

## 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.<sup>18</sup>

High-proof grain alcoholic beverages, such as Everclear or Gem Clear, represent a type of “neutral spirit” that is odorless, 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)” (TTB, 2007).<sup>19</sup> 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 people inexperienced at drinking, 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 alcohol by volume [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 750 mL 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.

Among 12- to 20-year-olds, 11.1 percent engaged in binge drinking (defined as five or more drinks in a row for males and four or more for females) on at least 1 day in the past 30 days, according to data from the 2019 National Survey on Drug Use and Health (CBHSQ, 2020a). Binge drinking “is associated with drunk driving, risky sexual behavior, physical and sexual assaults, injuries, and suicides” (Naimi et al., 2015).

Research has found that college students often consume grain alcohol when binge drinking. The Maryland Collaborative to Reduce College Drinking and Related Problems created and administered the Maryland College Alcohol Survey in 2014 to 4,209 students from nine schools to measure levels of alcohol use and excessive drinking (Maryland Collaborative, 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.

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<sup>18</sup> Note that throughout this chapter, “states” refers to the 50 states and the District of Columbia.

<sup>19</sup> Proof is a method of measuring the alcohol content of spirits calculated by multiplying the percent of ABV by two.

Among people engaging in high-risk drinking (i.e., those who binge drank 1–4 days during the past month), 10.6 percent reported consuming grain alcohol over the last month. Among people who engage in very high-risk drinking (i.e., those who binge drank 5 or more days during the past month), 22 percent reported consuming grain alcohol over the last month.

Two studies looked at rates of high-proof grain alcoholic beverage consumption among all youth. According to an Internet panel of 1,032 youth ages 13–20, 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 (2015) 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 ranged from \$0.52–\$0.82 in one study. This was 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 et al., 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**

Some 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).

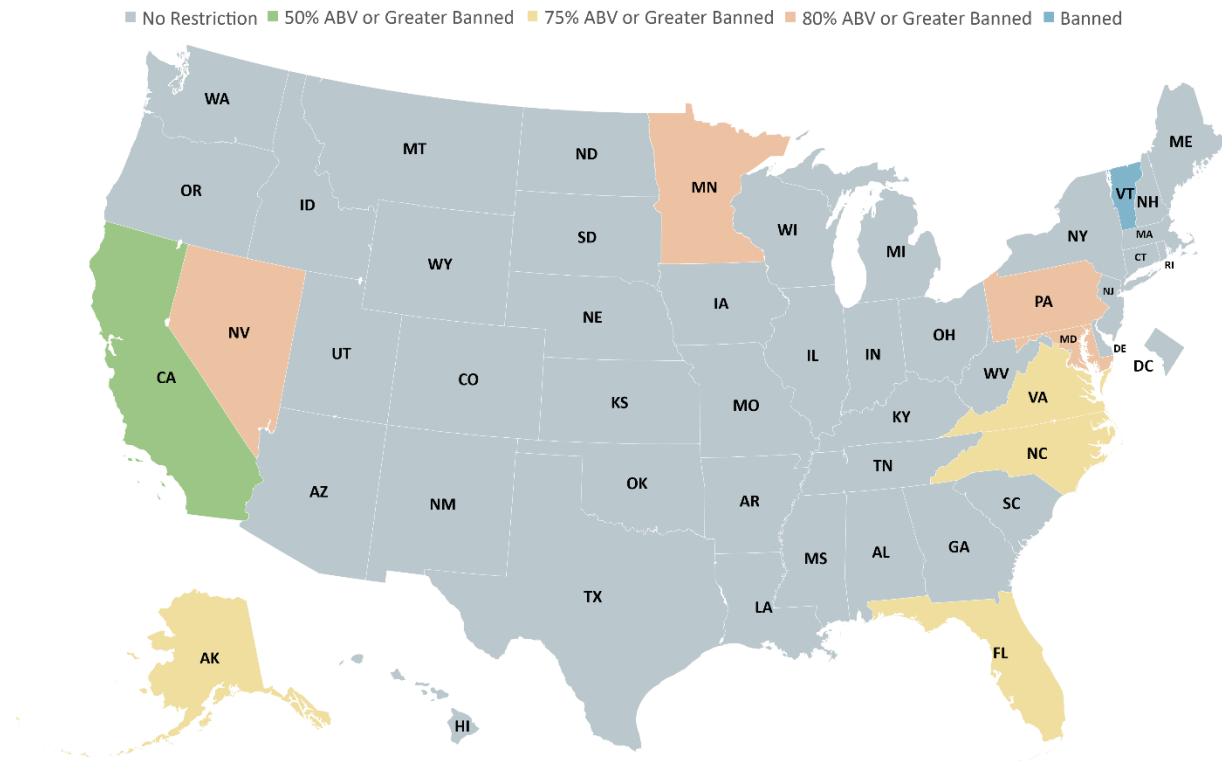
States that regulate grain alcohol through internal policy, rather than by statute or regulation, are reported as restricting sales only if their internal policies are published in writing. Counties or municipalities may also regulate the sale of high-proof grain alcoholic beverages by local ordinance. 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 (Exhibit 2.21). Six of these are license states: Alaska, California, Florida, Maryland, Minnesota, and Nevada. The other four are control states: North Carolina, Pennsylvania, Vermont, and Virginia. Two of the 10 states offer exceptions to the restrictions. Minnesota makes an exception for “spirits aged in wood casks for not less than 2 years.” Pennsylvania makes an exception for products produced by a “limited distillery license.”

Five states define the restrictions in terms of 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 [76.5 ABV] may not be sold or consumed in the state.” The North Carolina ABC Commission has issued a written statement that the highest proof liquor sold in North Carolina ABC stores will be 151 proof (75.5 ABV). Pennsylvania restricts sales of alcohol at 190 (95 ABV) proof or greater to non-potable uses. In 2017, Virginia increased the upper limit of neutral grain spirit or alcohol sold in government stores from a proof of 101 to 151 [75.5 ABV]. Vermont simply restricts the purchase of “pure ethyl or grain alcohol” to non-beverage purposes.

**Exhibit 2.21: Restrictions on High-Proof Grain Alcohol as of January 1, 2020****Data Sources and Citations**

Legal research for this topic is planned and managed by the Interagency Coordinating Committee on the Prevention of Underage Drinking (ICCPUD), chaired by Miriam Delphin-Rittmon, Ph.D., Assistant Secretary for Mental Health and Substance Use, and is conducted under contract number 75S20120C00001. For more information, including definitions of the variables for this policy, visit [stopalcoholabuse.gov](http://stopalcoholabuse.gov).

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