

Measuring Alcohol Outlet Density in Iowa

Overview & Methodology

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Alcohol Use in Iowa

Alcohol consumption is common in Iowa's cities, on college campuses, and at cultural events, and the state has the 2nd highest excessive drinking rate in the country¹. Unsurprisingly, Iowa ranks last among states in the belief that alcohol is harmful². These twin cultural and behavioral forces leave Iowans at higher risk of alcohol-related harms, including lower life expectancy³, higher obesity⁴, mental health disorders⁵, injuries⁶, risky sexual activity⁷, and chronic disease and cancers⁶.

Alcohol Control in Iowa

As one of 18 **alcohol control states**, Iowa controls the wholesale and distribution of all alcoholic beverages. These activities, which the [Iowa Alcoholic Beverages Division](#) administers, also include being responsible for licensing and monitoring alcohol laws and regulations. Alcohol license information is available for public download from the Iowa Alcoholic Beverages Division's [Public Database](#). For a brief history of alcohol control laws in Iowa, see Figure 1.

Figure 1: A Brief History of Alcohol Control in Iowa



Why Measure Alcohol Outlets?

The risk of excessive alcohol consumption increases when people live in high-risk environments, such as areas with a high concentration of alcohol availability. Communities with a high number of alcohol retailers, such as bars, taverns, and liquor stores, are at greater risk of experiencing alcohol-related harms than communities with fewer alcohol outlets. This is because neighborhoods with a high concentration of alcohol outlets also have above average excessive drinking rates⁸, underage drinking⁹, crime and violence^{8,10}, hospital admissions¹¹, sexually transmitted disease¹², and emergency service calls^{8,10}. Measuring alcohol outlets in Iowa can help local communities and state agencies identify high-risk areas, which, in turn, strengthens communities' ability to monitor local alcohol consumption and create targeted solutions that mitigate harms.

Iowa has the 2nd highest excessive drinking rate¹ but ranks the lowest in the belief that alcohol is harmful²

Iowa Alcohol Density Monitoring Program

The Public Science Collaborative (PSC) mapped the locations of alcohol outlets, alcohol-related automobile crashes, liquor sales, and sales violations, and alcohol outlet densities (AOD) for the entire state. We also layered additional local data to prototype community AOD monitoring resources. The visualizations can be found at the [Iowa Alcohol Density Monitoring Program](#), an interactive, web-based dashboard designed to help state and local groups better understand the alcohol risk environment. Additional resources include policy guides, user guides, and a place-based alcohol use disorder risk score to improve the localized targeting of alcohol programs and interventions.

PSC confirmed a positive association between a high concentration of alcohol outlets and 911 calls related to violent crimes and domestic violence in four Iowa study sites, which you can learn more about [here](#).

Our approach to alcohol outlet measurement is modeled on the methodology outlined by the Center for Disease Control's Toolkit for Measuring Alcohol Outlet Density. To learn more about the guide, please follow the [link here](#).

Methods

Table 1 shows the classification of licenses included in the Iowa Alcohol Density Monitoring Program. This strategy distinguishes each license type as either an on-premise establishment, retailers selling alcohol for consumption on-premise, like bars, restaurants, and clubs, or as off-premise establishments, retailers selling alcohol for consumption in other locations such as gas stations, liquor stores, grocery stores.

This coding strategy was created in collaboration with the Iowa Alcoholic Beverages Division, the National Alcohol Beverage Control Association, and the Public Science Collaborative over a series of 11 meetings and as informed by national experts in the field. This coding strategy has been presented to the Centers for Disease Control and Prevention, the state of Alabama's Alcohol Outlet Density Mapping team, the Iowa Alcoholic Beverages Division, the National Alcohol Beverage Control Association, the Governor's Office for Drug Control Strategy, the National Prevention Network, and the Alliance of Coalitions for Change in Iowa. The classification strategy is now considered best practice in Iowa.

Table 1: Iowa Alcohol Retail License Classification

On-Premise Alcohol Licenses	
Class C Liquor License (LC)	Allows for the sale of liquor, wine, & beer for on-premise consumption at bars, taverns, restaurants, etc. This license allows for the carryout of liquor, wine, beer, mixed drinks, and cocktails.
Special Class C Liquor License (BW)	Allows for the sale of beer & wine for on-premise consumption at bars, taverns, restaurants, etc. This license allows carryout beer.
Class B Beer Permit (BB)	Allows for the sale of beer for on-premise consumption in taverns, bars, restaurants, etc. This licenses allows carryout beer.
Class A Liquor License (LA)	Allows for the sale of liquor, wine, & beer to members of non-profit clubs for on-premise consumption.
Class B Liquor License (LB)	Allows for the sale of liquor, wine, & beer for on-premise consumption in hotels/motels. This includes room service and allows for carryout beer.
Off-Premise Alcohol Licenses	
Class E Liquor License (LE)	Allows for the sale of liquor for off-premise consumption from grocery, liquor, and convenience stores, etc. Includes wholesale to on-premise Class A, B, C, & D with a permit.
Class C Beer Permit (BC)	Allows for the sale of beer for off-premise consumption for grocery, liquor, convenience stores, etc.
Class B Wine Permit (WB)	Allows for selling wine for off-premise consumption for grocery, liquor, convenience stores, etc.
Class B Native Wine Permit (WBN)	Allows for the sale of Iowa Native wine for off-premise consumption for grocery, liquor, and convenience stores

*In the public use download file, the relevant data field is labeled "License Type". The parenthetical after the license type is the abbreviated code for the license as communicated by Iowa Alcoholic Beverages Division.

Community Work

The Public Science Collaborative is currently engaged in data-driven partnerships with communities in Iowa to leverage insights from the Iowa Alcohol Density Monitoring Program for local decision-making. Using data discovery and design thinking workshops, our team helps communities use alcohol outlet and related data to guide the development and implementation of local solutions to the widespread public health and safety risks associated with harmful alcohol consumption.

Interested in learning more? Please contact the project's principal investigator Shawn Dorius, sdorius@iastate.edu or PSC's alcohol analyst Kelsey Van Selous, kvansel@iastate.edu, to learn more about the project.