REPORT TO CONGRESS ON THE PREVENTION AND REDUCTION OF UNDERAGE DRINKING

POLICY SUMMARY:
High-Proof Grain Alcoholic Beverages

2017
Time period covered by this version of the Report to Congress: The 2017 version of the Report to Congress on the Prevention and Reduction of Underage Drinking primarily includes data from calendar year 2016. Epidemiological data in Chapters 1 and 2 draw from the most recently available federal survey data as of 2016. Chapter 3 includes data on ICCPUD member agency underage drinking activities in calendar year 2016. The state legal data reported in Chapter 4 reflects the state of the law as of January 1, 2016. The state survey data presented in Chapter 4 was collected in 2016, and is drawn from the most recent 12-month period in which the states maintained the data. Chapter 5 describes 2016 activities conducted by the Underage Drinking Prevention National Media Campaign.

Recommended Citation

High-Proof Grain Alcoholic Beverages

Policy Description

This policy addresses state laws that prohibit or restrict the retail availability of high-proof grain alcoholic beverages as a strategy for reducing underage drinking, particularly underage binge drinking.

High-proof grain alcoholic beverages such as Everclear or Gem Clear represent a type of “neutral spirits” that is odorless and colorless and contains a high percentage of alcohol. The Federal Alcohol and Tobacco Tax and Trade Bureau (TTB) defines “neutral spirits or alcohol” as “spirits distilled from any material at or above 95 percent alcohol by volume (190 proof), and if bottled, bottled at not less than 40 percent alcohol by volume (80 proof)” (Alcohol and Tobacco Tax and Trade Bureau, 2007). Grain spirits are neutral spirits distilled from a fermented mash of grain and stored in oak containers.

High-proof grain alcoholic beverages pose particular risks for young people. They have little or no taste, odor, or color and are often added to cocktails, soft drinks, and fruit punch. This can result in an easy-to-consume concoction with very high alcohol content that is difficult to detect, particularly for inexperienced drinkers, and can lead to binge drinking. A “serving” of alcohol contains 0.6 ounces of ethanol, per NIAAA. This is the amount of ethanol contained in 1.5 ounces of traditional (40 percent ABV) distilled spirits, 5 ounces of 12 percent ABV wine, and 12 ounces of 5 percent ABV beer. Grain alcohol, by contrast, contains approximately twice as much ethanol as traditional distilled spirits. Thus, an equivalent “serving” of grain alcohol would be 0.6 ounces of 95 percent ABV/190 proof or 0.8 ounces of 75.5 percent ABV/151 proof grain alcohol, respectively. This means there are 42 servings of 95 percent ABV/190 proof or 32 servings of 75.5 percent ABV grain alcohol in a 750mL bottle, compared with only 17 servings in a bottle of other types of distilled spirits (such as vodka) of the same size. Research suggests that young people often “overpour” their drinks, making a strong drink even stronger (White et al., 2005). This practice can therefore be particularly hazardous when high-proof grain alcoholic beverages are involved.

Underage binge drinking (defined as five or more drinks in a sitting for men and four or more drinks in a sitting for women) accounts for most of the alcohol consumed by underage youth (Office of Juvenile Justice and Delinquency Prevention, 2005). More than two-thirds of youth binge drink, and more than one fifth of these youth do so frequently (NRC and IOM, 2004). Binge drinking “is associated with drunk driving, risky sexual behavior, physical and sexual assaults, injuries, and suicides” (Naimi, Siegel, DeJong, O’Doherty, & Jernigan, 2015).

Research has found that college students often consume grain alcohol when binge drinking. The Maryland Collaborative to Reduce College Drinking and Related Problems (“the Collaborative”) created and administered the Maryland College Alcohol Survey to 4,209 students from nine schools to measure levels of alcohol use and excessive drinking (Maryland Collaborative to Reduce College Drinking and Related Problems, 2014). It found that among students who had consumed alcohol in the past month, 70 percent reported binge drinking during that time period, with 11.6 percent reporting they consumed grain alcohol. Among high-risk drinkers (those who

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1 Proof is a method of measuring the alcohol content of spirits calculated by multiplying the percent of alcohol by volume (ABV) by two.
binge drank one to four days during the past month), 10.6 percent reported consuming grain alcohol over the last month. Among very high risk drinkers (those who binge drank five or more days during the past month), 22 percent reported consuming grain alcohol over the last month.

Two recent studies looked at rates of high-proof grain alcoholic beverage consumption among all youth. According to an internet panel of 1,032 youth ages 13 to 20, 5.8 percent of all youth reported consuming high-alcohol-content grain alcoholic beverages in the past 30 days (Siegel et al., 2014), and 2.4 percent of youth reported binge drinking such beverages in the past 30 days (Naimi et al., 2015). Of youth who drank high-alcohol-content grain alcoholic beverages, 35.1 percent reported binge drinking. Naimi and colleagues also computed a market share ratio, the “proportion of binge reports accounted for by a particular alcohol type … or category … divided by its overall market share (i.e., percent of all drinks consumed) among the entire youth sample.” A number greater than 1.0 means “for a particular alcohol type or category, the number of binge drinking reports is disproportionately large relative to its market share.” The market share ratio for high-proof grain alcoholic beverages was the fifth highest (out of 19 alcohol types or categories), at 1.59. Given the characteristics of this product and given that it is frequently mixed with punch or similar beverages, however, some youth may have consumed it unknowingly, and thus may not have reported consuming it in the studies, so the above statistics may underreport its consumption.

In many states, youth can easily obtain these beverages at low prices. The cost per ounce of ethanol for grain alcohol ranges from 52¢ to 82¢. This is substantially lower than beer ($1.93 per ounce of ethanol), vodka ($1.85 per ounce of ethanol), or flavored alcoholic beverages ($2.14 per ounce of ethanol; DiLoreto, 2012). At this strength and price, grain alcohol provides one of the cheapest means to obtain a standard drink of alcohol and to engage in binge drinking.

Types of Restrictions on Sale of High-Proof Grain Alcoholic Beverages

Many states prohibit or restrict retail sale of high-proof grain alcoholic beverages. State statutes or regulations may restrict the type of such beverages that can be sold in the state. Control states, where the state government maintains direct control over the distribution and sale of alcoholic beverages at the wholesale and/or retail levels, may also regulate high-proof grain alcoholic beverages through internal policies that are not reflected in statute or regulation (i.e., by determining administratively that the beverages will not be made available at state-run wholesale and/or retail outlets). States that regulate grain alcohol through internal policy, rather than by statute or regulation, are reported as restricting sales only if their internal policies are published in writing. Counties or municipalities may also regulate the sale of high-proof grain alcoholic beverages by local ordinance. Such restrictions are not included in this report.

Current Status of Sale of High-Proof Grain Alcoholic Beverages

Ten states regulate the sale of high-proof grain alcoholic beverages through statute, regulation, or written policy (see Exhibit 4.2.43). Six of these are license states: Alaska, California, Florida, Maryland, Minnesota, and Nevada. The other four are control states: North Carolina, Pennsylvania, Virginia, and Vermont. Two of the 10 states offer exceptions to the restrictions. Minnesota makes an exception for “spirits aged in wood casks for not less than two years.” Pennsylvania makes an exception for products produced by a “limited distillery license.”
Chapter 4.2: Policy Summaries

Exhibit 4.2.43: Restrictions on High-Proof Grain Alcohol

Five states define the restrictions in terms of alcohol by volume (ABV). California prohibits the sale of beverages greater than 60 percent ABV. Alaska prohibits the sale of beverages greater than 76 percent ABV. Minnesota prohibits 80 percent ABV or more, and Nevada restricts grain alcohol with an ABV of over 80 percent. Maryland makes it illegal to sell grain alcohol with 95 percent ABV or more.

Four states define the restriction in terms of proof. Florida law provides that “[a] distilled spirit greater than 153 proof may not be sold or consumed in the state.” The North Carolina Alcoholic Beverage Control Commission has issued a written statement that the highest proof liquor sold in North Carolina ABC stores will be 151 proof. Pennsylvania restricts sales of alcohol at 190 proof or greater to nonpotable uses. In Virginia, the law states that no “neutral grain spirit or alcohol… shall be sold in government stores at a proof greater than 101.” Vermont simply restricts the purchase of “pure ethyl or grain alcohol” to non-beverage purposes.

References and Other Information

Legal research and data collection for this topic are planned and managed by the Substance Abuse and Mental Health Services Administration (SAMHSA) and conducted under contract by The CDM Group, Inc. To see definitions of the variables for this policy, visit stopalcoholabuse.gov and follow links to the Report to Congress, Supplemental Materials, Definitions of Variables in Legal Policies. For further information and background, see the following resources:


Maryland Collaborative to Reduce College Drinking and Related Problems. (2014). High-risk drinking among college students in Maryland: Identifying targets for intervention. College Park, MD: Center on Youth Adult Health and Development, University of Maryland School of Public Health; Baltimore, MD: Center on Alcohol Marketing and Youth, Johns Hopkins University Bloomberg School of Public Health.


