids, and Alcohol Research Briefs*. In 2005 and 2006, more than a million copies of these materials were distributed. The Leadership also distributes weekly electronic newsletter updates to more than 600 recipients, including Governors' spouses, national organizations, State officials, members of the prevention community, and other stakeholders in the underage drinking prevention effort. The Leadership's Web site (<u>www.alcoholfreechildren.org</u>), which received more than 10 million hits per year in 2005 and 2006, provides information for adults, from parents to policymakers.

(Goals 1, 2, 3, and 6)

• **Publications**: NIAAA disseminates information for adults about the prevention of underage drinking through a variety of publications, including an updated and expanded version of its parents' booklet, *Make a Difference: Talk to Your Child About Alcohol* (available in English and Spanish); a special issue of the journal, *Alcohol* 

*Research and Health* (2004/2005), which focused on the topic of "Alcohol and Development in Youth: A Multidisciplinary Overview"; a 2006 issue of the *Alcohol Alert* journal, focusing on "Underage Drinking: Why Do Adolescents Drink, What Are the Risks, and How Can Underage Drinking Be Prevented?"; seasonal fact sheets focusing on underage drinking issues associated with high school graduation, the first weeks of college, and college spring break celebrations; and the widely cited report by NIAAA's College Drinking Task Force (2002), titled *A Call to Action: Changing the Culture of Drinking at U.S. Colleges.* (Goal 3)

- NIAAA's Web site: The NIAAA Web site (<u>www.niaaa.nih.gov</u>) is targeted toward adults and provides information about the science and prevention of underage drinking. It includes links to NIAAA's college-years-focused Web site (<u>www.collegedrinkingprevention.gov</u>) and its Web site that targets youthful audiences (<u>www.thecoolspot.gov</u>). (Goals 1, 2, and 3)
- "The Coolspot": An NIAAA Web site for Kids—Targeted to youth ages 11 to 13 years old, NIAAA "The Coolspot" Web site (www.thecoolspot.gov) provides information on underage drinking, including advice on developing effective refusal skills. Recent upgrades to the site include the addition of a wide range of new sound effects and voice-overs throughout the site; a dedicated teacher and volunteer corner, with information for use in middle-school classrooms or afterschool programs; and advice on innovative ways to teach young people about peer pressure and resistance skills through a guided reading activity and two interactive lesson plans. (Goals 1 and 2)
- NIAAA's College Drinking Prevention Web site: NIAAA's Web site addressing alcohol use among college students, <u>www.collegedrinkingprevention.gov</u>, was recently redesigned and updated to permit easier navigation by topic or by audience. Updated features include new statistics, recent research papers and presentations from NIAAA College Drinking Task Force participants, and a new section on choosing the right college.

(Goals 1 and 2)

## Activities Related to Underage Drinking

• Alcohol Policy Information System: NIAAA's Alcohol Policy Information System (APIS) is an Internet resource that provides authoritative, detailed, and comparable information on alcohol-related policies in the United States at both State and Federal levels. Designed primarily as a tool for researchers, APIS is intended to encourage and facilitate research on the effects and effectiveness of alcohol-related policies. Though the APIS site is not dedicated specifically to a focus on underage drinking policies, it does provide information on policies relevant to underage drinking such as those that prevent retail alcohol outlets from selling and serving alcohol to persons under the age of 21. (Goal 6)

• Longitudinal and Genetic Epidemiology Studies and NIAAA's National Epidemiological Survey on Alcohol-Related Conditions: A number of longitudinal and genetic epidemiology studies have generated data that are particularly pertinent to the question of underage drinking. NIAAA's National Epidemiological Survey on Alcohol-Related Conditions (NESARC), which includes young adults aged 18 to 21 in its sample, is among these studies. All have the potential to enhance understanding of the etiology, extent, and consequences of underage alcohol consumption. Analysis of data from the NESARC indicates that 18- to 24-year-olds have the highest prevalence of alcohol dependence of any age group in the general population, a finding that underscores the need for enhanced early prevention efforts. (Goals 4 and 5)

#### National Institute on Drug Abuse

The mission of the National Institute on Drug Abuse (NIDA) is to bring the power of science to bear on drug abuse and addiction. This mission is accomplished through the conduct of scientific research, the support of extramural scientific research, and the synthesis and dissemination of scientific findings.

#### Activities Specific to Underage Drinking

None

#### Activities Related to Underage Drinking

NIDA supports a large portfolio of research on prevention interventions that target the precursors to and actual initiation and progression of alcohol, tobacco, and drug abuse. The following interventions were developed as part of a research protocol in which an intervention group and a comparison group were matched on important characteristics such as age, grade in school, parents' level of education, family income, community size, and risk and protective factors. The NIDA-sponsored interventions described below were tested in a family, school, or community setting, all with positive results. Prevention research continues to identify effective programs and strategies; thus, this list is not exhaustive, nor is it meant to be.

• Caring School Community Program (Formerly the Child Development Project): This program is a universal, family-school partnership initiative designed to reduce risk and bolster protective factors among elementary schoolchildren. It focuses on strengthening students' sense of community regarding, or connection to, their schools. Research has shown that this sense of community has been pivotal to reducing youth drug use, violence, and mental health problems while promoting academic motivation and achievement. The Caring School Community Program addresses these issues with a set of mutually reinforcing classroom, school, and family involvement approaches that promote positive peer, teacher-student, and home-school relationships and the development of social, emotional, and character-related skills. It provides detailed instructional and implementation materials and accompanying staff development. (Goals 1, 2, and 5)

- Classroom-Centered and Family-School Partnership Interventions: These interventions are multicomponent, universal, first-grade interventions designed to reduce later onset of violence and aggressive behavior and improve academic performance. The classroom-centered (CC) intervention combines two effective classroom programs, the "Good Behavior Game" and "Mastery Learning," and includes classroom management and organizational strategies as well as reading and mathematics curricula. It also focuses on enhancing teachers' behavior management and instructional skills. The family-school partnership (FSP) intervention targets the same risk factors of aggression and learning problems but directly involves parents. It seeks to improve parent-teacher communication, parental teaching, and children's behavior management strategies in the home. Findings show that sixth graders exposed to the CC intervention in first grade had significantly reduced aggressive behavior compared to control students. (Goals 1 and 2)
- **Promoting Alternative Thinking Strategies**: The Promoting Alternative Thinking Strategies (PATHS) program is a comprehensive initiative designed to promote emotional health and social competencies and reduce aggression and behavior problems in elementary school children while enhancing educational processes in the classroom. This K–5 curriculum is designed for use by educators and counselors in a multiyear, universal prevention model. Although primarily for use in school and classrooms, the PATHS program also provides information and activities for parents' use. PATHS has been shown to improve protective factors and reduce behavioral risk factors that lead to youth problem behaviors. Studies report reduced aggressive behaviors, increased self-control, and improved ability to tolerate frustration and use conflict-resolution strategies among students exposed to the PATHS program. (Goals 1 and 2)
- Skills, Opportunity, and Recognition (Formerly the Seattle Social Development Program): The Skills, Opportunity, and Recognition (SOAR) program is a universal, multicomponent, school-based intervention for children in grades one through six that seeks to reduce childhood risks for delinquency and drug abuse by enhancing protective factors. SOAR combines training for teachers, parents, and children during the elementary grades to promote children's bonding to school, positive school behavior, and academic achievement. These strategies are employed to enhance opportunities, skills, and rewards for children's prosocial involvement in school and their families. Long-term follow-up results show positive outcomes for SOAR participants, including reduced antisocial behavior, misbehavior, alienation, and teen pregnancy; and improved academic skills, commitment to school, and positive relationships with people. (Goals 1 and 2)
- **Guiding Good Choices**: The Guiding Good Choices (GGC) curriculum was launched as part of the Seattle Social Development Project at the University of Washington. Its purpose is to educate parents on how to reduce risk factors and strengthen bonding in their families. In five two-hour sessions, parents are shown how to: (1) create age-appropriate opportunities for family involvement and interaction; (2) set clear expectations, monitor children, and apply discipline; (3) teach their children peer-coping

strategies; (4) adopt effective family conflict-management approaches; and (5) express positive feelings to enhance family bonding. Dr. Richard Spoth of Iowa State University independently tested this intervention with rural parents and found it to be effective in inhibiting alcohol and marijuana use if special efforts are made to ensure recruitment and retention of study participants. (Goals 1 and 2)

- Life Skills Training: The Life Skills Training (LST) program was designed to address a wide range of risk and protective factors by teaching general personal and social skills along with drug resistance skills and normative education. It entails a three-year prevention curriculum for students in middle or junior high school, presenting 15 sessions during the first program year, 10 booster sessions during the second program year, and 5 sessions during the third program year. The LST curriculum can be taught in either grades six, seven, and 8 (for middle school) or grades seven, eight, and nine (for junior high schools). It covers three major content areas: (1) drug resistance skills and information, (2) self-management skills, and (3) general social skills. The LST program has been tested extensively over the past 20 years and found to reduce the prevalence of tobacco, alcohol, and illicit drug use relative to controls by 50% to 87%. When combined with the LST Booster Program, it has been shown to reduce the prevalence of substance abuse long term by as much as 66%, with benefits still in place beyond the high school years. Although the LST program was tested originally with a sample consisting predominantly of White youth, several studies have confirmed its effectiveness for innercity, non-White youth. A recently developed, age-appropriate version of the LST program for upper-elementary school students also has been shown to reduce tobacco and alcohol use among that group (Botvin et al., 2003). It entails 24 classes (8 classes per year) presented during grades three through five or four through six. (Goals 1, 2, and 4).
- Life Skills Training Booster Program: This is a three-year, universal classroom program of LST booster sessions: 15 during the first year, 10 during the second year, and 5 during the third year. (Goals 1, 2, and 4)
- Lions' Quest Skills for Adolescence Program: This Skills for Adolescence (SFA) initiative is a widely used, commercially available, universal life skills education program. The 40-session SFA program utilizes social-influence and social-cognitive approaches to teaching cognitive-behavioral skills for building students' self-esteem and personal responsibility; improving their ability to communicate effectively, make better decisions, resist social influences, and assert their rights; and increasing students' knowledge about drug use and its consequences (Quest International, 1992). A rigorous school-based evaluation of the program, funded by a NIDA research grant, compared the effectiveness of SFA delivered in sixth grade with "standard" drug prevention programs in preventing or delaying the onset of students' tobacco, alcohol, and illegal substance use through middle school. Some of the results after one year indicate that exposure to this program can help deter initiation of regular cigarette smoking and marijuana use; moreover, these results held across all racial/ethnic groups studied. Additional findings

after two years indicate lower initiation and regular marijuana use across all groups and lower binge drinking rates among Hispanic students. (Goals1, 2, and 4)

**Project ALERT**: This two-year, universal program for middle school students includes a drug use prevention curriculum that reduces the onset and regular use of substances among youth. The 14-lesson Project ALERT program is designed to prevent drug use initiation and the transition to regular use. It focuses on substances that adolescents typically use first and most widely—namely, alcohol, tobacco, marijuana, and inhalants. Project ALERT uses participatory activities and videos to help students establish non-drug norms, develop reasons not to use, and resist pro-drug pressures. It has been shown to prevent marijuana use initiation, decrease current and heavy smoking and help smokers quit, curb alcohol misuse, and reduce pro-drug attitudes and beliefs. It also has been proven successful with high- and low-risk youth from a variety of communities. An enhanced version of Project ALERT that targets high school students, Project ALERT Plus, is currently being tested in 45 rural communities (<u>www.projectalert.com</u>). (Goals 1, 2, 4, and 6)

- **Project STAR**: Project STAR is a comprehensive drug abuse prevention community program with components for schools, parents, community organizations, and health policymakers. An additional component targets mass media to encourage publicizing positive efforts for drug prevention. The Project STAR middle-school component is a social influence curriculum that is incorporated into classroom instruction by trained teachers over a two-year timetable. In the Project's parent program, parents work with their children on homework, learn family communication skills, and get involved in community action. Project strategies range from an emphasis on individual-level change such as teaching youth drug use resistance skills to a focus on school and community-change, including limiting youth access to alcohol or drugs. Long-term follow-up studies showed significant reductions in drug use among Project STAR participants compared to adolescents who had not received the prevention intervention. (Goals 1, 2, 4, and 6)
- The Strengthening Families Program for Parents and Youth Aged 10- to 14–Years-Old (Formerly the Iowa Strengthening Families Program): This program entails seven sessions, each of which must be attended by youth and their parents. Program implementation and evaluation have been conducted through partnerships that include State university researchers, Cooperative Extension System staff, local schools, and community implementers. Longitudinal study of comparisons with control group families showed positive effects on parents' child management practices (for example, setting standards, monitoring children, and applying consistent discipline) and on parent-child affective quality. Additionally, a recent evaluation found delayed initiation of substance use at the six-year follow-up stage. Other findings showed improved youth resistance to peer pressure to use alcohol, reduced affiliation with antisocial peers, and reduced levels of problem behaviors. Importantly, conservative benefit-cost calculations indicate returns of \$9.60 per dollar invested in this program.

(Goals 1, 2, and 4)

- Focus on Families: Focus on Families (FOF) is a selective program for parents receiving methadone treatment and their children. It seeks to reduce parents' use of illegal drugs by teaching them skills for relapse prevention and coping. It also teaches parents how to better manage their families to reduce their children's risk for future drug abuse. The parent training component involves a five-hour family retreat and 32 parent sessions of 1.5 hours each. Children attend 12 of the sessions to practice developmentally appropriate skills with their parents. Results from an experimental evaluation of FOF found positive program effects on parents at the one-year follow-up stage, especially with regard to parenting skills, rule-setting, domestic conflict resolution, drug refusal skills, and drug use. At the one-year assessment, significantly fewer children in the experimental condition reported having stolen something in the previous six months. After two years of family skills training, positive effects were still evident in parents' drug refusal skills, and positive effects were seen in parents' problem-solving skills in general situations. No statistically significant differences in drug use were found between those in the experimental versus control conditions, although the direction of difference favored the experimental participants. Importantly, the strength of FOF program effects on children was substantially stronger at the two-year follow-up stage, but the direction of the differences seen on all primary child outcome measures were stronger at the second-year assessment than at the end of the first year. These findings suggest that interventions to prevent relapse among parents and substance abuse among their children may produce immediate as well as delayed or "sleeper" effects on targeted risk, protective factors, and substance use. The promise of the FOF program is evident in its impact on the early reduction of family-related risk factors—particularly for very high-risk families—with an overall trend toward positive program effects on child outcomes. (Goals 1, 2, 3, and 4)
- **Coping Power:** Coping Power is a multicomponent preventive intervention directed at preadolescent children at high risk for aggressiveness and later drug abuse and delinquency. The child-directed component, which has been tested primarily with highly aggressive boys and shown to reduce substance use among that group, is derived from an anger management program. It entails a 16-month program for fifth- and sixth-graders. Group sessions for this component usually occur before or after school or during nonacademic periods. They focus on teaching children how to identify and cope with anxiety and anger; control impulsiveness; and develop social, academic, and problemsolving skills at school and home. Parents are also provided training throughout the course of the Coping Power program. Results indicate that Coping Power resulted in relatively lower rates of substance use at post-intervention than seen among the controls. The children of families participating in the Coping Power child and parent components showed significantly reduced aggressive behavior, as rated by parents and teachers. (Goals 1 and 2)
- Adolescents Training and Learning to Avoid Steroids (ATLAS): The Adolescents Training and Learning to Avoid Steroids (ATLAS) program is a selective, multicomponent program for male high school athletes that is designed to reduce risk factors for use of anabolic steroids and other drugs while providing healthy sports

nutrition and strength-training alternatives to illicit use of athletic-enhancing substances. Coaches and peer teammates facilitate ATLAS curriculum delivery with scripted manuals in small cooperative learning groups. These groupings take advantage of an influential coaching staff and the team atmosphere where peers share common goals. The program's seven 45-minute classroom sessions and seven physical training periods involve role-playing, student-created campaigns, and educational games. Instructional aids include pocket-sized food and exercise guides and easy-to-follow student workbooks. Parents are involved through parent-student homework and their exposure to the booklet, *Family Guide to Sports Nutrition*. Attitudes and alcohol and illicit drug use, as well as nutrition behaviors and exercise self-efficacy, remained significantly healthier among ATLAS program participants at the one-year follow-up stage. (Goals 1 and 2)

- **Project Towards No Drug Abuse**: Project Towards No Drug Abuse (Project TND) is an indicated prevention intervention that targets high school age youth who attend alternative or traditional high schools. The Project takes into consideration the developmental issues faced by older teens, particularly those at risk for drug abuse, while pursuing its goal of preventing the transition from drug use to drug abuse among that group. At the core of Project TND is a set of 12 in-class sessions that provide motivation, cognitive misperception correction, social and self-control skills, and decision-making materials targeting the use of cigarettes, alcohol, marijuana, and hard drugs as well as violence-related behaviors such as carrying a weapon. The Project has been found to be effective at the one-year follow-up stage across three truly experimental field trials and across outcome variables. Sustained evaluation has shown that many of its effects are maintained at the two-year follow-up stage. (Goals 1, 2, 4, and 6)
- Reconnecting Youth Program: The Reconnecting Youth (RY) program is a schoolbased indicated prevention program for high school students with poor school achievement and potential for dropping out. Participants may also show signs of multiple problem behaviors such as substance abuse, depression, aggression, or suicidal behaviors. Students are screened for eligibility and then invited to participate in the program. The goals of the RY program are to increase school performance, reduce drug use, and improve students' mood- and emotional-management skills. RY blends small group activities (10 to 12 students per class) with foster positive peer bonding and social skills training in a daily, semester-long class. RY skills, taught by a specially trained teacher or group leader, include self-esteem enhancement, decision-making, personal control, and interpersonal communication. Early experiments have shown that participation in RY improved school performance (20% increase in grade point average), decreased school dropout, reduced hard drug use (by 60%), and decreased drug use control problems such as adverse consequences and progression to heavier drug use. Recent studies of a refined RY program model that included an additional skills training component focusing on depression and anger management and increased monitoring of drug use report greater decreases in hard drug use, depression, perceived stress, and anger management problems.

(Goals 1, 2, and 4)

- Early Risers "Skills for Success" Risk Prevention Program: Early Risers is a selective, multicomponent, preventive intervention for children deemed at heightened risk for early onset of serious conduct problems, including licit and illicit drug use. The program's focus is on elementary schoolchildren who have demonstrated early aggressive behavior. It is designed to deflect children from the "early starter" developmental pathway toward normal development by effecting positive change in academic competence, behavioral self-regulation, social competence, and parent investment in the child. Early Risers has two broad components: CORE, a set of child-focused intervention components delivered continuously in school and over the summer for two or three years; and FLEX, a family support and empowerment component tailored to meet family-specific needs and delivery through home visits, which is implemented in tandem with CORE. Recent research findings reveal that program participants showed greater gains in social skills, peer reputation, pro-social friendship selection, academic achievement, and responsiveness to parental discipline than did controls. (Goals 1 and 2)
- Fast Track Prevention Trial for Conduct Problems: Fast Track is a universal, comprehensive preventive intervention for young children at high risk for long-term antisocial behavior. Based on a developmental model, the intervention includes a universal classroom program (adapted from the PATHS curriculum; see description above) for high-risk kindergarten-age children. Fast Track also includes training for parents. Children receive social skills training, academic tutoring, and home visits aimed at improving academic and social competencies and reducing behavioral problems. In first grade, the classroom intervention targets building children's skills in four areas: emotional understanding and communication, friendship, self-control, and social problem solving. A selective Fast Track intervention was designed to reach parents and children at higher risk for conduct problems. Its parenting strategies provide skills to support school adjustment, improve children's behavior, build parents' self-control, promote appropriate expectations for the child's behavior, and improve parent-child interaction. Evaluation research reveals that by the end of third grade, 37% of the Fast Track intervention group was free of serious conduct problems, compared with 27% of the control group. (Goals 1, 2, and 4)
- Adolescent Transitions Program: The Adolescent Transitions Program (ATP) is a school-based program that uses a tiered approach to provide prevention services to students in middle and junior high school and their parents. The universal intervention, targeted for parents of all students in a school, establishes a Family Resource Room at the school site to engage parents, establish norms for parenting practices, and disseminate information about risks for problem behavior and substance use. The selective ATP intervention, called the Family Check-Up, offers family assessment and professional support to identify families at risk for problem behavior and substance use. The indicated intervention consists of the Parent Focus curriculum, which provides direct professional support to parents to help them make the changes indicated by their participation in the Family Check-Up. Services may include behavioral family therapy, parenting groups, or case management services.

(Goals 1, 2, and 4)

- Community Monitoring Systems: Tracking and Improving the Well-Being of America's Children and Adolescents—Monitoring the well-being of children and adolescents is a critical component of efforts to prevent psychological, behavioral, and health problems and to promote children's successful development. Research during the past 40 years has helped identify aspects of child and adolescent functioning that are important to monitor. It further has shown that these aspects, which encompass family, peer, school, and neighborhood influences, are associated with both positive and negative outcomes for youth. As systems for monitoring well-being become more available, communities will become better able to support prevention efforts and select prevention practices that meet community-specific needs. This monograph describes Federal, State, and local monitoring systems that provide estimates of problem prevalence; risk and protective factors; and profiles regarding mobility, economic status, and public safety indicators. Data for these systems come from surveys of adolescents and archival records. (Goals 1, 2, 5, and 6)
- Preventing Drug Use Among Children and Adolescents: A Research-Based Guide for Parents, Educators, and Community Leaders (2nd Edition). This booklet is based on a major literature view of all of NIDA's prevention research from 1997 through 2002. Before publication, it was reviewed for accuracy of content and interpretation by a scientific advisory committee, and reviewed for readability and applicability by a Community Anti-Drug Coalitions of America focus group. The publication includes a discussion on the principles of prevention and how to apply those principles in family, school and community settings as well as information on identifying and using risk and protective factors in prevention planning and summaries of effective prevention programs (Goals 1, 2, 3, 5, and 6)
- **Drug Facts Chat Day:** On October 12, 2007, NIDA hosted its first Drug Facts Chat Day. This activity was open to students at over 200 schools nationwide. Beginning at 8 AM and continuing throughout the school day, NIDA scientific staff members responded to e-mailed questions and concerns from students across the country. Almost 40,000 questions were submitted, many of which addressed alcohol use. Given the tremendous response to this event, the NIDA personnel were unable to respond to all of the questions raised. Transcripts of the Day's questions and answers were posted on the NIDA Web page (www.drugabuse.gov) to allow students to continue to read about the issues that concern students with regard to alcohol, tobacco and drug use. NIDA plans to improve its ability to respond to the even greater volume and type of queries anticipated during the 2008 Chat Day event. (Goals 1 and 2)
- **Monitoring the Future**: The Monitoring the Future (MTF) initiative is an ongoing study of the behaviors, attitudes, and values of American secondary school students, college students, and young adults. Each year, some fifty thousand 8<sup>th</sup>-, 10<sup>th</sup>-, and 12<sup>th</sup>-grade students are surveyed (12<sup>th</sup> graders since 1975, and 8<sup>th</sup> and 10<sup>th</sup> graders since 1991).

Annual follow-up questionnaires are mailed to a sample of each graduating class for a number of years after their initial participation. (Goal 3)

## Substance Abuse and Mental Health Services Administration

The mission of the Substance Abuse and Mental Health Services Administration (SAMHSA) is to build resilience and facilitate recovery for people with or at risk for substance abuse and mental illness.

## Activities Specific to Underage Drinking

 Development of an Underage Drinking Public Service Campaign Directed at Parents: The Underage Drinking Public Service Campaign, with contributions from several ICCPUD agencies and input from public health advocacy groups and the alcoholic beverage industry, is one of many initiatives HHS has launched to reduce the underage demand for alcohol use in America. SAMHSA supports the Ad Council in developing this campaign, which targets parents of youth 9 to 15 years old. The campaign's public service announcements (PSAs) reach a variety of audiences in addition to parents because of their broad distribution. Since its launch during the first quarter of 2007, the Underage Drinking Public Service Campaign has been aired from coast to coast and has received more than \$60 million in donated media support for its television, radio, PR/alternative media, interactive media, and print ads. Web activity has been very heavy, with an average of 66,499 monthly visitors to the campaign's site (www.family.samhsa.gov) and 965,577 visitors to date. The campaign's Start Taking Before They Start Drinking brochure has been downloaded almost 80,000 times since the campaign's launch. An additional satellite media tour during summer resulted in 109 PSA airings and campaign-related interviews that reached more than 15 million additional listeners nationwide.

Awareness of this campaign is very strong. Four in 10 parents surveyed reported that they recalled seeing or hearing a campaign PSA. Those parents who recalled the ads further indicated that they were more likely to talk to their 10- to 15-year-old children about underage drinking, be extremely or very concerned about their child facing underage drinking, talk to other parents or friends about the issue of underage drinking, and visit the campaign's Web site for more information about talking to their children about underage drinking.

(Goals 1, 2, and 3)

• Leadership to Keep Children Alcohol Free: The Leadership to Keep Children Alcohol Free ("the Leadership") is a nationwide organization of current and former Governor's spouses who focus on preventing alcohol use by children ages 9 to 15. SAMHSA works with the Leadership to link this important initiative to prevention programs that are funded by the SAPT Block Grant and to other SAMHSA supported programs such as the Town Hall Meetings. Additionally, SAMHSA has supported the Leadership in its efforts to disseminate *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking* through State roll-outs involving the First Spouses of various States.

(Goals 1, 2, 3, and 6)

- **Too Smart to Start Underage Drinking Prevention Campaign**: The Too Smart to Start (TSTS) effort is a national community education program targeting children and youth between the ages of 9 and 13 years old. It has been tried and tested in 12 communities nationwide and found to be successful in actively involving entire communities in sending clear, consistent messages about why children should reject underage drinking. TSTS provides professionals, volunteers, and parents with tools and materials that can help shape healthy behaviors regarding alcohol use for a lifetime. It includes a Web page (www.toosmarttostart.samhsa.gov), technical assistance, and a community action kit to help plan, develop, promote and support local underage alcohol use prevention activities. It also includes materials and strategies that are flexible for use in communities of all sizes. (Goal 2)
- Health Communication Initiative for Preventing Underage Alcohol Use: This SAMHSA/CSAP effort provides resources, message development, and public education for preventing underage alcohol use among youth up to the age of 21. It also provides ongoing support for the TSTS initiative and Reach Out Now Teach Ins. Additionally, it provides multifaceted, evidence-based approaches that communities throughout America can use to build resiliency and enhance protective factors and reduce the risk factors associated with underage alcohol use. (Goal 3)
- *Reach Out Now*: Fifth- and Sixth-Grade Scholastic, Inc., Supplements: SAMHSA and Scholastic, Inc., have developed special supplementary materials devoted to underage drinking that target 10- to 12-year-olds and their parents. Titled *Reach Out Now*: *Talk With Your Fifth Graders About Underage Drinking*, and *Reach Out Now*: *Prevent Underage Alcohol Use by Talking With Your Sixth Grader*, these publications have been focus group-tested with parents and teachers. They include a classroom discussion guide for teachers, an activity sheet for students, and a take-home packet for parents. Reach Out Now is in its sixth year. In March 2007, a package of *Reach Out Now* materials was mailed to fifth-and sixth-grade classrooms across the Nation, including those in States participating in the Leadership to Keep Children Alcohol Free initiative. As an add-on to *Reach Out Now*, over 1,400 Reach Out Now Teach-Ins were conducted nationwide to reinforce the message to the Nation's youth to reject alcohol. The teach-ins used the *Reach Out Now* supplements and other SAMHSA materials to teach students and the community about the dangers of underage alcohol use and to encourage young people to make healthy choices.

According to a study of the *Reach Out Now* program conducted by Scholastic, educators who responded to the survey reported that 80% of those in the sixth grade had used or planned to use the *Reach Out Now* materials and 83% had distributed or planned to distribute the "Family Resource Guide" for their students to take home. In the sixth grade, 81% of the educators had used or planned to use the *Reach Out Now* materials, and 76% had distributed or planned to distribute the "Family Resource Guide" for their "Family Resource Guide" for their

students to take home. (Goals 1, 2, and 3)

- Town Hall Meetings: As part of a national effort to prevent and reduce underage alcohol use and to help educate young people and caring adults about the risks associated with underage drinking, the ICCPUD and SAMHSA supported more than 1,200 community Town Hall Meetings in spring 2006. These meetings were convened nationwide, including U.S. Territories and jurisdictions. They gave people in diverse communities the opportunity to come together to learn more about the research on underage drinking and the impact of the problem of underage drinking on individuals, families, and communities. The Town Hall Meetings were a first step toward moving communities to action in addressing underage alcohol use and beginning a dialogue on how they can prevent or reduce it. In spring 2008, SAMHSA and the ICCPUD collaborated again to support an additional 1,600 Town Hall Meetings across the country. (Goals 1, 2, 3, and 6)
- SAMHSA's Strategic Prevention Framework State Incentive Grant (SPF SIG) program builds on the successful State Incentive Cooperative Agreements, which have given the Governors of 42 States and Territories the opportunity to enhance their jurisdictions' substance abuse prevention systems and fill gaps in programs with evidence-based services to address the widespread problems related to substance abuse. The program's grants, or SPF SIGs, give States and communities the opportunity to focus resources on critical needs identified through an epidemiologically based State Needs Assessment and subsequently to target populations and ages across the lifespan with evidence-based prevention and early intervention policies, programs, and practices. SPF SIGs are intended to fulfill SAMHSA's overall goal of increasing the capacity and effectiveness of States and communities as they respond to critical problems and needs by implementing SAMHSA's SPF. They also support States by providing prevention resources and facilitating systems improvement to help ensure that Substance Abuse Prevention and Treatment (SAPT) Block Grants increasingly utilize performance outcomes. SPF SIG recipients receive support for up to five years, subject to availability of funding.

The SPF SIG program offers an excellent vehicle for supporting the goals of the OSF's underage drinking initiative. State applicants must include the prevention of underage alcohol consumption in their SPF SIG programs and provide a comprehensive strategy that addresses this problem in addition to other SPF SIG priorities. All tasks, including needs assessment, consensus building, planning, funding allocations, implementation, and evaluation must be carried out with a consideration for the issue of underage drinking.

(Goal 1)

• **Potential Interventions for Underage Drinkers in Emergency Rooms**: This SAMHSA White Paper addresses interventions that could be used with underage drinkers admitted to emergency rooms. It details the barriers encountered in recruiting underage drinkers

into brief, emergency-room intervention programs and describes the variables that can increase adolescent participation in such interventions. It also discusses the impact or non-impact of emergency-room intervention programs on adolescents' progress through the developmental continuum, and the role of significant others. The White Paper concludes with a discussion of next steps and recommendations. (Goals 1 and 2)

• Treatment of Adolescent Alcohol Abuse and Alcoholism: Replication of Effective Alcohol Treatment Interventions for Youth—SAMHSA's Adopt/Expand Effective Adolescent Alcohol and Drug Abuse Treatment Program builds on effective interventions for youth experiencing alcohol or other drug problems. It supports efforts that have been shown to increase the availability and effectiveness of treatment for youth with alcohol and drug problems, and that target youth under 21 years old. Program sites are funded to provide training and certification in the use of Motivational Enhancement Therapy/Cognitive Behavioral Therapy, an intervention that has been proven effective with adolescent populations. Funded programs treat approximately 2,000 teens and their families per year.

(Goal 3)

• Four-State Video Pilot Project: SAMHSA has initiated a project to explore the potential benefits of developing a series of short videos (each approximately 7 to 10 minutes long) that will showcase underage alcohol use prevention efforts in the States. A pilot test of this project currently is underway in four States: Arkansas, Louisiana, Mississippi, and Texas. The pilot videos are being developed in direct collaboration with the featured States. The purpose of the videos is to help States raise awareness about their unique underage alcohol use issues and prevention activities, and to help build enthusiasm for developing, implementing, and expanding underage drinking prevention activities. Feedback from the pilot States will help determine the viability of this approach and help us discern whether similar videos should be funded. (Goal 2)

#### Activities *Related to* Underage Drinking

• SAMHSA's Substance Abuse Prevention and Treatment Block Grant: SAMHSA's Substance Abuse Prevention and Treatment (SAPT) Block Grant program is a primary funding source for alcohol prevention and treatment services in the United States. States have the option of using this resource to prevent and treat alcohol use disorders among adolescents; however, SAPT Block Grants contain a prevention set-aside that reserves a minimum of 20% of each State's grant allocation for prevention activities. Although the majority of SAPT Block Grant programs are designed to prevent substance abuse in general, many will have an impact on underage drinking. The grant application asks States to report voluntarily on underage drinking strategies such as implementation of public education and/or media campaigns; laws against alcohol consumption on college

campuses; policies and enforcement of laws that reduce access to alcohol by those under the age of 21, including event restrictions, product price increases, and penalties for sales to youth under the legal drinking age; data for estimated age of drinking onset; and statutes restricting alcohol promotions to underage audiences. The responses to these requests are part of CSAP's "e-prevention" Block Grant database. (Goal 1)

- Outreach to Children of Parents in Treatment: In collaboration with the National Association for Children of Alcoholics (NACoA), the Outreach to Children of Parents in Treatment (OCPT) project has developed a kit that includes prevention materials that target school-age youth under 18 years old who are the children of parents in substance abuse treatment programs. The materials have been disseminated to substance abuse treatment centers to use in staff inservice trainings and with children of parents in treatment. The kit also includes a promising practices program list that identifies existing prevention and support services for children of substance-abusing parents in various settings (e.g., treatment centers, faith/community settings, private voluntary organizations); a practice manual and resource packet; videos; and colorful announcement posters. In August 2004, a three-day, training-for-trainers workshop was held on the use of the Center for Substance Abuse Prevention's (CSAP) Children's Program Kit: Supportive Education for Children of Addicted Parents. Representatives from CSAP's Centers for the Application of Prevention Technologies (CAPT), One Sky Center, and the Center for Substance Abuse Treatment's (CSAT) Addiction Technology Transfer Centers (ATTCs) attended. They learned the structure, philosophy, and goals of a children's supportive education program; program implementation strategies; how to train group facilitators to run educational support groups for children of parents who are alcohol or drug dependent using the Children's Program Kit; and how to engage treatment providers, schools, and community-based prevention programs to partner in providing groups. (Goal 2)
- **Building Blocks for a Healthy Future**: Building Blocks for a Healthy Future is an early childhood substance abuse prevention program that educates parents and caregivers about the basics of risk and protective factors, ways to reduce risk factors, and how to reinforce skills that will enable caregivers to better nurture and protect their children and promote healthy lifestyles. Designed for parents and caregivers of children ages three to six years old, this program is designed to help open up the lines of communication with young children and make it easier to keep those lines of communication open as they grow older. It is the product of a collaboration among the National Head Start Association, the National Association for Elementary School Principals, the National League of Cities, and the American Medical Association to facilitate the training and dissemination efforts of effective materials and products. (Goal 2)

**Partnership for a Drug-Free America**: CSAT is working with the nonprofit Partnership for a Drug-Free America (PDFA) to develop a consumer-related, interactive, online treatment resource targeted to friends, family, and other caring influencers of substance-

dependent youth and young adults. The planned Web site will offer encouragement and access to general expertise on substance use disorders and information to help these influencers identify additional assistance and resources. Culturally appropriate information developed by SAMHSA and links to culturally specific SAMHSA resources will be highlighted on the site. (Goal 2)

- National Helpline (1-800-662-HELP): Individuals in need of treatment for alcohol or illicit drug problems can call the 24-hour SAMHSA National Helpline anytime for referral to appropriate treatment services. Additionally, individuals seeking treatment can go to the SAMHSA Web site, <u>www.samhsa.gov</u>, or to <u>http://findtreatment.samhsa.gov</u> to locate treatment services in their area or anywhere in the United States. (Goal 1)
- **Targeted Capacity Expansion Program**: CSAT's Targeting Capacity Expansion (TCE) program addresses emerging substance abuse trends and the disparity that exist in some areas between the demand for and the availability of appropriate treatment. The program addresses the latter aspect by providing grants to support rapid and strategic responses to demands for both alcohol and drug treatment services in communities with serious emerging drug problems as well as communities that have developed innovative solutions to unmet needs. Adolescents are one of the target populations for the TCE grants. (Goal 1)
- Screening, Brief Intervention, Referral, and Treatment Grants: SAMHSA's Screening, Brief Intervention, Referral, and Treatment (SBIRT) grant program supports the implementation of a system within community and specialist settings that screens for and identifies individuals with substance use-related problems. Depending on the level of problems identified, SBIRT grant-funded projects provide for brief interventions within generalist settings, when appropriate; or they motivate and refer individuals with high levels of substance abuse problems and probable diagnosis of a substance-dependence disorder to utilize specialist settings for assessment and diagnosis and either brief or long-term treatment, including training in self-management and involvement in mutual help groups. Several SBIRT grantees have developed programs that are available to individuals under 21 years of age. (Goal 1)
- Young Offender Reentry Program: The Young Offender Reentry Program (YORP) addresses the needs of sentenced substance-abusing juveniles and young adult offenders from ages 14 to 21 who are returning to their families and community from adult or juvenile incarceration in facilities including prisons, jails, or juvenile detention centers. YORP is designed to form partnerships that will plan, develop, and provide community-based substance abuse treatment and related reentry services for the targeted population. (Goal 2)
- **Program to Provide Treatment Services for Family, Juvenile, and Adult Drug Courts**: Drug Courts are designed to combine the sanctioning power of courts with

effective treatment services to break the cycle of child abuse, neglect, or criminal behavior; alcohol and drug use; and incarceration or other penalties. It develops and utilizes motivational strategies to help adolescents deal with the often very powerful negative influences of peers, gangs, and family members. (Goal 6)

- **Programs for Improving Addiction Treatment**: CSAT supports a variety of programs to improve the transfer of science to the point of service in efforts to improve addiction treatment nationally. For example, CSAT's Addiction Technology Transfer Center (ATTC) Network is dedicated to identifying and advancing opportunities for improving addiction treatment, upgrading the skills of existing practitioners and other health professionals, and disseminating the latest science to the treatment community. It provides both academic (pre-service) and continuing education opportunities as well as technical assistance to multiple disciplines working in the addiction treatment field. In addition several Treatment Improvement Protocols (TIPs) address these concerns (e.g., 16: *Alcohol and Drug Screening of Hospitalized Trauma Patients*, 24: *A Guide to Substance Abuse Services for Primary Care*, 26: *Substance Abuse Among Older Adults*, 31: *Screening and Assessing Adolescents for Substance Use Disorders*, 32: *Treatment of Adolescents With Substance Use Disorders*, 34: *Brief Interventions and Brief Therapies for Substance Abuse*). (Goal 1)
- **Outreach to State Insurance Commissioners**: CSAT provided experts to educate State legislators who also serve as State insurance commissioners about the repeal of a model insurance law that does not support reimbursement for medical care following an alcohol-related traffic crash resulting in injury. The now-repealed law was based on the 1950s premise that alcohol problems were due to a moral failing rather than the current disease model of alcohol problems. With the repeal of the law, State insurance guidelines currently allow reimbursement for alcohol-related events and allow attending emergency room providers to conduct brief interventions addressing patients' injury and drinking patterns. (Goal 6)
- **Fetal Alcohol Spectrum Disorders**: SAMHSA's Fetal Alcohol Spectrum Disorders (FASD) Center for Excellence is the largest alcohol-prevention initiative within SAMHSA. The FASD Center addresses innovative techniques and effective strategies to prevent alcohol use among women of childbearing age and persons and families affected by FASD. Communities, States, and juvenile justice systems are improving existing service delivery systems, policies, and procedures to screen for FASD at intake and refer patients for diagnosis and surveillance to create sustainable evidence-based responses to FASD among children, youth, and adults. Although this initiative does not target underage drinkers specifically, it is expected that children, youth, and adults will be reached, educated, and/or trained on co-occurring issues (substance use/abuse) across the lifespan among individuals affected by FASD. (Goal 2)
- Access to Recovery: The Access to Recovery (ATR) grant program is a Presidential Initiative designed to promote consumer choice among substance abuse clinical treatment and recovery support service providers, expand access to a comprehensive array of clinical treatment and recovery support options (including faith-based programmatic options), and increase national substance abuse treatment capacity. A State or Tribal organization may implement this program throughout their entire jurisdiction or they may target geographic areas of greatest need, specific populations in need, or areas with a high degree of readiness to implement the program. Program guidelines allow flexibility in the design and implementation of ATR voucher programs to meet the needs of consumers in State and Tribal communities. States and Tribes are encouraged to support any mixture of traditional clinical treatment and recovery support services that can be expected to achieve the program's goal of achieving successful outcomes for the largest number of people at the lowest available cost. (Goal 1)
- **Drug and Alcohol Services Information System**: The Drug and Alcohol Services Information System (DASIS) is the primary source of national data on substance abuse treatment. SAMHSA's Office of Applied Studies (OAS) maintains the DASIS, which, though not specific to youth, provides information on treatment facilities with special programs for adolescents and on the demographic and substance abuse characteristics of adolescent treatment admissions. The DASIS has three components:
  - <u>The Inventory of Substance Abuse Treatment Services (I-SATS), which is a listing of all known public and private substance abuse treatment facilities in the United States and its territories;</u>
  - <u>The National Survey of Substance Abuse Treatment Services (N-SSATS), which is</u> an annual survey of all facilities in the I-SATS that collects information on those facilities' locations, characteristics, services offered, and utilization. Data from the N-SSATS is used to compile and update the National Directory of Drug and Alcohol Abuse Treatment Programs and the online Substance Abuse Treatment Facility Locator;
  - <u>The Treatment Episode Data Set (TEDS), which is a compilation of data on the</u> demographic and substance abuse characteristics of admissions to and discharges from substance abuse treatment, primarily at facilities that receive public funding. Information on treatment admissions is routinely collected by State administrative systems and then submitted to SAMHSA in a standard format for entry into the TEDS.

(Goal 5)

• National Registry of Evidence-Based Programs and Practices: The National Registry of Evidence-Based Programs and Practices (NREPP) is a searchable online registry of mental health and substance abuse interventions that have been reviewed and rated by independent reviewers (<u>www.nrepp.samhsa.gov</u>). The purpose of this registry is to assist the public in identifying approaches to preventing and treating mental and/or substance use disorders that have been scientifically tested and that can be readily disseminated to the field. NREPP is one way that SAMHSA is working to improve access to information

on tested interventions and thereby reduce the lag time between the creation of scientific knowledge and its practical application in the field. An Intervention Summary Report is posted on the NREPP Web site for every intervention reviewed and contains descriptive information about the intervention and its targeted outcomes as well as expert ratings on the intervention's quality of research and readiness for dissemination. The information and ratings are provided to help individuals and organizations begin to determine whether a particular intervention may meet their needs. Notwithstanding, SAMHSA advises individuals to have direct conversations with intervention personnel and others listed in the NREPP before making any decisions regarding selection and/or implementation of an intervention.

- (Goal 4)
- National Survey on Drug Use and Health: Conducted by SAMHSA's OAS, the National Survey on Drug Use and Health (NSDUH; formerly the National Household Survey on Drug Abuse) is a primary source of information on the prevalence and patterns of alcohol, tobacco, and illegal drug use, abuse, and dependence in the noninstitutionalized United States civilian population aged 12 and older. Though the NSDUH is not alcohol-specific, it does track a variety of information on underage alcohol use and provides a database for studies on alcohol use and related disorders. (Goal 5)
- Service to Science: SAMHSA's CSAP funds logistics and technical assistance efforts to support its Service to Science Initiative, the goal of which is to enhance the capacity of community-based and local programs to plan, implement, and evaluate prevention interventions strategically and thereby build stronger evidence of the effectiveness of such interventions. Through this Initiative, CSAP directs fixed-price mini-subcontracts to a small number of selected underage drinking programs to assist them in enhancing program capacity for rigorous evaluation design, implementation and outcomes measurement, and data collection and analysis. The goal of these modest capacity-enhancement mini-subcontracts is to assist locally developed innovative programs that demonstrate readiness to move up the scale of evidence and that show promise of achieving recognition in SAMHSA's NREPP. (Goal 4)
- **Prevention Day Conference**: To help focus attention and resources on underage drinking problems, SAMHSA's CSAP invited over 1,200 organizations and the National Prevention Network membership to participate in its spring 2007 Community Prevention Day. The event theme was "Prevention Day: A Focus on Underage Drinking— Communities Connecting and Collaborating." Community Prevention Day served as a platform to gather SAMHSA/CSAP grantees, community-based organizations, prevention leaders, and public health advocates from across the country to share best practices, knowledge, and experience with a focus on preventing underage drinking and its consequences. Attendees participated in a series of plenary sessions and workshops designed to help strengthen local underage alcohol-use prevention efforts. Many workshops were led by ICCPUD representatives. Additionally, community-based organizations had an opportunity to dialogue with CSAP's grantees and their respective

State prevention representative regarding issues and resources related to underage drinking prevention in their local communities. (Goal 2)

#### Office of the Surgeon General

The Surgeon General is America's chief health educator. He or she is tasked to give Americans the best available scientific information on how to improve their health and reduce the risk of illness and injury. The Office of the Surgeon General (OSG) oversees the 6,000-member Commissioned Corps of the U.S. Public Health Service and assists the Surgeon General with his other duties.

#### Activities Specific to Underage Drinking

• *Call to Action*: In March 2007, the OSG released *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*. The OSG subsequently released *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking: What it Means to You* series, with separate volumes for families, communities, and educators. These publications summarize the major findings of the *Call to Action* and list the action steps for each targeted audience.

(Goals 1, 2, 3, 4, 5, and 6)

Dissemination of the Call to Action and its Guides: The OSG, SAMHSA, NIAAA, and • other ICCPUD agencies are collaborating to disseminate and promote the Call to Action and its Guides using a variety of means. On the day the Call to Action was released, the Acting Surgeon General held a press conference in Washington, D.C., and participated in a three-hour satellite media tour in which he discussed to that report with various news stations throughout the United States, resulting in substantial press coverage. Subsequently, SAMHSA Regional Health Administrators and representatives from ICCPUD, the Leadership to Keep Children Alcohol Free, and various HHS agencies conducted a coordinated media release for the Guides. ICCPUD members have also promoted the Call to Action with their counterparts in the States. For example, the OSDFS and OJJDP invited the Acting Surgeon General to speak about the Call to Action at their conferences. The Acting Surgeon General also spoke at various private conferences and meetings such as the annual meeting of the National Association of State Alcohol and Drug Abuse Directors. He conducted a series of State-specific rollouts of the Call to Action in collaboration with members of the Leadership to Keep Children Alcohol Free at events that included Governors and other State officials, advocacy and community groups and coalitions, and other parties committed to the goals of the Call to Action. The resulting press coverage called public attention to the Call to Action and to the national health problem of underage drinking. Additionally, many States have been promoting the *Call to Action*, which is available on the Web at www.surgeongeneral.gov and www.stopalcoholabuse.gov, in State meetings and via links from their State Web sites.

(Goals 1, 2, 3, 4, and 6)

#### Activities *Related to* Underage Drinking:

- **50** Schools in **50** States: As part of his 50 Schools in 50 States tour of the Nation's 50 States, the District of Columbia, Puerto Rico, and other territories, the Acting Surgeon General will continue to address underage drinking as a public health problem when he speaks to students about how they can make healthy choices and how those choices can benefit them now and later in life. (Goal 2)
- Year of the Healthy Child: Although the Acting Surgeon General declared 2005 "The Year of the Healthy Child," he later expanded his focus, given the richness of the topic and the tremendous need, to dub the first 10 years of the 21<sup>st</sup> century "The Decade of the Healthy Child." The OSG has focused its efforts since on improving overall the body, mind, and spirit of the growing child, including the elimination of alcohol us among youth and the reduction of teen alcohol-related auto accidents. (Goals 1, 2, and 3)

### **DEPARTMENT OF JUSTICE**

#### Office of Juvenile Justice and Delinquency Prevention

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) provides national leadership, coordination, and resources to prevent and respond to juvenile delinquency and victimization.

#### Activities Specific to Underage Drinking

• Enforcing the Underage Drinking Laws Initiative: A Governor-designated agency and agency coordinator in each State and the District of Columbia implement the Enforcing the Underage Drinking Laws (EUDL) initiative. Agency contacts are listed on the Underage Drinking Enforcement Training Center's (UDETC) Web site (<u>www.udetc.org</u>). State agencies that implement OJJDP-supported EUDL programs include justice agencies, highway safety offices, health and human services agencies, and Governor's offices.

(Goal 6)

Congress directs OJJDP to develop task forces of State and local law enforcement and prosecutorial agencies, encourage innovating programming, and conduct public advertising programs that inform alcohol retailers about underage drinking and its consequences. The EUDL program encourages partnerships between law enforcement and underage drinking prevention advocates. One design element required in this discretionary program is use of multidisciplinary coalitions that utilize a comprehensive local approach.

(Goal 6)

A standard component of local EUDL discretionary programming is development and utilization of youth leadership to plan and implement the community EUDL program. Designated youth assist law enforcement with compliance checks, utilize media to promote underage drinking prevention, hold alcohol-free events, and participate in training events to learn about underage drinking issues. A major component of the EUDL program is training and technical assistance provided to adults and youth by UDETC personnel. Information on science-based strategies and other resources are accessible at the UDETC Web site (www.udetc.org). (Goal 2)

UDETC personnel have prepared and published the following documents to help States and local communities enforce retail establishment compliance with underage drinking laws:

- The Guide to Responsible Alcohol Sales: Off-Premise Clerk, Licensee, and Manager Training, which offers sales personnel training tools that stress support of management policies to prevent sales of alcohol to those under the age of 21;
- Preventing Sales of Alcohol to Minors: What You Should Know About Merchant Education Programs, which describes these programs and their role in comprehensive community strategies to reduce underage drinking, identifying necessary components and resources for more information;
- Strategies for Reducing Third-Party Transactions of Alcohol to Underage Youth, which dissuades adults from providing alcohol to underage persons, discusses the problem of non-retail sources of alcohol for underage drinkers, and describes the essential elements of shoulder-tap operations, along with other techniques, whose goal is to deter adults from buying or providing alcohol to underage drinkers; and
- Strategies to Reduce Underage Alcohol Use: Typology and Brief Overview, which is published in both English and Spanish, summarizes effective policies and procedures for reducing underage alcohol use. It also presents common strategies to reduce underage drinking and discusses how effective they are based on existing research and evaluation.

(Goals 1 and 6)

UDETC personnel also maintain a small library of radio and television PSAs aimed at increasing awareness among parents and other adults of underage drinking and its consequences. EUDL State coordinators and EUDL-funded communities voluntarily forward PSAs to this Center, which shares the collection with State coordinators and others seeking guidance or assistance with their own PSAs. (Goal 1)

OJJDP collaborates with UDETC to present an annual National Leadership Conference that provides training opportunities and promotes cooperation, coordination, and collaboration among partnering highway safety offices, health agencies, justice agencies, enforcement, schools, youth advocacy groups, health care professionals, and alcohol prevention service providers. UDETC's monthly, Web-enhanced audioconferences tackle a wide range of underage drinking issues and science-based approaches that address those issues. (Goals 1 and 6)

As part of OJJDP's efforts to address underage drinking, EUDL grantees routinely partner with a number of other private and public organizations. For example, a total of 45 States work closely with State alcohol beverage control agencies or other State-level enforcement agencies that specialize in alcohol enforcement; 25 States have incorporated college communities into EUDL funding priorities; a total of 15 States engage members of the Leadership to Keep Children Alcohol Free in their State EUDL programs; and 6 States have established linkages to the United States military bases to address underage and hazardous drinking behavior by troops. (Goals 1 and 6)

• NIAAA Studies, Through the Prevention Research Center, of EUDL Discretionary Programming in Rural Sites: In FY 2004 and FY 2005, the EUDL discretionary program partnered with NIAAA to address underage drinking in rural communities. OJJDP is funding 7 States' efforts to conduct best and most promising EUDL program activities in up to 5 rural sites in each of the 7 States. NIAAA is funding and managing an evaluation of the rural sites being conducted by the Prevention Research Center. This effort establishes community coalitions to reduce and prevent underage drinking in rural areas.

(Goal 4)

- OJJDP EUDL Partnership With the United States Air Force (USAF) and NIAAA: • In 2006, OJJDP issued a solicitation, "Enforcing Underage Drinking Laws Discretionary Program." Grants under this program sought to reduce the availability of alcoholic beverages to, and the consumption of alcoholic beverages by, persons serving in the United States Air Force who are under the age of 21. The specific goals of the program are to (1) decrease the number of first-time alcohol-related incidents among underage Air Force personnel, (2) decrease the incidence of unintentional injuries related to alcohol consumption among underage Air Force personnel, and (3) reduce alcohol-related traffic injuries or fatalities among underage Air Force personnel. OJJDP has awarded grants to 4 States in response to this solicitation: Arizona, California, Hawaii, and Montana. Each State has identified one or more Air Force Bases (AFBs) that will participate in this project, forming coalitions with their adjacent communities. The participating AFBs are Davis-Monthan AFB and Luke AFB (Arizona), Beale AFB (California), Hickam AFB (Hawaii), and Malmstrom AFB (Montana). NIAAA will provide evaluation support for the project through a contract mechanism. The contract is for 48 months and will include an evaluation of all activities developed at each AFB/community site. (Goal 6)
- Youth Courts: Youth courts (also called teen, peer, and student courts) are programs in which youthful offenders are sentenced for minor delinquent and status offenses or problem behaviors by their peers. Over the past years, as a result of a Federal initiative by OJJDP, there has been over a 1,000% increase in the number of youth court programs. The Federal Youth Court Program is sponsored by four Federal agencies: the U.S. Departments of Transportation (NHTSA); Education (OSDFS); Health and Human

Services (Youth Services Bureau) and Justice (OJJDP). Federal funding supports training, technical assistance, program development guides, operational materials for adults and youth, data collection, research, and other efforts to support the national infrastructure of local youth court programs. (Goals 1, 2, 3, 4, 5, and 6)

A recent national data collection survey indicated that of the 1,019 youth courts operating in 48 States and the District of Columbia, 73% now handle alcohol-related crimes and offenses by minors. In support of those who work within the youth court system, online training is available at <u>www.youthcourt.net</u> to provide youth court administrators with options for helping to teach the young people in their courts about the effects of underage drinking. The majority of the training is geared toward middle school and high school students.

(Goals 2, 3, and 6)

• Juvenile and Family Drug Courts: In 2004, OJJDP assumed management of the juvenile and family drug court program for OJP. Though drug courts initially were implemented to address adult drug offenders, this approach has been modified over time to operate within the juvenile justice system to address the unique needs of juvenile substance abusers and within the civil justice system, and to address the substance abuse of parents who are charged with abuse and neglect of their children. Youth who participate in juvenile drug courts generally are between 14 and 17 years old. A high percentage of these youth are multi-substance abusers with the vast majority having engaged in alcohol abuse. The drug court program uses the coercive power of the judicial branch to foster abstinence and helps alter destructive behavior through a combination of escalating sanctions, mandatory drug testing, treatment, and effective aftercare.

OJJDP manages approximately 85 juvenile and family drug court grants. Additionally, OJJDP sponsors training for courts that are planning to initiate either a juvenile or family drug court program. During 2005, 80 courts participated in these training sessions. Approximately 60 courts will participate in these training sessions during 2006. To inform the development and implementation of its juvenile drug court program, OJJDP will fund an independent evaluation of the strategies employed in juvenile drug courts and their impact on the behavior of participating youth. The evaluation's findings should contribute to a more comprehensive assessment of juvenile drug courts and their role in assisting substance-abusing youth involved in the juvenile justice system. Subject to the availability of appropriated funds, OJJDP also plans to solicit applications for new juvenile and family drug court grants in FY 2007. (Goal 6)

• **Beyond the Bench**: In partnership with NHTSA, OJJDP funded a video produced by the Police Executive Research Forum. This video, titled *Beyond the Bench*, features two judges who have exercised leadership on the underage drinking issue to highlight appropriate judicial leadership activity in developing a community response to preventing underage drinking. The video may be accessed through NHTSA's Web site. (Goal 6)

# Activities *Related to* Underage Drinking None

#### DEPARTMENT OF LABOR

#### Occupational Safety and Health Administration

The mission of the Occupational Safety and Health Administration (OSHA) is to assure the safety and health of America's workers by setting and enforcing standards; providing training, outreach and education; establishing partnerships; and encouraging continual improvement in workplace safety and health.

#### Activities Specific to Underage Drinking None

#### Activities *Related to* Underage Drinking

• **Teen Worker Initiative**: Now a part of OSHA's strategic plan, this initiative seeks to reduce the risk of injuries and illnesses among 14- to 24-year-old workers. It sparked development of an innovative Teen Worker Web site that targets teens and their employers, educators, and parents with age- and audience-appropriate information about potential workplace hazards and how to reduce such occupational risks.

The Web site incorporates text that recognizes alcohol and drug use as a workplace hazard, reminding teens that in order to work, they must be alcohol and drug-free. Embedded links access other government Web sites, directing employers to DOL's Working Partners for an Alcohol- and Drug-Free Workplace Web site, teens to ONDCP's National Youth Anti-Drug Media Campaign Freevibe Web site, and educators and parents to ONDCP's The Anti-Drug Web site, respectively. (Goal 2)

• Federal Network for Young Worker Safety and Health: In 2003, OSHA convened the Federal Network for Young Worker Safety and Health (FedNet). The main goal of this group is to reduce redundancies and maximize Federal resources to address occupational safety and health issues facing young workers. Ten Federal departments and agencies (Labor, Transportation, the Center for Disease Control and Prevention, Commerce, Agriculture, Education, Environmental Protection Agency, Housing and Urban Development, the Equal Employment Opportunity Commission, and the National Labor Relations Board) attend quarterly Network meetings.

One avenue toward FedNet's goal is to identify and evaluate existing tools and resources that promote young worker occupational safety and health. Early meetings were used to explore available resources. FedNet participants strive not so much to create new

materials as to identify existing materials on similar topics, create mechanisms to hold these resources together, and disseminate them to the appropriate target audience.

A FedNet participant from the DOT's NHTSA acts as a liaison to the ICCPUD Committee on the Prevention of Underage Drinking to ensure that FedNet members are informed about new initiatives from this committee and to encourage the Federal agency members to incorporate these initiatives into their respective agency activities. (Goal 6)

#### **Employment Training Administration**

The Employment Training Administration's (ETA) mission is to advance the U.S. labor market by providing high quality job training, employment, labor market information and income maintenance services primarily through State and local workforce development systems.

## Activities *Specific to* Underage Drinking None

#### Activities Related to Underage Drinking

• **Youth Offender Portfolio**: Since 1999, DOL/ETA has funded youth offender pilot and demonstration projects designed to provide comprehensive services to youth between the ages of 14 and 24 who are offenders, gang members, or at risk for involvement with the juvenile justice system. These projects assist targeted youth with their transition into long-term employment at wage levels that are likely to break the cycle of crime and juvenile delinquency. The youth offender initiative originally was funded through the Office of Policy Development, Evaluation, and Research as a demonstration project and by design, it collected limited, quantifiable local or national program outcomes. Over the ensuing years a number of youthful offender-based initiatives have been conducted that seek to deliver pre- and post-release services, alternatives to incarceration and re-entry transition options through vehicles such as aftercare, case management, and/or gang intervention/prevention services to court-involved and at-risk youth.

In cooperation with local juvenile courts, some sites have supported youth courts where youth are held accountable to each other for minor infractions, including underage drinking. This has helped to create a positive peer environment to reduce the peer pressure to engage in risky behaviors such as underage drinking. In other sites, probation officers visit schools in the local communities and teach underage drinking prevention classes to all youth including young offenders. Career preparation classes have a component about alcohol and drug use on-the-job and what constitutes a drug-free workplace.

The Hammond, Louisiana, youth offender site, in partnership with the Southeastern Louisiana University's Health Department, has provided trainings and seminars directly to young participants concerning the dangers of underage drinking. Participants also have the opportunity to view videos and, as needed, be referred to experienced counselors for the development of one-on-one treatment programs.

Many sites provide alternative activities for youth at times when they are most likely to consume alcohol, such as on weekends and evenings. These include community service activities, social outings, picnics, and leadership conferences. Traditional counseling and intervention services also are provided for youth who feel they may have a problem with substance abuse. Many youth engaged in Labor's youth offender initiative are required to provide some manner of restitution as part of their adjudication. This expectation requires sites to coordinate community service activities, partly for the purpose of restitution but also to use this time to emphasize the value of their efforts in restoring community trust while enhancing personal self-esteem. Offender-based sites also offer traditional case management and assessment services for youth that include a focus on the substance abuse and mental health needs of the youth and provide referrals when appropriate. (Goal 2)

## **OFFICE OF NATIONAL DRUG CONTROL POLICY**

#### Activities Specific to Underage Drinking

• *Challenges in Higher Education*: In June 2004, the Office of National Drug Control Policy (ONDCP) released this booklet, which focuses on college-aged drug and alcohol use. The booklet also contains information on underage drinking and policy/program directions to address binge drinking on campus. Outreach activities continue to find venues to bring ONDCP's perspective on youth alcohol and drug use to college health professionals, BACCHUS-GAMMA and the Inter-Association Task Force, which together represent over 35 national organizations with members from colleges representing the areas of student personnel, student activities, campus health centers, college presidents, college administrators, and college students. (Goal 2)

#### Activities Related to Underage Drinking

• The National Youth Anti-Drug Media Campaign: ONDCP's National Youth Anti-Drug Media Campaign addresses underage drinking in the context of teen drug use. The branded teen message, "Above the Influence," challenges teens to view "anything that makes me less than me is not for me." Negative influences, primarily drug use but also alcohol, and the negative pressures that lead teens to use substances are positioned as harmful. The campaign's outreach to parents focuses on strong parental monitoring and communication skills that have been proven to reduce a range of risky behaviors, including underage drinking. In 2006, campaign placed four "open letters" to parents in newspapers across the country, each specifically mentioning underage drinking. The combined number of media impressions for adults was 1.3 billion. The campaign's parenting brochures (and other multicultural parenting brochures) and a CD-ROM all focus on strategies of successful parents and mention underage drinking. In 2006, 1.8 million prevention brochures were distributed. Almost half a million intervention materials were distributed. (Goal 2)

• **Drug-Free Communities Grant Program**: Originally funded by Congress in 1997 with the understanding that local problems need local solutions, the Drug-Free Communities (DFC) program currently supports over 700 drug-free community coalitions across the United States. As a cornerstone of ONDCP's National Drug Control Strategy, DFC provides the funding necessary for communities to identify and respond to local substance use problems. Through the DFC program, ONDCP and its Federal partners are building a national network of community coalitions that are working to strengthen communities and reduce youth substance use (including alcohol). This ONDCP program, which is administered by SAMHSA, is applying the Strategic Prevention Framework to these community-based grants to link local needs with programs that have proven effective in addressing substance abuse. Information on DFC is available on the Web at <u>www.ondcp.gov/dfc</u>.

(Goal 2)

## DEPARTMENT OF TRANSPORTATION

#### National Highway Traffic Safety Administration

The National Highway Traffic Safety Administration (NHTSA) develops, promotes, and implements effective educational, engineering, and enforcement programs to end preventable tragedies and reduce economic costs associated with vehicle use and highway travel.

#### Activities Specific to Underage Drinking

- Programs to Encourage States to Enact Minimum Drinking Age and Zero-Tolerance Laws: NHTSA has implemented Congressionally mandated programs to encourage States to enact minimum drinking age and zero-tolerance laws. Zero-tolerance laws make it unlawful for a person under the age of 21 to drive with any detectable alcohol in their system. Minimum drinking age laws make it unlawful for a person under age 21 to purchase or publicly possess alcohol. Currently all 50 States and the District of Columbia have enacted both laws. NHTSA continues to monitor State compliance with these Federal mandates. Failure to comply results in financial sanctions to the States. (Goal 6)
- Youth Traffic Safety Media Campaign Development: NHTSA has initiated a threepronged strategy to address youth traffic safety concerns. This strategy is the basis of a developing national media youth effort with an overarching focus primarily on adults and parents, which incorporates all three areas: teen seat belt use, graduated driver licensing (GDL), and youth access to alcohol. The program strategy that supports the media effort includes:

- Reducing youth access to alcohol through high-visibility enforcement of underage purchase, possession, and provision laws aimed at youth, parents, and alcohol vendors, supported by community activities;
- Increasing seat belt use among teens through primary seat belt laws, high-visibility enforcement of seat belt laws, and education to complement the laws and enforcement; and
- Using of GDL laws, including enactment of three-stage GDL legislation, highly publicized enforcement of GDL laws, and increased parental responsibility for monitoring compliance. This effort targets youth ages 15 to 20, parents, and other adults.

(Goals 1, 2, and 6)

• **High-Visibility Enforcement of Underage Drinking/Youth Access to Alcohol**: Highvisibility enforcement of underage purchase, possession, and provision laws can create a significant deterrent for violation of youth access laws, reduce consumption, and decrease alcohol-related crash involvement. NHTSA has identified core strategies for reducing youth access to alcohol and will demonstrate the application of high-visibility enforcement strategies in two community sites using paid media components and earned media efforts. The sites chosen for this demonstration include Chapel Hill, North Carolina, and Omaha, Nebraska. This effort targets high school age youth, their parents, and other adults in the community.

(Goals 1, 2, and 6)

• Development of a Students Against Destructive Decisions (SADD) Model Program: SADD, working with SAMHSA/CSAP's Northeast Center for the Application of Prevention Technologies (NECAPT), is looking at efforts developed by SADD that can be designed to have measurable outcomes. NECAPT will help SADD in the design, implementation, and evaluation of scientifically defensible programs, including possible submission of those programs for review by NREPP as models. Phase I of this effort, which targets high school age youth, involves focus groups with students and parents on the design of a social marketing campaign and informational meetings with school administrators and local law enforcement in pilot communities. This could result in print materials or a web-based training that would improve SADD programming based on prevention principles. The training module will help SADD State Coordinators and SADD advisors incorporate meaningful components of a prevention based program or activity.

(Goals 1 and 2)

• *SMASHED*: Toxic Tales of Teens and Alcohol: NHTSA, SAMHSA, and ED/OSDFS have collaborated to work with RADD and HBO Family to develop and disseminate an educational package that includes a copy of the HBO documentary, *SMASHED*, to thousands of schools and communities across the country. HBO licensed RADD and its Federal partners the use of *SMASHED*, which focuses on underage drinking and alcohol-related driving. This effort targets youth, their families, and community/school leaders. NHTSA is funding an independent evaluator to determine if tools like *SMASHED* can be

used effectively to stimulate community action to promote or initiate evidence-based programs and practices to address issues like underage drinking. (Goals 1, 2, and 3)

- Latino-Focused Strategies: NHTSA and ASPIRA, a national organization dedicated exclusively to developing the educational and leadership capacity of Latino youth, will utilize the ASPIRANTE (youth) program around the country to research, develop, test, and promote specific Latino youth underage drinking and impaired driving strategies. ASPIRA has sought the guidance of an expert panel to help determine which underage drinking strategies and interventions might best be used or adapted for use within the Latino community. The next phase of this effort has identified community pilot sites in Chicago, Illinois, and Puerto Rico to demonstrate these efforts. The target ages for this effort are high school students, primarily those aged 15 to 17 years old. (Goals 1 and 3)
- **BACCHUS and GAMMA Peer Education Network**: This effort seeks to determine the best methods of delivering screening and brief intervention. It has developed a tool kit for use on college campuses targeting college-age youth. (Goal 2)
- Underage Drinking Enforcement: NHTSA and the National Liquor Law Enforcement Association (NLLEA) are developing materials and testing promising strategies to assist State and local alcohol beverage control and law enforcement agencies in enforcing underage drinking laws. This effort is targeted toward adults. (Goal 6)
- **Information for Employers**: NHTSA, through a partnership with the Network for Employers of Traffic Safety (NETS) and with input from OSHA, has developed a publication, *Teens at Risk: A Parent's Guide to Underage Drinking*, which provides guidance to employees and their families on how to deal with this issue. This effort targets employers and parents of youth who are in high school and college. (Goal 2)
- **Project Youth-Turn**: Under a cooperative agreement with NHTSA, the National Organizations for Youth Safety (NOYS) has developed the first component of an online program called Project Youth-Turn, which enhances protective factors to help change attitudes regarding underage drinking and driving. NOYS also provides skills training for national youth leaders to use to train peers in how to help prevent underage drinking and driving and offers leadership materials on its web site. This effort targets youth 8 to 24 years old.
  - (Goal 2)
- Alcohol Prevention Guidebook for Colleges and Universities: NHTSA and OSDFS, through its Higher Education Center for Alcohol and Other Drug Prevention, has released the Alcohol Prevention Handbook for Colleges and Universities: Safe Lanes on Campus: A Guide for Preventing Impaired Driving and Underage Drinking. Grounded in research

literature, this 60-page guide targets college-age youth and describes strategies for combating underage drinking and impaired driving. (Goal 2)

#### Activities Related to Underage Drinking

- State Highway Safety Funding: NHTSA provides Federal funding to States and local communities through its State Highway Safety offices. Funds may be used for activities related to underage drinking and driving under the following programs: 402 (State and community programs), 410 (impaired driving incentive grants), 154 (open container transfers), 157 (occupant protection incentive grants), and 164 (repeat offender transfer). (Goal 2)
- Support of National Organizations for Youth Safety (in collaboration with HHS and ED): This Federal collaboration supports a national coalition of youth-serving organizations to address youth-related health and safety issues, including underage drinking. The coalition, National Organizations for Youth Safety (NOYS), has a membership of more than 30 active national organizations and Federal agencies. It engages youth leaders in reaching other youth through positive youth development actions to promote safe and healthy lifestyles. Member organizations represent culturally, ethnically, and geographically diverse youth through groups such as United National Indian Tribal Youth, National Asian Pacific Americans Against Substance Abuse, Farm Safety 4 Just Kids, 100% Drug-Free Clubs, National 4-H, and ASPIRA. These coalitions target youth from middle school through college ages. (Goal 2)
- **Stop Impaired Driving Web site**: NHTSA provides information and education to the public, including parents and other caregivers and adults who interact with youth, through its <u>www.stopimpaireddriving.org</u>Web site. The Web site also provides direct links with other Federal agencies and national organizations that offer additional information on these topics. (Goal 2)
- Zoning and Ordinance Plans to Prevent Underage Drinking and Impaired Driving: NHTSA and the Responsible Hospitality Institute (RHI) are developing a Web-based resource guide and recommendations on local community policies and processes to address underage drinking and impaired driving. RHI has identified local processes and initiatives such as late-night transportation and use of hospitality resource panels to address problems with underage drinkers. (Goal 6)
- **Training for Judges**: NHTSA, in partnership with the National Judicial College, supports the Courage to Live program, which trains judges to provide education and

information about the negative consequences of underage drinking and driving to youth in their communities. This effort targets high school age youth. (Goal 6)

- Juvenile Holdover Program: Under a cooperative agreement with NHTSA, the Community Anti-Drug Coalitions of America (CADCA) has developed and promotes the Juvenile Holdover Program as an alternative to the use of traditional juvenile detention, jails, or lockups when such facilities are inappropriate, unnecessary, or unavailable. CADCA provides training to its member coalitions on how to implement the program in their communities. This program is targeted toward adults. (Goal 6)
- National Roadside Survey of Impaired Driving: NHTSA's Office of Research and Technology plans to undertake a National Roadside Survey of Impaired Driving. This groundbreaking research will provide crucial data on the incidence of impaired drivers, including much needed data on over-the-counter, prescription, and illegal drug use. Previous roadside surveys have obtained blood alcohol concentrations (BAC) from drivers at roadside, but this study will also attempt to obtain saliva samples to determine whether drivers were using drugs. The roadside survey will be conducted in 60 sites across the country, with at least 6,000 subjects. Previous roadside studies have provided critical information regarding the proportion of drivers on the road across years at various BACs. For example, the 1973 survey indicated that 36% of nighttime weekend drivers had a positive BAC, compared to 26% in 1986, and 17% in 1996. Also noted was a significant decrease in drivers under the age of 21 who had been drinking in 1996 compared to the previous surveys (4% in 1973 compared to 0.3% in 1996). This type of information is needed to determine with greater accuracy the extent of the drinking and driving problem, including the involvement of underage drinkers, so that appropriate countermeasures can be developed and allocated. (Goal 5)

## Expenditures by Select ICCPUD Agencies for Programs Specific to Underage Drinking

ICCPUD Agency	Underage Drinking-Related Expenditures						
	FY 2005 Actual	FY 2006 Actual	FY 2007 Estimated				
Department of Education (ED)	\$38,536,891	\$39,756,489	\$39,756,640				
National Institute on Alcohol Abuse and Alcoholism (NIAAA) <sup>*</sup>	\$61,099,489	\$60,280,312	\$51,000,000				
Substance Abuse and Mental Health Services Administration (SAMHSA) **	\$11,821,000	\$21,929,000	\$34,746,000				
Office of Juvenile Justice and Delinquency Prevention (OJJDP) ***	\$25,343,013	\$23,895,580	\$24,817,385				
National Highway Traffic Safety Administration (NHTSA)	\$718,594	\$940,000	\$1,525,000				
TOTAL	\$136,478,097	\$145,901,381	\$151,027,640				

<sup>\*</sup>NIAAA's expenditures were lower in FY 2007 than in the previous two years partly because FY 2006 was the last year of funding for projects funded in response to two major RFAs.

<sup>\*\*</sup>FY 2005 was a planning year for SAMHSA's SPF SIG program, and FY 2006 was the year in which most States began to operationalize the program in communities. Therefore, FY 2007 is the first full year in which this program was operational.

\*\*\*\*Amounts may include carryover from a previous year or obligations using previous year obligations.

#### APPENDIX B

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#### PREFACE TO APPENDIX B

Federal funding supports a wide variety of surveys. Information about underage alcohol use, abuse, and consequences primarily comes from three federally funded surveys—the National Survey on Drug Use and Health (NSDUH), Monitoring the Future (MTF), and the national Youth Risk Behavior Survey (YRBS). Briefly, each of these three surveys makes a unique contribution to our understanding of the nature of youth alcohol use. The NSDUH assesses illicit drug, alcohol, and tobacco use among non-institutionalized individuals age 12 and older and serves as the major Federal source of nationally representative data on substance use in the general population of the United States. The MTF examines attitudes and behaviors of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders with regard to alcohol, drug, and tobacco use and provides important data on both substance use and the attitudes and beliefs that may contribute to such behaviors. The YRBS examines various risk behaviors among high school students and provides vital information on specific behaviors that cause the most important health problems among youth in the United States today.

When viewing the results from these surveys, readers may encounter differences in results for some findings. To address questions related to differences in youth substance use prevalence estimates generated by these surveys and to improve the understanding of Federal policy makers regarding the influence of methodological differences on youth prevalence estimates, the Office of the Assistant Secretary for Planning and Evaluation within the Department of Health and Human Services, commissioned a group of recognized experts in the area of survey design, sampling techniques, and statistical analysis to write papers examining and comparing the methodologies in each survey. The commissioned papers and accompanying Federal commentaries can be found in a special issue of Journal of Drug Issues (Volume 31, Number 3, Spring 2001). These experts agreed that the overall methodology for each survey is strong and that observed differences are not the result of flaws or serious weaknesses in survey design. In fact, some differences are to be expected such as those resulting from home- vs. school-based settings. From a policy perspective, serious and complex issues such as youth alcohol use and related behavior often require examination and analysis from multiple perspectives. Given that no one survey is absolute or 100% precise, input from multiple sources is not only valuable but also necessary.

#### National Survey of Drug Use and Health (NSDUH)

NSDUH, the primary source of statistical information on the use of illegal drugs by the United States population age 12 and older, also collects information on use of alcohol; use of tobacco products; trends in initiation of substance use; prevention-related issues; substance dependence, abuse, and treatment; and mental health. Conducted since 1971, this annual survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their places of residence. The survey is sponsored by SAMHSA and is planned and managed by SAMHSA's Office of Applied Studies (OAS). Data collection is conducted under contract with RTI International. NSDUH collects information from residents of households, non-institutional group quarters (e.g., shelters, rooming houses, dormitories), and civilians living on military bases. Since 1999, the NSDUH has been carried out using computer-assisted

interviewing. Most of the questions are administered with audio computer-assisted selfinterviewing (ACASI). ACASI is designed to provide respondents with a highly private and confidential means of responding to questions to increase the level of honest reporting of illicit drug use and other sensitive behaviors. Less-sensitive items are administered using computerassisted personal interviewing (CAPI). The NSDUH is designed to be able to provide estimates for all 50 States and the District of Columbia, as well as national estimates. The design also over samples youth ages 12 to 17 and young adults ages 18 to 25. For the 2007 survey, 67,870 interviews were completed for a weighted response rate for interviewing of 73.9%. Prior to 2002, NSDUH was called the National Household Survey on Drug Abuse (NHSDA). Because of improvements to the Survey in 2002, the 2002 data constitute a new baseline for tracking trends in substance use. Therefore, SAMHSA recommends that estimates from 2002 forward not be compared with estimates from 2001 and earlier years of NHSDA.

#### **Monitoring the Future**

MTF measures alcohol, tobacco, and illicit drug use as well as perceived risk, personal disapproval, and perceived availability associated with each substance among nationally representative samples of students in public and private secondary schools throughout the conterminous United States. NIDA supports MTF through a series of investigator-initiated grants to the University of Michigan's Institute for Social Research. Every year since 1975, a national sample of 12<sup>th</sup> graders has been surveyed. Beginning in 1991, the survey was expanded to include comparable numbers of 8<sup>th</sup> and 10<sup>th</sup> graders each year. The study also includes representative samples of adults through age 45 from previous high school graduating classes, who are administered follow-up surveys by mail and representative samples of college students one to four years past high school, who are part of these follow-up samples. The 2007 numbers are 16,100 for 8th graders, 16,100 for 10th and 14,500 for 12th graders. University of Michigan staff members administer the questionnaires to students, usually in their classrooms during a regular class period. Questionnaires are self-completed and formatted for optical scanning. In 8th and 10<sup>th</sup> grades, the questionnaires are completely anonymous. In the 12<sup>th</sup> grade, they are confidential (to permit the longitudinal follow-up of a random subsample of participants). Extensive procedures are followed to protect the confidentiality of both the subjects and their data.

#### Youth Risk Behavior Survey

In the United States in the late 1980s, only a limited number of health-related school-based surveys such as MTF existed. Therefore, CDC developed the Youth Risk Behavior Surveillance System (YRBSS) to monitor 6 categories of priority health risk behaviors that contribute substantially to the leading causes of death, disability, and social problems among youth and young adults. YRBSS includes biennial national, State, and local school-based surveys of representative samples of students in grades 9 through 12, as well as other national and special population surveys. The national survey—the YRBS—is conducted by CDC. The target population of the national survey comprises all public and private high school students in the 50 States and the District of Columbia. The State and local surveys are conducted by education and health agencies. The national sample is not an aggregation of the State and local surveys, and State and local estimates cannot be obtained from the national sample. In 2007, 14,103 students completed the national YRBS with an overall response rate of 68%.

#### **Additional Surveys**

Three additional Federally supported surveys collect information on alcohol consumption and related information of a segment of the underage population-those 18 to 20 years of age. The first is the NESARC. The second is the Worldwide Surveys of Substance Abuse and Health Behaviors Among Military Personnel. The third is the National Health Interview Survey (NHIS). The NESARC, a large nationwide household survey sponsored by NIAAA and fielded by the Census Bureau, was designed to assess the prevalence of alcohol use disorders and their associated disabilities in the general population age 18 and older. NESARC is a longitudinal survey with the first wave fielded in 2001-2002. The second wave of NESARC was conducted in 2005 among the individuals who participated in Wave 1 and will yield longitudinal information that will be available in 2008. Begun in the early 1980s and fielded every 2 to 4 years, the worldwide survey was designed to measure prevalence of substance use and health behaviors among active-duty military personnel on United States military bases worldwide. In 2005, the Department of Defense (DoD) initiated the DoD Lifestyle Assessment Program, which incorporates the active duty health behaviors study and expands the scope to include the National Guard and Reserves as well as other special studies. Data from the 2005 survey, now called the DoD Survey of Health Related Behaviors Among Active Duty Military Personnel, became available in December 2006. Begun in 1957, the NHIS is a household, multistage probability sample survey conducted annually by interviewers of the United States Census Bureau for the Centers for Disease Control and Prevention's National Center for Health Statistics (Pleis & Lethbridge-Cejku, 2007). Information from these three surveys related to underage drinkers ages 18 to 20 may be a valuable addition to the report in future years when Wave 2 NESARC data are available.

#### Purpose of the Data Appendix

Extensive information on underage alcohol use can be found in a variety of sources. The purpose of this data appendix is to provide the reader with one convenient location in which to find the latest statistics on underage drinking. Topics covered in the appendix include age of initiation of drinking and related information; alcohol use, binge use, and heavy alcohol use; alcohol abuse and dependence; drinking and driving; perceptions and attitudes related to alcohol; and other risky behaviors. Many of the tables presented here were created specifically for this report. Others, such as detailed tables from NSDUH data, are routinely produced and posted on the SAMHSA Web site but are not routinely published in printed reports. To keep this appendix to a manageable size, most of the statistics are presented in the form of percentages. To provide readers with a frame of reference for appreciating the magnitude of underage alcohol use, Table 7, "Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in the Past Month Among Persons Ages 12–20, by Demographic Characteristics: Numbers in Thousands (National Survey on Drug Use and Health, 2005, 2006 and 2007)" has been included. Table 8 presents the same information as percentages. For the majority of the other tables, information is presented as percentages only. A link to the Web site for the annual report is under development. When it is available, the tables containing the corresponding numbers will be added to the Web site, as will tables reporting standard error and P-values.

#### Association vs. Causation

In the section on other risky behaviors, data related to a number of risky behaviors are displayed by categories of alcohol use. When viewing this data, it is important for readers to keep in mind that association does not prove causation. Just because alcohol use is associated with other risky behaviors is not proof that alcohol use causes these other risky behaviors. Additional research must be done to establish whether alcohol is a causative factor.

#### Additional Methodological Caveats

The age of initiation of alcohol use is an important topic. When reviewing studies in this area, it is important to recognize that different researchers have used different methods to describe initiation of drinking and to estimate the average age at first use of alcohol. In some cases, large differences in estimates have resulted, primarily due to differences in how age groups and time periods are specified in the calculations. To help readers understand the impact of these different calculation methods, a few examples are discussed here. A popular method for computing the average age involves restricting the age group of estimation to persons ages 12 to 17 or 12 to 20, with no restriction on the time period. This method provides an estimate of the average age of first use among persons in the age group who have ever used alcohol in their lifetime, and typically this results in a younger estimated average age of first use than other methods. This is because initiation occurring in older age groups is excluded from the calculation, and also because the calculation gives too much weight to very early initiation. For example, 15-year-olds who will first use at age 17 are excluded because they have not yet used alcohol at the time of data collection. Thus, based on the 2003 NSDUH, the average age of first use among lifetime alcohol users age 12 to 20 is 14.0 years, the average age of first use among 20-year-olds is 15.4 years, and the average age of first use among all lifetime drinkers is 16.8 years old.

The above method has limited utility for assessing trends because estimates do not reflect a welldefined recent time period. A 20-year-old may have first used alcohol at age 10, so an average age of first use among 12- to 20-year-olds would span a period covering as much as 10 years. Besides not reflecting the most current patterns, year-to-year change in this average is typically negligible due to the substantial overlap in the covered time periods. Trends in average age of initiation are best measured by estimating the average age among those who initiated alcohol use during a specific time period such as a calendar year or within the 12 months prior to interview in a repeated cross-sectional survey. These estimates also can be made with or without age restrictions. For example, the average age of first use among persons in 2003 who initiated within the past 12 months was 16.5 years, but restricting the calculation to just those who initiated before age 21 results in an average age of 15.6. Based on the 2003 NSDUH, an estimated 11% of recent initiates were age 21 or older when they first used.

It should also be mentioned that estimates of average age of first use among recent initiates based on the NSDUH sample of persons 12 and older is biased upward because it does not capture all of the initiation occurring prior to age 12. An estimated 6.6% of alcohol initiates during 1990– 1999 were age 11 or younger, based on the 2003 NSDUH. Exclusion of these early initiates from the calculation inflates the estimates of average age by approximately a half-year. Using NSDUH, this bias can be diminished by making estimates only for time periods at least two years prior (e.g., from 2003 NSDUH, estimate average age at first use for 2001, but not 2002), an approach used in prior NSDUH reports. Although it provides interesting historical data, it does not give timely information on emerging patterns of alcohol initiation.

Serious bias concerns also are associated with historical estimates of the number of initiates and their average age at first use constructed from retrospectively reported age at first use. Memory errors are more likely to occur for the older respondents—they may not remember when an event occurred. Moreover, an event may be remembered as having occurred more recently than it actually did—a kind of "forward telescoping" of the recalled timing of events. Evidence of telescoping, such as when respondents report a more recent time of first use than is true, suggests that trend estimates based on reported age at first use may be misleading. For example, in the 2006 MTF, alcohol use by the end of 6<sup>th</sup> grade is reported by 19.4% of the 2006 8<sup>th</sup> graders but by only 5.2% of the 2006 12<sup>th</sup> graders.

In addition to the above-mentioned telescoping, several other factors also probably contribute to this difference. One is that eventual dropouts are more likely than average to drink at an early age. Thus, they will be captured as 8<sup>th</sup> graders but not as 12<sup>th</sup> graders. The lower grades also have lower absentee rates. Another is related to the issue of what is meant by first use of an alcoholic beverage. Those in 12<sup>th</sup> grade are more inclined to report only use that is not adult-approved and do not count having less than a glass with parents or for religious purposes. Younger students may be more likely to report first use of a limited amount of alcohol. Thus 8<sup>th</sup> and 9<sup>th</sup> grade data probably exaggerate drinking while 11<sup>th</sup> and 12<sup>th</sup> grade data may understate it.

#### Web sites for Data on Underage Drinking

The following Federal Web sites can be useful to those seeking data related to underage drinking:

- 1. Information from SAMHSA data on underage drinking is available at <u>http://oas.samhsa.gov/underage.cfm</u>.
- 2. Data from the YRBSS are available at <u>www.cdc.gov/HealthyYouth/yrbs/index.htm</u>.
- 3. Information from NHTSA on underage drinking, and on drinking and driving, is available at <a href="https://www.nhtsa.gov/portal/site/nhtsa/menuitem.18e416bf1b09b6bbbf30811060008a0c">www.nhtsa.gov/portal/site/nhtsa/menuitem.18e416bf1b09b6bbbf30811060008a0c</a> and <a href="https://www.nhtsa.gov/portal/site/nhtsa/menuitem.a0bd5d5a23d09ec24ec86e10dba046a0">www.nhtsa.gov/portal/site/nhtsa/menuitem.a0bd5d5a23d09ec24ec86e10dba046a0</a>.
- 4. Information from NIAAA on underage drinking is available at <u>www.niaaa.nih.gov/AboutNIAAA/NIAAASponsoredPrograms/underage.htm</u>
- 5. Information from NIDA's Monitoring the Future survey is available at <u>www.monitoringthefuture.org</u>.

## AGE OF INITIATION OF DRINKING

	mousanus anu percentages											
Demographic Characteristic	Number of Past-Year Initiates (1,000s) <sup>1</sup>			Percentage of Past-Year Initiates <sup>1</sup>			Percentage of Past-Year Initiates Among Persons at Risk for Initiation <sup>1,2</sup>			Percentage of Past-Year Initiates Among Past-Year Users <sup>1</sup>		
	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007
TOTAL	4,274	4,381	4,559	1.8	1.8	1.8	9.3	9.3	9.4	2.6	2.7	2.8
AGE												
12-17	2,749	2,698	2,689	10.8	10.6	10.7	15.4	15.1	15.0	32.5	32.3	33.6
12-13	434	391	369	5.3	4.9	4.5	5.9	5.4	5.0	48.0	46.3	46.6
14-15	1,188	1,116	1,152	13.7	12.7	13.5	19.0	17.8	18.3	40.3	38.1 <sup>b</sup>	42.9
16-17	1,127	1,191	1,168	13.4	14.0	13.6	27.0	27.4	26.9	24.5	26.0	25.7
18-25	1,421 <sup>b</sup>	1,623	1,757	4.4 <sup>b</sup>	5.0	5.4	23.4 <sup>a</sup>	26.8	26.6	5.6 <sup>b</sup>	6.3	6.9
18-20	<b>998</b> <sup>a</sup>	1,150	1,173	$7.7^{\mathrm{a}}$	9.0	8.9	27.7	31.7	29.4	$10.8^{a}$	12.4	12.6
21-25	423 <sup>b</sup>	473 <sup>a</sup>	584	$2.2^{b}$	$2.4^{a}$	3.0	17.1 <sup>b</sup>	19.5	22.3	2.6 <sup>b</sup>	2.9 <sup>a</sup>	3.6
26 or Older	105	60	112	0.1	0.0	0.1	0.5	0.3	0.5	0.1	0.0	0.1
GENDER												
Male	$1,988^{a}$	2,174	2,200	1.7	1.8	1.8	10.9	11.5	11.2	2.4	2.6	2.6
Female	2,286	2,208	2,359	1.8	1.7	1.8	8.3	7.8	8.2	2.9	2.8	3.0
GENDER/AGE												
Male 12-17	1,270	1,305	1,293	9.8	10.1	10.0	14.1	14.4	14.3	30.7	31.3	31.9
Female 12-17	1,479	1,393	1,397	11.9	11.2	11.3	16.8	15.9	\15.7	34.3	33.3	35.3

Table 1. Past-year initiation of alcohol use among persons aged 12 or older, persons aged 12 or older at risk for initiation of alcohol use, and past-year alcohol users aged 12 or older, by demographic characteristics: Numbers in thousands and nercentages

\* Low precision, no estimate reported.

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level. <sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

<sup>1</sup> Past-Year Initiates are defined as persons who used the substance(s) for the first time in the 12 months prior to date of interview.

<sup>2</sup> At Risk for Initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005, 2006, and 2007.

					Mean Age				
		Total			Male			Female	
Substance	2005	2006	2007	2005	2006	2007	2005	2006	2007
ALCOHOL	16.8	16.6	17.0	16.7	16.5	17.0	16.9	16.6	16.9
Initiated prior to age 21 <sup>1</sup>	15.6 <sup>a</sup>	15.8	15.8	15.7	15.9	15.9	15.5 <sup>a</sup>	15.7	15.8
ILLICIT DRUG <sup>2,3</sup>	22.0	19.1	19.2	19.2	19.2	17.5	24.1	19.0	20.6
Marijuana and Hashish	20.6	17.4	17.8	19.0	17.4	17.6	22.0	17.4	18.0
Cocaine	20.2	20.7	20.2	20.8	21.0	20.9	19.4	20.3	19.2
Crack	23.4 <sup>b</sup>	24.1 <sup>b</sup>	33.8	22.0 <sup>b</sup>	23.9 <sup>b</sup>	37.4	24.5	24.5	24.6
Heroin	22.2	20.7	21.8	22.6	20.0	21.1	21.7	21.8	23.3
Hallucinogens	18.7	19.7	19.4	19.2	17.8 <sup>b</sup>	19.4	18.0	21.2	19.5
LSD	18.3	19.4	18.3	18.9	19.3	18.6	16.8	19.6	17.6
PCP	16.5	16.3	16.4	16.6	15.8	16.0	16.4	16.7	17.2
Ecstasy	20.8	21.1	20.2	21.3	19.1 <sup>a</sup>	20.9	20.2	$22.6^{a}$	19.4
Inhalants	16.1	$15.7^{a}$	17.2	16.4	15.7 <sup>a</sup>	17.5	15.8	15.6	16.8
Nonmedical Use of Psychotherapeutics <sup>3,4</sup>	24.8	23.1	23.8	22.6	21.5	21.7	26.3	24.2	25.6
Pain Relievers	23.6	22.4	22.6	21.9	21.9	21.6	24.9	22.8	23.6
OxyContin <sup>®</sup>	26.3	23.8	25.8	27.4	23.6	24.6	24.8	24.1	26.8
Tranquilizers	26.7	24.2	26.3	25.8	22.9	24.1	27.4	25.1	27.9
Stimulants <sup>3</sup>	20.1	23.0	21.9	20.2	19.7	19.0	20.1	24.7	23.3
Sedatives	35.0 <sup>a</sup>	30.0	24.2	28.4	19.9	23.5	38.4 <sup>a</sup>	33.4 <sup>a</sup>	24.8
ILLICIT DRUG OTHER THAN MARIJUANA <sup>2,3</sup>	22.5	20.9	21.4	19.9	20.1	19.1	24.3	21.5	23.4
CIGARETTES	17.3	17.1	16.9	17.2	16.7	16.7	17.3	17.4	17.1
Daily Cigarettes <sup>3</sup>	19.7	19.3	19.2	19.2	19.9	19.2	20.2	18.7	19.3

Table 2. Mean age at first use among past-year initiates of substance use aged 12 or older, by gender

\*\* Low precision, no estimate reported.

NOTE: Past-Year Initiates are defined as persons who used the substance(s) for the first time in the 12 months prior to date of interview.

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level.

<sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

<sup>3</sup> Estimates in these designated rows do not include data from methamphetamine initiation items added in 2007 or methamphetamine use items added in 2005 and 2006.

<sup>4</sup> Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-thecounter drugs.

<sup>5</sup> Daily Cigarette Use is defined as ever smoking every day for at least 30 days.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005, 2006, and 2007.

 <sup>&</sup>lt;sup>1</sup> Mean age of first use among past year initiates of alcohol use who were age 20 or younger.
 <sup>2</sup> Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

	NUMBE	<b>P</b> OF INITIATE	1705-2000	MEAN	AGE-SPECI	FIC RATES <sup>1</sup>
Veen		Under 19	18 on Oldon	MEAN	10 17	19 25
<u>1065</u>	All Ages	1 446	18 of Older	17.2	12-17	220.6
1905	2,921	1,440	1,470	17.3	73.4	230.0
1900	3,134	1,728	1,400	17.5	94.J 105.1	210.8
1907	3,537	1,971	1,580	10.8	103.1 00 /	213.8
1060	3,536	2.046	1,092	17.4	108.0	205.1
1970	3,550	2,040	1,455	16.9	125.2	237.3
1971	3,676	2,557	1,435	16.9	112 7	250.3
1972	4 105	2,130	1,520	16.8	137.5	250.5
1973	3 984	2,524	1 460	16.6	136.0	242.1
1974	4.164	2.685	1,479	16.7	147.5	254.3
1975	3.955	2,555	1.400	16.7	137.3	244.1
1976	3.845	2,508	1.337	16.5	136.8	243.7
1977	4,245	2,751	1,495	16.9	155.4	260.9
1978	3.871	2,561	1.310	16.6	147.7	245.8
1979	3,697	2,431	1,266	16.5	145.0	240.0
1980	3,642	2,389	1,253	16.7	148.6	234.7
1981	3,565	2,291	1,274	17.1	144.3	238.8
1982	3,375	2,275	1,099	16.8	141.3	202.1
1983	3,478	2,492	985	16.4	156.8	179.5
1984	3,353	2,316	1,037	16.4	148.3	192.7
1985	3,451	2,240	1,211	16.8	150.0	225.9
1986	3,387	2,174	1,213	17.0	150.1	220.3
1987	3,218	2,154	1,064	16.9	156.7	199.5
1988	2,885	1,859	1,026	16.9	133.8	191.8
1989	2,750	1,676	1,074	17.1	115.6	198.4
1990	3,046	1,871	1,175	17.1	127.6	222.6
1991	2,862	1,773	1,089	17.0	115.2	211.0
1992	3,142	1,965	1,177	17.0	122.4	227.7
1993	3,185	2,102	1,082	16.6	128.5	209.9
1994	3,218	2,092	1,126	16.6	127.3	219.5
1995	3,298	2,165	1,133	16.5	129.8	214.4
1996	3,366	2,204	1,163	16.7	129.6	214.6
1997	3,552	2,246	1,306	16.9	130.9	230.9
1998	3,574	2,201	1,373	17.2	126.9	246.5
1999	3,583	2,298	1,284	16.6	128.1	233.9
2000	3,746	2,406	1,340	16.7	128.9	237.8
2001	3,945	2,530	1,415	17.0	131.6	240.4
2002	4,207	2,836	1,371	16.7	146.3	239.4
2003	4,588	3,123	1,465	16.7	165.9	259.3
2004-	4,886	3,408	1,4/9	16.4	1/9.1	259.8
$2005^{-1}$	5,494	3,768	1,726	16.4	201.4	303.9
2006			1,/11		223.0	314.5

Table 3. Numbers (in thousands) of persons who first used alcohol in the United States, their mean age at first use, and rates of first use (per 1,000 person-years of exposure): 1965-2006

<sup>\*</sup>Low precision; no estimate reported.

-- Not available.

NOTE: Comparisons between years, particularly between recent estimates and those from 10 or more years prior, should be made with caution due to potential reporting and other biases.

<sup>1</sup>The numerator of each rate is the number of persons in the age group who first used the drug in the year, while the denominator is the person-time exposure of persons in the age group measured in thousands of years.

<sup>2</sup>Estimated using 2006 and 2007 data only.

<sup>3</sup>Estimated using 2007 data only

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005, 2006, and 2007.

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Cotogory	Fema	ale	Mal	e	Total		
Category —	%	CI <sup>†</sup>	%	CI <sup>†</sup>	%	CI <sup>†</sup>	
Race/Ethnicity							
White, non-Hispanic	17.8	±2.2	25.0	±4.2	21.5	$\pm 2.8$	
Black, non-Hispanic	22.7	±3.7	30.7	±4.5	26.7	±2.6	
Other, <sup>‡</sup> non-Hispanic	21.8	$\pm 4.8$	25.9	±4.7	23.9	±3.6	
Hispanic	24.2	±2.3	33.6	±2.6	29.0	±1.5	
Grade							
9	27.1	±3.3	34.5	±4.7	30.9	±2.9	
10	22.2	±3.1	26.6	±3.3	24.4	±2.4	
11	13.8	$\pm 2.4$	25.1	$\pm 2.4$	19.6	±1.9	
12	14.8	±2.7	21.2	±4.3	18.0	±3.0	
Total	20.0	±1.9	27.4	±2.7	23.8	±1.9	

Table 4. Percentage of U.S. high school students who drank alcohol<sup>\*</sup> for the first time before age 13 years, by sex, race/ethnicity, and grade

<sup>\*</sup>Other than a few sips. <sup>†</sup>95% Confidence interval. <sup>‡</sup>Other includes Asian, Native Hawaiian, Pacific Islander, American Indian, Alaska Native, and multiple races.

Source: Youth Risk Behavior Survey, 2007

	Years							
Category	Female	Male	Total					
Race/Ethnicity								
White, non-Hispanic	13.5	12.9	13.2					
Black, non-Hispanic	13.0	12.3	12.6					
Other <sup>*</sup> , non-Hispanic	13.0	12.6	12.8					
Hispanic	13.1	12.4	12.7					
Grade								
9	12.1	11.6	11.9					
10	13.0	12.6	12.8					
11	13.8	13.1	13.4					
12	14.2	13.6	13.9					
Total	13.3	12.7	13.0					

Table 5. Mean age of first drink of alcohol among U.S. high school students, by sex, race/ethnicity, and grade

\* Other includes Asian, Native Hawaiian or other Pacific Islander, American Indian or Alaska Native, and multiple races.

Source: Youth Risk Behavior Survey, 2007

### ALCOHOL USE, BINGE DRINKING, AND HEAVY DRINKING

used before grade 7													
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
8th Graders													
Percent who ever used	54.5	55.3	53.8	52.5	52.1	51.7	50.5	47.0	45.6	43.9	41.0	40.5	38.9
Percent of ever users who first used before grade 7	54.3	54.4	51.9	54.1	52.6	51.3	52.3	48.9	52.0	47.6	49.0	47.9	49.1
10th Graders													
Percent who ever used	70.5	71.8	72.0	69.8	70.6	71.4	70.1	66.9	66.0	64.2	63.2	61.5	61.7
Percent of ever users who first used before grade 7	22.8	22.1	21.4	22.3	22.4	22.5	20.8	22.3	22.3	19.3	19.0	17.2	18.2
12th Graders													
Percent who ever used	80.7	79.2	81.7	81.4	80.0	80.3	79.7	78.4	76.6	76.8	75.1	72.7	72.2
Percent of ever users who first used before grade 7	12.1	10.4	11.8	9.7	9.8	9.7	10.8	8.5	9.4	10.0	7.7	7.2	8.4

Table 6. Percent of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders who have ever used alcohol and percent of alcohol users in these grades who first used before grade 7

Source: SAMHSA/OAS, based on data from University of Michigan, Monitoring the Future

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				Тур	e of Alcoho	Use			
		Alcohol Us	е	Bir	nge Alcohol	Use	Неа	avy Alcohol	Use
Demographic Characteristic	2005	2006	2007	2005	2006	2007	2005	2006	2007
TOTAL	10,819	10,823	10,730	7,197	7,239	7,172	2,296	2,359	2,313
GENDER									
Male	5,658	5,752	5,609	4,175	4,192	4,158	1,492	1,561	1,532
Female	5,160	5,072	5,122	3,022	3,047	3,015	803	798	781
HISPANIC ORIGIN AND RACE									
Not Hispanic or Latino	9,098	9,097	8,992	6,008	6,116	5,996	2,015	2,035	2,023
White	7,568	7,446	7,440	5,224	5,222	5,205	1,838	1,880	1,852
Black or African American	1,077	1,063	1,031	516	495	471	101	73	86
American Indian or Alaska Native	52	73	66	44	55	*	15	11	*
Native Hawaiian or Other									
Pacific Islander	15	*	*	10	*	*	2	*	6
Asian	249	324	261	119	193	149	20	21	30
Two or More Races	137	152	164	95	115	103	40	35	31
Hispanic or Latino	1,721	1,726	1,738	1,189	1,123	1,176	281	324	290
GENDER/RACE/HISPANIC ORIGIN									
Male, White, Not Hispanic	3,904	3,916	3,912	2,963	2,975	2,999	1,171	1,217	1,221
Female, White, Not Hispanic	3,664	3,530	3,528	2,261	2,247	2,206	667	664	631
Male, Black, Not Hispanic	580	561	493	325	290	277	70	46	69
Female, Black, Not Hispanic	496	502	538	191	205	194	31	27	16
Male, Hispanic	963	959	937	743	696	695	202	237	203
Female, Hispanic	759	767	802	445	426	481	79	88	88

## Table 7. Alcohol use, binge alcohol use, and heavy alcohol use in the past month among persons aged 12 to 20, by demographic characteristics: Numbers in thousands

\*Low precision; no estimate reported.

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level.

<sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005, 2006, and 2007.

	Type of Alcohol Use								
	Alcohol Use			Binge Alcohol Use			Heavy Alcohol Use		
Demographic Characteristic	2005	2006	2007	2005	2006	2007	2005	2006	2007
TOTAL	28.2	28.3	27.9	18.8	19.0	18.6	6.0	6.2	6.0
GENDER									
Male	28.9	29.2	28.4	21.3	21.3	21.1	7.6	7.9	7.8
Female	27.5	27.4	27.3	16.1	16.5	16.1	4.3	4.3	4.2
HISPANIC ORIGIN AND RACE									
Not Hispanic or Latino	28.7	29.0	28.6	19.0	19.5	19.1	6.4	6.5	6.4
White	32.3	32.3	32.0	22.3	22.7	22.4	7.8	8.2	8.0
Black or African American	19.0	18.6	18.3	9.1	8.6	8.4	1.8	1.3	1.5
American Indian or Alaska Native	21.7	31.3	28.3	18.1	23.6	*	6.0	4.7	*
Native Hawaiian or Other	10.0	-14	-14	0.4	-14	ste	1.4	.14	4.7
Pacific Islander	12.0	*	*	8.4	*	*	1.4	*	4.7
Asian	15.5	19.7	16.8	7.4	11.8	9.6	1.2	1.3	1.9
Two or More Races	24.0	27.5	26.2	16.6	20.7	16.4	7.1	6.3	5.0
Hispanic or Latino	25.9	25.3	24.7	17.9	16.5	16.7	4.2	4.8	4.1
GENDER/RACE/HISPANIC ORIGIN									
Male, White, Not Hispanic	32.6	33.2	32.7	24.7	25.2	25.1	9.8	10.3	10.2
Female, White, Not Hispanic	31.9	31.4	31.2	19.7	20.0	19.5	5.8	5.9	5.6
Male, Black, Not Hispanic	20.4	18.7	17.2	11.4	9.7	9.7	2.5	1.5	2.4
Female, Black, Not Hispanic	17.6	18.4	19.4	6.8	7.5	7.0	1.1	1.0	0.6
Male, Hispanic	27.9	26.7	25.8	21.5	19.4	19.2	5.9	6.6	5.6
Female, Hispanic	23.7	23.8	23.5	13.9	13.2	14.1	2.5	2.7	2.6

 Table 8. Alcohol use, binge alcohol use, and heavy alcohol use in the past month among persons aged 12 to 20,

 by demographic characteristics: Percentages

\*Low precision; no estimate reported.

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level.

<sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005, 2006, and 2007.
	Past-Month	n Alcohol Use	Past-Month Binge Alcohol Use <sup>1</sup>					
• · · ·	<b>_</b>	95% Confidence	<b>_</b>	95% Confidence				
State	Percentage		Percentage	Interval				
Total	28.2	(27.6 - 28.7)	18.8	(18.3 - 19.3)				
Alabama	24.1	(20.3 - 28.5)	15.3	(12.4 - 18.7)				
Alaska	27.0	(24.0 - 30.2)	17.9	(15.2 - 21.0)				
Arizona	28.4	(25.2 - 31.9)	18.5	(16.2 - 21.1)				
Arkansas	28.5	(24.5 - 32.7)	20.1	(17.2 - 23.3)				
California	25.9	(24.3 - 27.7)	16.6	(15.2 - 18.1)				
Colorado	32.1	(28.5 - 36.1)	21.8	(18.6 - 25.3)				
Connecticut	33.0	(27.4 - 39.1)	23.4	(18.2 - 29.5)				
Delaware	28.5	(24.8 - 32.6)	19.6	(16.4 - 23.2)				
District of Columbia	32.3	(27.4 - 37.7)	23.6	(18.7 - 29.4)				
Florida	28.0	(25.6 - 30.5)	17.9	(15.7 - 20.3)				
Georgia	23.5	(20.1 - 27.2)	14.4	(11.4 - 17.9)				
Hawaii	23.8	(21.1 - 26.8)	16.6	(14.3 - 19.3)				
Idaho	21.6	(18.5 - 25.1)	16.0	(13.4 - 18.9)				
Illinois	28.6	(27.0 - 30.2)	19.6	(18.1 - 21.1)				
Indiana	25.4	(21.1 - 30.3)	18.1	(14.1 - 23.1)				
Iowa	30.1	(26.9 - 33.4)	21.1	(18.1 - 24.5)				
Kansas	31.2	(27.3 - 35.2)	23.1	(19.7 - 26.8)				
Kentucky	28.0	(25.2 - 31.1)	19.0	(16.3 - 22.0)				
Louisiana	29.1	(25.6 - 32.9)	17.3	(14.2 - 20.9)				
Maine	31.4	(27.5 - 35.6)	21.4	(17.9 - 25.4)				
Marvland	27.8	(24.3 - 31.5)	16.9	(14.1 - 20.2)				
Massachusetts	33.6	(27.9 - 39.7)	24.0	(19.1 - 29.6)				
Michigan	28.7	(26.6 - 30.9)	19.2	(17.4 - 21.2)				
Minnesota	30.5	(26.6 - 34.7)	22.5	(19.5 - 25.7)				
Mississippi	22.6	(19.1 - 26.6)	15.8	(13.2 - 18.6)				
Missouri	30.5	(25.7 - 35.8)	21.3	(13.2 - 10.0) (17.4 - 25.9)				
Montana	34.7	(30.3 - 39.3)	26.6	(17.4 23.3) (22.6 - 31.1)				
Nebraska	32.9	(29.2 - 36.7)	22.5	(19.1 - 26.2)				
Nevada	26.3	(232 - 295)	17.5	$(19.1 \ 20.2)$ $(14.7 \ -20.7)$				
New Hampshire	32.4	(23.2  27.3)	22.7	(17.8 - 28.5)				
New Jersey	31.3	(27.1  50.2)	20.0	(17.0 - 20.3)				
New Mexico	28.8	(27.5 - 35.5) (25.7 - 32.2)	18.9	(10.9  23.4) (16.3 - 21.8)				
New York	32.3	(20.7 - 32.2)	20.8	(10.3 - 27.3)				
North Carolina	24.4	(19.4 - 30.3)	16.0	(19.3 - 22.3) (11.8 - 21.4)				
North Dakota	24.4	(1).7 = 30.3) (35.5 + 42.0)	20.7	(11.0 - 21.4) (26.1 - 22.6)				
Obio	30.3	(33.3 - 43.0) (28.7 - 31.0)	21.6	(20.1 - 33.0)				
Oklahoma	24.4	(20.7 - 31.9)	21.0 17.6	(20.0 - 25.2)				
Oragon	24.4	(20.7 - 28.0) (26.8 - 22.7)	10.0	(14.0 - 21.2) (17.1 - 22.1)				
Denneuluenie	28.2	(20.8 - 35.7) (26.5 - 30.2)	19.9	(17.1 - 25.1)				
Phodo Island	20.3	(20.3 - 30.2)	19.5	(17.9 - 20.9)				
South Corolino	30.0 22.0	(33.7 - 44.0)	23.0	(20.7 - 31.2)				
South Dalvata	22.9	(19.7 - 20.4)	13.9	(11.7 - 10.5)				
South Dakota	52.5	(28.8 - 36.4)	22.5	(19.5 - 25.8)				
Tennessee	22.4	(20.1 - 24.9)	14.7	(13.0 - 16.7)				
Texas	20.0	(24.4 - 27.7)	17.5	(15.9 - 18.8)				
Utan	17.3	(13.3 - 22.2)	13.4	(10.0 - 17.7)				
vermont	40.5	(33.3 - 48.2)	30.5	(23.6 - 38.3)				
virginia	27.9	(23.1 - 33.2)	18.3	(15.2 - 21.9)				
Washington	32.2	(27.9 - 36.8)	20.4	(15.8 - 26.0)				
West Virginia	28.8	(25.1 - 32.8)	19.6	(16.7 - 22.9)				
Wisconsin	35.5	(31.6 - 39.6)	25.7	(21.8 - 29.9)				
Wyoming	34.9	(31.1 - 38.9)	25.2	(21.7 - 29.0)				

Table 9. Past-month alcohol and binge alcohol use among persons aged 12 to 20, by State:
Percentages and confidence intervals

<sup>1</sup> Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.
 Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005, 2006, and 2007.

	Type of Alcohol Use												
		Alcohol Use	•	Bir	nge Alcohol	Use	He	avy Alcohol	Use				
Demographic Characteristic	2005	2006	2007	2005	2006	2007	2005	2006	2007				
TOTAL	4.2	3.9	3.5	2.0	1.5	1.5	0.2	$0.2^{a}$	0.1				
GENDER													
Male	3.5	3.5 <sup>a</sup>	2.6	1.7	1.5	1.2	0.3	0.2	0.1				
Female	4.9	4.2	4.4	2.2	1.4	1.8	0.2	0.3	0.1				
HISPANIC ORIGIN AND RACE													
Not Hispanic or Latino	3.9	3.9	3.3	1.6	1.4	1.3	$0.2^{\mathrm{a}}$	0.2	0.1				
White	4.0	4.3	3.5	1.4	1.4	1.3	0.2	0.2	0.1				
Black or African American	3.7	3.1	3.7	2.2	1.4	1.2	0.3	0.1	*				
American Indian or Alaska Native	4.0	*	*	3.7	*	*	*	*	*				
Native Hawaiian or Other													
Pacific Islander	*	*	*	*	*	*	*	*	*				
Asian	1.9	0.8	0.2	*	0.8	*	*	*	*				
Two or More Races	4.7	1.4	2.1	2.3	0.3	1.4	*	*	*				
Hispanic or Latino	5.5	3.5	4.2	3.4	1.5	2.5	0.4	0.4	0.1				
GENDER/RACE/HISPANIC ORIGIN													
Male, White, Not Hispanic	2.9	3.7	2.6	1.1	1.3	0.8	0.1	0.2	0.0				
Female, White, Not Hispanic	5.1	5.0	4.3	1.8	1.6	1.8	0.3	0.3	0.1				
Male, Black, Not Hispanic	3.8	4.2	2.2	2.6	2.5	1.3	0.4	0.2	*				
Female, Black, Not Hispanic	3.6	$1.8^{a}$	5.4	1.7	0.3	1.2	0.3	*	*				
Male, Hispanic	5.6	2.3	3.1	3.3	1.1	2.3	*	0.2	0.2				
Female, Hispanic	5.3	4.8	5.2	3.5	2.0	2.7	*	0.6	0.1				

## Table 10. Alcohol use, binge alcohol use, and heavy alcohol use in the past month among persons aged 12 to 13, by demographic characteristics: Percentages

\*Low precision; no estimate reported.

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

<sup>a</sup>Difference between estimate and 2007 estimate is statistically significant at the 0.05 level.

<sup>b</sup>Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

				Туре	e of Alcoho	l Use			
		Alcohol Us	e	Bing	e Alcohol L	lse	Heav	y Alcohol I	Jse
Demographic Characteristic	2005	2006	2007	2005	2006	2007	2005	2006	2007
TOTAL GENDER	15.1	15.6	14.7	8.0	8.9	7.8	1.7	1.2	1.4
Male	13.7	14.2	12.9	7.8	8.1	7.3	1.9	1.5	1.3
Female HISPANIC ORIGIN AND RACE	16.6	17.2	16.5	8.2	9.9	8.3	1.4	0.9	1.6
Not Hispanic or Latino	14.6	15.5	14.5	7.6	8.8	7.7	1.5	1.3	1.4
White	16.1	17.7	16.0	8.8	$10.4^{a}$	8.8	1.9	1.7	1.6
Black or African American	11.4	9.6	9.5	4.9	4.5	3.4	0.4	0.2	0.4
American Indian or Alaska Native Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*	*	*	*
Asian	6.5	4.4	5.9	1.3	2.9	3.0	0.1	*	*
Two or More Races	12.8	15.2	18.2	8.1	8.7	10.1	3.2	*	2.5
Hispanic or Latino GENDER/RACE/HISPANIC ORIGIN	17.6	16.4	15.5	9.7	9.4	8.3	2.2	0.9	1.5
Male, White, Not Hispanic	14.6	16.9 <sup>a</sup>	14.3	8.3	9.7	8.4	2.1	1.9	1.8
Female, White, Not Hispanic	17.7	18.7	17.9	9.2	11.2	9.1	1.7	1.5	1.4
Male, Black, Not Hispanic	9.7	7.1	8.1	4.6	2.8	3.3	0.4	0.1	*
Female, Black, Not Hispanic	13.0	12.3	10.9	5.2	6.3	3.5	0.4	0.2	0.7
Male, Hispanic	16.5	13.5	13.1	10.9	8.3	7.3	2.9	1.6	1.4
Female, Hispanic	18.7	19.6	17.9	8.5	10.6	9.4	1.5	0.0	1.6

# Table 11. Alcohol use, binge alcohol use, and heavy alcohol use in the past month among persons aged 14 to 15, by demographic characteristics: Percentages

\*Low precision; no estimate reported.

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

<sup>a</sup>Difference between estimate and 2007 estimate is statistically significant at the 0.05 level. <sup>b</sup>Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

	Type of Alcohol Use												
		Alcohol Use	)	Bir	nge Alcohol	Use	He	avy Alcohol	Use				
Demographic Characteristic	2005	2006	2007	2005	2006	2007	2005	2006	2007				
TOTAL	30.1	29.7	29.0	19.7	20.0	19.4	5.3	5.6	5.4				
GENDER													
Male	29.9	30.7	31.1	21.2	22.2	22.6	6.6	6.8	6.9				
Female	30.2 <sup>a</sup>	28.8	26.7	18.1	17.8	15.9	3.9	4.3	3.8				
HISPANIC ORIGIN AND RACE													
Not Hispanic or Latino	30.4	30.4	29.5	19.7	20.6	19.7	5.7	5.5	5.8				
White	34.7	34.6	33.6	23.4	24.2	23.4	6.9	7.1	7.2				
Black or African American	19.5	18.5	17.1	9.0	8.7	8.0	1.7	1.3	1.2				
American Indian or Alaska Native	*	*	*	*	*	*	*	4.2	*				
Native Hawaiian or Other													
Pacific Islander	*	*	*	*	*	*	*	*	*				
Asian	11.7	16.0	18.5	5.9	*	12.7	0.8	0.1	*				
Two or More Races	25.1	31.1 <sup>a</sup>	18.3	$17.7^{a}$	21.5 <sup>b</sup>	8.5	9.1 <sup>a</sup>	4.7	1.8				
Hispanic or Latino	28.1	26.5	26.3	19.7	17.5	17.5	3.5	5.7	3.5				
GENDER/RACE/HISPANIC ORIGIN													
Male, White, Not Hispanic	34.9	35.6	35.8	25.5	26.6	27.0	8.5	8.6	8.8				
Female, White, Not Hispanic	34.5	33.6	31.2	21.1	21.8	19.5	5.2	5.5	5.4				
Male, Black, Not Hispanic	20.4	19.0	18.5	11.6	10.0	9.3	2.7	1.5	1.8				
Female, Black, Not Hispanic	18.5	17.9	15.6	6.2	7.3	6.8	0.5	1.1	0.6				
Male, Hispanic	26.1	28.8	28.0	18.0	21.8	20.1	4.2	7.5	4.9				
Female, Hispanic	30.4	24.4	24.3	21.6 <sup>a</sup>	13.4	14.6	2.8	4.1	1.8				

# Table 12. Alcohol use, binge alcohol use, and heavy alcohol use in the past month among persons aged 16 to 17,by demographic characteristics: Percentages

\*Low precision; no estimate reported.

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

<sup>a</sup>Difference between estimate and 2007 estimate is statistically significant at the 0.05 level. <sup>b</sup>Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

	Type of Alcohol Use												
		Alcohol Use	)	Bir	nge Alcohol	Use	He	avy Alcohol	Use				
Demographic Characteristic	2005	2006	2007	2005	2006	2007	2005	2006	2007				
TOTAL	51.1	51.6	50.7	36.1	36.2	35.7	13.0	13.7	13.0				
GENDER													
Male	54.5	54.1	52.1	42.9	41.7	40.8	16.8	17.7	17.1				
Female	47.6	48.8	49.2	29.1	30.0	30.2	9.0	9.3	8.7				
HISPANIC ORIGIN AND RACE													
Not Hispanic or Latino	52.7	52.9	52.3	37.0	37.3	36.6	13.9	14.6	13.9				
White	58.4	57.9	57.2	43.1	43.0	42.2	17.0	18.2	16.9				
Black or African American	34.8	35.6	35.9	17.1	16.5	17.2	3.9	2.9	3.7				
American Indian or Alaska Native	*	*	*	*	*	*	*	8.1	*				
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*	*	*	*				
Asian	31.7	40.2	33.3	15.9	22.0	18.1	2.9	3.0	3.4				
Two or More Races	49.7	*	53.8	35.6	*	36.2	15.2	*	12.3				
Hispanic or Latino	43.8	45.6	43.5	31.9	30.9	31.4	8.6	9.8	9.0				
GENDER/RACE/HISPANIC ORIGIN													
Male, White, Not Hispanic	60.8	60.4	58.9	49.3	49.2	47.6	21.5	23.3	22.0				
Female, White, Not Hispanic	56.0	55.3	55.3	36.6	36.4	36.3	12.3	12.7	11.5				
Male, Black, Not Hispanic	39.8	36.1	33.4	22.5	18.9	20.3	5.2	3.4	6.2				
Female, Black, Not Hispanic	29.9 <sup>a</sup>	35.0	38.6	11.7	13.7	13.8	2.5	2.3	0.9				
Male, Hispanic	49.9	49.6	47.1	41.7	36.9	37.0	11.8	13.4	12.2				
Female, Hispanic	36.6	40.5	39.6	20.7	23.4	25.1	4.8	5.3	5.4				

## Table 13. Alcohol use, binge alcohol use, and heavy alcohol use in the past month among persons aged 18 to 20, by demographic characteristics: Percentages

\*Low precision; no estimate reported.

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

<sup>a</sup>Difference between estimate and 2007 estimate is statistically significant at the 0.05 level.

<sup>b</sup>Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

		Type of Alcohol Use													
		Alcohol Use		Bi	nge Alcohol U	lse	Heavy Alcohol Use								
Age Category	2005	2006	2007	2005	2006	2007	2005	2006	2007						
TOTAL	28.2	28.3	27.9	18.8	19.0	18.6	6.0	6.2	6.0						
12	2.5	1.9	2.2	1.3	0.6	0.9	0.1	*	0.1						
13	5.8	5.7	4.7	2.6	2.3	2.0	0.4	$0.5^{a}$	0.1						
14	10.6	11.8	10.0	5.2	6.2 <sup>a</sup>	4.5	$1.0^{a}$	0.7	0.4						
15	19.6	19.2	19.0	10.8	11.5	10.9	2.4	1.7	2.4						
16	27.0 <sup>a</sup>	27.3 <sup>b</sup>	23.8	16.8	18.2 <sup>b</sup>	15.1	4.2	4.5	3.8						
17	33.2	32.3	34.6	22.7	22.0	23.9	6.5	6.7	7.1						
18	44.4	46.2 <sup>a</sup>	41.8	30.8	32.7 <sup>a</sup>	28.9	10.6	12.8 <sup>b</sup>	9.6						
19	52.1	52.4	53.7	38.1	37.2	38.8	14.0	14.4	14.1						
20	57.6	56.9	57.8	39.9	39.0	40.3	14.5	14.0	15.8						

Table 14. Alcohol use, binge alcohol use, and heavy alcohol use in the past month, by detailed age category: Percentages

NOTE: Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level.

<sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

		Pregnancy Status						
Level of Alcohol Use/Age Group	Total <sup>1</sup>	Pregnant	Not Pregnant					
ALCOHOL								
Total	37.1	11.8	37.9					
15-17	25.9	15.9	26.0					
18-20	48.5	10.7	50.5					
BINGE ALCOHOL USE <sup>2</sup>								
Total	22.5	7.7	22.9					
15-17	15.3	9.5	15.3					
18-20	29.8	7.2	31.0					
HEAVY ALCOHOL USE <sup>2</sup>								
Total	6.1	1.4	6.3					
15-17	3.3	3.1	3.3					
18-20	9.0	1.0	9.5					

#### Table 15. Alcohol use in the past month among females aged 15 to 20, by pregnancy status and age group: Percentages

\*Low precision; no estimate reported.

<sup>1</sup> Estimates in the Total column are for all females aged 15 to 20, including those with unknown pregnancy status.

<sup>2</sup> Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Category	Fen	nale	Ма	ale	То	otal
	%	CI <sup>†</sup>	%	CI <sup>†</sup>	%	CI <sup>†</sup>
Race/Ethnicity						
White, non-Hispanic	47.1	±3.9	47.4	$\pm 4.1$	47.3	±3.4
Black, non-Hispanic	34.9	±4.2	34.1	$\pm 4.4$	34.5	±3.4
Other, <sup>‡</sup> non-Hispanic	36.4	±6.0	34.6	$\pm 5.8$	35.5	±4.6
Hispanic	47.5	±4.5	47.7	±4.1	47.6	±3.7
Grade						
9	37.2	±4.1	34.3	±4.3	35.7	±2.3
10	42.3	$\pm 4.4$	41.4	±4.2	41.8	±3.4
11	46.5	±4.7	51.5	±3.5	49.0	±3.7
12	54.2	±4.4	55.6	±5.7	54.9	±4.2
Total	44.6	±2.9	44.7	±2.9	44.7	±2.3

Table 16. Percentage of U.S. high school students who drank alcohol<sup>\*</sup> in the past 30 days, by sex, race/ethnicity, and grade

\* One or more drinks of alcohol on one or more of the 30 days preceding the survey † 95% Confidence Interval.

‡Other includes Asian, Native Hawaiian, Pacific Islander, American Indian, Alaska Native, and multiple races.

Source: Youth Risk Behavior Survey, 2007

Table 17. Percentage of U.S. high school students who drank five or more drinks of alcohol in a row on one or more of the past 30 days, by sex, race/ethnicity, and grade

Category	Fen	nale	Ма	ale	Total		
	%	CI <sup>†</sup>	%	CI <sup>†</sup>	%	CI <sup>†</sup>	
Race/Ethnicity							
White, non-Hispanic	27.9	±2.7	31.8	±3.7	29.8	±2.5	
Black, non-Hispanic	10.7	$\pm 2.0$	14.5	±2.7	12.5	±1.6	
Other, <sup>‡</sup> non-Hispanic	17.6	±5.4	20.4	±4.9	19.0	±4.5	
Hispanic	25.3	±3.6	28.3	±4.4	26.8	±3.4	
Grade							
9	17.2	±2.4	17.0	±3.4	17.0	±1.9	
10	21.8	±3.9	25.5	$\pm 3.8$	23.7	±3.0	
11	26.7	±4.1	33.1	$\pm 2.7$	29.9	±3.0	
12	32.8	±3.8	40.4	±5.2	36.5	±3.5	
Total	24.1	±2.2	27.8	±2.8	26.0	±2.0	

<sup>†</sup>95% Confidence Interval.

<sup>‡</sup> Other includes Asian, Native Hawaiian, Pacific Islander, American Indian, and Alaska Native.

Source: Youth Risk Behavior Survey, 2007

	Class of															
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Alcohol (never used in lifetime):																
12th Grade	7.5	6.9	7.0	6.8	7.4	7.2	7.4	7.4	7.8	8.7	7.8	8.0	9.3	10.5	12.0	12.5‡
Alcohol (30-day use):																
8th Grade															25.1	26.1‡
10th Grade															42.8	39.9‡
12th Grade	71.2	72.1	71.8	72.0	70.7	69.7	69.4	67.2	65.9	65.3	66.4	63.9	60.0	57.1	54.0	51.3‡
Beer (30-day use):																
8th Grade <sup>a</sup>															16.2	16.9
10th Grade <sup>a</sup>															31.1	28.9
12th Grade <sup>b</sup>	62.1	62.3	63.7	62.9	62.7	60.3	61.7	59.5	56.7	55.5	56.2	53.3	51.4	47.2	47.2	42.0
Liquor (30-day use):																
12th Grade <sup>b</sup>	45.0	48.2	47.3	47.9	44.6	45.2	46.4	42.3	40.0	41.0	39.0	35.6	35.7	30.8	31.3	28.6
Alcohol (5+ drinks in a row in past 2 weeks):																
8th Grade															12.9	13.4
10th Grade															22.9	21.1
12th Grade	39.4	40.3	41.2	41.2	41.4	40.5	40.8	38.7	36.7	36.8	37.5	34.7	33.0	32.2	29.8	27.9
College Students				43.9	43.6	44.0	43.1	45.4	44.6	45.0	42.8	43.2	41.7	41.0	42.8	41.4
Approx. Wtd. N's:																
8th Grade															17,500	18,600
10th Grade															14,800	14,800
12th Grade	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000	15,800

#### Table 18. Alcohol: Trends in various measures of use, by percent

(Continued on next page)

	Class of															
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	'06-'07 change
Alcohol (never used in lifetime):	00.0	40.0	10.0	00.0	40.0	40.0	00.0	40.7	2001	2002	2000	2004	2000	07.0	27.0	o r
	20.0	19.0	19.3	20.8	10.3	10.0	20.0	19.7	20.3	21.0	23.4	23.Z	24.9	27.3	27.8	-0.5
Alcohol (30-day use):																
8" Grade	24.3	25.5	24.6	26.2	24.5	23.0	24.0	22.4	21.5	19.6	19.7	18.6	17.1	17.2	15.9	+1.3
10 <sup>th</sup> Grade	38.2	39.2	38.8	40.4	40.1	38.8	40.0	41.0	39.0	35.4	35.4	35.2	33.2	33.8	33.4	+0.4
12 <sup>th</sup> Grade	48.6	50.1	51.3	50.8	52.7	52.0	51.0	50.0	49.8	48.6	47.5	48.0	47.0	45.3	44.4	+0.9
Beer (30-day use):																
8 <sup>th</sup> Grade <sup>a</sup>	17.4	18.3	18.8	18.4	16.7	16.2	16.6	15.2	15.0	12.3	12.0	14.4	12.8	12.0	12.2	+0.2
10 <sup>th</sup> Grade <sup>a</sup>	28.7	30.2	29.9	30.5	30.4	28.3	29.5	30.6	28.0	24.6	23.2	26.5	24.8	26.8	24.4	-2.4
12 <sup>th</sup> Grade <sup>b</sup>	43.4	42.6	44.9	46.9	44.4	45.6	42.7	42.7	41.5	39.7	37.8	38.3	38.0	35.5	36.6	+1.1
Liquor (30-day use):																
12 <sup>th</sup> Grade <sup>b</sup>	31.4	28.0	34.3	34.7	34.6	37.3	34.3	36.0	35.1	36.0	34.3	35.6	36.4	34.2	34.1	-0.1
Alcohol (5+ drinks in a row in past 2 weeks):																
8 <sup>th</sup> Grade	13.5	14.5	14.5	15.6	14.5	13.7	15.2	14.1	13.2	12.4	11.9	11.4	10.5	10.9	10.3	-0.6
10 <sup>th</sup> Grade	23.0	23.6	24.0	24.8	25.1	24.3	25.6	26.2	24.9	22.4	22.2	22.0	21.0	21.9	21.9	0.0
12 <sup>th</sup> Grade	27.5	28.2	29.8	30.2	31.3	31.5	30.8	30.0	29.7	28.6	27.9	29.2	28.1	25.4	25.9	+0.5
College Students	40.2	40.2	38.6	38.3	40.7	38.9	40.0	39.3	40.9	40.1	38.5					
Approx. Wtd. N's:																
8 <sup>th</sup> Grade	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	
10 <sup>th</sup> Grade	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	
12 <sup>th</sup> Grade	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	

Table 18. Alcohol:	Trends in	various measur	es of use. bv	percent (co	ntinued)
Laste Lot Hicohon		various measure		per cente (co	

‡ In 1993, the question text was changed slightly in half of the forms to indicate that a "drink" meant "more than just a few sips." The 1993 data are based on the changed forms only; N is one-half of N indicated. In 1994, the question text was changed in the remaining forms. Beginning in 1994, the data are based on all forms.

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, ss = .001. '--' indicates data not available. Any apparent inconsistency between the change estimate and the prevalence of use estimate for the two most recent classes is due to rounding error.

Data based on one of two forms in 1991-96; N is one-half of N indicated. Data based on one of four forms beginning in 1997. N is one-third of N indicated.

Data based on one of five forms in 1976-88; N is one-fifth of N indicated. Data based on one of six forms beginning in 1989. N is one-sixth of N indicated.

SOURCE: The Monitoring the Future Study, the University of Michigan.

						perec		uscu m	50 uays							
								C	ass of:							
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	'06-'07 change
8 <sup>th</sup> Grade:																
Alcohol	24.3	25.5	24.6	26.2	24.5	23.0	24.0	22.4	21.5	19.6	19.7	18.6	17.1	17.2	15.9	-1.3
Marijuana	5.1	7.8	9.1	11.3	10.2	9.7	9.7	9.1	9.2	8.3	7.5	6.4	6.6	6.5	5.7	-0.8
Cigarettes	16.7	18.6	19.1	21.0	19.4	19.1	17.5	14.6	12.2	10.7	10.2	9.2	9.3	8.7	7.1	-1.6
10 <sup>th</sup> Grade:																
Alcohol	38.2	39.2	38.8	40.4	40.1	38.8	40.0	41.0	39.0	35.4	35.4	35.2	33.2	33.8	33.4	-0.4
Marijuana	10.9	15.8	17.2	20.4	20.5	18.7	19.4	19.7	19.8	17.8	17.0	15.9	15.2	14.2	14.2	0.0
Cigarettes	24.7	25.4	27.9	30.4	29.8	27.6	25.7	23.9	21.3	17.7	16.7	16.0	14.9	14.5	14.0	-0.5
12 <sup>th</sup> Grade:																
Alcohol	48.6	50.1	51.3	50.8	52.7	52.0	51.0	50.0	49.8	48.6	47.5	48.0	47.0	45.3	44.4	-0.9
Marijuana	15.5	19.0	21.2	21.9	23.7	22.8	23.1	21.6	22.4	21.5	21.2	19.9	19.8	18.3	18.8	+0.5
Cigarettes	29.9	31.2	33.5	34.0	36.5	35.1	34.6	31.4	29.5	26.7	24.4	25.0	23.4	21.6	21.6	0.0
Approx. Wtd. N's:																
8 <sup>th</sup> Grade	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	
10 <sup>th</sup> Grade	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	
12 <sup>th</sup> Grade	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	

Table 19. Alcohol, marijuana, and cigarettes: 30-day use for 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders,

percent who used in 30 days

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, ss = .001. '--' indicates data not available. Any apparent inconsistency between the change estimate and the prevalence of use estimate for the two most recent classes is due to rounding error.

SOURCE: The Monitoring the Future Study, the University of Michigan.

‡ In 1993, the question text was changed slightly in half of the forms to indicate that a "drink" meant "more than just a few sips." The 1993 data are based on the changed forms only; N is one-half of N indicated. In 1994, the question text was changed in the remaining forms. Beginning in 1994, the data are based on all forms.

	Number of Drinks Consumed on Last Occasion of Alcohol Use         J									
Gender and Age Group	1 Drink	2 Drinks	3 or 4 Drinks	5 to 8 Drinks	9 or More Drinks	Drinks Consumed				
TOTAL	21.0	17.1	23.4	25.7	12.8	4.6				
GENDER										
Male	19.4	14.7	19.8	27.4	18.7	5.3				
Female	22.8	19.8	27.3	23.8	6.2	3.7				
AGE GROUP BY GENDER										
12 to 14	43.6	22.5	17.3	11.1	5.4	2.8				
Male	46.0	22.2	14.6	10.6	6.6	2.9				
Female	41.7	22.8	19.5	11.6	4.4	2.8				
15 to 17	23.7	17.4	22.5	24.7	11.8	4.4				
Male	22.8	15.2	18.7	26.7	16.7	5.0				
Female	24.7	19.7	26.4	22.7	6.5	3.7				
18 to 20	17.4	16.5	24.4	27.6	14.1	4.8				
Male	15.7	13.9	20.7	29.1	20.6	5.7				
Female	19.5	19.5	28.8	25.9	6.3	3.8				

 Table 20. Number of drinks consumed on last occasion of alcohol use in the past month among past-month alcohol users aged 12 to 20,

 by gender and age group: Percentage distributions and means

NOTE: Respondents with unknown responses to number of drinks consumed on last occasion of alcohol use were excluded.

			AGE GROUP	GENDER		
Source of Last Alcohol Use in the Past Month <sup>1</sup>	TOTAL	12-14	15-17	18-20	Male	Female
UNDERAGE DRINKER PAID	30.6	7.5	23.5	36.5	36.8	23.6
Purchased It Himself or Herself	8.8	1.7	5.0	11.4	11.4	5.9
From Store, Restaurant, Bar, Club, or Event	7.2	1.1	3.5	9.6	9.3	4.8
Liquor, Convenience, or Grocery Store	4.8	1.0	2.7	6.2	6.9	2.4
Restaurant, Bar, or Club	2.3	0.1	0.8	3.3	2.3	2.4
Concert, Sports, or Other Event	0.1	0.1	0.1	0.1	0.1	0.0
From Another Person	1.1	0.5	1.2	1.1	1.5	0.5
From Person under Age 21	0.4	0.3	0.6	0.3	0.5	0.2
From Person Aged 21 or Older	0.7	0.1	0.6	0.8	1.0	0.3
Purchased by Someone Else	21.7	5.6	18.3	25.0	25.3	17.6
Parent or Guardian	0.6	0.4	0.4	0.7	0.7	0.4
Another Family Member Aged 21 or Older	2.4	0.5	1.6	3.0	2.6	2.1
Someone Not Related Aged 21 or Older	15.7	3.0	12.2	18.7	17.9	13.3
Someone under Age 21	2.6	1.5	3.5	2.2	3.6	1.5
UNDERAGE DRINKER DID NOT PAY	69.4	92.5	76.5	63.5	63.2	76.4
Got It from Parent or Guardian	5.9	16.6	7.3	4.2	5.3	6.7
Got It from Another Family Member Aged 21 or Older	8.5	12.8	9.3	7.7	8.2	8.9
Got It from Someone Not Related Aged 21 or Older	26.4	13.4	20.3	30.5	22.1	31.0
Got It from Someone under Age 21	14.6	18.6	20.9	11.1	13.3	16.0
Took It from Own Home	3.9	14.0	5.3	2.2	4.0	3.8
Took It from Someone Else's Home	2.7	6.5	4.3	1.5	2.7	2.6
Got It Some Other Way	6.4	10.1	7.9	5.3	6.2	6.6
From Friend or Acquaintance, Unspecified Age and Method <sup>2</sup>	2.8	5.0	4.4	1.9	2.6	3.0

Table 21. Source of last alcohol use in the past month among past-month alcohol users aged 12 to 20, by age group and gender: Percentages

<sup>1</sup> Respondents with unknown responses were excluded. <sup>2</sup> Respondents were permitted to specify other sources for most recent alcohol use in the past month. This source is one of the most commonly reported other sources for most recent alcohol use in the past month.

			AGE GROUP	GENDER		
Social Context and Location of Last Alcohol Use	TOTAL	12-14	15-17	18-20	Male	Female
SOCIAL CONTEXT OF LAST ALCOHOL USE <sup>1</sup>						
Alone	4.9	10.3	5.3	4.1	6.4	3.3
With One Other Person	14.2	22.4	14.4	13.3	15.1	13.2
With Two or More Other People	80.9	67.3	80.3	82.6	78.5	83.5
LOCATION OF LAST ALCOHOL USE <sup>1,2</sup>						
In a Car or Other Vehicle	5.2	4.8	7.5	4.1	5.2	5.2
At Home	29.8	40.0	24.6	31.4	31.8	27.7
At Someone Else's Home	54.9	45.8	62.0	52.3	54.0	55.8
At a Park, on a Beach, or in a Parking Lot	4.6	7.2	7.3	3.0	4.5	4.8
At a Restaurant, Bar, or Club	9.4	4.4	3.7	12.7	6.7	12.4
At a Concert or Sports Game	1.5	1.2	1.7	1.5	1.6	1.5
At School	2.1	2.2	1.6	2.3	1.8	2.4
At Some Other Place <sup>3</sup>	6.9	7.8	8.5	5.9	6.8	7.0
Party, Wedding, or Celebration	2.2	2.7	2.8	1.8	1.7	2.7
Outside; location not specified	1.1	2.0	1.7	0.6	1.3	0.8
Hotel, Motel, or Resort	0.8	0.5	1.0	0.7	0.6	0.9
Camping, Hunting, or Fishing	0.4	0.4	0.6	0.3	0.3	0.4
Cabin, Cottage, Vacation Home, etc.	0.3	0.2	0.3	0.3	0.4	0.2
Dorm Room	0.2	*	0.1	0.3	0.1	0.3

Table 22. Social context and location of last alcohol use in the past month among past-month alcohol users aged 12 to 20, by age group and gender: Percentages

<sup>1</sup> Respondents with unknown responses were excluded.
 <sup>2</sup> Respondents could indicate multiple locations for the last time they used alcohol; thus, these response categories are not mutually exclusive.
 <sup>3</sup> Some Other Place includes only valid responses from the other-specify questions, including these six types of commonly reported locations.

			AGE GROUP	GENDER		
Social Context and Location of Last Alcohol Use	TOTAL	12-14	15-17	18-20	Male	Female
TOTAL	4.6	2.8	4.4	4.8	5.3	3.7
SOCIAL CONTEXT OF LAST ALCOHOL USE <sup>1</sup>						
Alone	2.9	2.1	2.7	3.3	3.2	2.3
With One Other Person	3.2	2.2	3.4	3.3	3.6	2.8
With Two or More Other People	4.9	3.1	4.7	5.2	5.9	3.9
LOCATION OF LAST ALCOHOL USE <sup>1,2</sup>						
In a Car or Other Vehicle	5.1	3.0	4.8	5.5	5.7	4.3
At Home	4.0	2.2	3.7	4.4	4.6	3.3
At Someone Else's Home	5.0	3.4	4.9	5.2	5.9	4.0
At a Park, on a Beach, or in a Parking Lot	5.2	4.2	5.1	5.7	6.2	4.2
At a Restaurant, Bar, or Club	4.7	2.2	4.7	4.8	6.0	4.0
At a Concert or Sports Game	6.1	3.4	6.2	6.3	7.8	4.2
At School	4.9	2.3	5.6	5.0	6.3	3.8
At Some Other Place <sup>3</sup>	5.5	3.2	4.9	6.2	6.7	4.1
Party, Wedding, or Celebration	4.6	2.8	4.1	5.3	5.6	3.9
Outside; location not specified	6.0	4.5	5.0	7.9	7.3	3.7
Hotel, Motel, or Resort	5.1	*	4.1	6.0	5.5	4.7
Camping, Hunting, or Fishing	5.0	*	5.0	5.5	6.3	3.8
Cabin, Cottage, Vacation Home, etc.	5.4	*	5.6	5.6	6.1	3.8
Dorm Room	3.9	*	*	3.9	5.5	2.9

Table 23. Mean number of drinks consumed on last occasion of alcohol use in the past month among past-month alcohol users aged 12 to 20, by social context and location of last alcohol use, age group, and gender: Percentages

NOTE: Respondents with unknown responses to number of drinks consumed on last occasion of alcohol use were excluded.

<sup>1</sup> Respondents with unknown responses were excluded.
 <sup>2</sup> Respondents could indicate multiple locations for the last time they used alcohol; thus, these response categories are not mutually exclusive.
 <sup>3</sup> Some Other Place includes only valid responses from the other-specify questions, including these six types of commonly reported locations.

			AGE GROUP	GEI	NDER	
Source of Last Alcohol Use in the Past Month <sup>1</sup>	TOTAL	12-14	15-17	18-20	Male	Female
TOTAL	4.6	2.8	4.4	4.8	5.3	3.7
UNDERAGE DRINKER PAID	6.0	4.8	6.3	6.0	6.9	4.5
Purchased It Himself or Herself	5.8	4.4	6.0	5.8	6.7	4.0
From Store, Restaurant, Bar, Club, or Event	5.8	4.3	5.9	5.8	6.7	3.9
Liquor, Convenience, or Grocery Store	6.4	*	6.2	6.5	7.1	4.3
Restaurant, Bar, or Club	4.5	*	4.7	4.5	5.4	3.6
Concert, Sports, or Other Event	7.9	*	*	9.2	8.8	*
From Another Person	6.4	*	6.5	6.3	6.7	5.3
From Person under Age 21	7.1	*	5.8	8.6	7.6	5.8
From Person Aged 21 or Older	6.0	*	7.3	5.5	6.2	5.0
Purchased by Someone Else	6.1	5.1	6.4	6.0	7.1	4.6
Parent or Guardian	5.3	*	5.3	5.4	6.0	3.9
Another Family Member Aged 21 or Older	5.2	*	5.4	5.2	6.0	4.2
Someone Not Related Aged 21 or Older	6.3	5.2	6.7	6.2	7.3	4.8
Someone under Age 21	6.4	5.1	6.3	6.5	7.2	4.3
UNDERAGE DRINKER DID NOT PAY	3.9	2.7	3.8	4.2	4.4	3.5
Got It from Parent or Guardian	2.5	1.7	2.1	3.1	2.7	2.3
Got It from Another Family Member Aged 21 or Older	3.6	2.3	3.5	3.9	4.1	3.2
Got It from Someone Not Related Aged 21 or Older	4.3	3.4	4.3	4.3	5.0	3.7
Got It from Someone under Age 21	4.2	3.2	4.0	4.5	4.6	3.8
Took It from Own Home	3.0	2.3	3.6	2.9	3.3	2.7
Took It from Someone Else's Home	3.7	2.6	3.7	4.1	3.8	3.6
Got It Some Other Way	4.4	3.4	4.3	4.7	4.9	3.9
From Friend or Acquaintance, Unspecified Age and Method <sup>2</sup>	3.9	3.7	4.1	3.8	4.1	3.7

Table 24. Mean number of drinks consumed on last occasion of alcohol use in the past month among past-month alcohol users aged 12 to 20, by source of last alcohol used in the past month, age group, and gender: Percentages

NOTE: Respondents with unknown responses to number of drinks consumed on last occasion of alcohol use were excluded.

 $^{1}$  Respondents with unknown responses were excluded.  $^{2}$  Respondents were permitted to specify other sources for most recent alcohol use in the past month. This source is one of the most commonly reported other sources for most recent alcohol use in the past month.

### ALCOHOL ABUSE AND DEPENDENCE

				Past-Year	Dependence	e or Abuse			
		Dependence	)		Abuse		Depe	endence or A	buse
Demographic Characteristic	2005	2006	2007	2005	2006	2007	2005	2006	2007
TOTAL	3.8	3.5	3.6	5.6	5.6	5.3	9.4	9.1	8.9
GENDER									
Male	4.0	3.4	3.8	6.1	6.2	6.0	10.0	9.6	9.7
Female	3.6	3.5	3.5	5.1	5.0	4.6	8.7	8.6	8.1
HISPANIC ORIGIN AND RACE									
Not Hispanic or Latino	3.7	3.5	3.7	5.7	5.8	5.6	9.4	9.3	9.2
White	4.4	3.9	4.2	6.5	6.9	6.7	10.9	10.8	10.8
Black or African American	1.6	1.8	1.8	2.8	2.2	2.4	4.4	4.0	4.1
American Indian or Alaska Native	7.1	5.1	4.6	6.3	5.9	8.3	13.4	10.9	12.9
Native Hawaiian or Other									
Pacific Islander	1.7	5.2	*	*	*	2.0	*	*	*
Asian	1.7	2.2	1.8	2.8	3.4	2.0	4.5	5.6	3.7
Two or More Races	4.3	5.1	4.9	5.4	6.3	4.0	9.7	11.4	8.9
Hispanic or Latino	4.0	3.3	3.6	$5.2^{\mathrm{a}}$	4.7	4.0	9.3 <sup>a</sup>	8.0	7.5
GENDER/RACE/HISPANIC ORIGIN									
Male, White, Not Hispanic	4.3	3.6	4.1	7.0	7.5	7.2	11.2	11.1	11.3
Female, White, Not Hispanic	4.4	4.3	4.3	6.1	6.3	6.0	10.5	10.6	10.3
Male, Black, Not Hispanic	1.9	2.5	1.9	3.5	2.4	2.8	5.4	4.9	4.7
Female, Black, Not Hispanic	1.3	1.2	1.7	2.1	1.9	1.9	3.3	3.1	3.6
Male, Hispanic	4.8	3.5	4.1	5.5	5.1	5.1	10.3	8.6	9.2
Female, Hispanic	3.2	3.2	3.0	4.9 <sup>b</sup>	4.1 <sup>a</sup>	2.8	8.2 <sup>a</sup>	7.3	5.8

#### Table 25. Alcohol dependence or abuse in the past year among persons aged 12 to 20, by demographic characteristics: Percentages

\*Low precision; no estimate reported.

NOTE: Dependence or abuse is based on definitions found in the 4<sup>th</sup> edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level. <sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

				Gender						
		Total		Male F					Female	
Past Year Alcohol Dependence or Abuse/Criteria Met	2005	2006	2007	2005	2006	2007	2005	2006	2007	
DEPENDENCE OR ABUSE	9.4	9.1	8.9	10.0	9.6	9.7	8.7	8.6	8.1	
DEPENDENCE	3.8	3.5	3.6	4.0	3.4	3.8	3.6	3.5	3.5	
DEPENDENCE CRITERIA										
Spent Time Getting, Using, or Getting Over Effects	10.8	10.3	10.2	11.2	10.3	10.4	10.4	10.3	10.0	
Unable to Set Limits/Used More Than Intended	1.9	1.9	2.0	1.9	$1.6^{a}$	2.0	2.0	2.1	2.0	
Needed to Use More Than Before for Desired Effects	12.4	12.0	12.3	13.8	13.2	13.4	11.0	10.8	11.2	
Unable to Cut Down or Stop Using	1.4	1.4	1.3	1.5	1.5	1.3	1.3	1.4	1.3	
Continued to Use Despite Problems with Emotions, Nerves, Mental Health, or Physical Problems	2.3	2.3	2.3	1.9	1.9	1.9	2.8	2.8	2.6	
Reduced or Gave Up Important Activities Due to Use	2.8	2.7	2.6	2.8	2.8	2.9	$2.8^{\mathrm{a}}$	2.5	2.3	
Experienced Withdrawal Symptoms Lasting Longer Than a Day	1.4	1.5	1.5	1.5	1.8	1.6	1.3	1.2	1.3	
ABUSE	5.6	5.6	5.3	6.1	6.2	6.0	5.1	5.0	4.6	
ABUSE CRITERIA										
Serious Problems at Home/Work/School Due to Use	2.4	2.4	2.2	2.2	2.4	2.2	2.6 <sup>a</sup>	2.4	2.1	
Physical Danger Due to Regular Use	5.9	5.9	5.8	6.6	6.5	6.6	5.2	5.3	4.9	
Use Caused Illegal Actions	1.4	1.3	1.3	1.8	1.7	1.7	0.9	0.9	0.8	
Continued Use Despite Problems with Family/Friends	2.2	2.2	2.1	2.1	2.1	2.1	2.3	2.4	2.1	

# Table 26. Alcohol dependence or abuse in the past year and alcohol dependence/abuse criteria met in the past year among persons aged 12 to 20, by gender: Percentages

\*Low precision; no estimate reported.

NOTE: Dependence or abuse is based on definitions found in the 4<sup>th</sup> edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Respondents were defined as having alcohol dependence if they reported a positive response to three or more of the seven dependence criteria. Respondents were defined as having alcohol dependence and reported a positive response to one or more of the four abuse criteria.

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level.

<sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

### DRINKING AND DRIVING

				ule	crash, D	y year				
	No Al	cohol	BAC=.0107		BAC	=.08+	BAC	=.01+	Total	
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2001	7,722	76.4	543	5.4	1,845	18.3	2,388	23.6	10,110	100
2002	7,816	76.1	581	5.7	1,869	18.2	2,450	23.9	10,266	100
2003	7,442	75.9	500	5.1	1,861	19.0	2,361	24.1	9,803	100
2004	7,505	77.1	448	4.6	1,780	18.3	2,229	22.9	9,733	100
2005	7,153	77.7	430	4.7	1,622	17.6	2.052	22.3	9,205	100
2006	6,900	75.6	484	5.3	1,738	19.1	2,222	24.4	9,121	100
2007	6,548	76.7	441	5.2	1,545	18.1	1,986	23.3	8,534	100

Table 27. People killed in motor vehicle traffic crashes when at least one driver or nonoccupant (ages 20 and under) was involved, by highest driver or nonoccupant BAC in the crash, by yoar

Source: NCSA, FARS 2001-2006(Final), 2007(ARF). 2007 data will be updated later in 2009 summer

Table 28. 16-to 20-year-old drivers involved in alcohol-related fatal crashes by their BAC, licensed drivers and involvement rate<sup>\*</sup> in alcohol-related fatal crashes, by year

Calendar	Number of Drivers	Any Al (BAC=	cohol .01+)	16-to 20-Year-Old	Alcohol Involvement
Year	Involved	Number	Percent	Licensed Drivers	Rate*
1994	7,723	1,831	24	11,728,563	15.61
1995	7,725	1,620	21	11,945,516	13.56
1996	7,824	1,772	23	12,089,294	14.66
1997	7,719	1,700	22	12,587,060	13.51
1998	7,767	1,721	22	12,660,903	13.59
1999	7,985	1,741	22	12,618,644	13.80
2000	8,024	1,904	24	12,857,375	14.81
2001	7,992	1,855	23	12,567,965	14.76
2002	8,128	1,887	23	12,512,204	15.08
2003	7,744	1,831	24	12,404,230	14.76
2004	7,755	1,772	23	12,484,983	14.19
2005	7,334	1,608	22	12,564,167	12.80
2006	7,315	1,776	24	12,778,636	13.90
2007	6,851	1,551	23	N/A	N/A

\*Per 100,000 Licensed Drivers. 2007 data will be updated later in 2009 summer NOTE: Some States include restricted drivers and graduated driver licenses in their license driver counts. Source: NCSA, FARS 1994-2006(Final), 2007(ARF). Licensed Driver data - FHWA.

Calendar	Number of	Any Al (BAC=	lcohol =.01+)	16-Year-Old	Alcohol
Year	Drivers Involved	Number	Percent	Drivers	Rate*
1994	1,162	142	12	1,470,521	9.66
1995	1,311	153	12	1,563,571	9.79
1996	1,304	180	14	1,550,375	11.61
1997	1,220	153	13	1,651,823	9.26
1998	1,174	126	11	1,626,819	7.75
1999	1,142	129	11	1,458,257	8.85
2000	1,079	133	12	1,470,141	9.05
2001	1,011	123	12	1,362,670	9.03
2002	1,156	131	11	1,318,404	9.94
2003	974	131	13	1,262,899	10.37
2004	968	128	13	1,250,800	10.23
2005	852	91	11	1,223,744	7.44
2006	785	111	14	1,299,465	8.54
2007	743	99	13	N/A	N/A

Table 29. 16-year-old drivers involved in alcohol-related fatal crashes by their BAC, licensed drivers, and involvement rate<sup>\*</sup> in alcohol-related fatal crashes, by year

\*Per 100,000 Licensed Drivers. 2007 data will be updated later in 2009 summer NOTE: Some States include restricted drivers and graduated driver licenses in their license driver

counts.

Source: NCSA, FARS 1994-2006(Final), 2007(ARF). Licensed Driver data - FHWA.

Table 30. 17-year-old drivers involved in alcohol-related fatal crashes by their BAC, licensed drivers and involvement rate<sup>\*</sup> in alcohol-related fatal crashes, by year

Calendar	Number of Drivers	Any A (BAC	lcohol =.01+)	17-Year-Old Licensed	Alcohol	
rear	Involved	Number	Percent	Drivers	Involvement Rate"	
1994	1,503	283	19	2,200,842	12.86	
1995	1,425	205	14	2,250,594	9.11	
1996	1,488	261	18	2,312,978	11.28	
1997	1,499	255	17	2,411,717	10.57	
1998	1,468	258	18	2,387,259	10.81	
1999	1,520	263	17	2,330,449	11.29	
2000	1,431	244	17	2,330,769	10.47	
2001	1,442	247	17	2,191,469	11.27	
2002	1,479	238	16	2,197,874	10.83	
2003	1,409	257	18	2,178,432	11.80	
2004	1,355	236	17	2,181,110	10.82	
2005	1,297	222	17	2,195,199	10.11	
2006	1,296	247	19	2,252,245	10.97	
2007	1,217	194	16	N/A	N/A	

\*Per 100,000 Licensed Drivers. 2007 data will be updated later in 2009 summer

NOTE: Some States include restricted drivers and graduated driver licenses in their license driver counts. Source: NCSA, FARS 1994-2006(Final), 2007(ARF). Licensed Driver data - FHWA.

		Any Alcohol	(BAC=.01+)	18-Year-Old	Alcohol
Calendar Year	Number of Drivers Involved	Number	Percent	Licensed Drivers	Involvement Rate*
1994	1,666	371	22	2,493,137	14.88
1995	1,738	374	22	2,563,026	14.59
1996	1,767	388	22	2,554,163	15.19
1997	1,703	370	22	2,702,477	13.69
1998	1,869	441	24	2,774,824	15.89
1999	1,853	372	20	2,767,520	13.44
2000	1,896	437	23	2,838,762	15.39
2001	1,843	407	22	2,754,846	14.77
2002	1,813	431	24	2,726,939	15.81
2003	1,873	458	24	2,765,798	16.56
2004	1,887	408	22	2,766,621	14.75
2005	1,717	375	22	2,785,042	13.46
2006	1,737	409	24	2,836,546	14.42
2007	1,635	350	21	N/A	N/A

Table 31. 18-year-old drivers involved in alcohol-related fatal crashes by their BAC, licensed drivers and involvement rate<sup>\*</sup> in alcohol-related fatal crashes, by year

\*Per 100,000 Licensed Drivers. 2007 data will be updated later in 2009 summer NOTE: Some States include restricted drivers and graduated driver licenses in their license driver counts.

Source: NCSA, FARS 1994-2006(Final), 2007(ARF). Licensed Driver data - FHWA.

Number of		Any Alcohol	(BAC=.01+)	19-Year-Old	
Calendar Year	Drivers Involved	Number	Percent	Licensed Drivers	Alcohol Involvement Rate*
1994	1,733	502	29	2,727,972	18.40
1995	1,623	409	25	2,688,274	15.21
1996	1,710	462	27	2,787,489	16.57
1997	1,728	456	26	2,828,354	16.12
1998	1,675	439	26	2,920,331	15.03
1999	1,853	509	27	3,020,668	16.85
2000	1,878	543	29	3,077,319	17.65
2001	1,937	518	27	3,086,268	16.78
2002	1,911	536	28	3,061,537	17.51
2003	1,766	483	27	3,018,679	16.00
2004	1,816	485	27	3,109,625	15.60
2005	1,798	423	24	3,109,403	13.60
2006	1,755	480	27	3,127,909	15.35
2007	1,647	431	26	N/A	N/A

Table 32. 19-year-old drivers involved in alcohol-related fatal crashes by their BAC, licensed drivers and involvement rate<sup>\*</sup> in alcohol-related fatal crashes, by year

\*Per 100,000 Licensed Drivers. 2007 data will be updated later in 2009 summer

NOTE: Some States include restricted drivers and graduated driver licenses in their license driver counts.

Source: NCSA, FARS 1994-2006(Final), 2007(ARF). Licensed Driver data - FHWA.

		Any Alcohol	(BAC=.01+)	20-Year-Old	Alcohol
Calendar Year	Number of Drivers Involved	Number	Percent	Licensed Drivers	Involvement Rate*
1994	1,659	534	32	2,836,091	18.83
1995	1,628	480	29	2,880,051	16.67
1996	1,555	481	31	2,884,289	16.68
1997	1,569	466	30	2,992,689	15.57
1998	1,581	457	29	2,951,670	15.48
1999	1,617	468	29	3,041,750	15.39
2000	1,740	547	31	3,140,384	17.42
2001	1,759	560	32	3,172,712	17.65
2002	1,769	551	31	3,207,450	17.18
2003	1,722	502	29	3,178,422	15.79
2004	1,729	515	30	3,176,827	16.21
2005	1,670	497	30	3,250,779	15.29
2006	1,742	530	30	3,262,471	16.25
2007	1,609	479	30	N/A	N/A

Table 33. 20-year-old drivers involved in alcohol-related fatal crashes by their BAC, licens	sed
drivers and involvement rate $^{*}$ in alcohol-related fatal crashes, by year	

\*Per 100,000 Licensed Drivers. 2007 data will be updated later in 2009 summer NOTE: Some States include restricted drivers and graduated driver licenses in their license driver

counts.

Source: NCSA, FARS 1994-2006(Final), 2007(ARF). Licensed Driver data - FHWA.

Table 34. Drove under the influence of alcohol in the past year among persons aged 16 to 2	20,
by demographic characteristics: Percentages	

	Drove	Under the Influence in Pas	t Year
		Alcohol	
Demographic Characteristic	2005	2006	2007
TOTAL	15.2	15.0	14.1
AGE			
16	5.2	5.0	4.5
17	11.5	10.8	11.2
18	16.1 <sup>a</sup>	17.5 <sup>b</sup>	13.8
19	20.2	19.3	19.2
20	23.4	22.5	22.5
GENDER			
Male	17.0	16.2	15.8
Female	13.4	13.6	12.3
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	16.0	15.7	14.9
White	18.9	18.3	17.4
Black or African American	6.7	7.3	6.0
American Indian or Alaska Native	17.8	21.9	*
Native Hawaiian or Other Pacific Islander	*	*	*
Asian	5.7	7.7	8.1
Two or More Races	15.7	18.4	13.0
Hispanic or Latino	11.7	11.4	10.4

\*Low precision; no estimate reported.

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level. <sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

Category	Fen	nale	Ma	ale	То	tal
	%	$\mathrm{CI}^\dagger$	%	$\mathrm{CI}^\dagger$	%	$\mathrm{CI}^\dagger$
Race/Ethnicity						
White, non-Hispanic	9.3	$\pm 1.8$	13.9	$\pm 1.9$	11.6	$\pm 1.5$
Black, non-Hispanic	3.9	±1.6	7.5	$\pm 2.6$	5.7	$\pm 2.0$
Other <sup>‡</sup> , non-Hispanic	8.6	$\pm 3.8$	12.7	±4.5	10.7	$\pm 3.8$
Hispanic	7.7	±1.9	13.0	±3.2	10.3	±2.1
Grade						
9	4.1	±1.5	6.8	±1.7	5.5	±1.3
10	7.3	±2.4	10.0	$\pm 2.1$	8.7	$\pm 1.7$
11	9.1	±2.3	13.7	$\pm 2.8$	11.5	±1.6
12	13.1	±3.4	23.6	±4.2	18.3	±2.8
Total	8.1	±1.5	12.8	±1.6	10.5	±1.3

Table 35. Percentage of U.S. high school students who drove after drinking alcohol<sup>\*</sup> in the past 30 days, by sex, race/ethnicity, and grade

\* In a car or other vehicle one or more times during the 30 days preceding the survey.

<sup>†</sup>95% Confidence Interval

<sup>‡</sup>Other includes Asian, Native Hawaiian, Pacific Islander, American Indian, and Alaska Native. Source: Youth Risk Behavior Survey, 2007

Category	Fen	nale	Μ	ale	Total		
	%	CI†	%	CI†	%	CI†	
Race/Ethnicity							
White, non-Hispanic	28.0	±3.2	27.8	$\pm 2.8$	27.9	±2.6	
Black, non-Hispanic	26.9	±3.6	28.1	±4.7	27.4	±3.9	
Other, <sup>‡</sup> non-Hispanic	27.5	±5.2	28.3	±5.1	27.9	±3.7	
Hispanic	35.1	±3.3	36.0	±4.1	35.5	±3.3	
Grade							
9	27.6	$\pm 4.5$	27.6	±3.0	27.6	$\pm 2.7$	
10	30.4	$\pm 4.1$	27.1	±2.7	28.7	±2.5	
11	26.8	±2.7	31.4	±3.2	29.2	±2.7	
12	30.5	±3.6	32.5	±5.1	31.5	$\pm 3.8$	
Total	28.8	+2 6	29.5	+2 1	29.1	+2.0	

Table 36. Percentage of U.S. high school students who rode with a driver who had been drinking
alcohol* in the past 30 days, by sex, race/ethnicity, and grade

In a car or other vehicle one or more times during the 30 days preceding the survey.

† 95% Confidence Interval

<sup>+</sup> Other includes Asian, Native Hawaiian, Pacific Islander, American Indian, and Alaska Native. <sup>+</sup> Other includes Asian, Native Hawaiian or other Pacific Islander, American Indian or Alaska Native, and multiple races.

Source: Youth Risk Behavior Survey, 2007

### PERCEPTIONS AND ATTITUDES

	Class of:															
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Percent reporting "great risk" in having 5 or more drinks in a row once or twice each weekend: 8th Grade															59.1	58.0
10th Grade 12th Grade <sup>a</sup>	34.7	34.5	34.9	35.9	36.3	36.0	38.6	41.7	43.0	39.1	41.9	42.6	44.0	47.1	54.7 48.6	55.9 49.0
Percent who disapprove of having 5 or more drinks in a row once or twice each weekend:																
8th Grade															85.2	83.9
10th Grade	4												~~ <i>-</i>		76.7	77.6
12th Grade <sup>°</sup>	57.4	56.2	56.7	55.6	55.5	58.8	56.6	59.6	60.4	62.4	62.0	65.3	66.5	68.9	67.4	70.7
Percent who disapprove of having 1-2 drinks nearly every day:																
8th Grade															82.2	81.0
10th Grade															81.7	81.7
12th Grade <sup>a</sup>	66.8	67.7	68.3	69.0	69.1	69.9	68.9	72.9	70.9	72.8	74.2	75.0	76.5	77.9	76.5	75.9
Percent reporting that it is "fairly easy" or "very easy" to get alcohol:																
8th Grade																76.2
10th Grade																88.6
12th Grade <sup>a</sup>																
Approx. Wtd. N's:																
8th Grade															17.500	18.600
10th Grade															14.800	14.800
12th Grade	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15200	15,000	15,800
	, -	, -	, -	, -	, -	, -	, -	, -	, -	, -	, -	, -	, -		, -	, -

Table 27 Alashal, Tranda in various attitudinal massures for 8 <sup>th</sup>	10th	and 10th	h ana dana 1	h
1 able 57. Alconol: 1 rends in various autuulinal measures lor 8	, IV .	, and $12$	graders,	by percent

(Continued on next page)

Class of:																
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	'06-'07 change
Percent reporting																
"great risk" in having 5																
or more drinks in a row																
once or twice each																
weekend:																
8 <sup>™</sup> Grade	57.7	54.7	54.1	51.8	55.6	56.0	55.3	55.9	56.1	56.4	56.5	56.9	57.2	56.4	57.9	+1.4
10 <sup>°°</sup> Grade	54.9	52.9	52.0	50.9	51.8	52.5	51.9	51.0	50.7	51.7	51.6	51.7	53.3	52.4	54.1	+1.7
12 <sup><sup>III</sup> Grade<sup>a</sup></sup>	48.3	46.5	45.2	49.5	43.0	42.8	43.1	42.7	43.6	42.2	43.5	43.6	45.0	47.6	45.8	-1.8
Percent who																
disapprove of having 5																
or more drinks in a row																
once or twice each																
weekend:																
8 <sup></sup> " Grade	83.3	80.7	80.7	79.1	81.3	81.0	80.3	81.2	81.6	81.9	81.9	82.3	82.9	82.0	83.8	+1.8s
10 <sup>™</sup> Grade	74.7	72.3	72.2	70.7	70.2	70.5	69.9	68.2	69.2	71.5	71.6	71.8	73.7	72.9	74.1	+1.2
12 <sup><sup>III</sup> Grade<sup>a</sup></sup>	70.1	65.1	66.7	64.7	65.0	63.8	62.7	65.2	62.9	64.7	64.2	65.7	66.5	68.5	68.8	+0.3
Percent who																
disapprove of having 1-																
2 drinks nearly every																
day:																
8 <sup><sup>m</sup></sup> Grade	79.6	76.7	75.9	74.1	76.6	76.9	77.0	77.8	77.4	78.3	77.1	78.6	78.7	78.7	80.4	+1.7
10 <sup>th</sup> Grade	78.6	75.2	75.4	73.8	75.4	74.6	75.4	73.8	73.8	74.9	74.2	75.1	76.9	76.4	77.1	+0.7
12 <sup>™</sup> Grade <sup>a</sup>	77.8	73.1	73.3	70.8	70.0	69.4	67.2	70.0	69.2	69.1	68.9	69.5	70.8	72.8	73.3	+0.5
Percent reporting that it																
is "fairly easy" or "very																
easy" to get alcohol:																
8 <sup>th</sup> Grade	73.9	74.5	74.9	75.3	74.9	73.1	72.3	70.6	70.6	67.9	67.0	64.9	64.2	63.0	62.0	-1.0
10 <sup>th</sup> Grade	88.9	89.8	89.7	90.4	89.0	88.0	88.2	87.7	87.7	84.8	83.4	84.3	83.7	83.1	82.6	-0.6
12 <sup>th</sup> Grade <sup>a</sup>							95.0	94.8	94.3	94.7	94.2	94.2	93.0	92.5	92.2	-0.3
Approx. Wtd. N's:																
8 <sup>th</sup> Grade	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	
10 <sup>th</sup> Grade	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	
12 <sup>th</sup> Grade	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	

Table 37. Alcohol: Trends in various attitudinal measures for 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders, by percent (continued)

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '--' indicates data not available. Any apparent inconsistency between the change estimate and the prevalence of use estimate for the two most recent classes is due to rounding error.

<sup>a</sup> Data based on one of five forms in 1975–88; N is approximately one-fifth of N indicated. Data based on one of six forms beginning in 1989. N is approximately one-sixth of N indicated. SOURCE: The Monitoring the Future Study, the University of Michigan.

	Have Four or Five Drinks of Alcoholic Beverage Nearly Every Day <sup>1</sup>					
		Great Risk				
Demographic Characteristic	2005	2006	2007			
TOTAL	62.9	63.3	63.7			
AGE						
12-13	66.2 <sup>a</sup>	67.5	68.3			
14-15	63.7	63.4	63.3			
16-17	61.6 <sup>a</sup>	63.0	64.0			
18-20	61.0	60.7	61.1			
GENDER						
Male	57.3	57.1	57.8			
Female	68.6	69.8	69.9			
HISPANIC ORIGIN AND RACE						
Not Hispanic or Latino	62.8	63.0	63.5			
White	61.5	61.0	61.6			
Black or African American	65.6 <sup>b</sup>	68.3	69.0			
American Indian or Alaska Native	55.7	52.3	64.8			
Native Hawaiian or Other Pacific Islander	*	*	*			
Asian	71.4	71.3	72.0			
Two or More Races	69.0	68.9	63.3			
Hispanic or Latino	63.0	64.7	64.9			
COUNTY TYPE						
Large Metro	65.3	65.3	66.7			
Small Metro	61.7	63.0	62.6			
Nonmetro	56.9	57.5	56.6			

 
 Table 38. Risk perceptions of having four or five drinks of an alcoholic beverage nearly every
 day, by demographic characteristics among persons aged 12 to 20: Percentages

\* Low precision; no estimate reported.

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level. <sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

<sup>1</sup> Respondents with missing data were excluded.

		Twice a Week <sup>1</sup>	U
_		Great Risk	
Demographic Characteristic	2005	2006	2007
TOTAL	36.6	37.3	37.4
AGE			
12-13	41.8	43.0	43.9
14-15	37.6	38.3	38.5
16-17	35.9	37.1	36.2
18-20	33.0	33.3	33.5
GENDER			
Male	32.6	33.4	33.9
Female	40.7	41.5	41.0
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	35.7	36.6	36.3
White	31.7	32.7	32.4
Black or African American	48.0	50.0	49.9
American Indian or Alaska Native	41.4	31.2	40.7
Native Hawaiian or Other Pacific Islander	*	52.2	39.9
Asian	47.6	45.5	44.3
Two or More Races	38.5	35.5	40.5
Hispanic or Latino	40.6	40.5	42.1
COUNTY TYPE			
Large Metro	37.3 <sup>a</sup>	38.7	39.4
Small Metro	36.6	36.1	36.4
Nonmetro	34.4	35.1 <sup>a</sup>	32.7

Table 39. Risk perceptions of having five or more drinks of an alcoholic beverage once or twice a week, by demographic characteristics among persons aged 12 to 20: Percentages Have Five or More Drinks of Alcoholic Beverage Once or

\* Low precision; no estimate reported.

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level. <sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

<sup>1</sup> Respondents with missing data were excluded.

	Parents' Feeling	gs about Youths Dr Beverages <sup>1</sup>	inking Alcoholic
		Strongly Disapprov	e
Demographic Characteristic	2005	2006	2007
TOTAL	88.9	89.6	89.6
AGE			
12-13	92.2 <sup>b</sup>	93.3	93.8
14-15	90.0	90.2	90.3
16-17	84.5	85.7	85.2
GENDER			
Male	88.0	88.4	88.8
Female	89.8	90.9	90.4
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	89.2	89.8	89.8
White	89.1	89.7	89.6
Black or African American	88.5	90.5	89.6
American Indian or Alaska Native	93.8	83.1	89.6
Native Hawaiian or Other Pacific Islander	*	*	*
Asian	92.3	90.1	93.9
Two or More Races	89.3	88.5	90.5
Hispanic or Latino	87.5	89.0	88.8
COUNTY TYPE			
Large Metro	89.8	90.1	90.6
Small Metro	88.3	89.6	89.4
Nonmetro	87.1	88.1	86.9

Table 40. Youths' perceptions of parents' feelings about youths having one or two drinks of an alcoholic beverage nearly every day, by demographic characteristics among persons aged 12 to 17: Percentages

\* Low precision; no estimate reported.

<sup>a</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.05 level. <sup>b</sup> Difference between estimate and 2007 estimate is statistically significant at the 0.01 level.

<sup>1</sup> Respondents with missing data were excluded.

### **OTHER RISKY BEHAVIORS**

-				-			
Category	Among	Non-	Among		Among Binge		
	Drink	ers	Drine	(ers	Drii	ikers	
	%	Cl <sup>§</sup>	%	Cl <sup>§</sup>	%	Cl§	
Sex							
Female	22.4	±3.0	50.1	±3.1	58.1	±3.3	
Male	17.5	±2.1	51.0	±3.5	58.0	±4.2	
Race/ethnicity							
White	16.7	±2.5	48.8	±3.5	56.7	±3.7	
Black, non-Hispanic	35.1	$\pm 4.0$	61.7	±6.0	67.6	$\pm 8.0$	
Other, <sup>††</sup> non-Hispanic	9.9	±3.2	44.3	$\pm 8.5$	50.8	±10.3	
Hispanic	21.0	±3.5	51.8	±3.6	61.3	±4.1	
Grade							
9	9.5	$\pm 1.8$	33.9	±3.9	46.6	±6.1	
10	16.6	±3.4	45.3	$\pm 4.4$	50.8	±5.5	
11	26.3	$\pm 4.0$	56.2	±4.2	62.0	±4.9	
12	36.7	±4.2	64.1	±3.9	67.8	±4.6	
Total	20.0	±2.2	50.5	±2.8	58.1	±3.0	

Table 41. Percentage of U.S. high school students who had sexual intercourse with one or more persons<sup>\*</sup>—by alcohol use, race/ethnicity, and grade

<sup>1</sup> Sexual intercourse during the 3 months preceding the survey.
 <sup>1</sup> Drank one or more drinks of alcohol during the 30 days preceding the survey.
 <sup>1</sup> Drank five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey.
 <sup>§</sup> 95% Confidence Interval

<sup>+†\*</sup>Other includes Asian, Native Hawaiian, Pacific Islander, American Indian, and Alaska Native. Source: Youth Risk Behavior Survey, 2007

Category	Amor	ng Non-	Amon	g Current	Among Binge		
	Drinkers		Dri	nkers <sup>†</sup>	Drinkers <sup>‡</sup>		
	%	CI§	%	Cl§	%	Cl§	
Sex							
Female	56.6	$\pm 5.1$	53.3	±4.2	50.8	±5.2	
Male	67.8	±5.5	68.1	±3.4	67.2	$\pm 3.8$	
Race/ethnicity							
White	59.8	±5.7	58.8	±3.1	58.4	±3.9	
Black, non-Hispanic	65.2	±6.3	67.8	±4.7	67.1	±7.0	
Other, <sup>†††</sup> non-Hispanic	^††	**	64.4	$\pm 8.7$	55.9	±9.6	
Hispanic	59.8	±5.9	60.8	±6.2	60.3	±6.4	
Grade							
9	68.5	±10.0	66.9	±7.3	66.1	±10.5	
10	68.6	±5.6	65.3	±4.9	61.9	±6.4	
11	64.9	±5.3	60.1	±4.7	60.2	±6.3	
12	50.2	±7.6	55.7	±3.5	54.8	±4.6	
Total	61.5	±3.7	60.7	±2.5	59.5	±3.3	

Table 42. Percentage of U.S. high school students who used a condom during their last sexual intercourse<sup>\*</sup>—by alcohol use, race/ethnicity, and grade

<sup>\*</sup> Among currently sexually active students. <sup>†</sup> Drank one or more drinks of alcohol during the 30 days preceding the survey. <sup>‡</sup> Drank five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey.

<sup>§</sup> 95% Confidence Interval
 <sup>†††</sup>Other includes Asian, Native Hawaiian, Pacific Islander, American Indian, and Alaska Native.
 <sup>††</sup> Fewer than 100 valid responses.

Source: Youth Risk Behavior Survey, 2007

Category	Amor Dri	ng Non- nkers	Amon Dri	g Current nkers <sup>†</sup>	Among Binge Drinkers <sup>‡</sup>		
	%	CI§	%	Cl§	%	CI <sup>§</sup>	
Sex							
Female	2.7	±1.3	26.1	±3.5	34.5	±4.5	
Male	4.1	±2.1	36.7	±3.9	42.7	±4.9	
Race/ethnicity							
White	2.0	±1.3	33.4	±3.3	39.6	±4.1	
Black, non-Hispanic	4.4	$\pm 1.7$	27.6	±5.2	37.5	±9.2	
Other, <sup>†††</sup> non-Hispanic	<sup>††</sup>	^††	31.4	±8.3	45.3	±12.4	
Hispanic	4.1	±3.1	28.1	±4.6	35.9	±5.4	
Grade							
9	2.5	±3.3	33.5	$\pm 8.8$	39.5	±10.6	
10	4.8	±2.6	31.8	±5.2	41.0	±6.0	
11	3.7	$\pm 2.8$	30.4	±3.9	38.0	$\pm 4.8$	
12	2.4	±1.5	31.0	±3.4	37.7	±4.6	
Total	3.3	±1.2	31.4	±2.5	38.8	±3.3	

Table 43. Percentage of U.S. high school students who drank alcohol or used drugs before their last sexual intercourse <sup>\*</sup>—by alcohol use, race/ethnicity, and grade

\* Among currently sexually active students.
 <sup>†</sup> Drank one or more drinks of alcohol during the 30 days preceding the survey.
 <sup>‡</sup> Drank five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey.

§ 95% Confidence Interval

<sup>11</sup> Fewer than 100 valid responses.

<sup>+++</sup>Other includes Asian, Native Hawaiian, Pacific Islander, American Indian, and Alaska Native. Source: Youth Risk Behavior Survey, 2007
Category	Among Non- Drinkers		Among Current Drinkers <sup>†</sup>		Among Binge Drinkers <sup>‡</sup>	
	%	Cl§	%	Cl§	%	Cl§
Sex						
Female	3.5	±0.9	33.0	±3.2	44.7	$\pm 4.0$
Male	5.1	±1.2	42.6	±3.3	52.1	±4.4
Race/ethnicity						
White	3.5	$\pm 1.0$	37.6	±3.7	47.7	±4.5
Black, non-Hispanic	8.1	$\pm 2.4$	43.1	±5.6	55.0	±9.9
Other, <sup>††</sup> non-Hispanic	2.8	±2.0	40.6	$\pm 8.2$	59.4	$\pm 8.7$
Hispanic	3.9	±1.6	33.2	±4.9	45.4	±5.4
Grade						
9	3.3	±1.3	33.4	±5.2	48.8	±7.7
10	3.9	$\pm 1.0$	37.9	±4.2	49.8	$\pm 5.7$
11	4.3	$\pm 1.7$	39.1	±4.6	49.7	±6.1
12	6.5	±2.1	40.0	±4.5	46.7	±5.0
Total	4.3	±0.9	37.8	±2.9	48.7	±3.7

# Table 44. Percentage of U.S. high school students who used marijuana<sup>\*</sup> during the past 30 days—by alcohol use, race/ethnicity, and grade

\* Used marijuana one or more times during the 30 days preceding the survey. <sup>†</sup> Drank one or more drinks of alcohol during the 30 days preceding the survey. <sup>‡</sup> Drank five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey.

<sup>§</sup> 95% Confidence Interval

Category	Among Non- Drinkers		Amon Dri	g Current nkers <sup>†</sup>	Among Binge Drinkers <sup>‡</sup>		
	%	Cl§	%	CI§	%	Cl§	
Sex							
Female	4.4	$\pm 1.0$	36.3	$\pm 4.2$	49.6	$\pm 5.0$	
Male	4.6	±1.5	40.6	±4.5	50.1	±4.7	
Race/ethnicity							
White	5.3	±1.6	42.4	$\pm 4.4$	52.2	$\pm 4.8$	
Black, non-Hispanic	3.7	$\pm 1.0$	24.3	±5.3	37.6	±7.5	
Other, <sup>††</sup> non-Hispanic	2.6	$\pm 1.7$	40.3	±10.8	54.9	±12.4	
Hispanic	2.9	±1.1	31.7	±6.0	43.6	±6.2	
Grade							
9	2.9	$\pm 1.1$	33.3	±5.0	48.9	$\pm 5.8$	
10	4.2	±1.7	39.3	±5.1	50.7	$\pm 5.9$	
11	4.6	±1.6	39.1	±5.8	50.0	±6.2	
12	7.8	±2.3	41.7	±5.5	49.9	±6.0	
Total	4.5	±1.1	38.5	±4.0	49.9	±4.3	

Table 45. Percentage of U.S. high school students who smoked cigarettes<sup>\*</sup>in the past 30 days by alcohol use, race/ethnicity, and grade

Smoked cigarettes on one or more of the 30 days preceding the survey. <sup>†</sup> Drank one or more drinks of alcohol during the 30 days preceding the survey. <sup>‡</sup> Drank five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey. <sup>§</sup> 95% Confidence Interval

Category	Among Non- Drinkers		Among Current Drinkers <sup>†</sup>		Among Binge Drinkers <sup>‡</sup>	
	%	Cl§	%	Cl§	%	Cl§
Sex						
Female	7.3	±1.5	22.4	±3.0	26.9	±4.3
Male	6.0	±1.1	18.7	$\pm 2.4$	21.3	±3.3
Race/ethnicity						
White	6.9	$\pm 1.7$	21.9	±2.6	24.0	±3.5
Black, non-Hispanic	6.1	±1.9	11.2	±3.7	15.2	±4.6
Other, <sup>††</sup> non-Hispanic	6.8	±2.3	23.8	±5.6	30.1	$\pm 8.1$
Hispanic	6.4	$\pm 1.8$	20.1	±3.7	24.7	±4.3
Grade						
9	7.6	±1.9	26.5	±3.6	32.4	±4.1
10	6.8	$\pm 1.7$	24.2	±4.1	27.5	±5.2
11	6.5	±1.3	18.4	±3.4	22.6	±4.3
12	4.8	$\pm 1.8$	13.9	±2.7	16.6	±3.6
Total	6.7	±1.1	20.5	±2.2	23.9	±3.0

Table 46. Percentage of U.S. high school students who ever used inhalants<sup>\*</sup>—by alcohol use, race/ethnicity, and grade

\* Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times in their lifetime.

<sup>†</sup> Drank one or more drinks of alcohol during the 30 days preceding the survey.

<sup>‡</sup> Drank five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey.

§ 95% Confidence Interval

Category	Among Non- Drinkers		Amon Dri	g Current nkers <sup>†</sup>	Among Binge Drinkers <sup>‡</sup>	
	%	Cl§	%	Cl§	%	CI§
Sex						
Female	4.3	$\pm 1.1$	11.0	$\pm 2.2$	12.6	±3.1
Male	18.0	$\pm 2.8$	38.9	±4.1	41.8	±4.2
Race/ethnicity						
White	12.5	±2.6	23.1	±3.7	25.0	$\pm 4.0$
Black, non-Hispanic	9.9	±2.5	28.9	±4.2	38.2	±5.4
Other, <sup>††</sup> non-Hispanic	6.7	±2.6	27.8	±6.6	39.5	±7.7
Hispanic	8.3	±2.1	27.5	±3.7	32.5	$\pm 4.8$
Grade						
9	12.0	±2.4	32.4	±4.9	35.4	$\pm 5.0$
10	11.0	$\pm 2.1$	28.3	$\pm 4.8$	33.9	$\pm 5.9$
11	10.0	$\pm 2.1$	22.2	±3.1	26.9	±4.6
12	10.7	±4.1	17.7	±3.0	20.0	±3.6
Total	11.1	±1.7	24.8	±2.8	28.2	±3.1

Table 47. Percentage of U.S. high school students who carried a weapon<sup>\*</sup> during the past 30 days—by alcohol use, race/ethnicity, and grade

\* For example, a gun, knife, or club on one or more of the 30 days preceding the survey.
<sup>†</sup> Drank one or more drinks of alcohol during the 30 days preceding the survey.
<sup>‡</sup> Drank five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey.

<sup>§</sup> 95% Confidence Interval

Category	Amor Drii	Among Non- Drinkers		g Current nkers <sup>†</sup>	Among Binge Drinkers <sup>‡</sup>	
	%	CI§	%	Cl§	%	Cl§
Sex						
Female	5.3	±1.5	12.8	±2.0	15.6	$\pm 2.8$
Male	6.8	$\pm 1.4$	14.1	±1.9	15.3	±2.3
Race/ethnicity						
White	5.3	$\pm 1.7$	11.3	$\pm 1.8$	13.4	±1.9
Black, non-Hispanic	10.1	$\pm 1.8$	20.0	±3.3	20.8	±4.5
Other, non-Hispanic	3.3	±1.6	20.2	±5.7	25.7	$\pm 8.7$
Hispanic	5.9	±1.5	15.1	±3.0	18.3	±3.2
Grade						
9	4.5	±1.2	13.5	±2.8	16.3	$\pm 4.1$
10	5.6	$\pm 2.2$	12.0	±2.4	13.7	±3.1
11	7.3	±1.9	13.6	±2.6	15.4	±3.6
12	8.1	$\pm 1.8$	14.6	±2.3	16.3	±2.6
Total	6.1	±1.2	13.5	±1.5	15.5	±1.8

 

 Table 48. Percentage of U.S. high school students who experienced dating violence<sup>\*</sup>—by

 alcohol use, race/ethnicity, and grade

Experienced dating violence on one or more of the 30 days preceding the survey.

<sup>†</sup> Drank one or more drinks of alcohol during the 30 days preceding the survey.

<sup>‡</sup> Drank five or more drinks of alcohol in a row on one or more of the 30 days preceding the survey.

<sup>§</sup> 95% Confidence Interval

	1991	1993	1995	1997	1999	2001	2003	2005	2007
Risk Behaviors									
Sexually active <sup>*</sup>	50.1	51.8	49.9	48.0	49.3	48.2	49.6	50.6	50.6
Alcohol or drug use									
before last sexual	29.3	30.0	34.4	33.4	33.4	34.0	33.7	31.4	31.4
intercourse'									
Condom use during last sexual intercourse <sup>†</sup>	44.4	51.9	53.3	54.4	56.7	57.1	61.1	62.9	60.7
Current cigarette use <sup>‡</sup>	45.2	51.2	55.7	60.1	56.5	50.5	42.7	43.4	38.5
Current marijuana use <sup>§</sup>	26.7	31.7	43.1	45.2	46.8	43.6	43.0	38.7	37.8
Lifetime inhalant use**			28.9	23.1	20.2	23.0	19.8	19.9	20.5
Carried a weapon <sup>††</sup>	34.2	30.1	27.5	25.3	23.5	24.6	25.0	26.3	24.8
Dating violence <sup>‡‡</sup>					12.0	13.4	12.6	12.8	13.5

Table 49. Trends in health-risk behaviors among U.S. students who had one or more drinks of alcohol on one or more of the past 30 days

\* Sexual intercourse during the 3 months preceding the survey.

<sup>†</sup> Among currently sexually active students.

<sup>‡</sup>Smoked cigarettes on  $\geq 1$  of the 30 day preceding the survey.

<sup>§</sup> Used marijuana one or more times during the 30 days preceding the survey.

\*\* Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any

paints or sprays to get high one or more times during their life.

<sup>††</sup> For example, a gun, knife, or club on  $\geq 1$  of the 30 days preceding the survey.

‡‡ Hit, slapped, or physically hurt on purpose by a boyfriend or girlfriend during the 12 months preceding the survey.

Source: Youth Risk Behavior Survey, 1991-2007

				-	•				
	1991	1993	1995	1997	1999	2001	2003	2005	2007
<b>Risk Behaviors</b>									
Sexually active <sup>*</sup>	56.1	58.6	57.0	52.2	55.1	54.4	56.8	58.3	58.1
Alcohol or drug use									38.9
before last sexual intercourse <sup>†</sup>	37.4	36.3	41.0	39.9	40.6	41.3	41.0	39.2	
Condom use during									59.5
last sexual intercourse <sup>†</sup>	44.6	49.9	51.3	53.5	54.7	57.2	60.1	60.7	
Current cigarette use <sup>‡</sup>	56.7	60.4	65.9	69.7	67.9	60.6	54.8	54.7	49.9
Current marijuana use <sup>§</sup>	36.8	41.1	53.6	54.0	57.6	53.9	53.5	49.7	48.7
Lifetime inhalant use**			33.6	26.7	23.4	26.7	24.0	23.1	23.9
Carried a weapon <sup>††</sup>	40.2	32.9	31.7	28.5	27.7	27.3	29.4	30.1	28.2
Dating violence <sup>‡‡</sup>					14.0	15.3	14.7	14.9	15.5

Table 50. Trends in health-risk behaviors among U.S. students who had five or more drinks of alcohol in a row on one or more of the past 30 days

\*Sexual intercourse during the 3 months preceding the survey.

<sup>†</sup> Among currently sexually active students.

<sup>‡</sup>Smoked cigarettes on  $\geq 1$  of the 30 day preceding the survey.

<sup>§</sup>Used marijuana one or more times during the 30 days preceding the survey.

\*\* Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life.

<sup>††</sup>For example, a gun, knife, or club on  $\geq 1$  of the 30 days preceding the survey.

‡‡ Hit, slapped, or physically hurt on purpose by a boyfriend or girlfriend during the 12 months preceding the survey.

Source: Youth Risk Behavior Survey, 1991-2007

#### APPENDIX C

# MEMBERS OF THE INTERAGENCY COORDINATING COMMITTEE ON THE PREVENTION OF UNDERAGE DRINKING (ICCPUD)

Eric B. Broderick, D.D.S., M.P.H. (Chair) Acting Administrator Substance Abuse and Mental Health Services Administration Assistant Surgeon General U.S. Department of Health and Human Services

Marilena Amoni Associate Administrator National Highway Traffic Safety Administration U.S. Department of Transportation

Robert Brewer, M.D., M.S.P.H. Alcohol Team Leader National Center for Chronic Disease Prevention and Health Promotion Centers for Disease Control and Prevention U.S. Department of Health and Human Services

Marty McGeein, R.N., M.B.A. Acting Deputy Assistant Secretary for Human Services Policy Office of the Assistant Secretary for Planning and Evaluation U.S. Department of Health and Human Services

Mr. J. Robert Flores Administrator Office of Juvenile Justice and Delinquency Prevention U.S. Department of Justice

Steve Jones, M.D. Principal Deputy Assistant Secretary of Defense (Health Affairs) U.S. Department of Defense

Ting-Kai Li, M.D. Director National Institute on Alcohol Abuse and Alcoholism National Institutes of Health U.S. Department of Health and Human Services Nora D. Volkow, M.D. Director National Institute on Drug Abuse National Institutes of Health U.S. Department of Health and Human Services

Bertha Madras, Ph.D. Deputy Director for Demand Reduction Office of National Drug Control Policy

Mr. John Manfreda Administrator Alcohol and Tobacco Tax and Trade Bureau U.S. Treasury Department

Rear Admiral Steven K. Galson, M.D., M.P.H. Acting Surgeon General U.S. Department of Health and Human Services

Ms. Deborah Price Assistant Deputy Secretary Office of Safe and Drug Free Schools U.S. Department of Education

Ms. Mary Beth Richards Bureau of Consumer Protection Deputy Director Federal Trade Commission

Mr. Curtis O. Porter Acting Associate Commissioner Family and Youth Services Bureau Administration for Children and Families U.S. Department of Health and Human Services

# APPENDIX D

# STRATEGIES FROM THE SURGEON GENERAL'S CALL TO ACTION TO PREVENT AND REDUCE UNDERAGE DRINKING

*The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking* sets six goals for the Nation and provides a set of strategic steps for each goal that parents, other adults, and public and private institutions can take to achieve the overarching goal of preventing and reducing underage drinking in America.

#### GOALS OF THE SURGEON GENERAL'S CALL TO ACTION

The six goals of the Surgeon General's *Call to Action* are not stand-alone objectives but highly integrated components of an overall approach to the prevention and reduction of underage drinking. The goals are as follows:

Goal 1: Foster changes in American society that facilitate healthy adolescent development and that help prevent and reduce underage drinking.

Goal 2: Engage parents and other caregivers, schools, communities, all levels of government, all social systems that interface with youth, and youth themselves in a coordinated national effort to prevent and reduce underage drinking and its consequences.

Goal 3: Promote an understanding of underage alcohol consumption in the context of human development and maturation that takes into account individual adolescent characteristics as well as environmental, ethnic, cultural, and gender differences.

Goal 4: Conduct additional research on adolescent alcohol use and its relationship to development.

Goal 5: Work to improve public health surveillance on underage drinking and on populationbased risk factors for this behavior.

Goal 6: Work to ensure that policies at all levels are consistent with the national goal of preventing and reducing underage alcohol consumption.

#### STRATEGIES OF THE SURGEON GENERAL'S CALL TO ACTION

The *Call to Action* describes a series of strategic steps that can be taken to bring about achievement of the six goals proposed by the Surgeon General. These coordinated actions are mutually supportive and mutually necessary. They were developed on the basis of a broad body of scientific knowledge. Some are derived directly from empirical studies, whereas others are extensions of the cumulative knowledge accrued in multiple fields.

#### **Goal 1: Foster Changes in American Society That Facilitate Healthy Adolescent Development and That Help Prevent and Reduce Underage Drinking**.

#### For Parents and Other Caregivers

Parents have a responsibility to help shape the culture in which their adolescents are raised, particularly the culture of their schools and community. Parental strategies include the following:

- Partner with other parents in their child's network to ensure that parties and other social events do not allow underage alcohol consumption, much less facilitate its use or focus on it.
- Collaborate with other parents in coalitions designed to ensure that the culture in the schools and community support and reward an adolescent's decision not to drink.
- Serve as a positive role model for adolescents by not drinking excessively, by avoiding alcohol consumption in high-risk situations (e.g., when driving a motor vehicle, while boating, and while operating machinery), and by seeking professional help for alcohol-related problems.

#### For Colleges and Universities

Given the prevalence of underage drinking on college campuses, institutions of higher education should examine their policies and practices on alcohol use by their students and the extent to which they may directly or indirectly encourage, support, or facilitate underage alcohol use. Colleges and universities can change a campus culture that contributes to underage alcohol use. Some measures to consider are to:

- Establish, review, and enforce rules against underage alcohol use with consequences that are developmentally appropriate and sufficient to ensure compliance. This practice helps to confirm the seriousness with which the institution views underage alcohol use by its students.
- Eliminate alcohol sponsorship of athletic events and other campus social activities.
- Restrict the sale of alcoholic beverages on campus or at campus facilities such as football stadiums and concert halls.
- Implement responsible beverage service policies at campus facilities such as sports arenas, concert halls, and campus pubs.

- Hold all student groups on campus, including fraternities, sororities, athletics teams, and student clubs and organizations, strictly accountable for underage alcohol use at their facilities and during functions that they sponsor.
- Eliminate alcohol advertising in college publications.
- Educate parents, instructors, and administrators about the consequences of underage drinking on college campuses, including secondhand effects that range from interference with studying to being the victim of an alcohol-related assault or date rape, and enlist their assistance in changing any culture that currently supports alcohol use by underage students.
- Partner with community stakeholders to address underage drinking as a community problem as well as a college problem and to forge collaborative efforts that can achieve a solution.
- Expand opportunities for students to make spontaneous social choices that do not include alcohol (e.g., by providing frequent alcohol-free late-night events, extending the hours of student centers and athletics facilities, and increasing public service opportunities).

# For Communities

Adolescents generally obtain alcohol from adults who sell it to them, purchase it on their behalf, or allow them to attend or give parties where it is served. Therefore, it is critical that adults refuse to provide alcohol to adolescents and that communities value, encourage, and reward an adolescent's commitment not to drink. A number of strategies can contribute to a culture that discourages adults from providing alcohol to minors and that supports an adolescent's decision not to drink. Communities can:

- Invest in alcohol-free youth-friendly programs and environments.
- Widely publicize all policies and laws that prohibit underage alcohol use.
- Work with sponsors of community or ethnic holiday events to ensure that such events do not promote a culture in which underage drinking is acceptable.
- Urge the alcohol industry to voluntarily reduce outdoor alcohol advertising.
- Promote the idea that underage alcohol use is a local problem that local citizens can solve through concerted and dedicated action.
- Establish organizations and coalitions committed to creating a local culture that disapproves of underage alcohol use, that works diligently to prevent and reduce it, and that is dedicated to informing the public about the extent and consequences of underage drinking.
- Work to ensure that members of the community are aware of the latest research on adolescent alcohol use and, in particular, the adverse consequences of alcohol use on underage drinkers and other members of the community who suffer from its secondhand effects. An informed public is an essential part of an overall plan to prevent and reduce underage drinking and to change the culture that supports it.
- Change community norms to decrease the acceptability of underage drinking, in part, through public awareness campaigns.
- Focus as much attention on underage drinking as on tobacco and illicit drugs, making it clear that underage alcohol use is a community problem. When the American people rejected the use of tobacco and illicit drugs as a culturally acceptable behavior, the use of

those substances declined, and the culture of acceptance shifted to disapproval. The same change process is possible with underage drinking.

## For the Criminal and Juvenile Justice Systems and Law Enforcement

The justice system and law enforcement<sup>19</sup> can:

- Enforce uniformly and consistently all policies and laws against underage alcohol use and widely publicize these efforts.
- Gain public support for enforcing underage drinking laws by working with other stakeholders to ensure that the public understands that underage drinking affects both the public health and safety.
- Work with State, Tribal, and local coalitions to reduce underage drinking.

#### For the Alcohol Industry

The alcohol industry has a public responsibility relating to the marketing of its product, since its use is illegal for more than 80 million underage Americans. That responsibility can be fulfilled through products and advertising design and placement that meet these criteria:

- The message adolescents receive through the billions of dollars spent on industry advertising and responsibility campaigns does not portray alcohol as an appropriate rite of passage from childhood to adulthood or as an essential element in achieving popularity, social success, or a fulfilling life.
- The placement of alcohol advertising, promotions, and other means of marketing do not disproportionately expose youth to messages about alcohol.
- No alcohol product is designed or advertised to disproportionately appeal to youth or to influence youth by sending the message that its consumption is an appropriate way for minors to learn to drink or that any form of alcohol is acceptable for drinking by those under the age of 21.
- The content and design of industry Web sites and Internet alcohol advertising do not especially attract or appeal to adolescents or others under the legal drinking age.

#### For the Entertainment and Media Industries

Because of their reach and potential impact, the entertainment and media industries have a responsibility to the public in the way they choose to depict alcohol use, especially by those under the age of 21, in motion pictures, television programming, music, and video games. That responsibility can be fulfilled by creating and distributing entertainment that:

• Does not glamorize underage alcohol use.

<sup>&</sup>lt;sup>19</sup> For the purposes of this document, law enforcement includes any enforcement agency that provides agents or officers who can enforce or regulate any Federal, State, Tribal, or local law or ordinance.

- Does not present any form of underage drinking in a favorable light, especially when entertainment products are targeted toward underage audiences or likely to be viewed or heard by them.
- Seeks to present a balanced portrayal of alcohol use, including its attendant risks.
- Avoids gratuitous portrayals of alcohol use in motion pictures and television shows that target children as a major audience. This is important because children's expectations toward alcohol and its use are, in part, based on what they see on the screen (Dunn & Yniguez, 1999; Kulick & Rosenberg, 2001; Sargent et al., 2006).

#### For Governments and Policymakers

Governments and policymakers can:

- Focus as much attention on underage drinking as on tobacco and illicit drugs, making it clear that underage alcohol use is an important public health problem.
- Ensure that all communications are clearly written and culturally sensitive.

#### Goal 2: Engage Parents and Other Caregivers, Schools, Communities, All Levels of Government, All Social Systems That Interface With Youth, and Youth Themselves in a Coordinated National Effort to Prevent and Reduce Underage Drinking and Its Consequences.

# Strategy 1: Provide positive scaffolding for children and adolescents to protect them from alcohol use.

# For Parents and Other Caregivers

Throughout a child's life, parental actions do make a difference. Parents can facilitate healthy development and help protect their children from the consequences of alcohol use by increasing protective factors and reducing risk factors related to alcohol use. A developmental approach to preventing and reducing underage drinking suggests such steps as these that parents can take to protect their children and adolescents:

- Create a stable family environment and practice, as parents, being supportive, involved, and loving. Research indicates that children of such parents have better developmental outcomes and are less likely to use alcohol than children raised in less supportive homes. Parental support includes monitoring an adolescent's activities and supporting his or her independence while setting appropriate limits (Barnes et al. 2000; Bogenschneider et al. 1998; Davies & Windle, 2001; DiClemente et al., 2001; Reifman et al., 1998; Steinberg et al., 1994).
- Provide opportunities for the adolescent to be valued at home, for example, by contributing to the family's well-being (e.g., chores, part-time job, caring for a younger sibling).
- Facilitate a willingness on the part of the adolescent to share information about his or her life. Research indicates that such adolescent sharing may be associated with better

outcomes around alcohol use, and, therefore, the source of parental information about their children's activities is important (Stattin & Kerr, 2000).

- Recognize that regardless of how close the parent-child relationship may be, that relationship alone is not sufficient to prevent underage alcohol use. Parents must support construction of scaffolds in the other social systems that influence their adolescent's behavior: schools, community, institutions, government, and the culture as a whole. It is the combined strength afforded by the interactions of all the scaffolds in all the social systems that is most effective in preventing underage drinking.
- Clearly and consistently communicate with their underage children so that the expectation that they are not to drink is understood.
- Know the basic facts and statistics about underage alcohol use and its consequences. Armed with this knowledge, parents will feel more confident when they talk with their children about alcohol.
- Reduce or eliminate adolescent access to alcohol and do not provide alcohol to adolescents. To do otherwise sends a mixed message at best, or a supportive message at worst, about underage alcohol use.
- Ensure that all parties attended by their adolescents are properly supervised and alcohol free, including the parties their own children give.
- Respond to known instances of alcohol use with appropriate disciplinary actions.
- Recognize the link between adolescent alcohol use and suicide, other substance use, mental disorders, and risky sexual behaviors.
- Seek professional intervention if they have concerns about their child's alcohol involvement.
- Support enforcement and criminal or juvenile justice systems' efforts to uphold underage drinking laws.

# Parental Monitoring

Parental monitoring is associated with better outcomes around adolescent alcohol use. As part of effective parental monitoring, parents, and other caregivers should:

- Be aware of their adolescent's whereabouts.
- Know their adolescent's friends.
- Be knowledgeable of their adolescent's activities.
- Enforce the parental rules they have set.
- Strengthen their adolescent's skills in refusing alcohol.

# Factors that Increase Risk

Parents should be aware of specific factors that may increase the risk of their adolescent becoming involved with alcohol or experiencing an adverse alcohol-related consequence. These factors include:

- A history of conduct problems.
- Depression and other mental disorders.

- A family history of alcohol dependence, which raises the risk of problematic alcohol involvement.
- Significant transitions (such as acquisition of a driver's license, a parental divorce, graduation from middle school to high school, or the move from high school to college or the workforce), which may increase the adolescent's stress level and/or exposure to different peers and opportunities, making it more likely that he or she will use alcohol.
- Interaction with peers involved in deviant activities.

#### An Ongoing Dialog

Parents and other caregivers should initiate and sustain with their adolescent an ongoing dialog about alcohol, as with other risky behaviors. In that dialog, parents should:

- Encourage input from their adolescent and respect that input.
- Enhance their adolescent's knowledge about drinking and its consequences.
- Clarify parental expectations.
- Set clear rules around not drinking.
- Establish specific consequences for alcohol use.
- Set clear limits, including never driving with any alcohol in their system or riding with a driver who has been drinking.
- Discuss laws concerning underage drinking (e.g., minimum legal drinking age and zero tolerance).<sup>20</sup>

# For Schools

School has a significant impact on an adolescent's life. The climate and cohesiveness of a school can play an important role in the development of an adolescent's self-identity, because students who are involved with their schools have increased opportunities for building self-confidence, developing relationships with others, and achieving success in their areas of interest. Schools can:

- Work to increase students' involvement in their school, a factor that has been found to predict less alcohol use (Catalano et al., 2004).
- Produce an environment that allows students to explore their talents and follow their passions, be they academic, musical, sports, or social and community causes.
- Provide positive outlets for adolescents' considerable energy and opportunities for validation and belonging.
- Serve as the source of a mentor, a valued teacher, or another caring adult, which has been shown to increase positive outcomes in adolescents.
- Implement evidence-based programs and practices to prevent underage drinking.
- Provide information to parents on the consequences of underage alcohol use, school policies and practices on alcohol use, and local resources.

 $<sup>^{20}</sup>$  Zero-tolerance laws prohibit a driver under the age of 21 with any detectable amount of alcohol in his or her system from operating a vehicle.

- Recognize that significant social transitions such as moving from elementary school to middle school, moving from middle school to high school, and obtaining a driver's license, are accompanied by increasing responsibility, added freedom, greater social pressure, and/or more demanding academic requirements. These factors may make it more likely that adolescents will use alcohol, in part because they increase adolescent stress levels. At such times of potentially increased risk, teachers and staff can be particularly alert and supportive, making a special effort to connect students at high risk or evidencing increased stress with an adult who can serve as a mentor and confidant.
- Recognize that children who mature earlier or later than the majority of their peers may be at increased risk.
- Provide and promote multiple alcohol-free venues where adolescents can get together with their friends.

#### For Colleges and Universities

Colleges should be safe places where students can thrive academically, grow personally, and mature socially without peer pressure to use alcohol. However, colleges can be settings where underage alcohol use is facilitated—inadvertently or otherwise—and even openly accepted as a rite of passage and actively encouraged by some students and organizations. In fact, some parents and administrators appear to accept a culture of drinking as an integral part of the college experience. Such attitudes need to change and can change through a recognition of the seriousness of the consequences of underage drinking in a university environment and a recognition of the university's responsibility to keep its campus safe for its students. Institutions of higher learning that accept this responsibility can build a developmentally appropriate protective scaffolding around their underage students by taking the following actions:

- Foster a culture in which alcohol does not play a central role in college life or the college experience.
- Recognize that the early part of freshman year is a time of increased risk for alcohol use.
- Provide appealing, alcohol-free locations (e.g., coffeehouses and food courts) where students can gather with their friends to socialize or study.
- Expand opportunities for students to make spontaneous social choices that do not include alcohol (e.g., by providing frequent alcohol-free late-night events, extending hours of student center and athletics facilities, and increasing public service opportunities).
- Offer alcohol-free dormitories<sup>21</sup> that promote healthy lifestyles.
- Provide easy access to information about alcohol's effects, the risks of using alcohol, and the school's alcohol policies.
- Provide referral and facilitate access to brief motivational counseling and treatment for alcohol and mental health problems as appropriate.

<sup>&</sup>lt;sup>21</sup> Offering this lifestyle option to students does not imply that underage alcohol use is appropriate in dormitories that are not designated as alcohol-free.

### For Communities

Communities can:

- Provide appealing, alcohol-free locations where adolescents can gather with their friends.
- Provide youth with opportunities to express their interests, explore their talents, pursue their passions, achieve success, commit themselves to positive endeavors, and earn status among their peers without having to use alcohol.
- Increase volunteer opportunities, including opportunities for younger adolescents, because they offer a way to experience self-fulfillment and achieve a sense of meaning and purpose.
- Work to ensure access to education about alcohol use and its consequences, brief motivational counseling, and treatment for alcohol use disorders (AUDs).

#### For the Criminal and Juvenile Justice Systems and Law Enforcement:

The justice system and law enforcement can:

- Increase the knowledge of judges and others in the justice system about the nature and scope of underage drinking and make them more aware that youth experiencing stressful events such as divorce or abuse may be at increased risk for alcohol involvement.
- Increase the knowledge of judges and others in the justice system about adolescent development and the nature and scope of consequences resulting from underage alcohol use.
- Require appropriate therapeutic interventions for parents with substance use disorders who are before the courts because their children are at heightened risk for underage drinking.
- Improve identification of AUDs and ensure timely access to treatment.

# Strategy 2: Decrease the risk of adolescent alcohol use and the associated negative consequences.

For Parents and Other Caregivers

- The action steps listed in Strategy 1 are also applicable here.
- Be aware that scare tactics are ineffective (Perry et al., 2003).

# For Schools

Schools can:

- Discourage violation of alcohol rules by consistently enforcing them.
- Provide students with the knowledge, skills, and motivation they need to resist peer and other pressures to drink (rather than using scare tactics, which have been shown to be ineffective).
- Identify students who are using alcohol and refer them for appropriate interventions.

- Ensure that school nurses are trained to recognize alcohol-related problems, to intervene appropriately when problems are found, and to be familiar with the referral network.
- Work with the community to ensure that the necessary infrastructure is in place so that students who need services and treatment can be referred to the appropriate personnel or health care provider.

## For Colleges and Universities

Colleges and universities have a responsibility to reduce risk factors associated with underage alcohol use and an obligation to students to protect them from adverse consequences of their own or others' alcohol use such as accidents, assaults, and rapes. Some of the measures available to colleges are to:

- Establish clear policies with specific penalties and consistent enforcement that prohibit alcohol use on campus by underage students.
- Distribute the school's alcohol policy to all incoming and returning students and their parents. Display the alcohol policy prominently on the school Web site and post it in school venues such as dormitories and sports facilities.
- Require all student groups, including fraternity and sorority members, athletes, and members of student organizations and clubs, to comply with campus and community policies related to alcohol use.
- Restrict or eliminate alcohol sales at concerts and at athletic and other campus events.
- Reinstate Friday classes to shorten the elongated weekend.
- Ensure that the student health center provides screening, brief motivational interventions, and/or referral to treatment for students concerned about their drinking and/or at high risk for alcohol-related problems (e.g., those who binge drink or those with a mental health disorder requiring treatment).
- Work with the local community to coordinate efforts at preventing and reducing underage drinking on and around campus. Easy access to alcohol on a college campus can undermine community efforts to reduce alcohol use by junior high and high school students.
- Work with the local community to control or reduce the number of bars and other alcohol outlets located near the campus and to eliminate or restrict high-volume, low-price drink specials and other promotions that encourage underage drinking. Easy, low-cost access to alcohol for underage youth off campus can undermine efforts on campus to reduce underage drinking.
- Work with the local community to ensure that bars and other alcohol outlets located near the campus comply with server training regulations and enforce all policies and laws with respect to underage youth.
- Work with the community to eliminate loud house parties and other disruptive events in which underage alcohol use is likely to be involved.

# For Communities

Communities can:

- Make adequate, affordable services available to youth who are at high risk of developing alcohol-related problems (e.g., those who binge drink or those who have a mental health disorder needing treatment).
- Make adequate, affordable services available to youth identified as having AUDs.

#### For the Criminal and Juvenile Justice Systems and Law Enforcement

The justice system and law enforcement can:

• Provide screening and appropriate interventions for youth who interface with the criminal justice system, including those who are incarcerated (e.g., in juvenile correctional facilities, detention centers, or jails). Although prisons often have such programs, jails usually do not; these programs provide a unique opportunity to intervene with high-risk youth.

#### For the Health Care System

The health care system is a powerful arena for screening, referrals, and interventions around underage drinking. The health care system can:

- Identify adolescents who use alcohol (e.g., when providing clinical preventive services and in the emergency department) and intervene where appropriate, including with those youth who may not meet the diagnostic criteria for alcohol abuse or dependence and those at high risk. Interventions also should address coexisting mental health and substance use problems in an integrated manner.
- Work in collaboration with parents, schools, and communities to develop and maintain a system for screening and referring adolescents with alcohol problems.
- Provide expanded services that are developmentally appropriate for adolescents and create a functional referral network so adolescent patients can be directed to appropriate services (lack of a referral system often is cited as a reason not to screen for alcohol use).
- Educate families, schools, and the community about the effectiveness of prevention efforts.
- Inform the public of the adverse consequences of underage drinking.
- Encourage partnerships between parents, schools, health care providers, faith-based groups, and other community organizations in prevention and reduction efforts aimed at underage drinking.
- Promote research on underage drinking in the context of adolescent development.

# Strategy 3: Raise the "Cost" of Underage Alcohol Use

The "cost" of underage drinking refers not just to the price of alcohol but to the total sacrifice in time, effort, and resources to obtain it, as well as to penalties associated with its use. Research indicates that increasing the cost of drinking can positively affect adolescent decisions about alcohol use (Coate & Grossman, 1988; Grossman et al., 1987, 1998; Kenkel, 1993; Ruhm, 1996; Sutton & Godfrey, 1995). In addition to price, the cost of underage drinking can be increased through a variety of measures:

- Enforcement of minimum drinking age laws and other measures that directly reduce alcohol availability. Enforcement should target underage drinkers, merchants who sell alcohol to youth, and people who provide alcohol to youth.
- Appropriate parental penalties for adolescent alcohol use, such as loss of privileges (e.g., allowance, going out with friends, use of the car).
- Holding adults accountable for underage drinking at house parties, even when adults are not at home.
- Enforcement of zero-tolerance laws that ban underage youth from driving with a blood alcohol content (BAC) above detectable levels.
- Any measure that decreases the availability of alcohol to youth and so raises the cost of getting it.
- Elimination of low-price, high-volume drink specials, especially in proximity to college campuses, military bases, and other locations with a high concentration of youth.

In raising the cost of underage drinking, care has to be taken to balance the conflicting goals of different parties, including adults for whom alcohol use is legal, and to avoid unintended consequences. For example, if the penalty for underage alcohol use at an institution of higher learning is too severe, it may be entered on a student's permanent record, potentially restricting future educational and employment opportunities. In addition, there may be reasons to invoke civil rather than criminal penalties for certain adult infractions such as violating social host laws. Some strategies also will have an impact on adults, forcing a decision on what additional cost society is willing to bear in order to protect its youth from the adverse consequences of alcohol use.

# For Communities

Communities can:

- Publicize existing laws against underage alcohol use, as well as their enforcement.
- Publicize existing laws that reduce alcohol availability to minors and underage access to alcohol, including age verification of Internet and other alcohol sales, as well as their enforcement.
- Restrict adolescent access to alcohol as is appropriate for community norms and goals.

# For the Criminal and Juvenile Justice Systems and Law Enforcement

The justice system and law enforcement can:

- Enforce consistently and uniformly all existing laws against underage alcohol use.
- Enforce consistently and uniformly existing laws that reduce alcohol availability to minors and underage access to alcohol, including age verification for Internet and other alcohol sales.

#### For Governments and Policymakers

Like schools and communities, governments at all levels—including local, Tribal, State, and Federal—can increase the cost of adolescent alcohol use and restrict adolescent access to alcohol by:

- Coordinating efforts by the public and private sectors to increase public knowledge of the scope of the problem of underage drinking in the United States, the adverse consequences that accompany it, the public health and safety problem it creates, and effective measures for preventing and reducing it, with special emphasis on the Nation's collective responsibility to do so.
- Supporting adequate enforcement of laws and regulations.

#### **Goal 3: Promote an Understanding of Underage Alcohol Consumption in the Context of Human Development and Maturation That Takes Into Account Individual Adolescent Characteristics as Well as Ethnic, Cultural, and Gender Differences.**

#### For Parents and Other Caregivers

- Youth of different ages are developmentally different and require different strategies, approaches, and types of scaffolds that are developmentally appropriate. Risk and protective factors related to alcohol use shift throughout adolescence, and parents need to be alert to these shifts.
- The protective scaffolding that parents provide to support the positive development of their children in relation to alcohol use should begin before puberty and continue throughout the span of adolescence into young adulthood.
- Parents need to appreciate that the nature of adolescence makes alcohol especially appealing to youth and understand how, from a developmental perspective, to reduce that appeal and the demand it creates for alcohol.
- Parents need to be aware of adolescents' particular vulnerability to alcohol's effects.
- During periods of high stress such as a parental divorce, and during times of significant social transitions such as the move from elementary school to middle school and from middle school to high school, the risk for alcohol involvement may increase. Parents need to be especially watchful during these periods and, if necessary, temporarily increase the supportive scaffolding around their adolescents.

# For Schools

- Schools should be sensitive to the complex nature of the relationship between alcohol use and development and to the developmental needs of adolescents, both as a group and individually, when implementing programs related to alcohol use.
- Sanctions for infractions of alcohol use policies should be developmentally appropriate and avoid unintended outcomes. For example, suspension from school may provide additional free time for drinking whereas required participation in student/parent education programs and community service does not.

#### For Communities

- Communities need to work to address underage drinking in the context of overall adolescent development. This includes making a commitment to provide as many opportunities for positive experiences as possible for all youth but especially for those at high risk for alcohol use and other negative outcomes.
- Recognize that status is especially important to adolescents and provide positive ways for adolescents of different genders, socioeconomic backgrounds, ethnicity, and race to achieve status.
- Communities can encourage identification and early intervention for high-risk youth.

#### For the Health Care System

Health care practitioners can:

- Be sensitive to adolescence as a time of risk for alcohol use as well as be aware of individual differences in development and other personal characteristics in the adolescent that may heighten that risk.
- Discuss alcohol use with their young patients, taking into account the latest scientific information about the relationship of alcohol to human maturation.
- Identify alcohol use in their adolescent patients.
- Be familiar with and strengthen referral networks for adolescents.
- Make education about alcohol use and its consequences and brief motivational intervention widely available.

# For the Criminal and Juvenile Justice Systems and Law Enforcement

• Penalties for violations should be developmentally appropriate and avoid unintended outcomes. For example, community service can serve both as a penalty (loss of leisure time) as well as an opportunity for personal growth.

#### For Governments and Policymakers

Governments and Policymakers can:

- Understand, through a developmental perspective, why merely providing adolescents with information about alcohol is ineffective in preventing and reducing underage alcohol use.
- Understand why restrictions on adolescent access to alcohol and on alcohol availability need to be in place to prevent and reduce underage alcohol use and its consequences.
- Give careful consideration to providing special protection for populations at high risk, whether they are children of alcoholics, Native Americans, or others.

#### **Goal 4: Conduct Additional Research on Adolescent Alcohol Use and Its Relationship to Development**.

New, more effective, and enduring interventions are needed to prevent and reduce underage drinking as well as to treat youth with AUDs. Existing interventions should be refined on the basis of the latest scientific findings, including research on adolescent development. By studying the problem of underage alcohol use in the context of adolescence as a developmental phenomenon and as a function of individual characteristics and environmental factors, it will be possible to increase understanding of the problem and to improve the effectiveness of interventions.

#### For Researchers

- Develop and implement new and more potent prevention and reduction approaches based on the latest scientific data, including advances in understanding the role of human maturation and development in adolescent alcohol use.
- Conduct additional research to refine interventions and identify risk and protective factors on the basis of gender, ethnicity, and socioeconomic level, particularly in potentially high-risk cases such as early-maturing adolescents and children with a family history of alcohol dependence.
- Conduct research to better understand the short- and, especially, the intermediate- and long-term consequences of underage alcohol use, particularly as it relates to brain development and function, organ maturation, and susceptibility to later AUDs.
- Better understand how adult drinking behavior influences underage alcohol use.
- Evaluate interventions, including media messages and educational programs, to determine those that are most effective.
- Conduct studies and/or amend ongoing surveys to collect more detailed data on actual adolescent alcohol consumption (e.g., actual consumption as a category rather than "5+ drinks"), on pre-adolescent alcohol use, and on secondhand effects.

- Conduct animal studies to develop data on alcohol's effect on maturation processes and on brain and organ development and function because animal research makes it possible to perform certain studies that cannot be conducted in human adolescent research.
- Conduct research to identify genetic influences on both alcohol use and the development of alcohol-related problems in adolescents.
- Conduct research to refine the diagnostic criteria used for identifying alcohol problems in youth that require intervention.
- Track policy changes at the State level (because underage drinking policies vary widely across States) and evaluate their impact on underage alcohol use and consequences.<sup>22</sup>

#### **Goal 5: Work to Improve Public Health Surveillance on Underage Drinking and on Population-Based Risk Factors for This Behavior.**

State, Tribal, and local public health agencies; policymakers; and the general public need complete and timely information on patterns and trends in youth alcohol consumption in order to develop and evaluate prevention strategies.

- Collect more detailed data on the quantity and frequency of adolescent alcohol consumption.
- Collect information on the secondhand effects of underage drinking.
- Collect information on pre-adolescent alcohol use.
- Routinely test all injury deaths in people under age 21 for alcohol involvement to better estimate the extent of alcohol-related consequences.
- Conduct ongoing public health surveillance on the type(s) of alcohol and the quantity and frequency with which they are used by age.
- Conduct ongoing, independent monitoring of alcohol marketing to youth to ensure compliance with advertising standards.
- Build State and Federal public health capacity in alcohol epidemiology to ensure the timely analysis and dissemination of these and other data on underage drinking and to ensure that these data are used to support public health practice.
- Support close collaboration between State and Federal public health and substance abuse agencies in the assessment of underage drinking and related harms and in the design and evaluation of population-based prevention strategies.
- When appropriate, engage youth in the process of collecting data related to underage drinking.
- When appropriate, conduct multimethod research using ethnographic methods in addition to epidemiological and experimental studies.

<sup>&</sup>lt;sup>22</sup> The Alcohol Policy Information System (APIS; <u>http://www.alcoholpolicy.niaaa.nih.gov</u>) is an online resource that provides detailed information on a wide variety of alcohol-related policies in the United States at both State and Federal levels. It features compilations and analyses of alcohol-related statutes and regulations.

### **Goal 6: Work to Ensure That Policies at All Levels Are Consistent With the National Goal** <u>of Preventing and Reducing Underage Alcohol Consumption.</u>

Policymakers and administrators at all levels of government have a responsibility to develop and implement appropriate policies and regulations that facilitate safe adolescent development, protect against underage alcohol use and its consequences, and avoid creating unacceptable risk around alcohol use.

#### For Parents and Other Caregivers

The influence of parents alone is not sufficient to prevent adolescents from using alcohol. Adolescents need additional scaffolding from their schools and communities in the form of policies designed to protect them from alcohol use and its consequences. Parents can:

- Work with the schools to ensure that protective rules around adolescent alcohol use are in place, that the penalties are well known, and that enforcement is sure and uniform.
- Work with organizations and institutions in the community to develop a broad commitment to preventing and reducing underage drinking through appropriate policies, recognizing that adolescent alcohol use is not a parental problem alone but a community problem that requires a collaborative effort to solve.

# For Schools

Schools can play a significant role in preventing and reducing underage alcohol use. They can:

- Establish and enforce strict policies against alcohol use on campus.
- Sponsor only interventions that research has confirmed are effective in preventing and reducing underage alcohol use.

#### For Colleges

Colleges can support the national goal of preventing and reducing underage drinking. They can:

- Establish and enforce clear policies that prohibit alcohol use by underage students on their campuses.
- Sponsor only interventions that research has confirmed are effective in preventing and reducing underage alcohol use.

# For Communities

By publicizing both penalties and enforcement of laws against providing alcohol to minors, driving under the influence (DUI), and drinking before age 21, communities emphasize their

seriousness about preventing and reducing underage drinking. Communities have at their disposal a variety of additional measures to reduce underage drinking. These measures include:

- Implementing an ongoing media campaign that makes people within the jurisdiction aware of existing policies and laws designed to restrict underage access to alcohol and the penalties for violating such laws.
- Requiring compliance training as a condition of employment for all sellers and servers of alcohol in restaurants and bars.
- Supporting enforcement of penalties for use of false IDs.
- Restricting drinking in public places, including at community events.
- Providing for restrictions on youthful drivers, which gradually are removed based on age and driving experience.
- Detecting and stopping underage drinking parties.
- Conducting regular and comprehensive programs to check restaurants, retail outlets, and other vendors of alcohol products for compliance with underage drinking laws (e.g., through keg registration programs) and applying substantial fines that increase with each violation and temporary or permanent license revocation for repeated violations.

# For the Criminal and Juvenile Justice Systems and Law Enforcement

The justice system and law enforcement can:

- Enforce consistently and uniformly all laws related to underage alcohol use, including those against the use of false IDs, those that restrict drinking in public places, and those related to vendors of alcohol products.
- Enforce graduated driver's license laws for novice teenage drivers that include nighttime driving restrictions, requiring novice drivers to drive accompanied by an adult parent or guardian, and restricting the number of other teenage passengers.
- Enforce zero-tolerance laws and laws addressing driving risks associated with driving after drinking among people under the age of 21 (e.g., speeding, running red lights, and failure to wear safety belts).
- Seek to provide appropriate screening and interventions in all criminal justice settings that interface with adolescents.

# For Professional Health Care Associations

To ensure that all who need it receive appropriate care, including screening, assessment, and treatment for heavy drinking and alcohol-related problems (including AUDs), professional health care associations can:

- Support widespread dissemination and implementation of screening and brief motivational intervention, particularly in emergency departments and trauma centers.
- Support provision of a full range of treatment services.

### For Governments and Policymakers

Like communities, governments at all levels have a variety of means to prevent and reduce underage drinking. Governments can consider measures that:

- Support use of cost-effective technologies such as the Internet, to make education about alcohol use and its consequences and brief motivational interventions more accessible and affordable.
- Encourage early intervention for high-risk children and access to a full range of treatment options for youth with alcohol problems.

# APPENDIX E

# DSM-IV-TR DIAGNOSTIC CRITERIA FOR ALCOHOL ABUSE AND DEPENDENCE<sup>23</sup>

#### ALCOHOL ABUSE

(A) A maladaptive pattern of drinking, leading to clinically significant impairment or distress, as manifested by at least one of the following occurring within a 12-month period:

- Recurrent use of alcohol resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to alcohol use; alcohol-related absences, suspensions, or expulsions from school; neglect of children or household).
- Recurrent alcohol use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by alcohol use).
- Recurrent alcohol-related legal problems (e.g., arrests for alcohol-related disorderly conduct).
- Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol (e.g., arguments with spouse about consequences of intoxication).

(B) Never met criteria for alcohol dependence

# ALCOHOL DEPENDENCE

(A) A maladaptive pattern of drinking, leading to clinically significant impairment or distress, as manifested by three or more of the following occurring at any time in the same 12-month period:

- Need for markedly increased amounts of alcohol to achieve intoxication or desired effect; or markedly diminished effect with continued use of the same amount of alcohol.
- The characteristic withdrawal syndrome for alcohol (or a closely related substance) or drinking to relieve or avoid withdrawal symptoms.
- Persistent desire or one or more unsuccessful efforts to cut down or control drinking; or drinking in larger amounts or over a longer period than intended.
- Important social, occupational, or recreational activities given up or reduced because of drinking.
- A great deal of time spent in activities necessary to obtain, to use, or to recover from the effects of drinking.
- Continued drinking despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to be caused or exacerbated by drinking.

<sup>&</sup>lt;sup>23</sup> American Psychiatric Association (APA). *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*. Washington, D.C.: APA, 1994.

(B) No duration criterion separately specified, but several dependence criteria must occur repeatedly as specified by duration qualifiers associated with criteria (e.g., "persistent," "continued").

#### APPENDIX F

# **GLOSSARY OF ABBREVIATIONS AND ACRONYMS**

# Acronym Glossary of Federal Departments and Agencies

Department of Defense	DoD
Department of Education	Education or ED
Office of Safe and Drug-Free Schools	OSDFS
Office of Elementary and Secondary Education	OESE
Department of Health and Human Services	HHS
Administration for Children and Families	ACF
Family and Youth Service Bureau	FYSB
Agency for Healthcare Research and Quality	AHRQ
Centers for Disease Control and Prevention	CDC
Center for Medicaid Services	CMS
Health Resources and Services Administration	HRSA
National Institute on Alcohol Abuse and Alcoholism	NIAAA
National Institute on Drug Abuse	NIDA
Office of Public Health and Science	OPHS
Office of the Surgeon General	OSG
Substance Abuse and Mental Health Services Administration	SAMHSA
Center for Mental Health Services	CMHS
Center for Substance Abuse Prevention	CSAP
Center for Substance Abuse Treatment	CSAT
Office of Applied Studies	OAS
Department of Justice	DOJ
Office of Juvenile Justice and Delinquency Prevention	OJJDP
Office of Justice Programs	OJP
Department of Labor	DOL
Employment Training Administration	ETA
Office of Youth Services	OYS
Occupational Safety and Health Administration	OSHA
Office of National Drug Control Policy	ONDCP
Department of Transportation	DOT
National Highway and Traffic Safety Administration	NHTSA

Acronym (4	lossarv of Federa	I Programs and A	Agencies	(alnhahetical)
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Access to Recovery	ATR
Addiction Technology Transfer Center	ATTC
Administration for Children and Families	ACF
Agency for Health Care Research and Quality	AHRQ
Alcohol Policy Information System	APIS
Basic Center Program	BCP
Behavioral Risk Factor Surveillance System	BRFSS
Birth Control and Alcohol Awareness: Negotiating Choices	
Effectively	Project BALANCE
Centers for Disease Control and Prevention	CDC
Centers for Medicare and Medicaid Services	CMS
Center for Mental Health Services	CMHS
Center for Substance Abuse Prevention	CSAP
Center for Substance Abuse Treatment	CSAT
Community Anti-Drug Coalitions of America	CADCA
Drug Abuse Resistance Education	DARE
Department of Defense	DoD
Department of Education	ED
Department of Health and Human Services	HHS
Department of Justice	DOJ
Department of Labor	DOL
Department of Transportation	DOT
Drug and Alcohol Services Information System	DASIS
Drug-Free Communities Program	DFC
Employment Training Administration	ETA
Enforcing the Underage Drinking Laws	EUDL
Family and Youth Services Bureau	FYSB
Fatality Analysis Reporting System	FARS
Federal Alcohol Spectrum Disorder	FASD
Grants to Reduce Alcohol Abuse Program	GRAAP
Health Resources and Services Administration	HRSA
Institute of Medicine	IOM
Interagency Coordinating Committee on the Prevention of Underag	e
Drinking	ICCPUD
International Association of Chiefs of Police	IACP
Inventory of Substance Abuse Treatment Services	I-SATS
Iowa Strengthening Families Program	ISFP
Local Educational Agencies	LEAs
Monitoring the Future Survey	MTF
Mothers Against Drunk Driving	MADD
National Academy of Sciences	NAS
National Alcohol Screening Day	NASD
National Association for Children of Alcoholics	NACoA
National Association of School Resource Officers	NASRO

National Epidemiological Survey on Alcohol Related Conditions	NESARC
National Health and Nutrition Examination Survey	NHANES
National Highway Traffic Safety Administration	NHTSA
National Institutes of Health	NIH
National Institute on Alcohol Abuse and Alcoholism	NIAAA
National Liquor Law Enforcement Association	NLLEA
National Organizations for Youth Safety	NOYS
National Registry of Effective Programs and Practices	NREPP
National Survey of Substance Abuse Treatment Services	N-SSATS
National Survey on Drug Use and Health	NSDUH
Network for Employees of Traffic Safety	NETS
Occupational Safety and Health Administration	OSHA
Office of Juvenile Justice and Delinquency Prevention	OJJDP
Office of National Drug Control Policy	ONDCP
Office of the Surgeon General	OSG
Office of the Assistant Secretary for Planning and Evaluation	ASPE
Office of Youth Services	OYS
Outreach to Children of Parents in Treatment	OCPT
Partnership for Drug-Free America	PDFA
Pregnancy Nutrition Surveillance System	PNSS
Pregnancy Risk Assessment Monitoring System	PRAMS
Protecting You/Protecting Me	PYPM
Public Service Announcements	PSAs
Recording Artists, Actors, and Athletes Against Drunk Driving	RADD
Robert Wood Johnson Foundation	RWJ
Safe and Drug-Free Schools and Communities Act	SDFSCA
Screening, Brief Intervention, Referral, and Treatment	SBIRT
School Health Policies and Programs Study	SHPPS
State Incentive Grant Program	SIG
Strategic Prevention Framework	SPF
Street Outreach Program	SOP
Students Against Destructive Decisions	SADD
Substance Abuse and Mental Health Services Administration	SAMHSA
Substance Abuse Prevention and Treatment Block Grant	SAPT BG
Targeted Capacity Expansion Program	TCE
Techniques for Effective Alcohol Management	TEAM
Too Smart to Start	TSTS
Transitional Living Program	TLP
Treatment Episode Data Set	TEDS
Treatment Improvement Protocols	TIPS
Uniform Accident and Sickness Policy Provision Law	UPPL
Uniform Facility Data	UFDS
Virginia Commonwealth University	VCU
Youth Offender Demonstration Project	YODP
Young Offender Reentry Program	YORP
Youth Opportunity Grants	YOGs

Youth Risk Behavior Survey Youth Risk Behavior Surveillance System

YRBS YRBSS

### APPENDIX G

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