Alcohol outlet density (AOD) is a measure of the physical availability of alcohol in a particular geographic area. Higher AOD is an environmental risk factor for excessive drinking and alcohol-related harms. Measuring AOD can be useful for monitoring the availability of alcohol in communities.

The Community Preventive Services Task Force recommends regulating AOD as an evidence-based strategy for preventing excessive alcohol use. Identifying areas where alcohol outlet density is particularly high or increasing over time may guide prevention efforts.

Along with excessive alcohol consumption, higher AOD is associated with higher rates of violence, injuries, and alcohol-related motor vehicle crashes.

Monitoring AOD is important for public health and safety because it informs practitioners of the availability and convenience of accessing alcohol in communities.

Areas of higher AOD can be associated with historically marginalized communities, such as Black, Indigenous, People of Color (BIPOC) and low-income communities, potentially because of factors such as systemic injustices communities have endured, including redlining (communities systematically denied housing loans and infrastructure investment along racial lines), poverty, and inadequate access to healthy foods.

Maps of AOD visually show that Denver neighborhoods with historic redlining had some of the highest alcohol outlet densities in the city.
Rural counties in the southwest, south central, and along the Rocky Mountain corridor have a higher AOD per 10,000 residents but lower density per square mile than urban counties.*

In 2020, Denver County had about 29 alcohol outlets per 10,000 residents and 13 alcohol outlets per square mile, representing the highest AOD among urban counties that year.*

Interested in learning more about AOD in your county or census track?

Visit https://cdphe.colorado.gov/alcohol-outlet-density to explore interactive maps of AOD in Colorado.

Contact the alcohol epidemiologist at Colorado Department of Public Health and Environment with any questions about AOD.

Check out additional resources on AOD from the SEOW, CDPHE, and CDC and see references for this publication.

Sources: Colorado Department of Revenue, Liquor Enforcement Division, 2020; American Community Survey, 2015-2019

*Alcohol outlet density measurements calculated using January 2020 licensee lists from the Colorado Department of Revenue-Liquor Enforcement Division and 2015-2019 American Community Survey population census estimates.