

---

# Public Health and the Four P's of Marketing: Alcohol as a Fundamental Example

*Cassandra Greisen, Elyse R. Grossman, Michael Siegel, and Mellissa Sager*

**E**xcessive and underage alcohol consumption has numerous short- and long-term consequences including, but not limited to assault, violence, injury, motor vehicle crashes, and chronic disease. It is one of the most preventable public health problems in the United States (US). The sale and use of alcohol are strongly affected by environmental conditions commonly executed through influencing the 4 P's of marketing: Place, Product, Promotion, and Price. Public health professionals can use the same strategies to change environmental factors that influence behavior and thereby improve health outcomes. Below are several examples of how states can and do use their regulatory authority to mitigate the negative health outcomes associated with excessive and underage alcohol consumption. Due to the short nature of this piece, the strong body of evidence showing the effectiveness of tax/price in reducing alcohol use and related health and social problems is only mentioned.

## Place

Alcohol regulation in the US is largely based on the blueprint outlined in the book *Toward Liquor Control*, which summarizes several basic public policy principles aimed at protecting public health and safety. One of these guiding principles is curtailing public order problems by adopting restrictions on outlet density

(i.e., preventing high concentrations of retail alcohol outlets in a small area) and limits on hours and days of sale. Alcohol outlet density is a recognized environmental risk factor for excessive alcohol consumption and is associated with adverse health and safety outcomes, such as underage drinking, drunk driving<sup>1</sup> and violence,<sup>2</sup> including homicide.<sup>3</sup> Limiting the hours and days of sale are also known to play a role in shaping the environmental conditions around retail alcohol outlets. A 2015 systematic review concluded that decreasing the physical availability of alcohol by reducing density of outlets and reducing hours of sale for off-premise consumption (e.g., take-out stores) decreases per capita consumption and as a result reduces alcohol-related harms.<sup>4</sup>

The Community Preventive Services Task Force (CPSTF), an independent, nonfederal panel of public health and prevention experts, reviewed the evidence on interventions to prevent excessive alcohol consumption and recommended limiting the availability of alcohol through regulatory authority, including licensing — typically through state alcohol regulatory agencies — and local zoning processes.<sup>5</sup> Additionally, the CPSTF also recommended maintaining limits on hours of sale finding that increasing hours of sale by two or more hours, particularly for on-sale establishment (i.e., bars and restaurants), was associated with increased consumption, violent crime offenses, and motor vehicle crash injuries.<sup>6</sup> Similarly, the CPSTF found harms resulting from the removal of limits on days of sale for both on- and off-premise outlets and recommended maintaining these limits to mitigate harm.<sup>7</sup> However, before developing alcohol regulations and zoning policies, localities should ensure that their rules and regulations do not violate state preemption (limitation of local authority). Although limited

---

**Cassandra Greisen, M.P.A.**, is a Manager of Public Policy at the National Alcohol Beverage Control Association. **Elyse R. Grossman, J.D., Ph.D.**, is a Policy Fellow at the Johns Hopkins Bloomberg School of Public Health and a Legal Policy Analyst at The CDM Group, Inc. **Michael Siegel, M.D., M.P.H.**, is a Professor in the Department of Community Health Sciences at Boston University School of Public Health. **Mellissa Sager, J.D.**, is a Senior Staff Attorney at the Network for Public Health Law – Eastern Region.

by this doctrine, many local governments throughout the US are permitted to use their licensing and zoning/land use powers to regulate alcohol outlet density by ensuring that the placement and operations of alcohol retail outlets align with their local conditions.<sup>8</sup> To assist communities, the Center on Alcohol Marketing and Youth at The Johns Hopkins Bloomberg School of Public Health created an interactive web tool that outlines each state's preemption level.<sup>9</sup>

Additionally, states and localities must ensure that their rules and regulations are not arbitrary or capricious. Establishing a nexus between the regulation and the documented harm, backed by scientific evidence, is one way to mitigate legal challenges and establish fair and balanced alcohol regulations. To help communities conduct public health surveillance to assess the nexus between alcohol outlet density and related public health and safety harms, the Centers for Disease Control and Prevention created the *Guide for Measuring Alcohol Outlet Density*.<sup>10</sup>

quently, as of September 2018, 37 states have enacted laws banning powdered alcohol.

Control jurisdictions within the US — market participants, meaning the government takes ownership of the product at some point in the business cycle, at the retail and/or wholesale levels — can also create internal administrative restrictions to prevent the sale of certain products. Many of these jurisdictions have used this authority to restrict grain alcohol, which has often occurred after public health professionals expressed concerns. Grain alcohol has high alcohol content, a low price, and is odorless and colorless, making it difficult to detect in cocktails or punches. One study found that of youth who reported drinking grain alcohol, 35.1% reported binge drinking.<sup>13</sup> Therefore, as of October 2014, nine of 18 control jurisdictions created internal administrative restrictions: (a) banning grain alcohol  $\geq 95\%$  ABV (ID, ME, MI); (b) banning grain alcohol at an even lower ABV (WV, IA); (c) requiring it to be purchased through spe-

Clearly, regulation of alcohol advertising is necessary to protect underage youth from targeting by alcohol brands, which results in disproportionate exposure to advertisements for those brands. Moving forward, (1) the Federal Trade Commission could establish mandatory regulatory standards that restrict advertising patterns that result in greater proportional youth exposure than adult exposure; (2) state AGs could demand that alcohol companies alter their advertising practices and pursue litigation against companies that fail to act; and (3) Congress could place jurisdiction over alcohol advertising in the hands of a federal agency, just as it has done for tobacco advertising.

### Product

Youth are more likely than adults to consume lower priced, high alcohol content products that taste sweet or flavored.<sup>11</sup> Policymakers have been and should continue to regulate and restrict products with high youth appeal. "Palcohol" — a powdered alcohol approved by the Alcohol Tobacco Tax and Trade Bureau (TTB) in 2015 — is an example of successful product restriction. It was to be sold in one ounce packages with 10 percent alcohol by volume (ABV) and in four approved flavors: Rum, Vodka, Cosmopolitan, and Powderita. Palcohol was designed to be added to water to create a standard mixed drink. However, public health professionals expressed concerns that youth would be attracted to the different flavors and to the ease with which these packets could be concealed and transported.<sup>12</sup> Conse-

cial order (NC, OH, UT); or (d) having partial shelf restrictions (OR, UT).<sup>14</sup> Control jurisdictions have also banned products based on flavors (e.g., bubble gum or cotton candy), product design (e.g., Jell-O shots or alcohol-infused whipped cream), and product labeling/marketing (e.g., hollow candies or mason jars with fruit).

Public health advocates can also use the power of the states' Attorneys General (AGs) to bring litigation against alcohol manufacturers or to petition government agencies for product restrictions. For example, when companies began producing caffeinated alcoholic beverages (CABs) that looked like nonalcoholic energy drinks, a group of AGs became concerned. After reaching agreements with individual brand manufacturers to pull their CABs from the market, they petitioned the Food and Drug Administration

(FDA) to stop the sale of these products. In 2010, the FDA sent letters to manufacturers of seven CABs stating that the products did not meet the legal standard of “generally recognized as safe.”<sup>15</sup> As a result, these manufacturers removed the caffeine from their alcoholic products.

Although public health advocates have had successes in restricting powdered alcohol, grain alcohol, and CABs, vigilance is important as the alcohol industry is constantly creating new products. A current concern is “Multiple Fruit-Flavored Alcoholic Drinks in a Can” (MFAC).<sup>16</sup> These products are large (e.g., 23.5 ounces), with high alcohol content (12–14% ABV) and low prices. Given preliminary research, this product appears to be attractive and harmful to youth.<sup>17</sup> It is important that the public health community continue to work with policymakers, regulators, and the state AGs to use all the tools available to regulate and restrict alcohol products particularly attractive to youth.

### Promotion

The growing evidence that alcohol marketing promotes underage drinking,<sup>18</sup> and that underage youth drink only a limited number of alcohol brands,<sup>19</sup> is critical information for policymakers and regulators. Recently researchers, for the first time, examined the relationship between the placement of brand-specific alcohol advertisements in magazines and the underage youth readership of these magazines.<sup>20</sup> They surveyed the patterns of advertising for 24 alcohol brands that are popular among underage youth (“youth brands”) and 656 brands that are consumed primarily by legal age adults (“adult brands”) in 49 national consumer magazines. After controlling for young adult and total readership, cost of advertising, advertising budgets, and magazine readership demographics, they found that in magazines with very high youth readership, youth alcohol brands were eight times more likely to advertise than the adult brands. This study provided strong evidence that underage youth are disproportionately exposed to such advertising, especially for brands that are popular among underage drinkers. As such, researchers concluded that alcohol companies target youth in their advertising.<sup>21</sup> Unlike tobacco advertising, which is regulated by the FDA, alcohol advertising is essentially unregulated, subject only to self-administered, voluntary standards. The key criterion used in advertising decisions under these standards is that alcohol companies may not advertise their products in magazines with more than 28.4% youth readers.<sup>22</sup>

Clearly, regulation of alcohol advertising is necessary to protect underage youth from targeting by alcohol brands, which results in disproportionate exposure

to advertisements for those brands. Moving forward, (1) the Federal Trade Commission could establish mandatory regulatory standards that restrict advertising patterns that result in greater proportional youth exposure than adult exposure; (2) state AGs could demand that alcohol companies alter their advertising practices and pursue litigation against companies that fail to act; and (3) Congress could place jurisdiction over alcohol advertising in the hands of a federal agency, just as it has done for tobacco advertising.

### Price

Given the short nature of this piece, the well-established impact of price on alcohol consumption is discussed only briefly here. Namely, researchers using a wide variety of methods, data, and outcome measures have concluded that “increases in the prices of alcoholic beverages lead to reductions in drinking and heavy drinking as well as in the consequences of alcohol use and abuse.”<sup>23</sup>

### Note

As each of the first three authors contributed equally, their names are listed alphabetically.

Dr. Elyse R. Grossman, Dr. Michael Siegel, and Ms. Mellissa Sager have no conflicts to report. Ms. Greisen reports that she is the Manager of Public Policy for the National Alcohol Beverage Control Association, a national trade association for “Control System” Jurisdictions — those jurisdictions where the government (state/local) serve as market participants in the distribution and/or sale of beverage alcohol within their borders.

### References

1. M. J. Chen, P. J. Gruenewald, and L. G. Remer, “Does Alcohol Outlet Density Affect Youth Access to Alcohol?” *Journal of Adolescent Health* 44, no. 6 (2009): 582–589.
2. P. J. Trangenstein et al., “Outlet Type, Access to Alcohol, and Violent Crime,” *Alcoholism: Clinical and Experimental Research* 42, no. 11 (2018): 2234–2245.
3. T. S. Naimi et al., “Alcohol Policies and Alcohol-Involved Homicide Victimization in the United States,” *Journal of Studies on Alcohol and Drugs* 78, no. 5 (2017): 781–788.
4. A. Sherk, T. Stockwell, T. Chikritzhs, S. Andreasson, et al., “Alcohol Consumption and the Physical Availability of Take-Away Alcohol: Systematic Reviews and Meta-analyses of the Days and Hours of Sale and Outlet Density,” *Journal of Studies on Alcohol and Drugs* 79, no. 1 (2018): 58–67.
5. Task Force on Community Services, “Recommendations for Reducing Excessive Alcohol Consumption and Alcohol-Related Harms by Limiting Alcohol Outlet Density,” *American Journal of Preventive Medicine* 37, no. 6 (2009): 570–571.
6. R. A. Hahn, J. L. Kuzara, R. Elder, et al., “Effectiveness of Policies Restricting Hours of Alcohol Sales in Preventing Excessive Alcohol Consumption and Related Harms,” *American Journal of Preventive Medicine* 39, no. 6 (2010): 590–604.
7. Task Force on Community Services, Recommendations on Maintaining Limits on Days and Hours of Sale of Alcoholic Beverages to Prevent Excessive Alcohol Consumption and Related Harms,” *American Journal of Preventive Medicine* 39, no. 6 (2010): 605–606.
8. Community Anti-Drug Coalitions of Americas (2011).
9. Interactive tool, available at <<http://www.camy.org/research-to-practice/place/alcohol-outlet-density/preemption-data->

- tool.html> (last visited March 29, 2019); J. F. Mosher and R. D. Treffers, "State Pre-emption, Local Control, and Alcohol Retail Outlet Density Regulation," *American Journal of Preventive Medicine* 44, no. 4 (2013): 399-405.
10. CDC, *Guide for Measuring Alcohol Outlet Density* (2017), available at <<https://www.cdc.gov/alcohol/pdfs/CDC-Guide-for-Measuring-Alcohol-Outlet-Density.pdf>> (last visited May 3, 2019).
  11. E. K. Fortunato, M. Siegel, R. L. Ramirez, C. Ross, W. DeJong, A. B. Albers, et al., "Brand-Specific Consumption of Flavored Alcoholic Beverages among Underage Youth in the United States," *American Journal of Drug and Alcohol Abuse* 40, no. 1 (2014): 51-57; J. F. Mosher and D. Johnsson, "Flavored Alcoholic Beverages: An International Marketing Campaign That Targets Youth," *Journal of Public Health Policy* 26, no. 3 (2005): 326-342.
  12. T. S. Naimi and J. F. Mosher, "Powdered Alcohol Products: New Challenge in an Era of Needed Regulation," *JAMA* 314, no. 2 (2015): 119-120.
  13. T. S. Naimi, M. Siegel, W. DeJong, C. O'Doherty, and D. Jernigan, "Beverage- and Brand-Specific Binge Alcohol Consumption among Underage Youth in the U.S.," *Journal of Substance Use* 20, no. 5 (2015): 333-339.
  14. E. R. Grossman, J. Binakonsky, and D. Jernigan, "The Use of Regulatory Power by U.S. State and Local Alcohol Control Agencies to Ban Problematic Products," *Substance Use & Misuse* 53, no. 8 (2017): 1229-1238.
  15. U.S. Food and Drug Administration, Caffeinated Alcoholic Beverages Website, available at <<https://www.fda.gov/Food/IngredientsPackagingLabeling/FoodAdditivesIngredients/ucm190366.htm>> (last visited May 3, 2019).
  16. M. E. Rossheim and D. L. Thombs, "Multiple Fruit-Flavored Alcoholic Drinks in a Can (MFAC): An Overlooked Class of Potentially Harmful Alcohol Products," *American Journal of Drug and Alcohol Abuse* 39, no. 5 (2013): 280-283.
  17. See Rossheim, *supra* note 16.
  18. P. Anderson et al., "Impact of Alcohol Advertising and Media Exposure on Adolescent Alcohol Use: A Systematic Review of Longitudinal Studies," *Alcohol & Alcoholism* 44, no. 3 (2009): 229-243; L. A. Smith and D. Foxcroft, "The Effect of Alcohol Advertising, Marketing and Portrayal on Drinking Behavior in Young People: A Systematic Review of Prospective Cohort Studies," *BMC Public Health* 9 (2009): 1-11; T. S. Naimi et al., "Amount of Televised Alcohol Advertising Exposure and the Quantity of Alcohol Consumed by Youth," *Journal of Studies on Alcohol and Drugs* 77, no. 5 (2016): 723-729; D. Jernigan et al., "Alcohol Marketing and Youth Alcohol Consumption: A Systematic Review of Longitudinal Studies Published Since 2008," *Addiction* 112, suppl. 1 (2017): 7-20.
  19. M. Siegel et al., "Brand-Specific Consumption of Alcohol among Underage Youth in the United States," *Alcoholism: Clinical & Experimental Research* 37, no. 7 (2013): 1195-1203.
  20. C. King, III et al., "Alcohol Advertising in Magazines and Underage Readership: Are Underage Youth Disproportionately Exposed?" *Alcoholism: Clinical & Experimental Research* 41, no. 10 (2017): 1775-1782.
  21. See King, *supra* note 20; "Target" is an objective term established by case law to mean advertising that achieves higher proportional exposure among youth than among adults. *People of the State of California, ex rel. Bill Lockyer v. R.J. Reynolds Tobacco Company*.
  22. See King, *supra* note 20.
  23. F. J. Chaloupka, M. Grossman, and H. Saffer, "The Effects of Price on Alcohol Consumption and Alcohol-Related Problems," 2002, available at <<https://pubs.niaaa.nih.gov/publications/arh26-1/22-34.htm>> (last visited May 3, 2019).