

Alcohol Beverage Control: The North Carolina Policy Implications

In North Carolina, 27% of high school students are drinking alcohol regularly and nearly 50% of those students binge drink.¹ Alcohol consumption during adolescence is associated with significant differences in structure and function in the developing human brain.² Consequences of underage drinking include violence, traffic crashes, property damage, injury, and high-risk sex and cost the citizens of North Carolina \$1.3 billion in 2013.³ Finally, underage drinking is not a phase or period of life that people grow out of. Nationally, nearly 97% of heavy drinkers started drinking before the age of 21.⁴ There are multiple evidenced based strategies identified by researchers and expert panels across the world that address underage and excessive drinking; particular significance has been given to alcohol beverage control.

In scores of peer reviewed scientific journal articles, alcohol control has been shown to reduce alcohol outlet density, overall consumption and generate more revenue than the private sale of alcohol. In 2012, the Centers for Disease Control as part of their Community Guide series on alcohol, recommended against the privatization of state run alcohol sales after a systematic review of existing evidence. As per the CDC:

Seventeen studies assessed the effects of privatization on per capita alcohol sales, a well-established proxy for excessive alcohol consumption and related harms:

- *Overall, there was a 44.4% median increase in per capita sales of privatized alcoholic beverages within the jurisdiction that underwent privatization during the years following privatization of retail alcohol sales (interquartile interval [IQI]: 4.5% to 122.5%; 17 studies).*
- *During this same time frame, sales of non-privatized alcoholic beverages within the jurisdiction that underwent privatization decreased by a median of 2.2% (IQI: -6.6% to -0.1%; 9 studies).*
- *One study in Finland assessed the effects of privatization for groups reporting different levels of alcohol consumption. It found privatization increased consumption across all groups.⁵*

Alcohol Control and Outlet Density:

- In the seven States surrounding and including North Carolina, three of which are control states and four of which are license states, **control states average 5 off premises spirits outlets** per 100k residents whereas **license states average 14. That is nearly 3 times as many outlets (per capita) in license states as are in control states!**^{6, 7, 8}
- For direct comparison, **North Carolina has 4 off premises spirits outlets per 100,000 people and Kentucky has 21.**^{6,7}
- And the negative effect of increased outlet density is clear. Higher outlet density is correlated with:
 - Higher levels of alcoholism and violence;^{9, 10}
 - Increased physical assaults (by 3.4 assaults per additional outlet);¹¹
 - Increased alcohol-related injury crashes;¹²
 - Increased alcohol consumption by college students;¹³
 - Increased underage drinking;¹⁴
 - Economic decline in neighborhoods; and¹⁵
 - Higher murder rates.¹⁶

Alcohol Control and State Revenue:

- In the seven states surrounding and including North Carolina, 3 of which are control states and 4 of which are license states, *control states average \$30 per capita in spirits ethanol sold, while license states average less than half as much revenue* at \$14 per capita per gallon of spirits ethanol sold.⁷

Alcohol Control and Consumption Levels:

- **Alcohol beverage control is good for both public health and state revenue.** Among all 50 states, **North Carolina ranks 44th per capita in consumption per gallon and 7th in revenue per gallon.** In comparison, South Carolina, a state with private sales, ranks 27th in consumption per gallon and 38th in revenue per gallon.⁷
- **States with private spirits sales have significantly more outlets per capita, more outlets lead to increased consumption and increased health and safety issues.**⁵
- **A substantial body of research links overall alcohol consumption in a society to a variety of alcohol-related harms including deaths and injuries from accidents, homicides and other violent assaults, suicide, cirrhosis and other diseases.**¹⁷
- **Higher consumption of alcohol across populations has also been linked to cancer, fetal alcohol syndrome, reduced worker productivity and increased crime.**^{18, 19, 20}

Cautionary Tales: Washington and Iowa

Two of the cases of a states switching from the controlled sale of spirits to privatization have occurred in Iowa and Washington.

- In Iowa, the change was found to increase spirits consumption by 10% and overall consumption of alcohol by 5%.^{21, 22}
- In Washington:
 - Before privatization Washington had 330 outlets that sold spirits, 6 years after privatizing that number has sky rocketed to 1600 and counting.
 - A study analyzing voter's opinions after privatization found that 20% who were in favor of privatization would change their vote if they had the option, most citing increased outlets as the reason.²³

¹ NC YRBS 2017. <https://nccd.cdc.gov/Youthonline/App/Results.aspx>

² Feldstein, SW, et al. (2014). The effect of alcohol consumption on the adolescent brain: A systematic review of MRI and fMRI studies of alcohol-using youth. *Neuroimage Clinical*. **Volume 5**, 2014, Pages 420-437

³ Underage Drinking Enforcement Training Center 2013 data (2015). <http://www.udetc.org/factsheets/NorthCarolina.pdf>

⁴ Office of Applied Studies, Substance Abuse and Mental Health Services Administration, US Department of Health and Human Services. National Household Survey on Drug Abuse, 2001 [computer file]. ICPSR version. Research Triangle Park, NC: Research Triangle Institute [producer], 2002. Ann Arbor, Mich: Inter-university

⁵ CDC Guide to Community Preventive Services. Preventing excessive alcohol consumption: privatization of retail alcohol sales. www.thecommunityguide.org/alcohol/privatization.html.

⁶ National Alcohol Beverage Control Association (NABCA). US Alcohol Data from 2015. (2017). Alexandria, VA: NABCA.

- ⁷ Kerr, W. (2016). Alcohol Beverage Revenues: 2014 State Revenues. ARG/PHI. NABCA Research.
- ⁸ Control: NC, VA, WV; Private: GA, SC, TN, KY
- ⁹ Scribner, R. *Alcoholism: Clinical & Experimental Research*, February 2000
- ¹⁰ LaBouvie, E. & Ontkush, M.: "Violent crime and alcohol availability: relationships in an urban community." *Journal of Public Health Policy* 19(3):303-318. 1998.
- ¹¹ Scribner, R., Mackinnon, D. & Dwyer, J.: "The risk of assaultive violence and alcohol availability in Los Angeles County." *American Journal of Public Health* (85) 3: 335-340. 1995.
- ¹² Scribner, R., Mackinnon, D. & Dwyer, J.: "Alcohol outlet density and motor vehicle crashes in Los Angeles County cities." *Journal of Studies on Alcohol* (44): 447-453, July 1994.
- ¹³ Chaloupka, F. & Wechsler, H. "Binge drinking in college: the impact of price, availability and alcohol control policies." *Contemporary Economic Policy*, vol xiv, October 1996.
- ¹⁴ Weitzman, R. et al. (2003). The relationship of alcohol outlet density to heavy and frequent drinking and drinking-related problems among college students at eight universities. *Journal of Health and Place*; 9, 1-6.
- ¹⁵ Maxwell, A. & Immergluck, D. "Liquor lining: liquor store concentration and community development in lower-income Cook County (IL) neighborhoods." Chicago IL: Woodstock Institute, 1997.
- ¹⁶ Scribner, R. et al.: "Alcohol availability and homicide in New Orleans: conceptual considerations for small area analysis of the effect of alcohol outlet density." *Journal of Studies on Alcohol*, May 1999.
- ¹⁷ Rehm J, Greenfield TK, Kerr WC. Patterns of drinking and mortality from different diseases – an overview. *Contemp Drug Prob.* 2006;33(2):205-235.
- ¹⁸ Babor TF, Caetano R, Casswell S, et al. *Alcohol: No Ordinary Commodity. Research and public policy.* New York, NY: Oxford University Press; 2003.
- ¹⁹ Harwood HJ. *Updating Estimates of the Economic Costs of Alcohol Abuse in the United States. Estimates, update methods, and data.* Rockville, MD: National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health; 2002.
- ²⁰ Nelson (2013). Alcohol-Attributable Cancer Deaths and Years of Potential Life Lost in the United States. *Am J PH.*
- ²¹ Holder HD, Wagenaar AC. Effects of the elimination of a state monopoly on distilled spirits' retail sales: a time-series analysis of Iowa. *Br J Addict.* December 1990;85(12):1615-1625.
- ²² Mulford HA, Ledolter J, Fitzgerald JL. Alcohol availability and consumption: Iowa sales data revisited. *J Stud Alcohol.* September 1992;53(5):487-494.
- ²³ Kerr, W. C., Williams, E., & Greenfield, T. K. (2015). Analysis of Price Changes in Washington Following the 2012 Liquor Privatization. *Alcohol and Alcoholism (Oxford, Oxfordshire)*, 50(6):654–660. <http://doi.org/10.1093/alcalc/aggv067>