Alcohol Outlet Density in Minnesota

A TOOL FOR YOUR COMMUNITY

Summary

- Alcohol outlet density refers to the concentration of licensed establishments within a certain area where alcoholic beverages are available for purchase.

- High alcohol outlet density is a risk factor for excessive alcohol use, which is associated with numerous acute and chronic health conditions, social harms, and economic costs.

- Alcohol outlet density can be measured in several different ways, but the method used should be selected after considering population density, geographic location, and how the data will be used.

- Communities can use alcohol outlet density as a tool for preventing excessive alcohol use to inform liquor licensing and zoning decisions and to guide the development of other evidence-based prevention strategies.

Background

Excessive alcohol use is a leading cause of death in the United States with more than 140,000 people dying from it every year.[1] In Minnesota, there were on average 2,151 alcohol-related deaths per year between 2015 and 2019.[2] Binge drinking is defined as four or more drinks consumed on one occasion for women and five or more drinks for men.[3] Nationwide 15.4% of adults reported binge drinking in 2021. However, Minnesota has one of the highest binge drinking rates in the country with 17.9% of adults reporting binge drinking in 2021.[4]

Excessive alcohol use increases the risk for chronic diseases and conditions such as liver disease, heart disease, and several types of cancer. In addition, it increases the risk of more immediate outcomes like injuries from motor vehicle crashes or violence like homicide, suicide, and sexual assaults.[3] High alcohol outlet density is considered an environmental risk factor for excessive alcohol use, contributing to a larger public health problem.[5] Economically, excessive alcohol consumption cost Minnesota $7.85 billion in 2019 from factors such as alcohol-related hospitalizations, treatment for alcohol use disorder, reduced productivity, and other costs such as traffic crashes and criminal justice-related expenses.[6]

## Definitions and measurement methods

Alcohol outlets are licensed businesses that sell alcoholic beverages and can be categorized into either on-premises or off-premises outlets depending on where the alcohol is consumed. On-premises outlets have alcohol available for consumption on-site and include bars, clubs, breweries, wineries, and restaurants. Off-premises outlets sell alcohol meant to be consumed off-site and include liquor stores, grocery stores, and gas stations. Alcohol outlet density is defined as the concentration of retail alcohol outlets within a certain area.[7] According to the

Center for Disease Control and Prevention's *Alcohol Outlet Density Surveillance Toolkit (https://www.cdc.gov/alcohol/pdfs/CDC-Alcohol-Outlet-Density-Surveillance-Toolkit.pdf)*, there are four main methods in which alcohol outlet density is measured:

- *Count-based Indicators*:
    1. Number of alcohol outlets per square mile
    2. Number of alcohol outlets per 10,000 people
- *Distance-based Indicators*:
    3. Average distance of one outlet to the nearest alcohol outlet
    4. Average distance of person to the nearest alcohol outlet[8]

Indicator Calculations
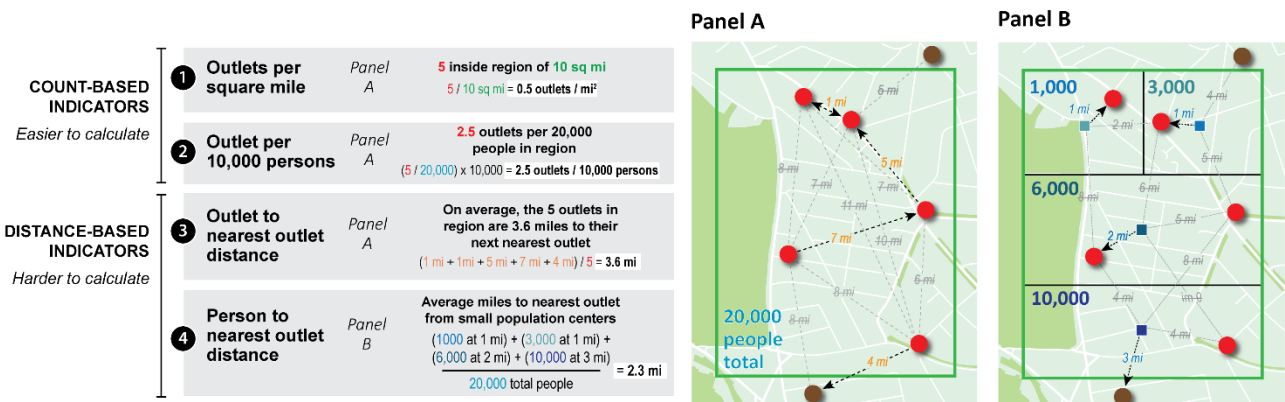
Note: Distances (between outlets or people and outlets) can reach outside region boundary when available for more accuracy. Indicator calculation for a region is only based on the nearest distances for outlets or people within that region.

From the CDC's Alcohol Outlet Density Surveillance Toolkit https://www.cdc.gov/alcohol/fact-sheets/outlet-density-measurement.htm

Count-based indicators are typically easier to calculate, but each indicator has its own advantages and disadvantages. For example, the number of alcohol outlets per 10,000 people indicator does not take into consideration areas with a high alcohol outlet density but low population density, such as entertainment districts, where many people come and go but fewer people reside. The indicator used should consider the characteristics of the community, such as population density and geographic area of the area.

Why does alcohol outlet density matter?

High alcohol outlet density is associated with social harms such as disorderly conduct and property damage in neighborhoods in and around the high-density area. In addition, high alcohol outlet density is associated with other outcomes in surrounding neighborhoods such as drunk driving, domestic violence, and child abuse.[3]

Since alcohol outlet density varies greatly among different communities, conducting public health surveillance of alcohol outlet density can give communities information to develop tailored goals for preventing excessive alcohol consumption.[7] In addition, higher alcohol outlet density is associated with greater proportions of families living in poverty, lower educational attainment, and high proportions of Black and Latino residents in urban areas, contributing to increased health disparities.[9] Reducing alcohol outlet density serves as an opportunity to reduce the risk of excessive alcohol use-related morbidity and mortality in disproportionately affected groups. Since higher alcohol outlet density is more prevalent in low-income neighborhoods and communities of color, measuring alcohol outlet density offers an additional health equity consideration in alcohol policy development.

Next steps: alcohol outlet density and community-level prevention

Alcohol outlet density can be a useful measurement tool in your community for many reasons. Cities and local authorities can use alcohol outlet density when making alcohol licensing decisions. For example, areas with high alcohol outlet density might choose to issue fewer new licenses or renew fewer licenses to reduce the density of alcohol outlets in those areas as a strategy for preventing excessive alcohol use and associated harms. Increased enforcement of liquor laws in certain areas as well as zoning changes in retail alcohol outlet classification could also lead to reductions in excessive alcohol use. Lastly, alcohol outlet density data can be utilized to develop evidence-based prevention approaches for excessive alcohol use.[7]

References

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