**Name:** Alcohol Outlet Density

**Short Description**: The number of off-premise (purchases intended to be consumed off-site) beer, wine, and liquor stores per 10,000 people.

**Data Source:**

* Name: United States Census Bureau, County Business Patterns (CBP)
* Link to Source: [County Business Patterns: 2018 (census.gov)](https://www.census.gov/data/datasets/2018/econ/cbp/2018-cbp.html)

**Year:** 2019

**Source Geographic Level**: ZIP Code

**Stratification:** Not applicable to alcohol outlets.

**Selection Rationale:** Alcohol outlet density contributes to capturing built environment impacts on mental wellness. Alcohol outlets have been found to be overconcentrated in low income and racial and ethnic minority neighborhoods, reflecting the impacts of structural racism.

**Strengths and Limitations**

* **Strengths:**
* *[Importance]* Exposure to alcohol and liquor outlets and advertising has been found to be concentrated in low income and racial/ethnic minority communities[[1]](#footnote-2) and higher alcohol outlet density has also been found to be associated with more highly segregated communities[[2]](#footnote-3). Additionally, research on alcohol outlets has found an association between higher alcohol outlet density and adverse mental health outcomes.[[3]](#footnote-4), [[4]](#footnote-5)
* *[Equity]* Historical discriminatory redlining practices have shown to increase present day exposure to retail alcohol availability, particularly in Black American and Latinx neighborhoods.[[5]](#footnote-6) Incorporation of this measure acknowledges the disparate burden that overconcentration of alcohol outlets places on these neighborhoods.
* *[Relevance and Usability]* Data on alcohol outlet density can inform intervention strategies for reducing excessive alcohol consumption and related harms. The Community Preventive Services Task Force recommends using regulatory authority like licensing and zoning to limit alcohol density.[[6]](#footnote-7) The inclusion of this measure within our framework enables users to understand the role of the built environment and its impacts on community mental wellness.
* *[Scientific Soundness]* This measure of alcohol outlet density follows the CDC Guide for Measuring Alcohol Outlet Density for container-based measures with a population-based denominator.[[7]](#footnote-8) This measure calculation is advantageous because it is both simple to calculate and simple to communicate.
* *[Feasibility]* CBP is an annual series and has included ZIP Code Business Patterns data since 1986. Full release of CBP statistics is available approximately 16 months after each reference year. CBP data is easily accessible for download.
* **Limitations:**
* *[Relevance and Usability]* The CBP suppresses data for ZIP Codes with fewer than 3 establishments. As a result, ZIP Codes with between 0 to 2 alcohol outlets cannot be distinguished from each other and all are assigned a density value of zero. As a result, this measure will primarily capture variation in alcohol outlet density for higher exposure areas. Additionally, we note that some studies

call for further research on the relationship between alcohol outlet density and alcohol use and harm [[8]](#footnote-9), and others have found that individuals in areas of high alcohol outlet density in particular communities actually drank less frequently and that it may be important to consider the intersection of income and alcohol outlet density.[[9]](#footnote-10)

* *[Scientific Soundness]* Container-based methods are unable to detect high-density clustering of outlets within a ZIP Code, nor can they account for the size of the directly exposed population or effects from neighboring ZIP Codes. Nevertheless, given that the primary function of the tool is to delineate variations in population-level exposure, this method provides a sufficient estimate at the neighborhood level.

**Default Weight:** 4.3% (*see Weighting Documentation for details on how default weights were assigned*)

**Calculation:**

Alcohol outlets are defined using the North American Industry Classification system (NAICS) Industry Code 445310 for “Beer, Wine, and Liquor Stores”

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2. Scott, J., Danos, D., Collins, R., Simonsen, N., Leonardi, C., Scribner, R., & Herd, D. (2020). Structural racism in the built environment: Segregation and the overconcentration of alcohol outlets. *Health & place*, *64*, 102385. <https://www.sciencedirect.com/science/article/pii/S1353829219313917> [↑](#footnote-ref-3)
3. Giesbrecht, N., Huguet, N., Ogden, L., Kaplan, M. S., McFarland, B. H., Caetano, R., Conner, K. R., & Nolte, K. B. (2015). Acute alcohol use among suicide decedents in 14 US states: impacts of off-premise and on-premise alcohol outlet density. Addiction (Abingdon, England), 110(2), 300–307. <https://doi.org/10.1111/add.12762> [↑](#footnote-ref-4)
4. Pereira, G., Wood, L., Foster, S., & Haggar, F. (2013). Access to alcohol outlets, alcohol consumption and mental health. PloS one, 8(1), e53461. <https://doi.org/10.1371/journal.pone.0053461> [↑](#footnote-ref-5)
5. Lee, J. P., Ponicki, W., Mair, C., Gruenewald, P., & Ghanem, L. (2020). What explains the concentration of off-premise alcohol outlets in Black neighborhoods?. *SSM-Population Health*, *12*, 100669. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7576518/> [↑](#footnote-ref-6)
6. The Community Guide. Excessive Alcohol Consumption. <https://www.thecommunityguide.org/topic/excessive-alcohol-consumption> [↑](#footnote-ref-7)
7. Centers for Disease Control and Prevention. Guide for Measuring Alcohol Outlet Density (2017). Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services. <https://www.cdc.gov/alcohol/pdfs/CDC-Guide-for-Measuring-Alcohol-Outlet-Density.pdf> [↑](#footnote-ref-8)
8. Gmel, G., Holmes, J., and Studer, J. (2016) Are alcohol outlet densities strongly associated with alcohol‐related outcomes? A critical review of recent evidence. *Drug Alcohol Rev*, 35: 40– 54. <https://doi.org/10.1111/dar.12304> [↑](#footnote-ref-9)
9. Mair, C., Sumetsky, N., Gruenewald, P.J., and Lee, J. (2020) Microecological Relationships Between Area Income, Off-Premise Alcohol Outlet Density, Drinking Patterns, and Alcohol Use Disorders: The East Bay Neighborhoods Study. *Alcoholism: Clinical and Experimental Research.* <https://doi.org/10.1111/acer.14387> [↑](#footnote-ref-10)