**Name**: Adult Binge Drinking

**Short Description**: Percent of adults reporting binge drinking in the past 30 days (calculated as a crude prevalence).

**Data Source(s)**:

* Name: The Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), accessed via the PLACES Project Data Portal

Link to Source: <https://chronicdata.cdc.gov/browse?category=500+Cities+%26+Places&sortBy=newest&utf8>

**Year(s):** 2018

**Source Geographic Level**: Zip Code Tabulation Area (ZCTA)

**Stratification**: Not available

**Selection Rationale:** A person’s risk for developing alcohol use disorder (AUD) depends on how much, how often, and how quickly they consume alcohol. Binge drinking over time increases the risk of AUD.[[1]](#footnote-2) Heavy alcohol use increases the odds of having mental health problems for those over the age of 50[[2]](#footnote-3), and alcohol dependence has been found to be associated with major depression among adults 18 and over.[[3]](#footnote-4)

**Strengths and Limitations**

* **Strengths**:
  + [*Importance*] Binge drinking has been found to produce depressive symptoms in the general population, and has been found to contribute independently to the occurrence of depressive symptoms.[[4]](#footnote-5)
  + [*Feasibility*] BRFSS data is collected every year, and PLACES integrates the new data yearly. The data is easily downloadable.
  + [*Scientific Soundness*] The methods used by the CDC to generate these small area estimates accounts for the associations between individual health outcomes, individual characteristics, and spatial contexts. CDC’s internal and external validation studies confirm strong consistency between small area estimates and direct BRFSS survey estimates at state and county levels. [[5]](#footnote-6)
* **Limitations**:
  + [*Relevance and Usability*] This measure is a model-based estimate[[6]](#footnote-7), so it may be difficult to interpret on its own. Further, the measure does not convey the frequency of binge drinking or the specific amount of alcohol consumed.[[7]](#footnote-8)
  + [*Scientific Soundness*] This measure is self-reported and depends on the accuracy of the person surveyed.
  + [*Scientific Soundness*] Age adjusted prevalence is not available at the census tract level, so this data is reported as a crude prevalence.

**Default Weight**:2.5% (*see Weighting Documentation for details on how default weights were assigned*)

**Calculation**:

\*Where binge drinking is defined as a woman consuming more than four alcoholic drinks during a single occasion or a man consuming more than five alcoholic drinks during a single occasion.

\*\* Denominator excludes those who refused to answer, had a missing answer, or answered “don’t know/not sure”.[[8]](#footnote-9)

**Methods**:

BRFSS estimates the crude prevalence based on self-reports using small area estimation (SAE) and multilevel regression and poststratification (MRP) which links geocoded health surveys and high spatial resolution population demographic and socioeconomic data.[[9]](#footnote-10)

1. National Institute on Alcohol Abuse and Alcoholism. (2021, April). *Understanding Alcohol Use Disorder.* <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/understanding-alcohol-use-disorder> [↑](#footnote-ref-2)
2. Choi, N.G., DiNitto, D.M. and Marti, C.N. (2015), Alcohol and other substance use, mental health treatment use, and perceived unmet treatment need: Comparison between baby boomers and older adults. *American Journal on Addictions*, 24: 299-307. <https://doi.org/10.1111/ajad.12225> [↑](#footnote-ref-3)
3. Kuria, M. W., Ndetei, D. M., Obot, I. S., Khasakhala, L. I., Bagaka, B. M., Mbugua, M. N., & Kamau, J. (2012). The Association between Alcohol Dependence and Depression before and after Treatment for Alcohol Dependence. *ISRN psychiatry*, *2012*, 482802. <https://doi.org/10.5402/2012/482802> [↑](#footnote-ref-4)
4. Paljärvi, T., Koskenvuo, M., Poikolainen, K., Kauhanen, J., Sillanmäki, L., & Mäkelä, P. (2009). Binge drinking and depressive symptoms: a 5-year population-based cohort study. *Addiction (Abingdon, England)*, *104*(7), 1168–1178. <https://doi.org/10.1111/j.1360-0443.2009.02577.x> [↑](#footnote-ref-5)
5. Centers for Disease Control and Prevention. (2020, December 8). *PLACES* *Methodology*. <https://www.cdc.gov/places/methodology/> [↑](#footnote-ref-6)
6. Centers for Disease Control and Prevention. (2020, December 8). *PLACES* *Methodology*. <https://www.cdc.gov/places/methodology/> [↑](#footnote-ref-7)
7. Centers for Disease Control and Prevention. (2020, December 8). *Unhealth Behaviors Measure Definitions*. <https://www.cdc.gov/places/measure-definitions/unhealthy-behaviors/index.html#binge-drinking> [↑](#footnote-ref-8)
8. Centers for Disease Control and Prevention. (2020, December 8). *PLACES Measure Definitions*. <https://www.cdc.gov/places/measure-definitions> [↑](#footnote-ref-9)
9. Centers for Disease Control and Prevention. (2020, December 8). *PLACES* *Methodology*. <https://www.cdc.gov/places/methodology/> [↑](#footnote-ref-10)