EXECUTIVE SUMMARY

Introduction

Alcohol causes 88,000 deaths in America each year, making alcohol the third leading preventable cause of death in the U.S. (Stahre, Roeber, Kanny, Brewer, & Zhang, 2014).[1] Rates of binge drinking and alcohol use disorders among adults have increased significantly over the past 20 years (Grant, Chou, Saha, Pickering, Kerridge, Ruan, et al., 2017). The economic cost of this excessive alcohol use is estimated at $249 billion each year (Sacks, Gonzales, Bouchery, Tomedi, & Brewer, 2015).

Against this backdrop, alcohol use by people under age 21 has declined in the past two decades, but continues to contribute to a wide range of costly health and social problems. These include motor vehicle crashes (the greatest single mortality risk for underage drinkers), suicide, interpersonal violence (e.g., homicides, assaults, rapes), unintentional injuries (e.g., burns, falls, drownings), brain impairment, alcohol dependence, risky sexual activity, academic problems, and alcohol and drug poisoning. Annually, alcohol is a factor in the deaths of approximately 4,300 youths in the United States, shortening their lives by an average of 60 years (Stahre, Roeber, Kanny, Brewer, & Zhang, 2014).

In 2006, Congress enacted the Sober Truth on Preventing Underage Drinking Act, popularly known as the "STOP Act." The STOP Act, which was reauthorized in 2016 as part of the 21st Century Cures Act, established the Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD), and required two annual Reports to Congress, which are included in this volume. The first Report includes the most current data on underage alcohol use in the United States and information on federal prevention efforts (Chapters 1 through 3). The second Report details the production, broadcasting, and evaluation of "Talk. They Hear You.", the national adult-oriented media public service campaign required by the STOP Act (Chapter 4).

The STOP Act also requires annual reports on state prevention and enforcement activities. Accordingly, the ICCPUD has prepared individual reports for each of the 50 states and the District of Columbia, including state-specific population and underage alcohol use data. The State Reports, available on stopalcoholabuse.gov, also list whether the states have adopted 26 evidence-based policies and practices to reduce youth access to alcohol, and include data from states and the District of Columbia on their underage drinking enforcement and prevention activities, including expenditures on enforcement and prevention programs. These data are collected through a survey administered to state governments annually since 2011. Accompanying the State Reports is the "State Performance and Best Practices for the Prevention and Reduction of Underage Drinking" (State Performance and Best Practices), which summarizes and compares the states' performance in adopting the 26 evidence-based policies and in enforcing them.

Characteristics of Underage Drinking in America

Alcohol Is the Most Widely Used Substance Among American Youth

Alcohol continues to be the most widely used substance among America's youth, and a higher proportion use alcohol than use tobacco, marijuana, or other drugs. For example, according to

[1]Complete references are provided in Appendix D.

the 2016 Monitoring the Future (MTF) study, 19.9 percent of 10th graders reported alcohol use in the past 30 days, 14 percent reported marijuana use in the past 30 days, and 4.9 percent reported cigarette use in the same period (Miech et al., 2017).[2]

Youth Start Drinking at an Early Age

As discussed below, early initiation to alcohol use increases the risk for a variety of developmental problems during adolescence and for problems later in life. Early initiation is often an important indicator of future substance use and alcohol dependence (Buchmann et al., 2009; Grant & Dawson, 1998; Hawkins et al., 1997; Liang & Chikritzhs, 2015; Robins & Przybeck, 1985). Accordingly, delaying the onset of alcohol initiation may significantly improve later health. The peak years of initiation of alcohol use are in grades 7 to 11, and data from the 2015 Youth Risk Behavior Survey (YRBS)[3] indicate that almost one-fifth (17.2 percent) of underage drinkers currently in high school reported use of alcohol before they were 13 years old (Kann et al., 2016). Approximately 2,078 youths ages 12 to 14 initiated alcohol use each day in 2016, according to data from the National Survey on Drug Use and Health (NSDUH; Center for Behavioral Health Statistics and Quality [CBHSQ], 2017c).

Why Is Underage Drinking a Problem?

- Alcohol is used more widely than tobacco, marijuana, and other drugs by our nation's young people (Miech et al., 2017).
- Motor vehicle crashes are the greatest mortality risk for underage drinkers. In 2016, of the 1,908 drivers ages 15 to 20 who were killed in motor vehicle traffic crashes, 451 (24 percent) had a blood alcohol concentration (BAC) of 0.01 or higher (National Center for Statistics and Analysis [NCSA], 2017).
- Alcohol use contributes to brain impairment, sexual assault, and suicide, and is associated with academic problems (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2004; Brown & Tapert, 2004; White & Hingson, 2013).
- Early initiation of drinking is associated with development of an alcohol use disorder later in life (Grant & Dawson, 1997; Hingson & Zha, 2009).

Binge Drinking

Approximately 4.5 million (12.1 percent) of 12- to 20-year-olds reported past-month binge alcohol use[4] in 2016 (CBHSQ, 2017a). High BACs and impairment levels associated with binge drinking place binge drinkers and those around them at a substantially elevated risk for negative consequences, such as motor vehicle crashes, injuries, unsafe sexual practices, and sexual victimization. Given these consequences, reducing binge drinking has become a primary public health priority (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014).

Approximately 2.8 percent of 12- to 20-year-olds (1.1 million) could be also classified in an even higher-risk drinking category: heavy drinkers (consuming five 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 (CBHSQ, 2017a). Although youths, compared with adults, generally consume alcohol less frequently and consume less alcohol overall, they are much more likely to binge drink. A significant proportion of underage drinkers consume substantially more than the five-drink binge criterion. For example, averaged 2015 and 2016 data from the NSDUH

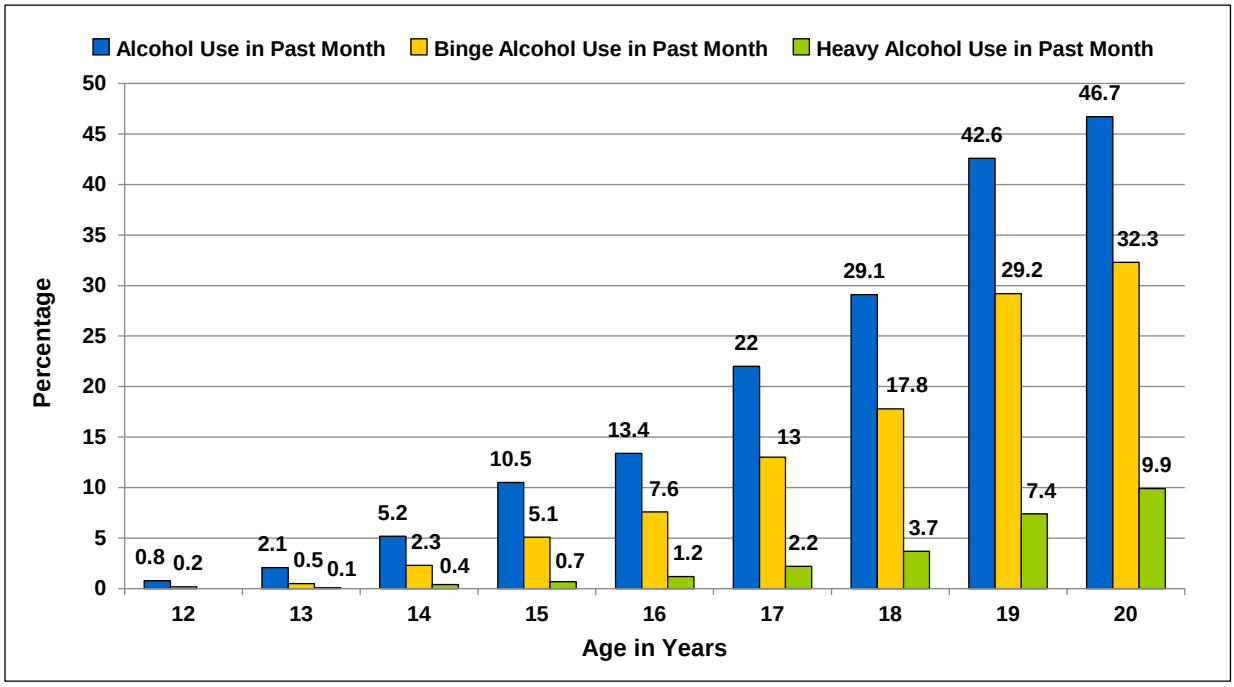
[2]For comparability with data from the 2016 National Survey on Drug Use and Health (NSDUH), the latest MTF data included in this report are also from 2016. The 2017 MTF data, available in December 2017, will be included in the next report.
[3]YRBS data are collected every 2 years; the latest available data are for 2015.
[4]Binge drinking is generally defined as five or more drinks on a single occasion for males, and four or more drinks on a single occasion for females.

show that 8.5 percent of underage drinkers had nine or more drinks during their last drinking occasion (CBHSQ, 2017c).

A troubling subset of binge drinking is very high-intensity binge drinking, or consumption of 10 to 15 or more drinks on a single occasion. According to MTF data for 2016, 4.4 percent of 12th graders reported consuming 10 or more drinks in a row, and 2.3 percent reported consuming 15 or more drinks in a row within the previous 2 weeks. Although these percentages continue to shift downward, a substantial number of underage drinkers still meet the definition of high-intensity binge drinkers (Miech et al., 2017).

Binge rates increase rapidly with age (Exhibit E.1). It is important to note that, because of their smaller size, very young adolescents (ages 12 to 15) may reach high risk levels of BACs with fewer drinks (three to four drinks) than older adolescents (age 18 or older; Donovan, 2009). This suggests that binge and heavy drinking may be even riskier for younger adolescents than for older youth and may occur with greater frequency than is reflected in survey data.

Exhibit E.1: Current, Binge, and Heavy Alcohol Use Among People Ages 12–20 by Age: NSDUH, 2016 (CBHSQ, 2017a)



Prevalence of Alcohol Abuse and Dependence Among Youth Is High

The prevalence of alcohol abuse and dependence among underage drinkers, based on the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (DSM-IV-TR (American Psychiatric Association [APA], 2000) criteria[5] is quite high. According to combined 2015–2016 NSDUH data, the prevalence of alcohol abuse or dependence is about 1 in 12 (8.5 percent) among 18- to 20-year-olds. In comparison, the prevalence for 21- to 24-year-

[5]The more recent DSM-V (APA, 2013) integrates the two DSM–IV disorders, alcohol abuse and alcohol dependence, into a single disorder called alcohol use disorder (AUD). DSM-V does not specifically address adolescents. NSDUH assesses substance use disorders based on DSM-IV criteria.

olds, who have the highest prevalence of alcohol use disorders, is 12.4 percent. In addition, 0.6 percent of 12- to 14-year-olds and 3.8 percent of 15- to 17-year-olds are estimated to have met criteria for alcohol use disorder (CBHSQ, 2017c).

College Drinking

Drinking and binging rates are higher for older underage youth, particularly 18- to 20-year-olds (see Exhibit E.1), and rates are higher for college students[6] than for same-age peers not attending college. Of college students, 63.2 percent drink, compared with 59.2 percent of those of the same age and not in college (Schulenberg et al., 2017). The problems associated with college drinking, in addition to traffic crashes and injury-related deaths, include sexual assault, other violent crime on college campuses, and reduced academic performance.

Underage Access to Alcohol

Selling alcohol to youth under age 21 is illegal in all 50 states and the District of Columbia. Giving alcohol to youth under age 21 is also illegal, 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 broad restrictions, underage youth find it relatively easy to acquire alcohol, often from adults. Younger underage drinkers (ages 12 to 14) are more likely to get alcohol from their own house than from another source, according to NSDUH data. Older drinkers are more likely to buy alcohol themselves, give money to an adult to buy it for them, or receive alcohol from an unrelated adult (CBHSQ, 2017c).

Prevention Efforts

Since the mid-1980s, the nation has proactively and systematically implemented underage drinking prevention efforts at the federal, state, and local levels. Key evidence-based prevention research strategies are described and called for in: *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs and Health* (Department of Health and Human Services [HHS], 2016); the Surgeon General's *Call to Action to Prevent and Reduce Underage Drinking*. (HHS, 2007); the Community Preventive Services Task Force *Guide to Community Preventive Services: Preventing Excessive Alcohol Consumption* (Community Preventive Services Task Force, 2016); the National Research Council (NRC) and Institute of Medicine (IOM) report *Reducing Underage Drinking: A Collective Responsibility* (NRC & IOM, 2004); the National Institute on Alcohol Abuse and Alcoholism (NIAAA) *Call to Action: Changing the Culture of Drinking at U.S. Colleges* (NIAAA, 2002), and CollegeAIM: College Alcohol Intervention Matrix (NIAAA, n.d.). Several of these important initiatives to encourage use of evidence-based strategies are discussed in Chapter 1 of this report.

Framework for Success in Reducing Underage Drinking

Epidemiological data demonstrates that the rate of underage drinking has decreased over the past decades in several segments of the 12- to 21-year-old population. Factors that have contributed to this success are varied and complex, with one clear factor being the increased attention to underage drinking at all levels of society. Federal initiatives have raised underage drinking to a

[6]College students are defined as MTF panel participants who are full-time students enrolled in a 2- or 4-year college 1 to 4 years after high school in March during the year of the MTF survey (Johnston et al., 2016). Same-age peers are defined as individuals 1 to 4 years post-high school graduation who are not enrolled in either a 2- or 4-year college at the time of survey completion.

prominent place on the national public health agenda, created a policy climate in which significant legislation has been passed by states and localities, raised awareness of the importance of proactive and systematic law enforcement, promoted both routine screening of youth in the healthcare system and brief intervention and referral to treatment where appropriate, and stimulated coordinated citizen action. Private and public efforts support the development of drug-free communities. These changes are mutually reinforcing and have provided a framework for a sustained national commitment to reducing underage drinking.

The federal agencies that participate in the ICCPUD (see Appendix A and sidebar in this section) contribute leadership and vision to the national effort specific to their missions and mandates. For example, NIAAA supports research on prevalence and patterns of underage alcohol use, underage drinking prevention, and treatment for youth who misuse alcohol or who have alcohol use disorder. The National Institute on Drug Abuse (NIDA) supports research on patterns and usage of drug use and alcohol use. The Centers for Disease Control and Prevention (CDC) provide research on the effectiveness of prevention strategies. SAMHSA works to reduce underage demand for alcohol, and the National Highway Traffic Safety Administration (NHTSA) provides data on underage alcohol use and traffic crashes. SAMHSA, CDC, and the National Institutes of Health (NIH) all conduct surveys (either directly or through grants) that gather the most current data on underage alcohol use.

Every ICCPUD agency engages in programs and activities that are aimed, either directly or indirectly, at underage drinking prevention or reduction. Together, these programs and activities constitute a coordinated federal approach that has helped to support year-by-year reductions in underage alcohol use rates as reported in national surveys.

The Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD) includes the following officials, as specified in the STOP Act:

- Secretary of Health and Human Services
- Secretary of Education
- Attorney General
- Secretary of Transportation
- Secretary of the Treasury
- Secretary of Defense
- Assistant Secretary for Mental Health and Substance Use
- Assistant Secretary for Children and Families
- Surgeon General
- Director of the Centers for Disease Control and Prevention
- Director of the National Institute on Alcohol Abuse and Alcoholism
- Director of the National Institute on Drug Abuse
- Director of the Office of National Drug Control Policy
- Administrator of the National Highway Traffic Safety Administration
- Administrator of the Office of Juvenile Justice and Delinquency Prevention
- Chairman of the Federal Trade Commission

Effective Solutions

Risk and protective factors that affect underage drinking can be influenced by programs and policies at multiple levels, including federal, state, community, family, school, and individual. As noted in the 2016 Surgeon General's report, *Facing Addiction in America* (HHS, 2016):

> Targeted programs implemented at the family, school, and individual levels can complement the broader population-level policy interventions and assist in reducing specific risk factors and promoting protective factors.

A comprehensive underage drinking prevention initiative includes a balance of evidence-based prevention programs and strategies, with multi-targeted approaches.

Evidence-based programs focusing on individuals that are highlighted in *Facing Addiction in America* include:

- *Good Behavior Game (GBG):* A school-based intervention that provides teachers with a method of classroom behavior management and aims to reduce early aggressive or disruptive behavior problems. Long-term research on GBG, supported by NIDA, shows a significant reduction in drug and alcohol misuse and in substance use disorders.
- *LifeSkills Training (LST):* A curriculum for middle-school students that has delayed early use of alcohol and reduced use for up to 5 years after the training ended. NIDA funds continued research on LST.
- *Strengthening Families Program:* For Parents and Youth 10–14 (SFP): A seven-session skills-building program developed with NIDA funding that enhances parenting skills and adolescent substance refusal skills. Multiple studies have showed reduction in youth alcohol use through age 21.
- *Screening, Brief Intervention, and Referral to Treatment (SBIRT):* An approach to community-based interventions intended to identify, reduce, and prevent problematic use, abuse, and dependence on alcohol and illicit drugs. Use of these tools can reduce risky behavior before it becomes more problematic in adolescents and youth who are at risk of or show signs of alcohol use. NIAAA has developed a screening guide titled *Alcohol Screening and Brief Intervention for Youth: A Practitioner's Guide* (NIAAA, n.d.).

These and many other programs are supported by federal agencies and are described in more detail in Chapter 3.

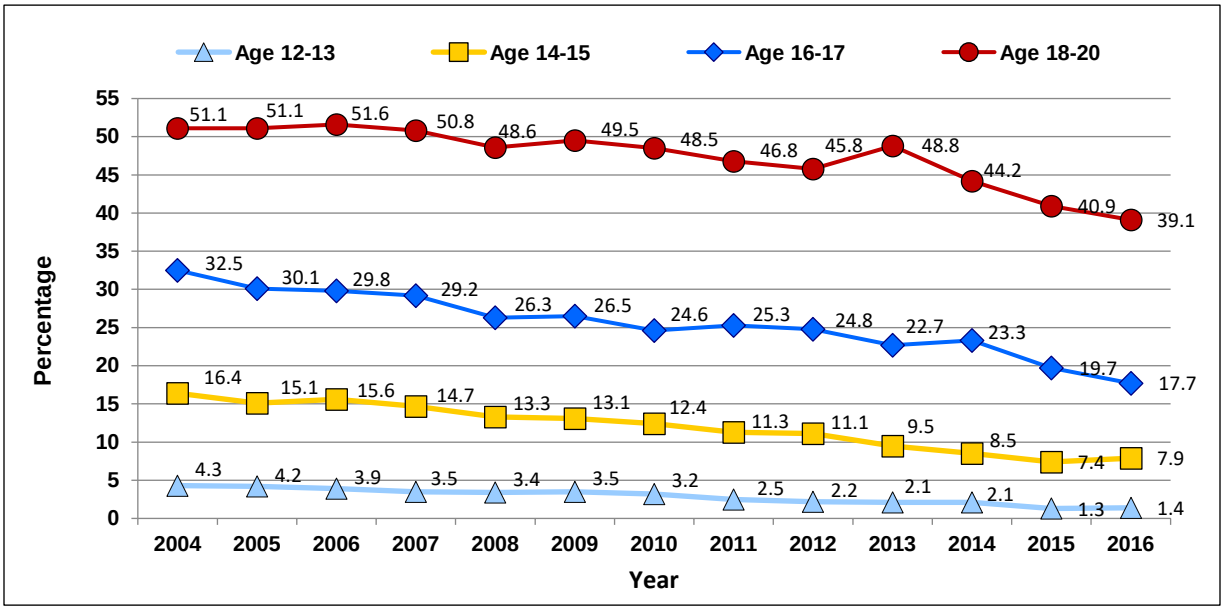
National Media Campaign

The STOP Act mandated the creation of a national media campaign to prevent underage drinking, and the **"Talk. They Hear You."** national media campaign was developed by SAMHSA's Center for Substance Abuse Prevention (CSAP) in response. This campaign is a significant environmental initiative and aims to prevent underage drinking among youth under age 21 by providing their parents and caregivers with information to address alcohol use early. The campaign, which consists of television and print Public Service Announcements (PSAs), a website, and a mobile app, has received an estimated 6.82 billion media impressions (number of times people have seen the ads or messages). The annual Report to Congress on the campaign is found in Chapter 4.

Extent of Progress in Reducing Underage Drinking

National epidemiologic data demonstrate that national and state prevention efforts are having positive effects. Local- and community-level activity, which is not generally measured, is also contributing. The overall prevalence of drinking for 12- to 20-year-olds has declined by 32.9 percent since 2004. Young adult (ages 18 to 20) past-month use remains at a high level, although (as illustrated in Exhibit E.2), some decline is evident since 2014 (CBHSQ, 2017a). In addition, alcohol-related traffic deaths among drivers ages 15 to 20 have declined 82 percent since 1982 (NCSA, 2017).

Exhibit E.2: Trends in Past-Month Alcohol Use for 12- to 20-Year-Olds: NSDUH, 2004–2016 (CBHSQ, 2017a)



Continued Effort Is Needed

Sustained efforts on prevention programs, policies, and enforcement are needed to (1) maintain the current successes, and (2) continue to lower the rates of underage drinking along with the many problems related to alcohol use.

The shifting landscape of issues and trends related to underage drinking—such as the development of new products (e.g., powdered alcohol products); the sale of high-alcohol-content grain beverages; changes in marijuana policies and laws; and the risk to youth of adverse effects of combined drug and alcohol use—must be continuously identified, monitored, and addressed. Ongoing engagement of policymakers, citizen coalitions, health professionals, educators, law enforcement, and others is essential to the implementation of effective prevention strategies.