#### EVIDENCE-BASED RESOURCE GUIDE SERIES

# Implementing Community-Level Policies to Prevent Alcohol Misuse

FOOI & LIQUOR

CHECKS CASHED

ATA



# Implementing Community-Level Policies to Prevent Alcohol Misuse

#### **Acknowledgments**

This report was prepared for the Substance Abuse and Mental Health Services Administration (SAMHSA) under contract number HHSS283201700001 / 75S20319F42002 with SAMHSA, United States Department of Health and Human Services (HHS). Donelle Johnson served as contracting officer representative.

#### Disclaimer

The views, opinions, and content of this publication are those of the authors and do not necessarily reflect the views, opinions, or policies of SAMHSA. Nothing in this document constitutes a direct or indirect endorsement by SAMHSA of any non-federal entity's products, services, or policies, and any reference to a non-federal entity's products, services, or policies should not be construed as such.

#### **Public Domain Notice**

All material appearing in this publication is in the public domain and may be reproduced or copied without permission from SAMHSA. Citation of the source is appreciated. However, this publication may not be reproduced or distributed for a fee without the specific, written authorization of the Office of Communications, SAMHSA.

#### **Electronic Access**

This publication may be downloaded from http://store.samhsa.gov.

#### **Recommended Citation**

Substance Abuse and Mental Health Services Administration (SAMHSA). *Implementing Community-Level Policies to Prevent Alcohol Misuse*. SAMHSA Publication No. PEP22-06-01-006. Rockville, MD: National Mental Health and Substance Use Policy Laboratory. Substance Abuse and Mental Health Services Administration, 2022.

#### **Originating Office**

National Mental Health and Substance Use Policy Laboratory, Substance Abuse and Mental Health Services Administration, 5600 Fishers Lane, Rockville, MD 20857, Publication No. PEP22-06-01-006. Released 2022.

#### **Nondiscrimination Notice**

The Substance Abuse and Mental Health Services Administration (SAMHSA) complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, religion, or sex (including pregnancy, sexual orientation, and gender identity). SAMHSA does not exclude people or treat them differently because of race, color, national origin, age, disability, religion, or sex (including pregnancy, sexual orientation, and gender identity).

Publication No. PEP22-06-01-006

Released 2022

# Abstract

Approximately 70 percent of adults in the United States report drinking alcohol in the past year, as do 30 percent of youth under the age of 21. Alcohol misuse is associated with a variety of harms that include multiple health conditions, like high blood pressure, cancer, and other diseases; mental health disparities; violence and crime; fatal and non-fatal motor vehicle crashes; and others, even death. As rates of alcohol use and related harms continue to remain high, it is important for communities to know the most effective options to prevent and reduce alcohol misuse.

This guide provides an overview of effective prevention policies that can be implemented at the local, state, tribal, and/or territorial levels. It lays out key considerations and strategies for these policies, including the most equitable ways to implement and enforce them. The guide illustrates how three United States communities have implemented these policies and concludes with guidance on conducting policy evaluations.



#### MESSAGE FROM THE ASSISTANT SECRETARY FOR MENTAL HEALTH AND SUBSTANCE USE, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

As the Assistant Secretary for Mental Health and Substance Use in the United States Department of Health and Human Services and the leader of the Substance Abuse and Mental Health Services Administration (SAMHSA), I am pleased to present this new resource: *Implementing Community-Level Policies to Prevent Alcohol Misuse*.

SAMHSA is committed to improving prevention, treatment, and recovery support services for individuals with mental illnesses and substance use disorders. SAMHSA's National Mental Health and Substance Use Policy Lab developed the Evidence-Based Resource Guide Series to provide communities, clinicians, policymakers, and others with the information and tools to incorporate evidence-based practices into their communities or clinical settings. As part of the series, this guide aims to highlight community-level policies to prevent and reduce alcohol misuse.

This guide and others in the series address SAMHSA's commitment to behavioral health equity, including providing equal access for all people to evidence-based prevention, treatment, and recovery services regardless of race, ethnicity, religion, income, geography, gender identity, sexual orientation, and disability. Each guide recognizes that substance use disorders and mental illness are often rooted in structural inequities and influenced by the social determinants of health. Behavioral health practitioners and community stakeholders must give attention to health equity to improve individual and population health.

Adapting evidence-based practices, while retaining core practice components, can help mitigate the disparities too often seen in behavioral health services for under-resourced populations and improve outcomes. This guide discusses the different policies that have been effectively implemented in communities across the United States to prevent and reduce alcohol misuse and related harms. I encourage you to use this guide to ensure that the interventions your community is implementing have the strongest potential to improve the health and safety of our neighbors, peers, colleagues, and families.

#### Miriam E. Delphin-Rittmon, PhD

Assistant Secretary for Mental Health and Substance Use U.S. Department of Health and Human Services

#### FOREWORD

# **Evidence-Based Resource Guide** Series Overview

The Substance Abuse and Mental Health Services Administration (SAMHSA), specifically its National Mental Health and Substance Use Policy Laboratory (Policy Lab), is pleased to disseminate information on evidence-based practices and service delivery models.

The Evidence-Based Resource Guide Series is a comprehensive set of modules with resources to improve health outcomes for people at risk for, experiencing, or recovering from mental and/or substance use disorders. It is designed for prevention practitioners, coalitions, community leaders, health professions educators, and others considering an intervention for their organization or community. Expert panels of federal, state, and non-governmental participants provided input for each guide in this series. The panels include accomplished researchers, educators, service providers, community members, community administrators, and federal and state policymakers. Members provide input based on their lived experience, knowledge of healthcare systems, implementation strategies, evidence-based practices, provision of services, and policies that foster change.

Implementing new policies requires a comprehensive, multi-pronged approach. This guide is one piece of an overall approach to implement and sustain change. Readers are encouraged to review the <u>SAMHSA website</u> for additional tools and technical assistance opportunities.

Behavioral health equity is the right to access high-quality and affordable healthcare services and supports for all populations, including Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, queer/questioning, and intersex (LGBTQI+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. As population demographics continue to evolve, behavioral healthcare systems will need to expand their ability to fluidly meet the growing needs of a diverse population. By improving access to behavioral health care, promoting quality behavioral health programs and practice, and reducing persistent disparities in mental health and substance use services for under-resourced populations and communities, recipients can ensure that everyone has a fair and just opportunity to be as healthy as possible. In conjunction with promoting access to high-quality services, behavioral health disparities can be further mitigated by addressing social determinants of health, such as social exclusion, unemployment, adverse childhood experiences, and food and housing insecurity. In all areas, including preventing alcohol misuse, SAMHSA is committed to behavioral health equity.

# **Content of the Guide**

This guide contains a foreword (FW) and five chapters (1-5). Each chapter is designed to be brief and accessible to anyone working to prevent and reduce alcohol misuse.

This guide reviews the literature on prevention of alcohol misuse among youth and adults, distills the research evidence into recommendations for practice, and provides illustrative examples of how stakeholders have implemented these recommendations.

#### FW Evidence-Based Resource Guide Series Overview

Introduction to the series.

#### **1** Issue Brief

Overview of current approaches and challenges to preventing alcohol misuse among youth and adults.

#### 2 What Research Tells Us

Current evidence on the effectiveness of prevention policies to prevent alcohol misuse among youth and adults.

#### 3 Identifying and Implementing Evidence-Based Policies to Prevent Alcohol Misuse

Practical information to consider when selecting and implementing policies to prevent alcohol misuse among youth and adults.

#### 4 Examples of Policies to Prevent Alcohol Misuse

Descriptions of policies from Chapters 2 and 3 that have been implemented to prevent and reduce alcohol misuse among youth and adults.

#### 5 Guidance and Resources for Policy Evaluation

Guidance and resources for evaluating prevention policies, monitoring outcomes, and improving quality.

#### FOCUS OF THE GUIDE

Alcohol misuse is a major public health concern in the United States, responsible for more than 140,000 deaths each year, and is a leading preventable risk factor for chronic diseases and injuries. This guide provides an overview of alcohol misuse in the United States, including rates and related harms across different populations. It views these data with a health equity lens, looking at the disparate conditions affecting these populations.

The purpose of this Evidence-Based Resource Guide is to provide communities, the prevention workforce, and other stakeholders with policies that governmental agencies and organizations can implement at the local, state, tribal, and territorial levels for preventing alcohol misuse. Each policy includes a description of the intervention, implementation examples, and considerations for health equity.

In addition, this guide summarizes other policies and strategies grounded in public health theory that communities are implementing to reduce alcohol misuse and related harms. It provides considerations and strategies for implementing policies, with a focus on equitable implementation. This guide illustrates how communities and legislators have developed and implemented these policies. CHAPTER



# **Issue Brief**

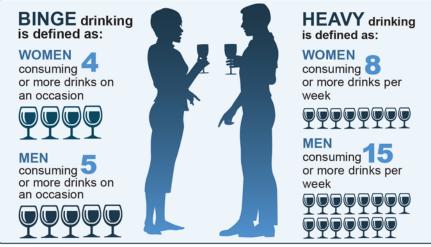
In the United States, <u>alcohol misuse</u> is responsible for approximately 140,000 deaths per year; nearly two-thirds (89,697) are among adults aged 20 to 64,<sup>1-2</sup> and 4,000 are among those under 21.<sup>2</sup> Prevention of alcohol misuse is critical for reducing potential harms to individuals who consume alcohol and those around them, as well as to communities that experience alcohol-related violence and crime. Prevention efforts that focus on reducing alcohol misuse and related adverse outcomes are broader than prevention efforts or the provision of treatment for <u>alcohol use disorder (AUD)</u>. Preventing alcohol misuse can reduce the risk of individuals developing AUD.

This guide focuses on alcohol misuse, given that it affects many people.<sup>3</sup> Most alcohol-related harms occur among people who drink relatively low or moderate levels, simply because they are more numerous in the population,<sup>4-5</sup> even though people who drink higher levels of alcohol have a higher individual risk of experiencing alcohol-related harms. This concept is often referred to as the "prevention paradox," and it supports implementing interventions affecting all people who drink—not just those who consume high amounts of alcohol.

#### Terminology

- Alcohol misuse, also referred to as excessive alcohol use, is defined as <u>binge drinking</u>, <u>heavy drinking</u>, driving under the influence of alcohol, any underage drinking, or any alcohol consumption by pregnant people. Other commonly used terms are "risky drinking," "problem drinking," or "excessive drinking." This guide will use the term "alcohol misuse."
- **Community** can be understood in multiple ways, including place-based communities (e.g., neighborhoods, cities, rural areas) or groups of identity (e.g., racial/ethnic groups, sexual and gender minorities, those in recovery from alcohol or <u>substance use</u>).
- Sex/Gender: Where possible, this guide uses the specific language used in the original data sources it references; for example, sex assigned at birth (male/female) or gender identity (man/woman/non-binary). Non-binary responses are included when available in the data sources, though such responses are often missing. Individuals whose gender identity corresponds to their sex assigned at birth are referred to as cisgender, and individuals whose gender identity differs from their sex assigned at birth are referred to as transgender.

#### **Definitions of Binge and Heavy Drinking**



The amount of alcohol consumed to be considered binge and heavy drinking differs for men and women because they metabolize alcohol differently. Factors like body fat and water content, time since last eating food, rate of ingestion, weight, size, and tolerance all influence how an individual metabolizes alcohol. These amounts may vary slightly depending on biological sex and gender identity. For example, biological females tend to be, on average, smaller and lower weight than biological males and, therefore, may metabolize alcohol differently.

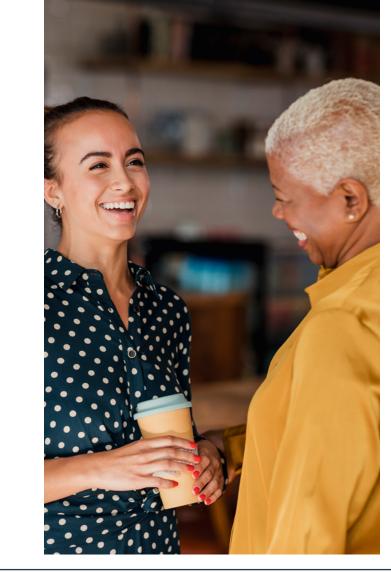
Source: Substance Abuse and Mental Health Services Administration (SAMHSA). (2018). Alcohol use facts and resources. https://www.samhsa.gov/sites/default/files/alcohol\_use\_facts\_and\_resources\_fact\_sheet\_2018\_data.pdf

## What Is Alcohol Misuse and Alcohol Use Disorder?

Alcohol misuse is a pattern of drinking resulting in harm to one's own or others' health and safety, one's interpersonal relationships, or one's ability to function at work, school, or home. It includes binge and heavy drinking, as well as underage drinking, driving under the influence (DUI, also called drunk driving or driving while intoxicated, DWI), and drinking by pregnant people.

There is no universally agreed-upon safe level of alcohol use. The United States Dietary Guidelines for Americans recommend that men limit intake to two drinks in a day and women to one drink or less.<sup>6</sup> These amounts were established based on how men and women metabolize alcohol. There are currently no established guidelines that include number of drinks for individuals whose gender identities do not match their sex assigned at birth.<sup>7</sup> The rate at which alcohol is metabolized impacts an individual's blood-alcohol concentration (BAC), which measures the percent of alcohol in a person's bloodstream. Physical and mental impairment from alcohol use is assessed by BAC (see graphic).

Alcohol use disorder (AUD) is a chronic medical condition that meets criteria in the Diagnostic and Statistical Manual of Mental Disorders<sup>8</sup> and is characterized by the impaired ability to stop or control alcohol use, to relieve or avoid withdrawal symptoms, despite adverse social, occupational, or health consequences.



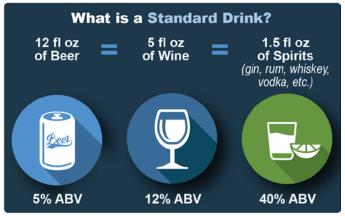
Blood	Blood Alcohol Concentration (BAC)		
BLOOD			
	TYPICAL EFFECTS		
0.02%	<ul> <li>Some loss of judgement</li> <li>State of relaxation</li> <li>Altered mood</li> <li>When driving: Decline in visual function and increased distraction</li> </ul>		
0.05%	<ul> <li>Exaggerated behavior</li> <li>Impaired judgement</li> <li>Lowered level of alertness</li> <li>Reduced coordination</li> <li>When driving: Poor response time and reduced ability to track objects</li> </ul>		
0.08%	<ul> <li>Poor muscle coordination</li> <li>Impaired judgement, self-control, reasoning, and memory</li> <li>Poor concentration</li> <li>Reduced capability to process information</li> <li>When driving: Impaired perception and speed control</li> </ul>		
0.10%	<ul> <li>Deteriorated reaction time and control</li> <li>Slurred speech, poor coordination, and slowed thinking</li> <li>When driving: Reduced ability to maintain lane position</li> </ul>		
0.15%	<ul> <li>Major loss of balance</li> <li>Far less muscle control</li> <li>Vomiting</li> <li>When driving: Substantial impairment in vehicle control, attention, and visual and auditory processing</li> </ul>		

Note: These effects are generalized and may vary depending on individual factors. The federal limit to legally drive in the United States is a BAC of 0.08%, except Utah where it is 0.05%. Many states have set lower BAC limits to legally drive for individuals under the age of 21, known as zero tolerance laws. **Source:** Centers for Disease Control and Prevention (CDC). (n.d.). *Blood alcohol* 

concentration. https://www.cdc.gov/motorvehiclesafety/pdf/bac-a.pdf

# **Alcohol Products**

All alcohol products contain ethyl alcohol, or ethanol, that is produced through fermentation of different materials like grains (beer) and grapes (wine). The most common alcohol products are beer, wine, and liquor/spirits. The percentage of pure alcohol in these products is measured using alcohol by volume (ABV). Beer and wine are



Variation in ABV is reflected in standard drinks for the same size. For example, a 12 oz beer that is 8% ABV is 1.6 standard drinks and a 5 oz glass of wine that is 15% ABV is 1.25 standard drinks.

typically thought of as the safest alcoholic beverages because of their relatively low ABV, while liquor/spirits are thought of as more potent due to their higher ABV. However, no one alcoholic beverage is safer to drink than any other; the amount of alcohol *consumed* is what affects people the most, across all beverage types.<sup>9</sup>

Over the years, alcohol products have evolved beyond these standard types. The alcohol industry has introduced several new alcohol products since the 1990s that have raised public health concerns about higher levels of alcohol consumption, more alcohol consumed by youth, and greater physical and social harms. The most recent products, potentially associated with a high risk of alcohol-related harm, include:

- *Alcohol mixed with energy drinks*, in ready-todrink cans or mixed at bars or restaurants (note: these are banned in some states).<sup>10</sup>
- *Flavored alcoholic beverages*, also called "alcopops," which are sweetened beverages designed to appeal to youth or consumers who are less familiar with the taste of more traditional alcoholic beverages.<sup>11</sup>
- *Ready-to-drink cocktails*, which are pre-mixed cocktails available wherever alcohol is sold to-go.
- *"Hard" drinks*, such as hard kombucha or hard seltzers and sodas that add flavor and alcohol to previously alcohol-free beverages; these drinks have approximately the same alcoholic beverage content as beer.
- *High alcohol content beer*, such as those above 7 percent ABV and some even above 67 percent ABV.

- *Powdered alcohol*, available in capsule or packet form and containing alcohol that has been absorbed by a sugar derivative; individuals can consume alcohol capsules orally as a pill or dissolve them in water to make an alcoholic beverage.
- *Grain alcohol*, which is high-strength alcohol (e.g., above 100 proof, or 50 percent ABV) that has been restricted or banned in ten states as of 2019.<sup>12</sup>

## Demographic Characteristics of People Who Are Impacted by Alcohol Misuse

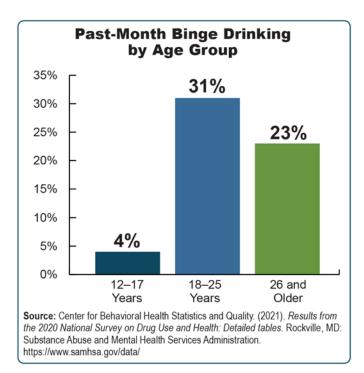
As communities recognize alcohol's role in individual and community harms, it is important to assess who is affected by alcohol misuse and the rates of alcohol misuse among different population groups. Paired with data on the broader context of where and how retailers market and sell alcohol, consumption data can assist communities in determining the best prevention approach to address their specific issues (see <u>Chapter 2</u> for a list of evidence-based policies and <u>Chapter 3</u> for implementation recommendations).

#### Age

In 2020, almost 70 (69.6) percent of people living in the United States age 21 and older (166.6 million people) reported drinking alcohol in the past year, as did 29.7 percent of underage individuals aged 12 to 20.<sup>13</sup> Nearly one in four individuals (24.3 percent) age 21 and over reported binge drinking in the past month.<sup>13</sup> Individuals aged 18 to 25 exhibited the highest rates of past-month binge drinking (31.4 percent), followed by individuals aged 26 and older (22.9 percent) and 12 to 17 (4.1 percent).<sup>13</sup> Younger people are more likely than older people to drive under the influence of alcohol; of drivers involved in fatal car crashes, 27 percent were aged 25 to 34, with the next largest groups being 21 to 24 (26 percent) and 35 to 44 (22 percent).<sup>14</sup>

Underage drinking remains a major concern in the United States, even though purchasing or possessing alcohol is illegal for those under the age of 21 in most circumstances.<sup>a</sup>

In fact, in 2016, underage drinking accounted for \$17.5 billion in alcohol sales, and people aged 12 to 20 drank 9 percent of all alcohol consumed that year.<sup>15</sup> Alcohol products, such as flavored alcoholic beverages, are particularly popular among youth, and evidence suggests that these products are specifically marketed to attract youth.<sup>16</sup> The link between youth exposure to marketing and underage drinking is clear: reducing youth exposure to marketing reduces youth alcohol consumption.<sup>16-17</sup> Early initiation of alcohol use sets young people up for greater likelihood of harm later in life.<sup>18-20</sup> Reducing youth exposure to alcohol advertising is just one example of a policy intervention that can help delay initiation, and thus reduce alcohol misuse and related harms.



In recent years, alcohol misuse has also been increasing in older adults. One study found that 20 percent of older adults surveyed drank alcohol 4 or more times per week, 27 percent reported having 6 or more drinks on at least 1 occasion in the past year, and 7 percent reported alcohol-

Thirty-seven states allow the consumption of alcohol for those under the age of 21 when with a parent, guardian, or spouse, or in private locations, such as a private residence or parent/guardian's home.

related blackouts.<sup>21</sup> Alcohol misuse in older adults can place these individuals at additional risk because they metabolize alcohol more slowly, are more susceptible to injury, and are more likely to be taking multiple prescription medications that may not be mixed with alcohol.<sup>22</sup>

#### **Sex/Gender**

Sex assigned at birth and gender identity impact alcohol misuse and associated risks in many ways. The former has a greater effect on impaired functioning, inhibition, and other behavioral impacts, while the latter has a greater effect on responses to marketing and susceptibility to sexual assault.<sup>23</sup> In the past, researchers did not collect data specific to sex assigned at birth and gender identity;<sup>7, 24</sup> however, these data are becoming more readily available and are improving our understanding of how these factors influence alcohol misuse and differences between majority and minority groups.<sup>25-27</sup> Given the current understanding of the interactions between sex assigned at birth, gender identity, and alcohol misuse, prevention programming should encompass and address all components of sex and gender.

*Sex assigned at birth.* In the United States, males have historically reported much higher rates of drinking and alcohol misuse than females. Males in the United States drink three times more alcohol than their female counterparts.<sup>28</sup> In 2020, among individuals aged 12 and



Definitions and measures of alcohol misuse have not always considered the complexity of biological characteristics, sex assigned at birth, gender identity, or the interactions among these factors. However, data on gender and sexual identities are becoming more readily available. Research in the areas of understanding and measuring alcohol misuse in transgender populations and how they differ from cisgender populations is ongoing. Data on alcohol misuse for gender minorities (e g , transgender, non-binary) have been inconsistent, but differences have been noted in alcohol misuse among these individuals and cisgender people across several behaviors, indicating that different groups have distinct health risks.

#### Alcohol Misuse by Gender Identity

Compared to cisgender individuals, individuals who identify as transgender are more likely to use substances, including alcohol.

Gender non-conforming individuals have higher odds of binge and heavy drinking than do gender-conforming individuals.

Transgender females have higher odds of binge and heavy drinking compared to cisgender females.

Women and gender minority college students drink less than cisgender, heterosexual college men but experience more alcohol-related consequences per drink.

Individuals who identify as transgender may be more influenced by norms associated with gender identity than those associated with their birth-assigned sex.

Stress related to gender identity is associated with risky drinking behavior.

#### Sources:

Azagba, S., Latham, K., & Shan, L. (2019). Cigarette, smokeless tobacco, and alcohol use among transgender adults in the United States. International Journal of Drug Policy, 73, 163-169. https://doi.org/10.1016/j.drugpo.2019.07.024.

Barger, B. T., Obedin-Maliver, J., Capriotti, M. R., Lunn, M. R., & Flentje, A. (2021). Characterization of substance use among underrepresented sexual and gender minority participants in The Population Research in Identity and Disparities for Equality (PRIDE) Study. Substance Abuse, 42(1), 104-115. https://doi.org/10.1080/08897077.2019.1702610 Cotaina, M., Peraire, M., Boscá, M., Echeverria, I., Benito, A., & Haro, G. (2022). Substance use in the transgender population: A meta-analysis. Brain Sciences, 12(3), 366. https://doi.org/10.3390/brainsci12030366

Hughto, J.M.W., Quinn, E.K., Dunbar, M.S., Rose, A.J., Shireman, T.I., & Jasuja, G.K. (2021). Prevalence and co-occurrence of alcohol, nicotine, and other substance use disorder diagnoses among US transgender and cisgender adults. JAMA, 4(2), e2036512. https://doi.org/10.1001/jamanetworkopen.2020.36512

Kidd, J. D., Levin, F. R., Dolezal, C., Hughes, T. L., & Bockting, W. O. (2019). Understanding predictors of improvement in risky drinking in a U.S. multi-site, longitudinal cohort study of transgender individuals: Implications for culturally-tailored prevention and treatment efforts. *Addictive Behaviors*, *96*, 68-75. https://doi.org/10.1016/j.addbeh.2019.04.017
 Schipani-McLaughlin, A.M., Nielsen, K.E., Mosley, E.A., Leone, R.M., Oesterle, D.W., Orchowski, L.M., Davis, K.C., & Gilmore, A.K. (2022). Alcohol use and alcohol-related consequences based on gender and sexual orientation among college students. *American Journal of Addiction*, *31*(3), 189-199. https://doi.org/10.1111/ajad.13283
 Smalley, K. B., Warren, J. C., & Barefoot, K. N. (2016). Differences in health risk behaviors across understudied LGBT subgroups. *Health Psychology*, *35*(2),103-114. https://doi.org/10.1037/hea0000231

Williams, E. C., Frost, M. C., Rubinsky, A. D., Glass, J. E., Wheat, C. L., Edmonds, A. T., Chen, J. A., Matson, T. E., Fletcher, O. V., Lehavot, K., & Blosnich, J. R. (2021). Patterns of alcohol use among transgender patients receiving care at the Veterans Health Administration: Overall and relative to nontransgender patients. *Journal of Studies on Alcohol and Drugs*, 82(1), 132-141. https://doi.org/10.15288/jsad.2021.82.132

older, the prevalence of binge drinking in the past month was higher among males than females (24.9 percent versus 19.7 percent, respectively).<sup>13</sup> An estimated half of all violent crimes involve alcohol use, including sexual assaults; nearly all perpetrators are male, while nearly all victims are female.<sup>29-30</sup> Males are four times as likely to drive under the influence compared to females.<sup>31</sup>

Female misuse of alcohol is, however, increasing.<sup>32</sup> In 2020, the prevalence of binge drinking in the past month among males and females aged 18 to 25 was nearly equal (31.3 percent and 31.4 percent, respectively).<sup>13</sup> Moreover, 2019 data on high school students, analyzed separately for male and females showed that females report current binge drinking at a higher rate than males in the same grade.<sup>33</sup> This pattern suggests that young females may be at particularly high risk of engaging in alcohol misuse, compared to male peers and older females. These findings are concerning, given that, compared to males, females are at higher risk for medical problems associated with alcohol misuse, including liver, brain, and heart damage;<sup>34.35</sup> and alcohol use is also a major risk factor for breast cancer.<sup>36</sup>

Gender identity. The impact of gender on alcohol misuse is influenced by gender roles and norms, relations, identity, and other components of gender in addition to sex assigned at birth and the intersection of these different factors.<sup>23</sup> Although gender-specific risks associated with drinking have been historically researched based on sex assigned at birth, gender identity may influence these risks. For example, alcohol products and marketing are often geared towards stereotypical preferences of women. This includes the commercialization of lower calorie beer, sparkling alcoholic beverage products, and wines named and branded for a moms' or girls' night out. Alcohol marketing also capitalizes on gendered messaging and stereotypes, such as using significant pink branding, focusing on all-women friendships, talking about the gender pay gap, and attaching to International Women's Day.37

These marketing tactics may influence alcohol consumption among women, compounding risks because, in addition to being subjected to gender-specific marketing practices, people in gender minority groups are more likely than majority groups to consume alcohol.<sup>23</sup>

#### **Sexual Orientation**

Sexual minorities tend to have a higher rate of alcohol misuse.<sup>27, 38</sup> According to the 2020 National Survey on Drug Use and Health, 32.6 percent of people identifying as lesbian, gay, or bisexual (LGB) aged 18 and older reported binge drinking in the past month.<sup>13</sup> This rate was higher than the national binge drinking prevalence rate of 24.2 percent:<sup>13</sup>

- Women aged 18 and over who identify as sexual minorities reported a higher percentage of past month binge drinking (34.3 percent) than did women overall (31.3 percent).
- Men aged 18 and over who identify as sexual minorities also reported a higher percentage of past month binge drinking (29.8 percent), compared to men overall (27.3 percent).

Similarly, the 2019 Youth Risk Behavior Survey found that LGB youth also had a significantly higher rate (33.9 percent) of current alcohol use than their heterosexual peers (28.8 percent).<sup>39</sup>

Federal surveys that have begun to ask sexual orientation questions in recent years find that substance misuse and substance use disorders, in general, are more prevalent among individuals who identify as lesbian, gay, bisexual, transgender, queer/questioning, and/or intersex (LGBTQI+) as compared to those who identify as heterosexual and/or cisgender.<sup>40-41</sup> Other research has produced similar findings, and indicates a nuanced intersection between sexual orientation and gender identity that influences social and biological risk factors for substance misuse. For example, one study found that sexual minorities assigned female sex at birth were more likely to report substance misuse, compared to the general population, in which more people assigned male sex at birth tend to report substance misuse.<sup>42</sup> Another study found that the intersection of gender and sexual orientation and how it influences alcohol misuse, specifically, may vary by identity, as youth who were questioning both their gender and sexual orientation had greater odds of initiating alcohol use before age 15.27

While biological traits that influence alcohol misuse appear more frequently in some populations than others, genetics account for half of AUDs,<sup>43</sup> and social/environmental influences account for the rest.

There are a range of social issues, such as stigma, discrimination, and other challenges not experienced by people who identify as heterosexual, that may put LGBTQI+ individuals at greater risk for behavioral health issues, including alcohol misuse.<sup>40-41</sup> Sponsored events in bars, product labeling that relies on rainbows and pride themes, advertisements in gay press publications, strategic advertising campaigns, and support of pride events increases the exposure of alcohol to LGBTQI+ populations.<sup>44-45</sup> These marketing practices entrench alcohol further in LGBTQI+ communities, potentially increasing the risk of alcohol misuse and alcohol-related harms in already disenfranchised and susceptible groups.

#### **Race/Ethnicity**

Rates of alcohol misuse differ among racial and/or ethnic groups in the United States.<sup>46,b</sup> Many of the observed differences in alcohol misuse by different races or ethnicities are rooted in social-structural inequities; for example, although men who identified as White were most likely to report driving under the influence of alcohol (followed by men who identified as American Indian/Alaska Native (AI/AN) and mixed race),<sup>48</sup> men who identified as Black/African American and Latino were more likely to be stopped, searched, and convicted for doing so.<sup>49</sup>

Among individuals aged 12 and older, past 30-day binge drinking rates are reported highest among those who identify as White (23.1 percent) and Hispanic (23.7 percent), closely followed by those who identify as Black/ African American (20.8 percent) and as two or more races (20.6 percent). Lowest past 30-day binge drinking rates are reported among people who identify as Asian Americans (12.1 percent). Reliable estimates for alcohol misuse among people who identify as AI/AN and Native Hawaiians/Pacific Islanders are not currently available.<sup>13</sup>

When compared to White populations, AI/AN communities have lower rates of alcohol use overall, but higher rates of binge and heavy drinking among people who currently drink alcohol.52 AI/AN populations also experience greater harms from alcohol misuse, as well as numerous health disparities that are associated with current and historical legacies of systemic racism and stigmatization.<sup>53-54</sup> American Indian vouth are more likely to report drinking, heavy drinking, and initiation of alcohol use at a younger age than White youth and are more likely to access alcohol from social sources like parties, siblings, non-parent adults, bars, and retail stores.<sup>50</sup> Other research suggests that American Indian youth access alcohol at higher rates than all other demographic groups except White youth.<sup>50</sup> Additionally, researchers have documented disproportionate marketing of alcohol to American Indians for decades.<sup>55</sup> According to a recent analysis of trends in alcohol-induced deaths in the United States during 2000-2016, both the death rate and its average annual rate of increase were highest amongst AI/AN individuals.<sup>56</sup> Furthermore, a commentary on the analysis cited that these extremely high rates are likely still undercounted due to racial misclassification on death certificates, making these rates even more concerning.57

Many Black, Indigenous, and People of Color (BIPOC) communities experience disproportionately greater exposure to alcohol than do Whites, largely through high densities of alcohol outlets (i.e., the number of bars, restaurants, and stores selling alcohol in a certain geographic area).<sup>50</sup> For example, low-income, predominantly Black neighborhoods in Baltimore had up to eight times as many liquor stores compared to communities with different socioeconomic and racial demographics.<sup>50-51</sup>

BIPOC communities also face high levels of exposure to alcohol marketing. One study found that there are five times more alcohol advertisements in Latino neighborhoods than in White neighborhoods;<sup>58</sup> similar patterns exist for billboard advertising in predominantly non-White communities.<sup>59</sup> Additionally, low-cost, high-alcoholic beverages, such as malt liquor, are more readily available and heavily marketed in communities of color than in predominantly White communities.<sup>60-61</sup>

<sup>&</sup>lt;sup>b</sup> The United States Census Bureau defines race and ethnicity as a person's self-identification with one or more social groups based on ancestral region of origin.<sup>47</sup> Information on race is collected to make funding decisions and understanding disparities in housing, education, employment, health care, and other sectors.<sup>47</sup> While there are no biologically distinct "races," there are biological traits that are more common in certain races than others.

Despite these environmental risk factors, non-White populations typically have lower drinking rates than Whites. However, they still experience disproportionate harm from alcohol consumption, particularly those with the lowest income levels.<sup>62</sup> The discrepancy between lower rates of drinking and higher rates of harm may be due to the combination of additional stress, stigma, and discrimination that non-White populations face, unresolved individual and community-level trauma, and exposure to drinking environments and settings associated with a high risk of harm.<sup>63-64</sup>

#### Socioeconomic Status

In general, people with higher socioeconomic status report drinking more frequently and more heavily than those with lower SES; however, people with lower socioeconomic status are, on average, more negatively affected by alcohol-related harms.<sup>65</sup> One study found that people who belonged to a household with a low income (below \$20,000) were more likely to either abstain from alcohol or drink heavily; they were less likely to report light or moderate drinking.<sup>66</sup>

Another study showed binge-drinking prevalence was highest among those with the highest income (>\$75,000);

the relationship between high income and high binge drinking rates have been duplicated in numerous studies.<sup>67-68</sup> When looking at education level, data show that higher education is associated with higher odds of a person drinking at some point in their life.<sup>69</sup> More recently, researchers found that, within the same urban area, people living in higher income neighborhoods drank more alcohol and reported more alcohol-related problems, compared to people in lower income neighborhoods.<sup>70</sup>

# Harms Associated with Alcohol Misuse

There are more than 200 conditions associated with alcohol misuse, many leading to chronic disease and death;<sup>71-72</sup> it is a leading preventable cause of death in the United States.<sup>73</sup> Harms related to alcohol misuse also have negative impacts on non-drinking individuals, family members, communities, and society.<sup>74</sup> Negative consequences of alcohol misuse can uniquely affect different sectors of society.<sup>75</sup> For example, alcohol misuse is associated with a host of long-term physical harms, which influence productivity in the workplace. Alcohol misuse may also jeopardize public safety.

Individual Morbidity and Mortality	Family/Relationships	Communities/ Society
<ul> <li>Unintentional injuries such as motor vehicle crashes, falls, drownings, and burns</li> <li>Alcohol poisoning</li> <li>Risky sexual behaviors</li> <li>Effects on pregnant people and their babies, including miscarriage and stillbirth</li> <li>Cardiac issues, such as high blood pressure, heart disease, and stroke</li> <li>Liver disease, gastritis, pancreatitis, and digestive issues</li> <li>Several different types of cancer, including mouth, throat, larynx, esophagus, liver, breast, colon, pancreatic, and rectum</li> <li>Neurological issues, including learning and memory problems, poor school performance, difficulty walking (ataxia), blindness, encephalopathy, and dementia</li> <li>A weakened immune system</li> <li>Weight and blood sugar level changes</li> <li>Behavioral health conditions, such as depression, anxiety, concurrent substance misuse, AUD, and suicide</li> <li>Fertility issues affecting both males and females</li> </ul>	<ul> <li><i>Partners</i></li> <li>Intentional injuries and violence, like sexual assault, homicide, domestic/intimate partner violence</li> <li>Decreased quality of life</li> <li>Physical and mental health problems</li> <li>Divorce and/or separation</li> <li><i>Children</i></li> <li>Poor school performance</li> <li>Negative effects on infants, children, and adults whose mothers drank during pregnancy, like pre-term birth, low birth weight, and fetal alcohol spectrum disorders</li> <li>Abuse and neglect</li> <li>Riding with driver under the influence</li> <li>Adverse childhood experiences</li> </ul>	<ul> <li>Workplace</li> <li>Unemployment</li> <li>Decreased productivity and career advancement and/ or opportunities</li> <li>Workplace problems (e.g., harassment)</li> <li>Public Safety</li> <li>Motor vehicle crashes</li> <li>Violent crime (e.g., assault, homicide)</li> <li>Disruptive behavior (e.g., threats, disorderly conduct)</li> <li>Incarceration and penal costs</li> </ul>

#### Impacts of Alcohol Misuse on Individuals, Family/Relationships, and Communities/ Society<sup>9, 71, 76-78</sup>

People experiencing harm due to others' drinking increases the broader community impact of alcohol misuse. One study found that one in five adults reported experiencing at least one harm due to others' drinking in the past year.<sup>79</sup> These secondhand effects of alcohol use include harassment or threats, financial harms, physical aggression, driving-related harms, and more.

The negative consequences of alcohol misuse create not only a social burden, but also a financial burden to society. In 2010, the most recent data available, the economic costs related to excessive alcohol use in the United States were estimated at \$249 billion. This resulted from lost workplace productivity, healthcare costs, criminal justice expenses, and costs associated with alcohol-related motor vehicle crashes and other property damage.<sup>80</sup> Costs to communities include those for law enforcement and social, healthcare, ambulatory, and emergency services to respond to and treat alcohol-related problems, including crashes, violent crimes, public intoxication, and other public nuisances. These costs can be substantial burdens for communities.

# **Community-Level Risk** and Protective Factors

Many community-level factors may influence an individual's drinking behavior and contribute to alcohol misuse.<sup>81-82</sup> Risk factors for alcohol misuse are characteristics associated with a *greater* likelihood of negative outcomes related to drinking, while protective factors are those associated with a *lower* likelihood of negative outcomes or reduced impact of risk factors.<sup>83</sup>

Many risk factors for alcohol misuse are tied to an individual's or family's behavior or circumstances. However, one's community—and the corresponding structural, societal, and cultural factors within it—can also create both risk and protective factors.

Key risks at the community level relate to alcohol availability and cost. When alcohol is low cost, widely available, and unrestricted, and when its use is normalized, individuals who are at risk for alcohol misuse have greater opportunities to drink at high or harmful levels.<sup>84-88</sup> More specifically, these community-level risk factors include:

- Beliefs and practices that normalize underage drinking.
- Alcohol use at younger ages (e.g., under 21), abundant alcohol advertising, and laws that do

not prohibit alcohol misuse, such as permitting driving while under the influence if BAC is legally low enough.<sup>89</sup>

- Alcohol that is easily and cheaply available, as is the case with low alcohol taxes and prices, weak restrictions and regulations on alcohol use in public places and at community events, weak retail restrictions and regulations (e.g., density, hours, and days of sale), and minimal point of sale restrictions (e.g., displaying alcohol at or near the checkout).
- Socioeconomic factors, like low neighborhood income.

The opposite of each of these risk factors can be considered protective factors and are important considerations for building and supporting healthy, resilient communities. For example, raising the price of alcohol through taxes or banning price promotions is a protective factor, as is limiting the number of alcohol outlets in a community.<sup>86, 90</sup>

## Individual- and Family-Level Risk and Protective Factors

While community-level risk factors are critical to understanding the most appropriate policy interventions to reduce alcohol misuse, it is helpful to understand that many individual- and family-level factors may also influence an individual's drinking behavior. These



individual-level factors should not be considered in isolation, but in the broader context of community-level factors.<sup>82-83, 91</sup>

Broader <u>social determinants of health</u> should be considered when assessing risk and protective factors across individuals, families, and the communities in which they live. Racial/ethnic, sexual, and gender minorities in the United States face a range of hardships that may directly affect their health, including income disparities, unemployment, residential segregation, substandard housing, discrimination, and less access to health care as compared to White, cisgender, or heterosexual populations.<sup>92</sup> The cumulative effects of these factors over a period of time may lead to high chronic stress, strain on the body, and negative coping skills, which are associated with poor health and alcohol misuse.<sup>93</sup>

All aspects of an individual's identity, including their age, race/ethnicity, genetic makeup, sexual orientation, gender, and SES, contribute to a person's relative advantage and disadvantage across life experiences.<sup>94</sup> These aspects cannot be considered in isolation when seeking to prevent or reduce alcohol misuse or related harms. For this reason, and as described in <u>Chapter 2</u>, focusing prevention efforts at the community level has the greatest opportunity to affect the broader social factors that influence drinking habits and associated harms.<sup>86</sup>

# Importance of Universal Prevention Efforts

Prevention efforts that focus on all people in a population (known as "<u>universal interventions</u>" or "universal prevention") have shown greater impact on substance misuse and related harms, compared to interventions that focus solely on individual-level changes in alcohol misuse.<sup>95-96</sup> Universal prevention has also been shown to be cost-effective while reducing the costs associated with alcohol misuse and related harms within communities. Universal interventions work to improve the lives of all individuals within a community, including those experiencing greater <u>health inequities</u>.

Finally, policies focused on alcohol misuse prevention (e.g., raising alcohol taxes, reducing the density of alcohol outlets, reducing hours of sale), through their secondary effects—such as reducing associated crime and violence—can help promote and maintain healthier, more resilient communities. <u>Chapter 2</u> contains more details on this prevention approach.

<b>Risk and Protective Factors Associated with Alcohol Misuse</b>			
Individual-level Risk Factors Include:	Individual-level Protective Factors Include:	Family-level Risk Factors Include:	Family-level Protective Factors Include:
<ul> <li>Early and persistent behavior problems (emotional distress, aggressiveness, delinquency)</li> <li>Failure in school</li> <li>Peers who use alcohol and other drugs</li> <li>Attitudes favorable to alcohol and other drug use</li> <li>Low perceived risk of alcohol use</li> <li>Lack of employment</li> <li>History of trauma</li> <li>Genetics</li> </ul>	<ul> <li>Success in school performance; strong bonds with institutions, such as school and religious organizations</li> <li>High level of self-regulation</li> <li>Secure attachment</li> <li>Mastery of communication and language skills</li> <li>Ability to make friends and get along with others</li> </ul>	<ul> <li>Parental alcohol use</li> <li>Family history of alcohol dependence</li> <li>Family conflict (marital discord)</li> <li>Low family bonding (lack of parent-child closeness)</li> <li>Inconsistent parental discipline</li> </ul>	<ul> <li>Strong and positive family bonds</li> <li>Parental monitoring of activities of children and their peers</li> <li>Clear rules of conduct consistently enforced within the family</li> <li>Involvement of parents in the lives of their children</li> </ul>

# 

# What Research Tells Us

This guide identifies policies implemented to prevent alcohol misuse by changing or influencing community conditions, systems, and behaviors. These policies should not be considered in isolation as they are most effective when coordinated to complement and reinforce one another to reduce the influence of alcohol in the overall environment.<sup>97</sup>

The policies included in this guide were selected after a comprehensive literature review and in collaboration with subject matter experts. Policies eligible for inclusion met the following criteria:

- Are clearly defined and replicable
- Have been evaluated through independent study
- Address the target outcome of reduction or prevention of alcohol misuse
- Are currently in use
- Have accessible implementation supports, such as implementation guides

A substantial body of evidence supports the policies included in this chapter; many have been researched for decades—in different settings and within different communities. However, it is important to note that the alcohol policy and regulatory landscape is continually changing, and interventions must adapt. Policies must keep pace with a dynamic industry that includes, but is not limited to, the following:



- Release of high-alcohol content products (such as high-alcohol supersized alcopops, hard seltzers, and high-alcohol craft beers)
- Increase in the number of establishments that sell alcohol, such as movie theaters and coffee shops, thus increasing availability
- Innovative marketing of alcoholic beverages (e.g., increased use of social media; paid <u>social</u> <u>media influencers</u> who discuss and market the product to a large network of followers; new digital marketing techniques, such as engaging with social media comments and connecting events and user locations directly to products and purchase opportunities)
- Different ways of selling and providing alcohol (e.g., curbside pick-up and carry out, providing free alcohol, online alcohol sales, home delivery)

As prevention practitioners<sup>a</sup> look for options to address emerging changes in their alcohol environments, they should consider policies that fit under the broader theory of creating safer communities through reducing **alcohol availability** via regulation and policy. Policies grounded in this approach have shown the greatest effectiveness in reducing alcohol consumption and related harms across the general population.<sup>96</sup> Strategies to affect availability can be conceptualized using the following framework:<sup>98</sup>

<sup>&</sup>lt;sup>a</sup> For simplicity, the term "practitioner" is used throughout this guide to refer to individuals providing health care, including behavioral health services. The authors recognize that some settings may use other terms, such as clinician or provider.

#### **Alcohol Policy: Key Resources**

- <u>The Community Guide</u>
- <u>Facing Addiction in America: The Surgeon</u> <u>General's Report on Alcohol, Drugs, and</u> <u>Health</u>
- Surgeon General's Call to Action to Prevent and Reduce Underage Drinking
- <u>National Academies of Science and</u> <u>Engineering: Reducing Underage Drinking: A</u> <u>Collective Responsibility</u>
- <u>CollegeAIM</u>
- STOP Act Report to Congress
- <u>Getting to Zero Alcohol-Impaired Driving</u> <u>Fatalities</u>
  - **Physical availability**, including restricting how, when, where, and to whom retailers can sell alcohol or where alcohol is consumed (such as parks, home parties, or beaches). Reducing the ease of accessing alcohol requires consumers to then devote more effort and intention to obtaining and consuming the product, which in turn reduces consumption and harm.
  - Financial availability, including mechanisms to raise the price of drinking, such as taxes, <u>minimum unit price</u> policies (setting a minimum price per <u>standard drink</u>, defined as approximately 14 grams of pure alcohol, found in 12 ounces of regular beer—usually about 5 percent alcohol, 5 ounces of winetypically about 12 percent alcohol, and 1.5

ounces of distilled spirits—about 40 percent alcohol<sup>99</sup>), and bans on price discounting such as "happy hours." By increasing the price of alcohol, demand decreases, reducing alcohol consumption and harm.

- Social availability, including assessing how marketing can be used to create a powerful normative climate that is positive towards drinking, impeding prevention efforts. By changing the perceived norms and social acceptability of alcohol through reducing alcohol marketing and discouraging access in peer and family networks, individuals (particularly youth) are less likely to begin drinking and more likely to decrease alcohol consumption.<sup>100</sup>
- **Psychological availability**, including understanding individuals' perceptions of how accessible alcohol is to them and their lifestyle often influenced by how they respond to alcohol marketing. By limiting or reducing exposure to alcohol marketing, people (and especially youth) are less likely to consume alcohol.<sup>16-17</sup>

The policies discussed here are grounded in the concept of availability, which has a substantial evidence base.<sup>81,</sup> <sup>101</sup> Where possible, this chapter also highlights if and how these policies have been implemented and studied in diverse communities (such as predominantly Black or Brown communities, rural communities, or with LGBTQI+ populations). It is important to note that not all of these policies have been tested or implemented in various communities, and all policies should be viewed through the lens of health equity.



Implementing Community-Level Policies to Prevent Alcohol Misuse What Research Tells Us

This chapter organizes the policies into three categories.

# **Policies with the** *Strongest Evidence*: Policies that are a high priority for implementation, based on level of evidence and population impact

Regulating alcohol outlet density

Minimum legal purchase age

Limiting days or hours of sales

Increasing alcohol taxes

Minimum pricing

Limiting alcohol advertising and marketing (specific to underage drinking)

Dram shop (commercial host) liability laws

**Policies with** *Moderate Evidence*: Policies that have mixed research evidence and should be pursued only together with the high priority policies

Restricting social availability of alcohol (e.g., social host ordinances)

Alcohol-impaired driving countermeasures

Limiting price promotions

**Policies with Limited to No Evidence:** Policies that are only effective when done in conjunction with high priority policies

Responsible beverage service

Retail environment limitations (e.g., limiting floor space for alcohol in retail establishments; banning products with a high risk of alcohol-related harm)

Restrictions on public places where alcohol is sold/ consumed

## Policies With the Strongest Evidence

The policies included in this section have a strong evidence base and have shown reductions in alcohol misuse and related harms. Importantly, research shows they affect populations broadly, rather than focus on small groups with a high risk of alcohol-related harm. These policies are endorsed or recommended by the <u>World Health Organization</u>; the <u>Community Preventive</u> <u>Services Task Force</u>; the <u>Surgeon General's Report on</u> <u>Alcohol, Drugs, and Health</u>; the <u>National Academy of</u> <u>Science and Engineering's Getting to Zero</u> report; and others. When considering policies for implementation, communities should prioritize this set of policies, as they will have the greatest impact on alcohol misuse.

# **Physical Availability**

Alcohol consumption and related harms decrease when communities reduce where, when, and how alcohol can be sold and consumed.<sup>87-88, 102-103</sup> Leading interventions to decrease alcohol availability include regulating alcohol outlet density, maintaining the legal purchase age of 21, and limiting the hours and days that establishments can sell alcohol.

#### **Types of Alcohol Outlets**

**On-premises:** Alcohol served in food and entertainment establishments, such as bars, restaurants, and other locations, for consumption on-site.

**Off-premises:** Alcohol purchased from liquor stores, grocery stores, convenience stores, or other retail establishments for consumption off-site.

Some establishments may allow on-premises consumption and off-premises purchases, like breweries and wineries.

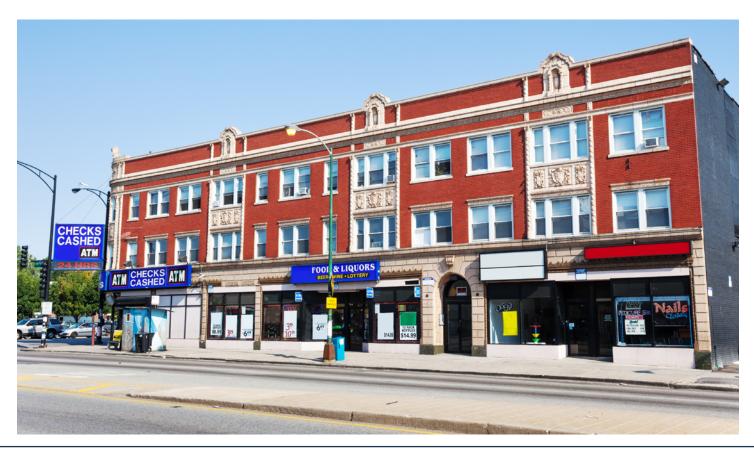
#### **Regulating Alcohol Outlet Density**

Jurisdictions can regulate the alcohol retail environment, including outlets that sell alcohol for consumption <u>on-</u><u>premises</u> and <u>off-premises</u>, by restricting the number and/or locations of alcohol outlets in a neighborhood or community. These policies limit the sale of alcohol through:

- Licensing restrictions that generally regulate the type or number of outlets per population (e.g., per 1,000 residents) or geographic area
- Zoning laws that apply land use provisions to determine the permissible locations for alcohol outlets<sup>86, 104</sup>

Licensing authority depends on the regulatory structure of the state and the degree to which it permits or preempts local policy on how, when, and where retailers can sell alcohol. States generally regulate licensing, although some localities may share licensing powers with the state or have local licensing power over certain kinds of alcohol outlets (e.g., on- or off-premises) or outlets selling certain alcoholic beverages.<sup>105-106</sup> Zoning authority gives local jurisdictions the ability to use planning and land use procedures to determine the placement and practices of businesses operating within their borders. <u>Nuisance ordinances</u> are often enacted in conjunction with zoning laws and licensing restrictions and allow local jurisdictions to regulate alcohol retailers who are consistently cited for poor business practices, such as lack of exterior lighting, sales to minors, graffiti, extensive advertising, or loitering or crime at their establishment. Governments may want to consider the above three regulatory policies as a complementary trio. Regardless of jurisdiction over licensing, town, city, and county governments most often employ zoning and nuisance powers to regulate access to alcohol. For example, pairing a zoning ordinance with a licensing policy that limits the number of retailers can help avoid clustering numerous outlets within one small area, which has been associated with youth alcohol consumption and increased crime.<sup>107-109</sup> It also helps ensure that alcohol establishments are not disproportionately located in low-income areas.<sup>110</sup>

Policy: Regulating Alcohol Outlet Density		
Description	Examples of Outcomes	
Limiting/restricting	Reduction in alcohol consumption <sup>86, 111</sup>	
where alcohol retailers may be located through licensing or zoning	<ul> <li>Limiting alcohol outlets to 70 per square mile in New York City decreased binge drinking prevalence by 0.7 percent.<sup>112</sup></li> </ul>	
	<ul> <li>Across six urban cities, increases in the density of alcohol outlets per square mile was associated with a 7- to 11-percent increase in total weekly alcohol use.<sup>113</sup></li> </ul>	
	<b>Reduction in alcohol-related harms</b> , including motor-vehicle crashes, injuries, violence, and medical conditions <sup>86, 114</sup>	
	<ul> <li>Removing alcohol outlets in Baltimore's residential areas was associated with 22 fewer homicides each year.<sup>115</sup></li> </ul>	
	<ul> <li>Intentional and unintentional injuries are significantly greater in areas with a higher density of off-premises alcohol outlets.<sup>114</sup></li> </ul>	



Implementing Community-Level Policies to Prevent Alcohol Misuse What Research Tells Us

#### Health Equity Considerations of the Policy

High alcohol outlet density in the United States is associated with communities that have higher levels of poverty and greater proportions of Black and Hispanic/ Latino populations,<sup>116-118</sup> particularly for off-premises outlets.<sup>119</sup> Studies have shown that communities of color tend to have the highest alcohol outlet density and associated problems, yet the lowest consumption levels, suggesting that systemic racism could partially explain these patterns.<sup>120</sup> Multiple studies have found that a history of discriminatory lending practices ("redlining"), which resulted in more alcohol retailers located in neighborhoods with higher population density, helps explain the overconcentration of alcohol outlets in these areas.<sup>110, 120-121</sup> A reduction of alcohol outlet density in communities of color could help reduce alcohol-related inequities, such as violence and other crimes.

#### **Minimum Legal Purchase Age**

The minimum legal purchase age law (often referred to as the minimum legal drinking age or MLDA) specifies the age when a person can legally purchase an alcoholic beverage. The federal National Minimum Drinking Age Act of 1984 created incentives so that, by 1988, every state had adopted a minimum purchase age of 21.

Despite subsequent efforts by some advocates to reduce the drinking age to 18, the <u>Community Preventive</u> <u>Services Task Force</u>, <u>Mothers Against Drunk Driving</u>, the <u>National Highway Traffic Safety Administration</u>,

#### **Real World Implementation Examples**

- The local city council of Atlanta, Georgia enacted a series of policies to reduce alcohol availability in 2003. These policies led to a decrease in alcohol density in the Buckhead neighborhood, which is 75 percent White and relatively young, with half the population aged 15 to 34 and the other half older than 35. A 3-percent reduction in outlet density was associated with a 28-percent reduction in violent crime—twice the decrease that occurred in comparable neighborhoods where outlet density had not changed.<sup>108</sup>
- In 1997, New Orleans, Louisiana implemented a series of policies, including increased licensing fees, enforcement, and expanding licensing board powers, that led to alcohol outlet density reductions, resulting in a significant decrease in violent assaults.<sup>122</sup> In addition, literature suggests that reducing the number of alcohol retailers reduces injury and crime.<sup>86</sup>

and other organizations all recommend maintaining the age of 21. The <u>Community Guide</u>, a collection of evidence-based recommendations and findings from the Community Preventive Services Task Force, found that well-enforced minimum legal purchase age policies reduced youth access to alcohol.<sup>123</sup>

	Policy: Maintaining the Minimum Legal Purchase Age of 21		
Description	Examples of Outcomes		
Sets the MLDA at 21 years old	<b>Reduction in alcohol consumption</b> among high school students, college students, and other young adults <sup>124-128</sup>		
	• After adoption of age 21 MLDA, the prevalence rates of past month drinking and of binge drinking among those aged 18 to 20 decreased from 59.1 and 31.4 percent in 1985 to 46.5 and 24.1 percent in 1999; some increases in these behaviors were noted between 1997 and 1999. In 2020, 32 percent of individuals aged 18 to 20 reported past-month drinking. <sup>13</sup>		
	Reduction in alcohol use disorder (AUD) among adults <sup>130</sup> Reduction in motor vehicle crashes		
	<ul> <li>The National Highway Traffic Safety Administration estimates that the law prevented 31,959 deaths from 1975 through 2017 due to alcohol-related traffic crashes.<sup>131</sup></li> </ul>		
	Reductions in crime		
	<ul> <li>Research has shown that early initiation of alcohol use is associated with greater alcohol-related violence, dating violence, and unintentional injury, among other negative consequences.<sup>125</sup></li> </ul>		

#### Health Equity Considerations of the Policy

Given that the minimum legal purchase age affects all individuals in the United States under the age of 21, it does not have disproportionate impacts on particular communities or populations. However, as with many policies, it requires enforcement to be effective, and communities should ensure equitable enforcement of policies. <u>The Community Preventive Services Task</u> <u>Force</u> recommends ensuring community buy-in for enforcement of underage drinking laws,<sup>132</sup> which may assist in equitable implementation.

#### **Real World Implementation Example**

 By 1988, all states set a minimum legal purchasing age of 21, in accordance with the 1984 federal law. However, states continue to find loopholes in this law that allow for youth consumption, such as drinking on private premises with parental consent. As of January 2021, 15 states had no exceptions to this law, which is in alignment with the best evidence on this policy.

#### Limiting Days or Hours of Sales

Localities, states, tribes (federally recognized AI/AN tribal governments), and territories can limit access to and availability of alcohol by reducing the number of days or hours that businesses can sell it for consumption on- or off-premises. In the United States, research on these policies has largely focused on the impact of legalizing Sunday sales at off-premises outlets or restricting hours that on- or off-premises stores can sell alcohol.

In the context of this guide, "limiting" can mean maintaining existing limits in response to any efforts to expand current days or hours of sale or enacting more stringent limits than currently exist. Limiting the hours of sale decreases alcohol availability and reduces consumption and related harms. Several scientific bodies have recommended limiting hours and days of sale, including the <u>World Health Organization</u><sup>133</sup> and <u>The Community Preventive Services Task Force.<sup>87</sup></u>

Policy: Limiting Days/Hours of Sale		
Description	Examples of Outcomes	
Limits the days and	Limiting Days of Sale	
hours that retailers can	Reduction in alcohol consumption <sup>134-135</sup>	
sell alcohol, both on- and off-premises	• One additional day of alcohol sales significantly increased per capita consumption of all alcohol by 3 percent, of beer by 5 percent, and of wine and liquor by 3 percent. <sup>102</sup>	
	Reduction in alcohol-related harms <sup>136-137</sup>	
	<ul> <li>In seven states that repealed Sunday sales bans for off-premises outlets, violent and property crimes increased significantly, by between 16 and 23 percent on Sundays.<sup>138</sup></li> </ul>	
	• In Virginia, an additional day of sale for stores that sell alcohol was associated with increased alcohol-related crimes committed on Sundays in areas near outlets that allowed Sunday sales. <sup>139</sup> Similar results were found in Pennsylvania, which showed a significant increase in crime occurring around Sunday-open state liquor stores in low-socioeconomic-status neighborhoods. <sup>137</sup>	
	Limiting Hours of Sale	
	Reduction in alcohol consumption <sup>87</sup>	
	Reduction in alcohol-related harms	
	• Allowing alcohol sales for an extra two hours or more was associated with increases in injuries from vehicle crashes, alcohol-related assaults and injuries, and admissions to the emergency department. <sup>87</sup>	

#### **Real World Implementation Examples**

- Sunday sales: There are no United States examples of reducing the numbers of days in which retailers can sell alcohol; instead, the trend has been to increase the number of days by allowing sales on Sundays.
- Hours of sale: In 2020, one legislative district in Baltimore reduced the allowed hours of alcohol sales in on- and off-premises establishments from 6:00 a.m.–2:00 a.m. to 10:00 a.m.–10:00 p.m.

#### Health Equity Considerations of the Policy

Following a partial repeal of Sunday sales bans in Philadelphia, one study found increases in property and overall crimes on Sundays in the immediate vicinity of alcohol outlets, but only around outlets in neighborhoods with low socioeconomic status.<sup>137</sup> The authors noted that many of these neighborhoods had above average rates of crime prior to the intervention, and that the findings were consistent with previous analyses showing that alcohol availability is associated with crime in areas with high poverty.<sup>137</sup> These findings suggest that increasing the hours and days of sale may disproportionately lead to increased harm in <u>under-resourced communities</u>. See the earlier section on "<u>Regulating Alcohol Outlet Density</u>" for more on this issue.

## **Financial Availability**

Increasing the price of alcohol has shown reduced consumption among both youth and adults.<sup>141</sup> Price increases can be accomplished by raising alcohol taxes, implementing minimum pricing policies, and banning price promotions, such as "happy hours."

#### **Increasing Alcohol Taxes**

The evidence on the association between raising alcohol prices, usually by increasing taxes on alcohol, and decreased consumption and associated problems has been growing for more than 50 years. Policymakers at the federal, state, and some local, tribal, and territorial levels can pass alcohol tax policies.

**Excise taxes** are based on the volume of alcohol sold, are different for different alcoholic beverages (beer, wine, liquor), and their real dollar value will decline if

not adjusted for inflation.<sup>142</sup> It is critical that excise taxes be adjusted regularly for inflation so they do not lose effectiveness as a prevention measure over time.<sup>143</sup>

**Sales taxes** are a percentage of the price of alcohol, may or may not differ by type of alcohol, and increase as the price of the alcoholic beverage increases, which will help account for some inflation.<sup>142</sup>

Raising the price on only one type of alcoholic beverage (e.g., beer, wine, or spirits) may lead to a switching of preference to the now cheaper option. A study of substantial tax increases on distilled spirits and wine, but not beer, enacted in Illinois in 2009 found that sales of spirits and wine decreased significantly but beer sales increased sufficiently to largely offset the decline in overall alcohol sales volume.<sup>144</sup> Nevertheless, there was still a reduction in alcohol-related harms.<sup>145-146</sup> For this reason, <u>stakeholders</u> may want to consider raising taxes across all product types. Alcohol taxes are recommended by <u>The Community Preventive Services Task Force</u> and are listed as one of the <u>World Health Organization's</u> "best buys" (effective and cost-effective ways to reduce non-communicable disease, including AUD).

#### **The State Alcohol Control System**

Alcohol is sold in two different types of states: 1) Control states/iurisdictions, where the government controls alcohol sales, and 2) License states/ jurisdictions, where governments license private businesses to conduct alcohol sales. In the United States, state or local control of alcohol sales is primarily limited to off-premises establishments. States/iurisdictions that move from control to privatized systems have experienced increases in the number of off-premises outlets, as well as longer hours and days of sale. Additionally, privatized systems have more alcohol advertising, greater numbers and types of alcohol products sold, and poorer enforcement of sales laws, including enforcing MLDA. Ultimately, privatization is associated with increases in alcohol misuse.88 As a result of these findings, the Community Guide recommends against privatization.<sup>140</sup>

Policy: Increasing Alcohol Taxes		
Description	Examples of Outcomes	
Increases in the price of alcohol, either by volume (excise tax) or retail sale price (sales tax)	<ul> <li>Alcohol consumption across the general population,<sup>85</sup> as well as among underage populations<sup>85</sup> and Hispanic people<sup>147</sup></li> <li>A 10-percent increase in price is estimated to decrease:<sup>85</sup> <ul> <li>Beer consumption by 5 percent</li> <li>Wine consumption by 6 percent</li> <li>Liquor consumption by 8 percent</li> <li>Total alcohol consumption by 8 percent</li> </ul> </li> <li>Alcohol-related harms</li> <li>Based on data from 50 studies, a doubling of the alcohol tax was estimated to result in average reductions in alcohol-related mortality (35 percent), motor vehicle fatalities (11 percent), sexually transmitted infections (6 percent), violence (2 percent), and crime (1 percent).<sup>148</sup></li> <li>Lower risk of alcohol-related consequences among Black women.<sup>119</sup></li> </ul>	

#### Health Equity Considerations of the Policy

Despite concerns that these taxes are regressive in nature, meaning they disproportionately impact those with lower incomes, research has shown that it is people who drink excessively who most experience the increased cost for alcohol taxes, regardless of income level.<sup>143, 149</sup> A study specifically looking at whether alcohol taxes disproportionately affect low-income communities found that if there are regressive effects, they are small and primarily concentrated among the heaviest drinking populations, not the broader population of people who drink alcohol.<sup>150</sup> Research has shown that alcohol taxes primarily affect the heaviest consumers of alcohol, who tend to be White, college-educated males between the ages of 21 and 50 earning \$50,000 or more per year.<sup>149</sup>

Finally, the benefits of higher alcohol taxes are generally progressive—meaning particularly beneficial to populations with fewer resources—as tax revenues are typically used to fund government services, which people with lower incomes are more likely to use than those with more personal wealth. Tax revenues can benefit prevention directly, by designating a portion of the derived revenues specifically for prevention and treatment services at the local, state, tribal, or territorial level.

#### **Real World Implementation Examples**

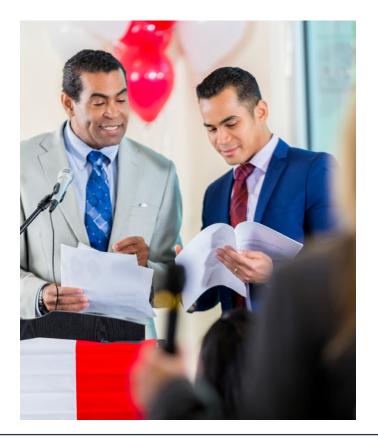
- After Maryland increased its sales tax on alcohol from 6 to 9 percent in 2011, the amount of total alcohol sold declined 4 percent in the 18 months following the increase.<sup>151</sup> Between 2011 and 2016, there was a 17-percent reduction in binge drinking by Maryland adults compared to an average national reduction of 6 percent.<sup>152</sup> There was also a 28-percent reduction in the number of Maryland high school students who reported binge drinking in the past 30 days between 2011 and 2015.<sup>152</sup> The implementation of this policy was also associated with a significant 6-percent annual reduction in the rate of alcohol-impaired drivers on Maryland highways.<sup>153</sup>
- After a 2009 increase in alcohol excise taxes in Illinois there was a 26-percent reduction in fatal alcohol-related motor vehicle crashes in the following 28-month period (from September 2009 to December 2011)—a decrease of nearly 10 deaths per month.<sup>145</sup>
- Following a 1983 alcohol tax increase in Alaska there was a 29-percent decrease in alcohol-related deaths; an additional alcohol tax in 2002 was associated with an additional 11-percent decrease in such deaths.<sup>154</sup>

#### **Minimum Pricing**

Alcohol minimum pricing policies are another way of maintaining or raising the price of alcohol and reducing practices that create risk of alcohol-related harms. There are two different ways to establish minimum prices: through a minimum unit price (MUP), which establishes a floor price per "unit" of pure alcohol, or a minimum price based on the container size of a specific alcoholic beverage type, regardless of the alcohol content within that beverage (such as a minimum price for a liter of beer, a liter of wine, or a liter of liquor).<sup>155</sup>

These policies can be made specific to on- or offpremises alcohol outlets, and retailers cannot sell alcohol for less than that price. MUP policies can be particularly effective for reducing alcohol use and related harms among people who drink excessively because they purchase larger quantities of alcohol; therefore, they purchase less, even though they tend to spend the same amount on alcohol after MUP policies are implemented.<sup>156-157</sup> As a result, MUP policies can reduce consumption and related harms, raise tax revenue, and reduce health inequalities.<sup>156</sup> Like excise taxes, MUPs will lose their effectiveness over time if they are not regularly adjusted for inflation. Minimum pricing has not been consistently implemented in the United States but is being explored based on the evidence from other countries, including Scotland and Canada.<sup>157-159</sup>

Policy: Increasing the Minimum Unit Price of Alcohol		
Description	Examples of Outcomes	
Sets a minimum	Decrease in alcohol sales	
price per unit of alcohol or amount of alcoholic beverage,	<ul> <li>In May 2018, Scotland set an MUP per unit of alcohol (at the time equal to approximately \$1.34 for a standard drink) that was associated with an 8-percent reduction in alcohol sales. Wales implemented the same policy in March 2020, which was associated with a 9-percent reduction in alcohol sales.<sup>157</sup></li> </ul>	
either on- or	Decrease in alcohol-related harms	
off-premises, or both	<ul> <li>In British Columbia, a 10-percent increase in the minimum price of alcoholic beverages was associated a year later with a 9-percent decrease in alcohol-related hospital admissions,<sup>158</sup> a 32-percent decrease in alcohol-attributable deaths,<sup>159</sup> and a 10-percent reduction in all crimes.<sup>160</sup></li> </ul>	



#### Health Equity Considerations of the Policy

The research on health inequalities related to MUP has been done primarily in the United Kingdom<sup>161</sup> and Canada.<sup>160</sup> Overall, minimum pricing policies mainly affect people who drink the most alcohol, regardless of income level.<sup>155</sup> Modeling results showed that the price increase was mostly assumed by people who drink heavily, but this group also had the greatest decrease in consumption. Additionally, the health benefits of the MUP policy particularly benefited individuals with the lowest socioeconomic status through greater reductions in harms. Individuals with the lowest socioeconomic status were 42 percent of the total study sample, but accounted for 82 percent of the reduction in premature deaths and 88 percent of the improvement in quality-adjusted life years.<sup>162</sup>

#### **Real World Implementation Examples**

- MUP policies have been introduced in Australia, Ireland, and Scotland.<sup>155</sup>
- In 2021, the Oregon Liquor and Cannabis Commission implemented a new minimum pricing policy for distilled spirits.<sup>163</sup>

# Social and Psychological Availability

Restricting alcohol marketing is the primary way to decrease the social and psychological availability of alcohol, known to be a risk factor for alcohol consumption. This research has primarily been done with youth, and increasingly shows that greater exposure and receptivity to marketing leads to:

- More developed norms and expectations (social availability)
- More identity building around drinking (psychological availability)<sup>164</sup>

Overall, the evidence is clear that youth exposure to alcohol marketing is associated with increases in youth drinking.<sup>17</sup>

Local, state, and territorial efforts to reduce alcohol advertising have largely focused on limiting outdoor advertising, such as on billboards, and limiting advertising at the point of sale, such as on alcohol outlet windows (including grocery/liquor stores and bars/ restaurants) and within the establishments themselves. Similar to alcohol outlet density, zoning policies can determine where alcohol can be seen, to reduce youth exposure (e.g., near schools and playgrounds) and disproportionate marketing to racial/ethnic populations (e.g., in predominantly Black, Indigenous, and People of Color (BIPOC) communities).<sup>165</sup> Full advertising bans have been determined to be the most effective option,<sup>166</sup> but can be difficult to achieve; more limited restrictions are possible, as described below.

Research has shown increased evidence of the harmfulness of digital marketing on youth alcohol consumption, suggesting the need for additional policy options to reduce youth exposure to online alcohol marketing.<sup>167</sup> Reducing or banning alcohol advertising is one of the <u>World Health Organization's</u> top recommendations to reduce non-communicable diseases, including AUD.

#### Health Equity Considerations of the Policy

Equity considerations around alcohol advertising and marketing are particularly relevant for youth populations and individuals living in under-resourced communities. For example, a study of alcohol advertising in Boston subway and streetcar stations found that Boston public school students reported seeing 1.34 alcohol advertisements per day at those locations, while the population as a whole saw just 1.09. Additionally, there were more advertisements in neighborhoods with high poverty rates (1.27 ads per station) than in neighborhoods with low poverty rates (1.16 ads per station).<sup>171</sup> A study of youth in Los Angeles found that African American and Hispanic youth were exposed to nearly twice as many alcohol advertisements across all media than their non-Hispanic, White peers, and that girls were exposed to 30 percent more advertising than boys.<sup>172</sup>

Given that women, BIPOC populations, and those living in lower socioeconomic status neighborhoods face greater exposure to alcohol advertising, reducing alcohol advertisements is considered an effective policy to help address this inequity. Additional research on the effects of policies that restrict alcohol advertising would further inform how these policies can reduce racial or ethnic disparities regarding exposure to alcohol marketing. Reducing disproportionate exposure to alcohol advertising may also reduce harms in neighborhoods of predominantly LGBTQI+ individuals, though there is little research exploring this specific population.

Policy: Limiting Alcohol Advertising and Marketing		
Description	Examples of Outcomes	
Limit or ban alcohol advertisements and marketing; bans may limit advertising on or in alcohol establishments, on billboards, or on city- owned property (such as bus or subway stations)	<ul> <li>Reduction in alcohol consumption<sup>17</sup></li> <li>Each additional alcohol advertisement that youth are exposed to is associated with a 1-percent increase in the number of drinks consumed.<sup>168</sup></li> </ul>	
	Decrease in positive drinking expectancies and norms among youth <sup>169-170</sup>	

#### **Real World Implementation Examples**

- In 2017, New York City banned alcohol advertisements on city buses, subway cars, and in subway stations, and in 2019 implemented a ban on alcohol advertising on city-owned property. Los Angeles, Philadelphia, and San Francisco have enacted similar policies.
- All European countries, except the United Kingdom, have banned one or more types of alcohol advertising,<sup>173</sup> including a total ban in Norway passed in 1975 that has since shown a sustained 8-percent reduction in consumption.<sup>174</sup>

#### Dram Shop (Commercial Host) Liability Laws

Dram shop, or commercial host, liability laws make an on-premises alcohol outlet (e.g., a bar, tavern, or similar commercial establishment) liable for the harmful actions of intoxicated patrons when the establishment serves alcohol to clearly intoxicated people or minors. Dram shop liability laws are an effective strategy to reduce alcohol consumption and alcohol-related harms,<sup>175-176</sup> with the potential benefit of business environments that support responsible beverage service without penalizing those who follow liquor control laws.<sup>176</sup> However, such laws may be limited by caps on the financial liability of servers and managers, statutes of limitations, and the standards for required evidence.<sup>176</sup>

#### Health Equity Considerations of the Policy

This policy must be implemented equitably across all retailers to ensure that establishments owned by BIPOC individuals are not disproportionally targeted for liability.

#### **Real World Implementation Examples**

 Most states have enacted dram shop (commercial host) liability laws for service to intoxicated adult customers and to underage customers.<sup>175, 177</sup>

## Policies With Moderate Evidence

There are several other effective policies that communities should consider while they work towards the high priority policies listed above. These policies are grounded in either evidence or in the theories of availability described above.

- **Restricting social availability of alcohol** (i.e., social host policies). Social host ordinances hold individuals responsible for hosting or providing a location for underage drinking and impose citations or fines. Research on the effects of these policies is limited to those that levy criminal penalties, which raises equity issues because of disparities in enforcement. The best practice is a civil social host liability law, which levies a civil fine rather than criminal prosecution; there have been few scientific evaluations of this law to date.<sup>178-179</sup>
- Alcohol-impaired driving countermeasures. Countermeasures for alcohol-impaired driving include reducing the blood alcohol content legal limit from 0.08 to 0.05, collecting information on the establishment that served alcohol to those cited for impaired driving (known as place of last drink), use of ignition interlocks,

Policy: Dram Shop (Social Host) Liability Laws		
Description	Examples of Outcomes	
On-premises alcohol outlets are	Decreases in alcohol-related automobile crash fatalities and injuries	
liable for the harmful actions of the intoxicated patrons they continue to serve alcohol	<ul> <li>Alcohol-related motor vehicle crash fatalities decreased by a median of 6 percent across six studies throughout the United States<sup>175</sup></li> </ul>	
	<ul> <li>Dram shop liability lawsuits in 1983 and 1984 in Texas led to decreases in single vehicle nighttime crashes of 7 percent and 5 percent after two separate, high-profile cases.<sup>175</sup></li> </ul>	
	Reduced alcohol consumption <sup>175, 176</sup>	

and sobriety checkpoints. These approaches are effective, particularly for reducing automobile crashes, but less so for reducing alcohol misuse and other alcohol-related harms; they often only target people who drink heavily. Decreasing the impaired driving blood alcohol content has shown reductions in injury, single vehicle nighttime crashes, fatalities, and more.<sup>89</sup>

• Limiting price promotions. Another policy that affects the price of alcohol is to restrict price discounting, such as "happy hour," all-youcan-drink specials, and two-for-one purchases. These policies can be passed at the local, state, tribal, or territorial levels. Limited research assesses the impact of these policies in a United States context, but associations have previously been noted between lower alcohol prices and increased consumption and other alcohol-related harms including violence, crime, and traffic fatalities,<sup>85</sup> leading to the recommendation that such restrictions be pursued or maintained if already in place.

## Policies With Limited to No Evidence

There are several policies with limited evidence of effectiveness when done in isolation that communities may nonetheless adapt. They are best implemented in conjunction with policies that have demonstrated strong to moderate evidence of effectiveness. Examples include:

- Voluntary responsible beverage service (RBS). It has been suggested that server demographic characteristics (e.g., age) are related to alcohol sales made to minors and intoxicated customers.<sup>180</sup> RBS is a training for servers and sellers to address such sales, but there is limited evidence demonstrating the effectiveness of this strategy in reducing alcohol misuse.<sup>181</sup>
- **Retail environment limitations**. These limitations may include reducing the floor space dedicated to alcohol products and banning products with a high risk of alcohol-related

harm. Communities have also implemented numerous other strategies and policies that address the broader retail environment, like prohibiting end-of-aisle placement; however, the evidence on these approaches is still emerging.

• Restrictions on public places where alcohol is sold/consumed. Communities may also restrict locations where alcohol is consumed, such as parks, festivals, and sporting events—additional research is needed to understand how effective these policies are; they may also raise equity issues, if they are selectively enforced.

# **Future Research**

Across the nation, some communities might find it challenging to address the increased availability of alcohol due to the general deregulation of alcohol policies over the years. Additional policy changes during the COVID-19 public health emergency increased the availability of alcohol, with an expansion in the number of states that allowed home delivery of alcohol. Some states have also made permanent the emergency allowances for curbside pickup of alcohol, and expanded restaurants and bars that allow alcohol consumption on adjacent sidewalks, parking lots, or other designated outdoor areas. Effects of these policies continue to be studied. Prevention practitioners and communities should rely on the basic principles of availability theory, as described above, to institute policies and strategies that address the deregulation of previously implemented policies.

To further support the implementation of effective alcohol policies in communities, researchers can continue evaluating the effects of implemented policies, including assessing whether there are disproportionate effects on different communities (e.g., rural/urban/ suburban) and populations, to ensure equitable implementation, enforcement, and outcomes. One option would be to build health equity impact assessments into law and rulemaking efforts at the local, state, tribal, and territorial levels; other countries, such as <u>Canada</u>, have implemented similar approaches to prioritize establishing equitable policies.



# Identifying and Implementing Evidence-Based Policies to Prevent Alcohol Misuse

This chapter provides key considerations for implementing prevention interventions, recommendations for addressing implementation challenges for the policies described in <u>Chapter 2</u>, and implementation resources.

## Key Considerations for Implementing Policies to Prevent Alcohol Misuse

One of the first steps in any policy effort is conducting capacity and needs assessments: a capacity assessment can help identify and define the existing strengths in the community while a needs assessment will identify gaps in the current policies. These assessments can help communities define the problem (such as high rates of crime, traffic crashes, or sexual assault), identify how alcohol may contribute to that problem, and determine the specific factors leading to alcohol misuse.

During this time, communities may also want to consider developing and reviewing community histories of policies and organizing—these stories provide useful insight into why the current situation exists and how structural and systemic systems have shaped the current risk and protective factors related to alcohol misuse.<sup>182</sup> Periodic capacity and needs assessments will ensure that communities are implementing the best possible interventions for their circumstances at that specific time and are not overly relying on previously implemented policies.<sup>183</sup>



#### Potential Questions for a Capacity or Needs Assessment

#### **Capacity Assessment**

- ✓ What resources are currently available in the community?
- ✓ Who are the policy allies and champions?
- ✓ What policies currently exist?
- ✓ Are there model policies available?
- ✓ Are there existing funding sources?

#### **Needs Assessment**

- ✓ Are there high rates of underage drinking?
- ✓ Are there high rates of adult alcohol misuse?
- ✓ Are pregnant people using alcohol?
- ✓ Are there certain settings that are consistently associated with alcohol consumption and are likely to have a high risk of harm, such as a park or a bar?
- ✓ Did a precipitating event happen that prompted interest in the community to intervene on alcohol misuse, such as a drunk driving fatality or an upcoming change in availability (such as new alcohol outlets opening in certain neighborhoods)?
- ✓ Does the community have the data to support the selected policy?

When developing policy, community members should serve as leaders and help to drive policy change. It is critical to engage a host of partners, such as people with lived experience, community members who experience alcohol-related harm, public health and policy/legislative experts, parents, educators, law enforcement, funders, and youth. A community prevention organization, often a community coalition, focused on preventing or reducing alcohol misuse can play this role. These individuals can help develop the policy language and decide the best communication and media strategies to advance political will and raise public awareness. Community members often mobilize their peers and the broader population to educate policymakers and support the policy. Community mobilization is a key component of any policy passage and is critical throughout the policy development process: planning, advocacy, education, policy passage, and implementation.

There is an identified <u>substance use prevention</u> <u>policy implementation process</u> that coalitions and stakeholders can use when beginning any policy activity, detailed by SAMHSA's Prevention Technology Transfer Center (PTTC) Network.

Implementing policy changes takes political will, community power, persistence, and knowledge of the policy process. Those responsible for driving and adopting policy change include the local, state, tribal, territorial, or federal agencies that will be responsible for regulating and reporting requirements; the elected officials who will vote on the policy; any other public or elected officials who pass and implement policies; and engaged stakeholders who can provide important insight into designing and implementing new policies that will ultimately affect them as well as provide timely feedback on policy implementation. Alcohol retailers who make changes to their outlets, either voluntarily or through new policy action, may also influence the shaping and implementation of a new policy.

There are at least four key elements in successful implementation of a new alcohol policy, whether at the city, county, state, tribal, territorial, or federal level:

1. **Public Awareness**: Any rule change will require educating the public and/or the affected organizations. For example, if a city prohibits "happy hours" or two-for-one price promotions, officials must notify bars, restaurants, and the broader public of this change after policy passage, preferably including data to explain why they made this change.

- 2. **Regulations**: If a new policy affects structures or systems, jurisdictions will need to establish new or update existing procedures. In the example of implementing licensing and zoning laws, policymakers will need to decide how jurisdictions will track licenses and permits and how and when they will provide new licenses or permits.
- 3. Enforcement: Nearly all policies require some level of monitoring and enforcement. For example, cities that pass ordinances limiting what alcohol products retailers can sell and where and when they can sell them will need to ensure that retailers have the correct license or permit and maintain consistent enforcement of the new policy. For instance, they could implement regular retail assessments to ensure retailers do not sell disallowed products.
- 4. Economic Impacts: The economic impact of any new policy should be considered at the outset of the policy process, including the cost of enforcing and monitoring the policy and the potential savings expected from reducing alcohol misuse (such as reduced costs for health care and emergency services utilization, disability adjusted years of life (DALYs), and loss of productive labor). Alcohol licensing and permitting fees should be earmarked for compliance and enforcement activities to ensure that the policy is implemented and operating as intended.

# Considerations for Equitable Implementation of Policies

Equity implications of policy implementation are also key considerations. Some prevention practitioners may want to focus their policy efforts specifically on communities and populations that governments and policies have historically disenfranchised, thus limiting their opportunity to experience optimal health, safety, and wellbeing. Such communities include tribal nations; LGBTQI+ populations; and communities of color. Advancing health equity and social justice requires partnerships and collaborative action. For those focused on the prevention of alcohol and other drug use, it may mean developing new relationships with organizations and individuals outside the usual participants. The <u>Prevention</u> <u>Institute</u> has identified five strategic opportunities to advance social justice and health equity:

- 1. Synergistic data creation and analysis: Work with partners to identify the data and measures that help policymakers and other stakeholders understand health- and alcohol-related inequities, assess opportunities for change, and determine which measures to track over time.
- 2. Aligned framing and strategic communications: Identify, frame, and communicate shared visions, values, and strategic directions for alcohol policy work.
- **3.** United multisector partnerships: Identify opportunities to develop shared visions and solutions that bring together organizations to encourage and sustain change.
- 4. Blended approaches to power building, policy, and systems change: Work with social justice advocates on community organizing and transformation of power relations, to change the policies and conditions that lead to the disproportionately harmful effects of alcohol on under-resourced communities.
- 5. Transformative resources for health equity and social justice: Prioritize the capacitybuilding of organizations focused on health equity and environmental- and communitylevel changes to prevent alcohol misuse and related harms and establish partnerships with organizations from under-resourced communities.

# Considerations and Strategies for Policy Implementation

In addition to these important initiatives, prevention practitioners and coalitions must further consider the actions described below when implementing policies to prevent alcohol misuse among youth and adults.

# Building Coalitions with Capacity *Consideration:*

• Coalitions bring together members of different sectors across a community (e.g., prevention practitioners, people with lived experience, parents, those who experience harms from alcohol use, medical professionals, law enforcement) to work on a common issue, such as substance use prevention. Coalitions can conduct a needs assessment to begin to

understand the local conditions related to alcohol misuse and associated harms. This critical process requires resources—both in funding and human capacity—and the more resources available, the more comprehensive the needs assessment and resulting actions can be.

• Once communities form and fund coalitions, they often need training to build the coalition's capacity to do the assessment, implementation, and evaluation activities. Topics for training may include community mobilization strategies, conducting a needs assessment, analyzing and interpreting data, selecting evidence-based interventions, advocating to and educating policymakers, and ensuring policy enforcement and monitoring.

#### Strategies:

Coalition builders should conduct intentional outreach to individuals and groups to ensure coalitions are diverse (see text box, "Coalition Membership"). Given that alcohol affects nearly every segment of society, broadening the stakeholder base is an important role of coalitions. This varied representation can help focus the coalition on building policies and implementation plans that improve equity within a community. Coalitions should be particularly thoughtful about reaching out to tribes who may be affected by local alcohol environments, as these are communities highly affected by alcohol misuse and related harms and are often left out of these important efforts. Additionally, coalition rules should ensure that all coalition members have an equal voice in discussions, regardless of title or position.

#### **Coalition Membership**

- Diversity in sexual orientation, gender identity, socioeconomic status, and race/ethnicity
- People in recovery from alcohol use disorder or who experience alcohol-related harms
- People from different community sectors (e.g., education, law enforcement, health care, faith community, parent-teacher organizations, treatment professionals, recovery organizations, chronic disease organizations)
- Community leaders
- Grassroot organizers



- There are many state and federal grant programs focused on substance use prevention that provide funding to communities to build coalitions or further their prevention work. Programs include, but are not limited to, the <u>Drug-Free</u> <u>Communities</u> grant program, <u>Partnerships</u> <u>for Success</u> grant program, <u>Sober Truth on</u> <u>Preventing (STOP) Underage Drinking Act</u> grant program, and the <u>Substance Abuse Prevention</u> <u>and Treatment Block Grant</u>.
- Many organizations provide training and technical assistance to engage in this work for free or at a reduced cost. Organizations can seek out training or technical assistance from programs such as SAMHSA's <u>PTTC Network,</u> the Community Anti-Drug Coalitions of <u>America</u>, and the <u>Center for Advancing Alcohol</u> <u>Science to Practice</u> funded by the Centers for Disease Control and Prevention (CDC).

# Evolving Community Needs *Consideration:*

• Patterns of alcohol consumption and related harms are continually changing, and the most appropriate program or policy for the state or community may change over time.

#### Strategy:

Regularly collecting and analyzing data on alcohol misuse by both youth and adults will help determine what products people are using, if certain subgroups are misusing alcohol at higher rates than others, where they are obtaining alcohol, and in what settings they are using the products. Stakeholders engaged in prevention efforts, including parents and youth, can provide first-hand information about alcohol misuse patterns and behaviors within the state/community. This strategy will ensure that the state/community implements the best interventions for their particular needs. These data may support existing policy efforts or suggest the need for changes. More information on this subject is provided in Chapter 5.

# State Preemption *Consideration:*

• State governments heavily regulate alcohol, and this regulation can be preemptive, limiting the ability of localities to pass policies entirely or that are more restrictive than state policies.

#### Strategy:

The first step in addressing this preemption is to understand what the state's alcohol laws are. and then explore the available options for local policies. Additionally, there may be non-alcoholspecific local powers available for jurisdictions to use for local alcohol policy, such as exploring land use laws to regulate alcohol outlet density. Legal experts on alcohol policy can help a jurisdiction better understand potential preemption issues and nuances or gray areas in the law, as well as encourage lawmakers to enact policies that protect against future preemption. There are often avenues that legal experts can find through careful analysis of state preemption laws, to allow local policy passage. The ability for jurisdictions to pass more restrictive policies or policies not specifically named in state alcohol laws that address local needs is critical. Numerous entities, including CDC, Healthy People 2030, and the National Association of County and City Health Officials have noted that state preemption laws around tobacco and/ or alcohol use do not advance public health priorities. Further, resources exist that explain preemption for specific alcohol policies, such as this list of state laws preempting local regulation of alcohol outlet density.

# Necessity of Long-Term Commitment *Consideration:*

- It can take considerable time to assess a community's local conditions, determine an appropriate policy intervention, develop and enact that policy, educate the community and local leaders about the policy, implement and enforce the policy, and evaluate its effects. It is important for a coalition to maintain consistent efforts across this period, even if policy adoption and enforcement may seem far away.
- It can take months or even years to see the results and impact of the policy. Policies to prevent alcohol misuse and reduce harm require time to develop and implement and see the effects.

#### Strategies:

• Coalitions should establish sustainable funding and policy campaign financing at the beginning of the policy development process. Funding may come from federal sources, such as programs that support efforts to prevent underage drinking or address community substance use, or from private sources, such as local hospitals, foundations, or insurance companies. Stakeholders should identify sources and the level of funding needed to implement the effort.

- It is important for coalitions to celebrate small victories along the way, such as getting the media to cover the issue of alcohol misuse or gaining key new coalition partners or staff. Acknowledging these victories will help keep coalition members engaged and motivated throughout the process. It is also valuable for coalitions to bring in and recognize other partners and policy champions along the way, to reinforce appreciation of their partners' work.
- Coalitions should prepare their members, partners, and lawmakers for the time required for policies to effect changes in alcohol misuse rates. Setting expectations early in the process will help reduce the chances of disappointment and frustration that may arise if it takes a year or more to see the positive outcomes of these policies.

# Concerns Around Lobbying *Consideration:*

• Many coalitions and organizations that receive federal funding do not think they can engage in policy work due to federal lobbying restrictions. This concern may dissuade organizations from working to implement evidence-based policies that may have substantial benefits for their communities.

#### Strategies:

- Many of the steps needed to pass a policy do not involve lobbying. Allowable activities include:
  - Conducting analysis or research on proposed or potential legislation
  - Talking to and educating elected officials broadly about alcohol misuse, without encouraging action on a specific legislative proposal
  - Responding to requests from policymakers and government officials on alcohol misuse questions
  - Talking to the media about legislative proposals without indicating specific support or opposition

 Coalitions and organizations funded by the federal government must consider lobbying limitations before undertaking policy work. There are several situations in which members of an organization or coalition can legally lobby for policy change using non-federal funds. For example, citizens can lobby on their own time and staff can lobby if using unrestricted funds. Building a diverse coalition that includes those who can legally lobby is a valuable consideration.

#### Policy Enforcement *Consideration:*

• To be effective, jurisdictions must enforce policies regularly, actively, and equitably. Such enforcement requires resources and a commitment to the activity from a variety of enforcement bodies, including law enforcement, licensing and regulatory bodies, health departments, and others.

#### Strategies:

- Including explicit enforcement instructions and • funding for enforcement bodies in the actual legislation or policy language ensures there is a political mandate to conduct enforcement activities according to the best possible evidence. Such activities include ensuring that enforcement does not disproportionately target individuals or retailers of color or the LGBTQI+ community; conducting efforts on a regular cadence; and transparently reporting the results of these efforts. Legislating a funding mechanism for enforcement will ensure its sustainability. Funding mechanisms may include licensing and permitting fees, block grants, or budget appropriations. Legislative language can specifically allocate funds for compliance checks and enforcement agents/activities at the local, state, tribal, or territorial level.
- The consequences associated with the implemented policy should be decided in conjunction with a diverse array of community leaders, as well as law enforcement, the health department, social services, judicial system, code enforcement, planning department, and local and state alcohol regulatory bodies (such as alcohol beverage control entities). Consequence options may include drug courts, tribal wellness courts, local drug courts, and victim restitution or other restorative justice programs. This language should

be built into the policy itself when drafted.

• The Alcohol Policy Information System provides useful background on <u>enforcement</u> <u>activities and measures</u>, and SAMHSA's <u>Report</u> to Congress on the Prevention and Reduction of <u>Underage Drinking</u> tracks each state's alcohol policy enforcement efforts—this information can be helpful when drafting the enforcement component of any policy.

# Industry Influence *Consideration:*

- The alcohol industry may try to influence policy based on economic interests.<sup>184</sup> For example, in 2020, the alcohol industry spent around \$30 million on lobbying at the federal level, with two companies accounting for almost one-third of the total expenditures.<sup>185</sup> The industry has also funded research and provided funding for interventions with minimal, if any, public health impact.<sup>186</sup>
- At the community level, the alcohol industry is often a vocal minority of bar and restaurant owners, breweries and wineries, and alcohol retailers and distributors. These businesses are often represented by broader trade organizations with funding from larger alcohol corporations,<sup>186</sup> and maintain a presence in local, state, tribal, and territorial government offices and at regulatory meetings about potential policies.
- Jurisdictions with less regulatory authority and controls may be more susceptible to industry influence because of economic factors, which are often a higher legislative priority than public health and safety.<sup>184</sup> Many policies implemented to prevent alcohol misuse are done so by state and local jurisdictions, which can limit the impact of industry-sponsored lobbying efforts and help promote public health.

#### Strategies:

Local jurisdictions have the greatest opportunities to limit the impacts of industry influence, and efforts should be made to strengthen their authority as it pertains to regulatory authority. As state and community leaders, parents, and other stakeholders collaborate to pass and implement policies to prevent alcohol misuse, they must become aware of industry efforts to block such efforts and prepare counter-messaging to gain support for public health policies.

- A comprehensive policy should also include media campaigns that promote messages to counter industry influence and reach youth who are most susceptible to such influence. Various anti-tobacco media campaigns, at both state and national levels, provide models for this kind of messaging.<sup>187-188</sup>
- Establishing conflict of interest policies that prohibit the formation of partnerships and funding mechanisms among alcohol regulatory bodies, prevention coalitions, and other organizations working in the policy space can reduce industry influence on policy and rulemaking around these issues. Additionally, bodies that create, implement, or enforce alcohol policies could be required to include public health representatives, to ensure they consider research and science in policy discussions.

## Implementation Guides and Manuals

Policy implementation is complex, and detailed guidance for implementing alcohol policies is limited. Below are several tools and resources to help stakeholders implement the policies described in <u>Chapter 2</u>, with implementation guides specific to those policies included where possible. The list also incorporates resources that provide general public health guidance, as many of the recommendations and suggestions tailored to other health topics are also relevant to alcohol policy.



#### **Regulating Alcohol Prices**

- The <u>Community Anti-Drug Coalitions of</u> <u>America (CADCA)</u>, in partnership with the <u>Center for Science in the Public Interest</u>, created a Strategizer on <u>Increasing Alcohol Taxes to</u> <u>Fund Programs to Prevent and Treat Youth-</u> <u>Related Alcohol Problems</u>, to help coalitions and communities implement alcohol taxes.
- The <u>Center on Alcohol Marketing and Youth</u> (CAMY) created a <u>tool</u> for states to analyze the effects on consumer costs and job impacts from a tax increase, with numerous options for customization.
- <u>ChangeLab Solutions</u> created <u>frequently asked</u> <u>questions</u> specific to alcohol taxes.
- The <u>Alcohol Policy Research Center</u> has a <u>resource</u> explaining alcohol compliance checks that includes tips and suggestions for successfully engaging in this practice.

#### **Regulating Retailers**

- CDC published a <u>Guide for Measuring Alcohol</u> <u>Outlet Density</u> and an <u>Alcohol Outlet Density</u> <u>Surveillance Toolkit.</u>
- CADCA, in collaboration with CAMY, created a Strategizer on <u>Regulating Alcohol Outlet</u> <u>Density</u> and another on <u>Dram Shop Liability</u> for local communities.
- <u>Ventura County Behavioral Health Department</u> (Alcohol and Drug Programs) published <u>Best</u> <u>Practices in Municipal Regulation to Reduce</u> <u>Alcohol-Related Harms From Licensed Alcohol</u> <u>Outlets.</u>
- ChangeLab Solutions produced frequently asked questions documents on <u>local authority to regulate</u> <u>alcohol outlet density</u> and on <u>dram shop liability</u>.

#### Tools to Conduct Strengths/Needs Assessment

- The <u>National Highway Traffic Safety</u> <u>Administration</u> published a <u>Community How-</u> <u>To Guide on Needs Assessments and Strategic</u> <u>Planning</u> specific to reducing underage drinking.
- The <u>Public Health Institute</u> created a detailed guide on how to conduct needs assessments across a variety of health topics, titled <u>Best</u> <u>Practices for Community Health Needs</u> <u>Assessment and Implementation Strategy</u> <u>Development</u>.

Implementing Community-Level Policies to Prevent Alcohol Misuse Identifying and Implementing Evidence-Based Policies to Prevent Alcohol Misuse

- The <u>Rural Health Information Hub</u> provides information on how to <u>conduct a needs</u> <u>assessment</u> in rural settings.
- CADCA's <u>Primer on Community Assessments</u> includes information on collecting data, analyzing issues, and creating a plan for change.
- <u>This journal article</u> describes strategies that activists have used to reduce alcohol-related harm and advance social justice.

#### **Resources to Support Policy Interventions**

- The <u>Southeast Prevention Technology Transfer</u> <u>Center</u> created a guidebook on <u>Implementing</u> <u>Policy to Prevent Alcohol, Tobacco, and Other</u> <u>Drug Misuse</u> that includes a 10-step policy process.
- CAMY created a <u>preemption tool</u> to help communities determine their state's preemption level.
- ChangeLab Solutions conducted <u>legal research</u> on the status of state preemption laws.
- CADCA created a webpage on <u>policy</u> <u>communication and the legislative process</u>, including a briefing on the legislative process and tips for talking to stakeholders.
- The <u>World Health Organization</u> created <u>a tool</u> for measuring alcohol policy implementation that may be translatable to states and localities.
- The <u>Campaign for Tobacco-Free Kids</u> developed <u>toolkits</u> for media and policy campaigns; state and local governments can use these toolkits.
- The <u>Network for Public Health Law</u> identifies policy approaches that will advance the goals of an organization or community and has a series of resources on preventing substance use and making healthier communities.

- The <u>PTTC Network</u> has an abundance of substance use prevention resources and tools, including webinars and trainings.
- The <u>CDC Alcohol Program</u> has factsheets on many topics, including binge drinking, cancer, drinking and driving, and pregnancy.
- The <u>Center for Advancing Alcohol Science</u> <u>to Practice</u> provides technical assistance and resources for advancing evidence-based, population-level alcohol policies.
- The <u>Alcohol Policy Information System</u> maintains an updated list of whether localities have authority to regulate alcohol sales within each state, as well as a detailed inventory of most of the alcohol policies currently in place at the state level.
- The <u>Partnership to End Addiction</u> created an <u>Advocacy Toolkit</u>, which provides tips on building relationships and communicating with policymakers at the federal, state, territorial, tribal, and local levels.
- The <u>Alcohol-Related Disease Impact (ARDI)</u> <u>Application</u> provides national and state estimates of alcohol-related health impacts, including deaths and years of potential life lost.
- The <u>Northwest PTTC</u> created an <u>Alcohol</u> <u>Awareness Toolkit</u> to raise awareness about alcohol-related harms and the importance of strong alcohol policies.



## **Examples of Policies to Prevent Alcohol Misuse**

This chapter highlights three examples of different policies and regulations enacted at both the state and local levels to prevent alcohol misuse in different communities. These examples illustrate the importance of advocacy and community involvement in developing policies and regulations and how the development and capacity building of community organizations facilitate actionable change.

- The first case example, Miami Gardens, Florida, describes a coalition-driven initiative implemented to reduce alcohol consumption associated with crime and a high risk of harm and to address inequitable alcohol marketing practices.
- The second example, the state of Oregon, explains how the state's regulatory agency instituted a minimum pricing policy on distilled spirits to reduce alcohol misuse, particularly among those who drink the most, to make a positive impact on public health and reduce alcohol-related harm.
- The third example, Baltimore, Maryland, illustrates how community collaboration and advocacy led to legislation that limits alcohol sale hours in a defined geographic area by using a data-driven approach that addressed public safety issues in and near off-premises alcohol establishments.



#### Policies Described in Chapter 2

- Regulating alcohol outlet density
- Minimum legal purchase age
- Limiting days and/or hours of sale
- Increasing alcohol taxes
- Minimum pricing
- Limiting price promotions

Each case example differs from the others in terms of context, policy or regulation, and adaptions made to meet the needs of the community. The examples only highlight key components of the policy or regulatory action process—they are not meant to be exhaustive narratives of a community's policy planning and implementation processes. Additional information can be found in the "Related Resources" section of each case example.

Specific information about the policies and regulations presented in this chapter was gathered from experts and through an environmental scan of policies, regulations, resources, and publications from state and federal government agencies and nonprofit organizations.

#### Reducing Alcohol Consumption Associated with Alcohol-Related Harm and Crime

#### Miami Gardens, Florida

#### Setting

The Live Healthy Miami Gardens (LHMG) Initiative and its Alcohol, Tobacco, and Other Drugs (ATOD) Sub-Council is a partnership of 100 organizations and residents working together to develop and implement effective community-level health strategies that improve health outcomes in the City of Miami Gardens, Florida. Miami Gardens is the third largest city in Miami-Dade County, with more than 105,000 residents.<sup>189</sup> It is a diverse, working- and middle-class community, where approximately 71 percent of residents identify as African American and 26 percent as Hispanic.<sup>190</sup>

#### Issue

The rates of alcohol sales to minors, illegal after-hours sales, and police calls for service to alcohol retailers and surrounding areas, coupled with the negative impacts of alcohol use on youth and neighborhoods, caused concern among residents and law enforcement officials. During 2018 and 2019, more than 30 percent of off-premises alcohol retailers sampled sold alcohol to underage decoy shoppers and more than 90 percent sold alcohol products after hours, both in violation of state and local laws. Research conducted by the ATOD Sub-Council identified concerns with predatory marketing practices that specifically targeted communities of color in Miami Gardens. In addition, LHMG documented that the marketing and sale of alcohol products with high risk of alcohol-related harms in their community was disproportionately high compared to surrounding towns. An assessment found that 71 percent of retailers carried a large volume of high-content alcohol products, compared to 12 percent in a predominantly White neighboring town, and that the types of products also varied at stores operated by the same retailer in different neighborhoods. For example, the same pharmacy chain sold and promoted alcohol products with a high risk of alcohol-related harm in Miami Gardens, but not in the neighboring White community. Even within Miami Gardens, the LHMG Initiative found higher risk alcohol practices and products in lower income sections of the city compared to higher income sections.

#### Solution

LHMG organized community support to change the alcohol environment in the city. After years of building a coalition to assess the alcohol risk environment and explore the inequities present in their community, the LHMG Initiative worked with the Miami Gardens City Council to develop new policies and enforcement procedures based on local research and observations. The Miami Gardens City Council decided to enforce various ordinances more diligently and revise existing protocols. These ordinances included:

- Sign ordinance limiting window space dedicated to promotional materials: the total area of all signs affixed or displayed in windows shall not exceed 20 percent of the window area, up to a maximum of 40 square feet.
- Local ordinance requiring all outlets selling beer and wine to ensure the sale of these products will make up no more than 15 percent of a store's gross receipts and that merchants must comply with the existing sign ordinance.
- Local ordinance that alcohol may not be sold between midnight and 6:00 a.m.

The Miami Gardens City Council also adopted three new ordinances:

- 1. Set of nuisance standards on existing and new alcohol outlets to reduce the negative impacts of nuisance and criminal activity in areas surrounding retailers.
- 2. Ordinance that requires establishments to lock coolers containing alcohol after midnight if the floor area of the outlet is less than 500 square feet.
- 3. Ordinance that requires establishments to move coolers and ice bins containing alcohol at least 20 feet from the register.

#### Intervention

Policy development occurred in three phases: readiness, research, and development.

#### Reducing Alcohol Consumption Associated with Alcohol-Related Harm and Crime

#### Miami Gardens, Florida

- **Phase 1: Readiness** focused on developing community readiness, obtaining stakeholder buy-in, establishing interest and capacity, securing resources, and cultivating relationships with state officials and senior city staff and department heads in Miami Gardens, such as those in code and law enforcement. The effort began in 2004 and took more than a decade to achieve its goal of community readiness.
- **Phase 2: Research**, from 2017 to 2019, conducted information gathering and data collection to identify the nature of the alcohol problems in the city, which resulted in potential policies and strategies to address them.
- **Phase 3: Development**, from 2019 to 2021, prioritized revising existing ordinances and enforcement protocols, developing new policies, and leveraging connections and relationships to enforce existing policies and strategies.

Phases 1 and 2 (activities conducted in 2004–2019) cost approximately \$500,000. Phase 3 (2019–2021) cost approximately \$100,000. The three phases included building a coalition, training staff on environmental strategies, collecting data to understand the scope of the problem, educating and organizing staff and community members, and adopting policies addressing the retail environment, to reduce nuisance behavior and violence. Policy development was supported by grants from the <u>Health Foundation of South Florida</u>, a philanthropic nonprofit agency focused on policy and system changes that improve the health of South Florida communities. Federal, state, and local government agencies provided funding to support early phases of implementation.

At the time of this guide's publication, all phases of policy development and passage were complete, and work was underway to implement the policies.

#### **Outcomes and Other Benefits**

- The policy process in the City of Miami Gardens included the revision and enforcement of existing policies, as well as the development of new policies, which arose out of work conducted over a decade in the community. Through their work, LHMG successfully reframed alcohol consumption as a public health issue in the City of Miami Gardens.
- Research suggests that city-level restrictions on the sale of high-alcohol content beverages result in reductions in crime, like assaults and vandalism, and can reduce alcohol retailers' risky alcohol-related operating practices.<sup>87-88</sup> In Miami Gardens, additional laws and better enforcement of existing laws can significantly reduce access to these products.

#### **Lessons Learned**

- **Coalition Development:** Policy development can take considerable time. Forming a coalition solidifies community commitment and maintains engagement throughout this process. A coalition will also serve as a community resource, as members become experts on alcohol policy through the work they are doing, ultimately providing a forum for solving other community-level problems.
- **Relationship Building and Stakeholder Buy-in:** LHMG established relationships with state and local officials, which helped to ensure that new policies were sensitive to the roles and interests of code enforcement, law enforcement, and the state (including alcoholic beverage control and the health department). Because of these relationships, key stakeholders viewed the coalition as a valued member of the community, which fostered collaboration based on mutual trust.
- Data-Driven Approach: LHMG modeled local data collection on national research on alcoholic beverages with a high risk of alcohol-related harm, alcohol outlet density, and marketing practices. When these national data were compared to conditions in the local community, they provided additional context that helped explain local observations. This context facilitated buy-in by and collaboration of some stakeholders, including law enforcement.

#### **Related Resources**

- Live Healthy Miami Gardens
- LHMG ATOD Sub-Council

#### Implementing a Minimum Pricing Policy Through Regulatory Action

#### State of Oregon

#### Setting

Established in 1933 as a state agency, the <u>Oregon Liquor and Cannabis Commission</u> (OLCC, formerly called the Oregon Liquor Control Commission) regulates the sale and service of distilled spirits and the production, processing, and sale of both medical and non-medical cannabis products.<sup>191</sup> The purpose of the OLCC is to support businesses, public safety, and community livability through education about and enforcement of liquor and cannabis laws.

#### Issue

Alcohol misuse is a substantial issue in Oregon. In 2020, the state ranked sixteenth in the nation for per capita alcohol consumption, according to a report published by the National Institute on Alcohol Abuse and Alcoholism;<sup>192</sup> and in 2020, data from SAMHSA's National Survey on Drug Use and Health found that 12 percent—nearly one in eight—of Oregonians aged 12 and older had an alcohol use disorder, the sixth highest rate in the country.<sup>193</sup> In addition to high rates of alcohol misuse, in 2020, Oregon had the greatest proportion of individuals in need of substance use disorder treatment but who did not receive it, compared to all other states.<sup>194</sup> Excessive alcohol use has had a negative effect in Oregon, costing the state \$4.8 billion in 2019— approximately \$1,100 per person.<sup>195</sup> Most of this cost was due to lost earnings for businesses and employees, and nearly 15 percent resulted from hospitalizations and other care related to excessive alcohol use.

#### Solution

Recognizing rising rates of alcohol misuse and related harms in the state, the OLCC proposed a minimum pricing policy that balances public health and business interests.<sup>196</sup> OLCC developed the policy with input from stakeholders, including public health agencies (such as the <u>Oregon Health Authority</u>), alcohol manufacturers and retailers, alcohol licensees (e.g., restaurants, bars), advocacy organizations, and the public. The policy provides a "floor" price for distilled spirits, but beer and wine are excluded. This policy increased the cost of high-proof, formerly low-priced spirits. All products that contain a high percentage of alcohol are subject to the floor pricing policy, resulting in higher prices for products with a greater alcohol content. For example, the minimum price for a 750 ml bottle of 80-proof spirits was set at \$8.95, with higher minimum prices for larger bottles or higher-proof liquors. Once developed, OLCC implemented the policy through regulatory action, not legislation. It is important to note that this rule could be implemented because of OLCC's control over distilled spirits. States, counties, tribal nations, or territories with different alcohol control systems may need to seek alternative mechanisms to implement a minimum prices, based on factors like the current market and inflation.

#### Intervention

OLCC's goal of reducing liquor consumption by heavy and binge drinkers drove development of the minimum pricing policy structure. With that goal in mind, the OLCC began to research regulatory actions that would align with public health and prevention objectives, as well as create revenue for the state. OLCC identified and discussed additional options, such as ceiling pricing and quantity limits, and conducted a SWOT (strengths, weaknesses, opportunities, and threats) analysis for each option identified. Throughout the development of the policy, OLCC collaborated closely with stakeholders to ensure the final regulatory action represented the interests of all parties and that the formula for pricing was fair and consistent with the original goal.

The identification-to-implementation process took 18 to 20 months to complete. Work began in early 2020, and consisted of strategy development, stakeholder identification, and compilation of resources. The first public notice was published in January 2021, and the policy went to the commission for verbal testimony in April 2021. Once these processes were complete, OLCC passed the regulatory action in July 2021, and it took effect in October 2021. OLCC staff developed the policy as part of their normal work, so there was no additional cost associated with this policy beyond staff time, which is funded by the state budget.

#### Implementing a Minimum Pricing Policy Through Regulatory Action

#### State of Oregon

#### **Outcomes and Other Benefits**

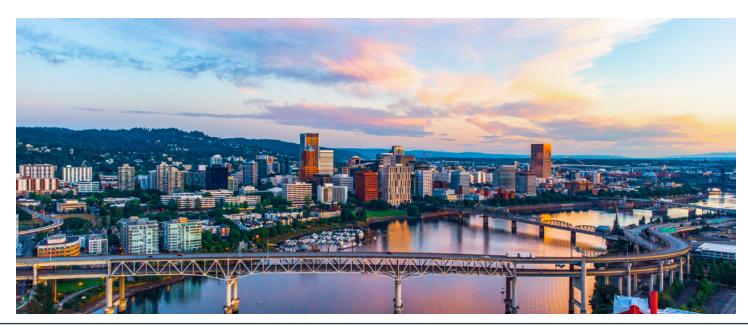
- The regulatory action affected the price of approximately <u>112 alcohol products</u> sold in Oregon, and the OLCC expects a 0.5-percent reduction in overall demand for alcohol.<sup>197</sup>
- Implementation of this regulatory action will raise revenue while reducing alcohol-related harms. Research suggests that an increase in the price of alcohol is associated with reductions in alcohol misuse, underage consumption, and alcohol-related harms.<sup>96</sup> There is also evidence to suggest that increasing the price of alcohol will reduce health inequities among different income groups.<sup>197</sup>
- As the state of Oregon receives revenue from the sale of distilled spirits, OLCC estimated that the General Fund would increase by \$7.5 million between 2021 and 2023 as a result of the higher prices required by the policy.<sup>197</sup>

#### **Lessons Learned**

- **Collaboration**: Working with various stakeholders was vital to ensure that the final regulatory action aligned with their interests. Stakeholders included representatives from the alcohol industry, industry groups, alcohol licensees (e.g., restaurants, bars), alcohol manufacturers and suppliers, retail liquor agents, public health stakeholders (such as the Oregon Health Authority), and the public. OLCC also received support from the State of Oregon Public Health Division, the Oregon Health Authority, and the Oregon Alcohol and Drug Policy Commission, all of whom sent letters of support for this regulatory action.
- **Options**: OLCC researched different policy options with the potential to produce the desired outcomes. They then approached their partners with the options—a key step that was instrumental in maintaining momentum and interest.
- Advocacy: The Alcohol and Drug Policy Commission and community advocacy groups were eager for additional action that addresses the high alcohol and other drug use rates in Oregon. In fact, the Commission's 2020–2025 strategic plan included language to increase the price of alcohol, and a 2021 bill introduced in the Oregon House would have raised alcohol taxes. These efforts, along with many others, helped create an environment that supported the OLCC effort to pass the above regulatory action.

#### **Related Resources**

- Oregon Liquor Control Commission
- OLCC Price Floor Summary
- Oregon Recovers



Implementing Community-Level Policies to Prevent Alcohol Misuse Examples of Policies to Prevent Alcohol Misuse

#### Baltimore City Council – Limiting Hours of Alcohol Sales

#### Baltimore, Maryland

#### **Settings**

As the legislative branch of the state's government, the General Assembly of Maryland is responsible for representing constituents, passing laws, managing revenue and funding, and overseeing executive agencies. The Assembly includes a 47-member Senate and a 141-member House of Delegates, with 1 senator and 3 delegates representing each of the state's 47 legislative districts. The 45<sup>th</sup> legislative district is in the city of Baltimore and is home to approximately 115,000 people. As of 2018, the population of the 45<sup>th</sup> legislative district is approximately 73 percent Black, 20 percent White, and 7 percent other races; roughly 3 percent identify as Hispanic. The median household income in the district is \$39,600, with more than 20 percent of the population living at or below the poverty level.<sup>198-199</sup>

#### Issue

In one neighborhood of the 45<sup>th</sup> legislative district in Baltimore, political representatives and community members grew increasingly concerned with the number of fatal and non-fatal shootings. In October 2019, there were two shootings in a single week in one retail alcohol establishment, prompting concern among residents and local officials. State legislators met with local officials and law enforcement and learned that in the previous three years 29 shootings had occurred in front of that establishment or within 500 feet.

Upon learning this fact, legislators and other officials collaborated with the Baltimore City Police Department and examined data related to gun-related violence in this neighborhood to assess the extent of violence. Police data showed that one neighborhood in the 45<sup>th</sup> legislative district was experiencing high rates of gun violence directly outside of off-premises alcohol outlets in the area. Data revealed that there were more than 20 alcohol establishments within a one-mile radius, and that at least 3 shootings had occurred in or around each establishment during the past three years—for a total of 130 shootings and 68 homicides. Most of these crimes occurred between the hours of 10:00 p.m. and 2:00 a.m.

#### Solution

In Maryland, the state legislature regulates much of local alcohol availability, but legislators traditionally defer to local representatives regarding these decisions. Senator Cory McCray, who represents the 45<sup>th</sup> legislative district, introduced legislation to reduce crime and violence occurring at and around off-premises alcohol outlets in the neighborhood. The legislation limited the hours of alcohol sales in a defined geographic area of Baltimore City, drawing on evidence that such limits reduce alcohol-related harms, including homicides and other crimes. Specifically, the state passed legislation restricting "taverns" in this area to limit alcohol sales from 9:00 a.m. to 10:00 p.m. A tavern, the most common license category in Baltimore, is an establishment that is permitted to sell for both on- and off-premises consumption. Outside this defined geographic area, Baltimore City allows taverns to sell alcohol from 6:00 a.m. to 2:00 a.m., unless otherwise stated.

#### Intervention

The Senate introduced the legislation on January 31, 2020, and the language was ultimately included in <u>House Bill</u> <u>954</u>, which went into effect on July 1, 2020. Once in effect, alcohol retailers needed to be notified about the change in law. Additionally, enforcement was needed to ensure retailers were following the new law. The Liquor License Board is the agency primarily responsible for enforcement, with additional support from the Baltimore City Police Department, as needed. A financial review of the new policy found that there was no extra cost to the state or Baltimore City, which had the necessary resources for enforcement of this new policy.

Since the legislation passed, legislators meet with the Baltimore City Police Department once a month to monitor the data related to violent crime and make sure that the city is meeting its goal of reducing gun violence in the neighborhood.

#### Baltimore City Council – Limiting Hours of Alcohol Sales

#### Baltimore, Maryland

#### **Outcomes and Other Benefits**

- The legislation took effect on July 1, 2020, and in the first 30 days after the legislation took effect, only 3 of the more than 20 affected establishments failed to comply with the new regulations. Two months after the legislation went into effect, officials observed a 50-percent reduction in homicides and violent crime near these establishments during the hours they were closed, compared to the same month in the previous year (i.e., comparing September 2019 to September 2020).<sup>200</sup> During the same time period, there were 34 fewer homicides within 500 feet of an alcohol establishment.
- Subsequently, the General Assembly passed similar laws to limit the hours of alcohol sales in Baltimore neighborhoods within the 40<sup>th</sup> and 41<sup>st</sup> legislative districts.

#### **Lessons Learned**

- **Data-Driven:** The data provided by the Baltimore City Police Department clearly showed an association between the rates of violent crime and number of alcohol establishments in the neighborhood and their hours of sales. Collecting and analyzing data to support legislative interventions and continuing to assess the influence of the legislation on outcomes were critical.
- **Buy-in from Legislators:** Though there had been coalitions advocating for a focus on alcohol and violence throughout Baltimore for years, it was difficult to create new policies until support was received from legislators and local officials. Through the work of legislative champions, the bill received support from the Baltimore City Police Department and local officials and legislators, who prioritized the issue and directed public resources towards its implementation.
- **Collaboration:** State legislators, local officials, and community members worked together to find approaches that would address violent crime, leading to a solution that improved both public health and safety. This example showed that community members have a responsibility to work together to create positive change that improves the health and safety of their neighbors.

#### **Related Resources**

- Maryland Senate Bill 571
- Maryland House Bill 954
- 40th Legislative District Data on Liquor Establishments and Crime



Implementing Community-Level Policies to Prevent Alcohol Misuse Examples of Policies to Prevent Alcohol Misuse

# CHAPTER

## Guidance and Resources for Policy Evaluation

The primary purposes of evaluating public health interventions are to:<sup>201</sup>

- Assess implementation: Was the intervention implemented as intended and what factors are influencing the intervention's success?
- **Determine effectiveness**: Did the intervention achieve its goals and objectives and expected outcomes? Were there any unintended consequences of the policy?
- Assess attribution: Did the intervention cause or contribute to progress on goals and objectives, or are other interventions and environmental or organizational factors also affecting outcomes?

A policy evaluation answers critical questions about whether an intervention is producing the intended outcomes, and why or why not. Evaluation can show how a policy benefits individuals and communities and provide evidence of its effectiveness.<sup>202</sup> Evaluation results may be helpful in ensuring sustainability of the implemented policy as well as in implementing future alcohol-related policies. In addition, practitioners can use these results for dissemination and to encourage adoption of successful interventions in other communities. Conducting an effective evaluation requires considerable technical expertise, and communities should consider working with an experienced evaluator to help collect and analyze data, potentially from local universities or consultants with the necessary technical skills to conduct policy



evaluations. In planning interventions, communities should also consider the results of interventions designed to address similar problems in other communities.

This chapter presents an overview of approaches to evaluate the implementation and outcomes of interventions to prevent alcohol misuse, starting with a framework to ensure that individuals and organizations conduct evaluations with equity in mind. It concludes with specific evaluation resources, including potential outcomes to track and how to use evaluation findings.

## Culturally Responsive and Equitable Evaluation (CREE)

As described in <u>Chapters 1</u> and <u>2</u>, alcohol misuse and related harms affect populations differently. When evaluating the effects of policies to prevent or reduce alcohol misuse, it is important to ensure that they are not benefiting or harming one community or population more than another. Equitable evaluation is a culturally responsive evaluation method that does not consider culture as a subjective factor that needs to be controlled;<sup>203</sup> instead, it explicitly acknowledges culture and context when assessing policy effectiveness. Equitable evaluation relies heavily on engaging the very participants who are affected by and responsible for implementing the policy and from whom evaluation Expanding the Bench Initiative defines Culturally

<u>Responsive and Equitable Evaluation</u> (CREE) as "evaluation that incorporates cultural, structural, and contextual factors (e.g., historical, social, economic, racial, ethnic, gender) using a participatory process that shifts power to individuals most impacted. CREE is not just one method of evaluation; it is an approach that should be infused into all evaluation methodologies."

data will be collected. According to the <u>Equitable</u> <u>Evaluation Initiative</u> (EEI),<sup>204</sup> evaluation efforts should be in service of equity, and evaluators should consider the following while developing their approach:

- Diversity of their evaluation teams, including cultural backgrounds, disciplines, beliefs, and lived experiences
- Degree to which communities have the power to shape and own the evaluation
- Cultural appropriateness and validity of evaluation methods, such as including language that represents diverse populations, developing evaluation materials that are clear and have accessible readability levels, and using data collection methods that are responsive to cultural differences
- Ability of the evaluation design to reveal structural and systems-level drivers of inequity (present-day and historical), such as ensuring that qualitative data are a key component of the evaluation design to give members of all populations an opportunity to identify how the policy affects different racial/ethnic communities, geographic neighborhoods, and socioeconomic classes

## Types of Evaluations and Study Designs

Individuals and organizations should start their evaluation activities during the policy planning process. There are <u>four basic types of evaluation</u>, as follows:

1. <u>Formative evaluation</u> assesses the readiness of an organization or community to implement the intervention, articulates a theory of change (often illustrated in a <u>logic model</u>), and determines the extent to which evaluators can assess an intervention's implementation and outcomes.<sup>205</sup> Communities and organizations can also use formative evaluation findings to adjust the intervention to achieve desired results.

- 2. <u>Process (implementation) evaluation</u> collects data about an intervention's implementation. This type of evaluation enables program managers and policymakers to assess whether they have implemented the intervention as planned (fidelity), and whether and to what extent it reached the intended audience. Process evaluation may continue while conducting an outcome or <u>impact evaluation</u>.
- 3. Outcome evaluation collects baseline data and data at defined intervals (e.g., monthly, annually) during and after implementation of the intervention to assess both short- and long-term outcomes related to the targeted behaviors. These outcome data provide program managers and policymakers with information to assess changes or improvements in attitudes and behaviors that can be associated with the intervention, as well as any unintended outcomes.
- 4. <u>Impact evaluation</u> assesses an intervention's effectiveness in achieving its ultimate goals. Impact evaluations determine whether, and sometimes to what extent, the newly implemented intervention led to changes in indicators. Conducting impact evaluations of policy implementation can be challenging: it often takes many years to see changes in behavior that may be associated with policy change, during which time other factors can also influence the behaviors and outcomes the intervention targets. Impact evaluations typically require either comprehensive data collected before policy passage to do a pre/ post comparison, or data from a similar jurisdiction that has not implemented the policy. Stakeholders and funders should be aware that an impact evaluation of the policy may not be feasible without substantial funding and technical expertise.

Each of these evaluation types is useful in judging an intervention's effectiveness in preventing alcohol misuse. However, when considering policy evaluation, it is important to remember there is rarely a concrete end date—the outcomes from a policy may not be observed for years, and the timeline for short-term outcomes (e.g., reductions in the number of alcohol outlets) may differ from that of longer-term outcomes (e.g., reductions in problem drinking). Both qualitative and quantitative methods, including community-based participatory approaches, are important when evaluating policies. Collection of baseline data, or data from before the policy was implemented, is critical across evaluation types. Communities and organizations should ensure they identify and collect data at the beginning of any policy process and then continue collecting those data as described below.

#### **Evaluation Plans**

CDC identified <u>six key steps to policy evaluation</u> that practitioners should consider at the beginning of any evaluation and include in an evaluation plan:<sup>202</sup>

- 1. Engage stakeholders: Multiple stakeholders with diverse backgrounds should be involved in the evaluation. Stakeholders may include policy experts, evaluation experts, subject matter experts, people with lived experience, those implementing the policy, and those affected by the policy, such as community members.
- 2. Describe the policy: Regardless of the type of evaluation conducted, it can be helpful for practitioners and stakeholders to develop a logic model that articulates the components of the policy they are evaluating, what the intended outcomes are, and how they hypothesize it will achieve the intended impact. Communities and organizations should consider the unintended consequences of the proposed policy and how it may affect different groups because of their social identities (e.g., race/ethnicity, age, sexual orientation, ability). A Community Anti-Drug Coalitions of America (CADCA) primer on developing logic models may be found here.<sup>206</sup>
- 3. Focus the evaluation design: As described above, communities and organizations can conduct several types of evaluation. It may be necessary for organizations to conduct multiple evaluations to understand fully how jurisdictions implemented a policy and what the outcomes

were. Once the organization or coalition has selected the types of evaluation to conduct, it is necessary to identify evaluation questions and determine meaningful indicators (more information on this subject is provided below).

- 4. Gather credible evidence: There are five questions that can help guide a data collection plan: 1) What do you need to know to answer your evaluation questions? 2) In what timeframe will you collect data, and how often? 3) What is your budget, and what is your staff capacity to collect data? 4) Are there ethical considerations, such as anonymity or privacy, that affect your data collection? and 5) Are the data reliable and valid?
- 5. Justify conclusions: Once results are available, the team should present them in a way that is meaningful and understandable to the audience(s)—policymakers, health departments, and/or the community at large. Stakeholders identified earlier in the evaluation process should have an opportunity to provide guidance and input on data interpretation. Coalitions and organizations should consider using this opportunity to look at and present the data through an equity lens, analyzing outcomes by different subpopulations the policy may affect (e.g., different racial/ethnic groups, populations with different socioeconomic characteristics, different age groups). During this phase, it is also valuable to compare the results with other evaluation findings and consider alternative explanations for the findings that those critical of the policy may find fault with.

#### 6. Ensure use and share lessons learned:

Coalitions and organizations can use evaluation results both internally (for continuous feedback on policy implementation) and externally (to provide information on the effectiveness of the policy, increase the evidence base, increase awareness about the policy, or justify the policy's continued existence and/or expansion to other jurisdictions). For each audience, coalitions and organizations should consider detailing what the communication objectives are, how to communicate the results, and what is the key focus. Other considerations specific to the target audience include what their priorities are, whether background information is needed, and how much time the audience will be given to review results.

## Outcomes

An important, but often challenging, step in implementing policies is determining whether they have produced desired outcomes. An outcome is the actual change resulting from an intervention's implementation. Implementers may see short-term outcomes of a policy immediately, such as changes in knowledge, beliefs, or perceptions, or reductions in the number of alcohol licenses given or reduced monthly alcohol sales. Long-term outcomes include change in behavior at both individual and population levels, including reductions in initiation and prevalence of alcohol misuse, and changes at the system level, such as reduction in alcohol-related healthcare costs. Collecting data on the patterns of alcohol misuse, including who is misusing alcohol, what products they are using, and how they are using them, will help communities conduct their regular needs assessments, as described in Chapter 3.

Given changing patterns of alcohol misuse, there are several key data elements that communities need to collect to understand alcohol misuse prevention and reduction efforts. Stakeholders working to prevent alcohol misuse among youth and adults should:

- Collect data on existing policies at the national, state, local, tribal, and/or territorial levels (depending on the scope of the policy)
- Examine how retailers are marketing alcohol products in their community to understand the potential impact of future policy
- Track patterns of alcohol misuse in populations at high risk, such as by race/ethnicity, gender identity, and sexual orientation

Below is a list of potential outcomes, illustrative outcome indicators, and data sources that communities and organizations may use to evaluate policies to prevent alcohol misuse among youth and adults.

Outcome	Illustrative Indicators	Illustrative Data Sources						
Short-Term Outcomes								
Change in knowledge of the harms of alcohol use, strengthened social norms	Level of perceived harm of alcohol products among youth, young adults, and adults	Monitoring the Future Survey						
Change in perceived social norms about alcohol behaviors	Proportion of youth (12-17) who overestimate the alcohol use rate among their peers	National Survey on Drug Use and Health						
Changes in policy and enforcement efforts	Proportion of jurisdictions with public policies that establish a fee on each alcohol product sold	State or local policy tracking systems						
	Proportion of jurisdictions with comprehensive policies that require retail licenses to sell							
	Enforcement intensity measured by citations/warnings given to retail establishments	Local or state law enforcement or licensing entities maintaining citation data						
Change in price of alcohol products	Amount of alcohol product taxes and fees	NIAAA Alcohol Policy Information System, local or state agencies responsible for collecting alcohol taxes (e.g., alcohol beverage control organizations, departments of revenue)						
Change in availability of alcohol products	Density of stores selling alcohol products, hours/days of sale	Government bodies/organizations licensing alcohol retailers						
Change in exposure to alcohol marketing	Number and content of alcohol advertisements	Media scans and tracking, surveys						

Outcome	Illustrative Indicators	Illustrative Data Sources					
Long-Term Individual-, Systems-, and Population-Level Outcomes and Impacts							
Change in initiation of alcohol use	Proportion of youth and young adults who report never having tried an alcohol product	National Survey on Drug Use and Health					
Change in alcohol use prevalence	Prevalence of alcohol use among youth, young adults, and adults	National Survey on Drug Use and Health, Youth Risk Behavior Surveillance System					
Change in sales of alcoholic products	Fewer sales reported in a community	Tax data, retail establishments					
Change in alcohol availability	Reduction in number of alcohol outlets, limiting hours/days of sale	Local or state alcohol license data					
Change in alcohol-related consequences	Reduction in violence and crime, rates of sexually transmitted infections, motor vehicle crashes and fatalities, sexual assault, emergency department visits	Law enforcement calls for service, health department surveillance, emergency departments, local surveys					

#### **Potential Sources of Outcome Data**

**Quantitative Data.** Several publicly available datasets include quantitative measures on alcohol use. Communities wanting more localized data should look at the surveillance measures their county and state public health departments collect at the county or census tract level. Organizations or coalitions can also consider local surveys of schools or community members (either existing surveys or new ones created as part of the policy), as well as conducting mapping of alcohol establishments, collecting calls for service data from law enforcement, tracking alcohol establishment license data, and analyzing data on alcohol sales.

Additional sources of data include hospitals and law enforcement, alcohol marketing (social media, retail signage, billboards, radio, and television spots), and observational assessments, such as environmental scans, which are particularly helpful in measuring changes in the retail environment. For example, an observational assessment could be conducted to determine whether alcohol advertisements are located in primarily lowerincome neighborhoods, or near places with high youth traffic, such as schools or parks. Scans can also measure the number and type of products, advertisements, and other risk and protective factors in and around alcohol retailers. Communities should consider whether they can compare their data with data from a similar community, such as a city or county with similar characteristics, or with state averages.



Implementing Community-Level Policies to Prevent Alcohol Misuse Guidance and Resources for Policy Evaluation

Sources of National Data on Alcohol Use Among Youth and Adults								
Survey Characteristic	National Survey on Drug Use and Health (NSDUH) <sup>13</sup>	Monitoring the Future (MTF) <sup>207</sup>	Youth Risk Behavior Surveillance System (YRBSS) <sup>208</sup>	Behavioral Risk Factor Surveillance System (BRFSS) <sup>209</sup>	National Health and Nutrition Examination Survey (NHANES) <sup>210</sup>			
Sponsoring agency or organization	Substance Abuse and Mental Health Services Administration	National Institute on Drug Abuse	Centers for Disease Control and Prevention	Centers for Disease Control and Prevention	Centers for Disease Control and Prevention			
Level of data available	National, state, sub- state regions	National, regional	National, state, district	State, counties, and metropolitan/ micropolitan areas	National			
Type of survey	Cross-sectional	Cross-sectional and longitudinal	Cross-sectional	Cross-sectional	Cross-sectional			
Mode of survey administration	Combination of web- based interviews with questionnaires accessed over the internet and in-person, face-to-face audio- and computer-assisted interviews	School-based, self-administered questionnaire	School- based, self- administered questionnaire	Telephone survey administered by states	Interviews and physical examinations			
Ages/grades	≥12 years	8 <sup>th</sup> and 10 <sup>th</sup> grades (since 1991) and 12 <sup>th</sup> grade (since 1975); ≥18 years to 60 years	9 <sup>th</sup> –12 <sup>th</sup> grades	≥18 years	All ages; however, data on alcohol use is available only for those ≥18 years			
Disaggregated data that could be included in a CREE	Race/ethnicity; gender identity; geographic breakdown	Gender identity	Race/ethnicity; gender identity; sexual orientation	Race/ethnicity; gender identity; urban/rural status	Race/ethnicity; gender identity			

**Qualitative Data.** Throughout an evaluation, it is important to engage both those implementing the policy and those affected by it. Encouraging and collecting the voices of key stakeholders, through qualitative data collection via interviews or focus groups, provides necessary context and allows evaluators to gain a deeper understanding of the story behind the quantitative data collected. It is important to note that qualitative data can be used across all the evaluation types discussed above (formative, process, outcome, and impact).

Evaluators can collect qualitative data from those who misuse alcohol, both initially to understand attitudes and perceptions of alcohol use, such as why and how they use the product, and during and after policy implementation to understand what is and is not working from the perspectives of those who misuse alcohol. Evaluators can also interview the policy implementors to understand what is going well, as well as community members to ensure that the policy is being appropriately enforced and determine if changes need to be made. For example, if survey data show that an increase in tax policy is affecting one demographic group differently than others, focus groups may help stakeholders understand why these differences may be occurring. Additionally, these data can identify inequitable distribution of unintended consequences of a policy, so policymakers can create community solutions. Discussions around policy implementation—in social media and in more traditional forms—can also facilitate evaluation of policy implementation and enforcement. Other methods include observational assessments, listening sessions, and open online forums for broader community feedback on policy consequences. Coalitions can also conduct media tracking to assess news coverage of the policy or review the types of alcohol advertisements present in their community (whether on social media, on television, in alcohol establishments, or elsewhere).

Qualitative data collection efforts both at the beginning of any evaluation and at the end can help provide context for quantitative study findings.<sup>211</sup>

## Using Evaluation Findings Internally

Coalitions can use data from a policy evaluation internally for process improvement, partner coordination, and celebration.<sup>212</sup>

- Improvement: Organizations can use data as soon as they are collected for immediate monitoring and rapid assessment of policy implementation and outcomes. Qualitative and quantitative data allow coalitions and prevention practitioners to judge whether a policy is reducing alcohol misuse and other related outcomes, such as car crashes, and to assess if there are any unintended and inequitable consequences. Policymakers and implementers can then adjust the policy and/or how it is implemented.<sup>201</sup>
- **Coordination**: Coalitions and prevention practitioners can also use data to coordinate with other community sectors. Findings from policy evaluations allow coalition members and stakeholders to understand what other communities are doing to address alcohol misuse, how this work may align with their own goals, and opportunities for collaboration.<sup>212</sup>
- Celebration: Data collection and analysis allow coalitions, prevention practitioners, and communities to identify and celebrate successes during the policy process, which may occur even before a policy is implemented. Regular acknowledgement and celebration of accomplishments, whether big or small, are an important part of sustaining community and practitioner motivation.<sup>212</sup>

# Policy process successes could include:

- Securing a meeting with a policymaker
- Publishing an article in a news media outlet about alcohol misuse
- Gaining new members and partners
- Passing policy

## Using Evaluation Findings Externally

The findings from a policy evaluation can be used outside of a coalition to ensure accountability and sustainability, in the following ways:<sup>212</sup>

- **Protection of Existing and Future Policies**: Opponents may try to reverse the recently passed policy or find other ways to weaken it. Being able to provide data on the new policy's positive effects is critical to ensuring the longterm viability of the effort. Additionally, these data can support the need for additional policies to prevent or reduce alcohol misuse.
- Celebration: In addition to organizations and coalitions celebrating successes internally, sharing the successes of the policy process and changes in outcomes with the broader community is important so everyone is aware of the significance of the work and what these policies can or have accomplished. These celebrations can support the protection of existing and future policies, as discussed above.
- **Diffusion of Information**: Other communities and states are often looking for examples of effective policies and policy processes as they address their own alcohol misuse issues. Creating infographics, data briefs, and publications about the policy and evaluation findings that can be shared with other coalitions, advocates, policymakers, and stakeholders can help support other communities in their prevention efforts.
- Accountability: Coalitions rely on parties outside their organizations for support, such as volunteers, funders, <u>community stakeholders</u>, and lawmakers; sharing evaluation findings allows coalitions to remain accountable to these stakeholders. Those who contribute their time, money, creativity, and/

or political support to the coalition will want to make sure the coalition's work is helping to reduce alcohol misuse and related outcomes. Findings from policy evaluations allow coalitions and prevention practitioners to describe what contribution they are making to reduce alcohol misuse. Stakeholders will then know that they are supporting a coalition whose work is grounded in outcomes.

• Sustainability: Addressing alcohol misuse requires consistent and long-term effort and collaboration from various stakeholders, such as volunteers, funders, and lawmakers. Information from policy evaluations can help to foster longterm support from stakeholders. Positive outcome data can also help coalitions assure stakeholders of the continued importance, effectiveness, and relevance of the implemented policies.

These internal and external data-sharing activities are critical to ensuring the current and long-term success of not only the recently implemented policy, but also all future policies aimed at preventing alcohol and other drug misuse in the community.

#### Ways to share findings could include:

- Press releases
- Guest opinion pieces ("op-eds")
- Town hall meetings
- Social media postings
- Presentations to the community
- Recognition events





## **Evaluation Resources**

- SAMHSA's <u>Strategic Prevention Framework</u> and <u>Selecting the Best Fit</u> guidance includes assistance on how coalitions and prevention planners can evaluate programs and environmental strategies.
- CDC's <u>Introduction to Process Evaluation</u> focuses on Tobacco Use Prevention and Control, defines process evaluation and describes its rationale, benefits, key data collection components, and evaluation management procedures. Additional <u>evaluation resources</u> from CDC are also available, including a brief on <u>Using Evaluation</u> to <u>Inform CDC's Policy Process</u>.
- CADCA created an <u>Evaluation Primer</u> on Setting the Context for a Community Anti-Drug Coalition Evaluation, which specifically addresses coalition evaluation.
- The National Institutes of Health has a <u>presentation</u> with tools and guidance for evaluation.
- CDC's <u>Evaluating Violence and Injury Prevention</u> <u>Policies</u> provides concrete recommendations on conducting policy evaluations.
- The <u>Rainbow Framework</u> provides tools for the many methods and processes that individuals and organizations can use in monitoring and evaluation.

## **Reference List**

- <sup>1</sup> Centers for Disease Control and Prevention. (2020). *Excessive alcohol use*. <u>https://www.cdc.gov/</u> <u>chronicdisease/resources/publications/factsheets/</u> <u>alcohol.htm</u>
- <sup>2</sup> Centers for Disease Control and Prevention. (2022). Alcohol and public health: Alcoholrelated disease impact (ARDI). <u>https://</u> nccd.cdc.gov/DPH\_ARDI/Default/Report. aspx?T=AAM&P=612EF325-9B55-442B-AE0C-789B06E3A8D5&R=C877B524-834A-47D5-964D-158FE519C894&M=DB4DAAC0-C9B3-4F92-91A5-A5781DA85B68&L=&F=AAMCauseAgeGroupAllNew&D=H
- <sup>3</sup> Substance Abuse and Mental Health Services Administration. (2018). *Alcohol use facts and resources*. <u>https://www.samhsa.gov/sites/default/</u> <u>files/alcohol\_use\_facts\_and\_resources\_fact\_</u> <u>sheet\_2018\_data.pdf</u>
- <sup>4</sup> O'Dwyer, C., Mongan, D., Millar, S. R., Rackard, M., Galvin, B., Long, J., & Barry, J. (2019). Drinking patterns and the distribution of alcoholrelated harms in Ireland: Evidence for the prevention paradox. *BMC Public Health*, *19*, 1323. <u>https://doi.org/10.1186/s12889-019-7666-4</u>
- <sup>5</sup> Rossow, I., & Romelsjö, A. (2006). The extent of the 'prevention paradox' in alcohol problems as a function of population drinking patterns. *Addiction*, *101*(1), 84-90. <u>https://doi.org/10.1111/j.1360-0443.2005.01294.x</u>
- <sup>6</sup> Department of Agriculture, & Department of Health and Human Services. (n.d.). *Dietary guidelines for Americans*, 2020–2025. www.DietaryGuidelines.gov
- <sup>7</sup> Gilbert, P. A., Pass, L. E., Keuroghlian, A. S., Greenfield, T. K., & Reisner, S. L. (2018). Alcohol research with transgender populations: A systematic review and recommendations to strengthen future studies. *Drug and Alcohol Dependence, 186*, 138-146. <u>https://doi.org/10.1016/j.</u> <u>drugalcdep.2018.01.016</u>
- <sup>8</sup> American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders: DSM-5 (5<sup>th</sup> ed., Vol. 5). American Psychiatric Association.
- <sup>9</sup> Centers for Disease Control and Prevention. (2021). Alcohol use and your health. <u>https://www.cdc.gov/</u> alcohol/fact-sheets/alcohol-use.htm

- <sup>10</sup> Alcohol Justice. (2017). Legislative activity dangerous products. <u>https://alcoholjustice.org/</u> legislative-activity/dangerous-products
- <sup>11</sup> Mosher, J. F., & Johnsson, D. (2005). Flavored alcoholic beverages: An international marketing campaign that targets youth. *Journal of Public Health Policy*, 26(3), 326-342. <u>https://doi. org/10.1057/palgrave.jphp.3200037</u>
- <sup>12</sup> Substance Abuse and Mental Health Services Administration. (2022). *State performance & best practices for the prevention and reduction of underage drinking report*. <u>https://www.samhsa.gov/resource/ebp/state-performance-best-practices-prevention-reduction-underage-drinking</u>
- <sup>13</sup> Center for Behavioral Health Statistics and Quality. (2021). 2020 National Survey on Drug Use and Health (NSDUH) releases. <u>https://www.samhsa.gov/ data/release/2020-national-survey-drug-use-andhealth-nsduh-releases</u>
- <sup>14</sup> National Highway Traffic Safety Administration. (2017). *Traffic safety facts 2016 data: Alcohol-impaired driving*. Department of Transportation. <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812450</u>
- <sup>15</sup> Eck, R. H., Trangenstein, P. J., Siegel, M., & Jernigan, D. H. (2021). Company-specific revenues from underage drinking. *Journal of Studies on Alcohol and Drugs*, 82(3), 368-376. <u>https://doi. org/10.15288/jsad.2021.82.368</u>
- <sup>16</sup> Jernigan, D., Noel, J., Landon, J., Thornton, N., & Lobstein, T. (2017). Alcohol marketing and youth alcohol consumption: A systematic review of longitudinal studies published since 2008. *Addiction*, *112*, 7-20. <u>https://doi.org/10.1111/add.13591</u>
- <sup>17</sup> Sargent, J. D., & Babor, T. F. (2020). The relationship between exposure to alcohol marketing and underage drinking is causal. *Journal of Studies* on Alcohol and Drugs, Supplement(s19), 113-124. https://doi.org/10.15288/jsads.2020.s19.113
- <sup>18</sup> Dawson, D. A., Goldstein, R. B., Saha, T. D., & Grant, B. F. (2015). Changes in alcohol consumption: United States, 2001–2002 to 2012– 2013. *Drug and Alcohol Dependence, 148*, 56-61. <u>https://doi.org/10.1016/j.drugalcdep.2014.12.016</u>

- <sup>19</sup> Hingson, R. W., Edwards, E. M., Heeren, T., & Rosenbloom, D. (2009). Age of drinking onset and injuries, motor vehicle crashes, and physical fights after drinking and when not drinking. *Alcoholism: Clinical and Experimental Research*, *33*(5), 783-790. https://doi.org/10.1111/j.1530-0277.2009.00896.x
- <sup>20</sup> Hingson, R. W., Heeren, T., & Edwards, E. M. (2008). Age at drinking onset, alcohol dependence, and their relation to drug use and dependence, driving under the influence of drugs, and motorvehicle crash involvement because of drugs. *Journal* of Studies on Alcohol and Drugs, 69(2), 192-201. https://doi.org/10.15288/jsad.2008.69.192
- <sup>21</sup> University of Michigan. (2021). Alcohol use among older adults. <u>https://deepblue.lib.umich.</u> edu/bitstream/handle/2027.42/167901/0236\_ <u>NPHA-Alcohol-report-FINAL-06082021.</u> pdf?sequence=4&isAllowed=y#:~:text=In%20 January%202021%2C%20the%20 University,use%20and%20reasons%20for%20 drinking.&text=Two%20in%20three%20adults%20 age,occasionally%20in%20the%20past%20year.
- <sup>22</sup> Sugarman, D., & Greenfield, S. (2021). *Rising alcohol use among older adults*. Harvard Health Publishing. <u>https://www.health.harvard.edu/blog/</u>rising-alcohol-use-among-older-adult-202109242599
- <sup>23</sup> Greaves, L., Poole, N., & Brabete, A. C. (2022). Sex, gender, and alcohol use: Implications for women and low-risk drinking guidelines. *International Journal* of Environmental Research and Public Health, 19(8), 4523. https://doi.org/10.3390/ijerph19084523
- <sup>24</sup> Flentje, A., Bacca, C. L., & Cochran, B. N. (2015). Missing data in substance abuse research? Researchers' reporting practices of sexual orientation and gender identity. *Drug and Alcohol Dependence*, *147*, 280-284. <u>https://doi.org/10.1016/j.</u> <u>drugalcdep.2014.11.012</u>
- <sup>25</sup> Cotaina, M., Peraire, M., Boscá, M., Echeverria, I., Benito, A., & Haro, G. (2022). Substance use in the transgender population: A meta-analysis. *Brain Science*, 12(3), 366. <u>https://doi.org/10.3390/</u> <u>brainsci12030366</u>
- <sup>26</sup> Schipani-McLaughlin, A. M., Nielsen, K. E., Mosley, E. A., Leone, R. M., Oesterle, D. W., Orchowski, L. M., Davis, K. C., & Gilmore, A. K. (2022). Alcohol use and alcohol-related consequences based on gender and sexual orientation among college students. *The American Journal on Addictions*, *31*(3), 189-199. <u>https://doi. org/10.1111/ajad.13283</u>

- <sup>27</sup> Gerke, D. R., Call, J., Atteberry-Ash, B., Katz-Kattari, S., Kattari, L., Kattari, L., & Hostetter, C. R. (2022). Alcohol use at the intersection of sexual orientation and gender identity in a representative sample of youth in Colorado. *The American Journal on Addictions*, 31(1), 61-68. <u>https://doi.org/10.1111/ajad.13243</u>
- <sup>28</sup> White, A. M. (2020). Gender differences in the epidemiology of alcohol use and related harms in the United States. *Alcohol Research: Current Reviews*, 40(2), 01. <u>https://doi.org/10.35946%2Farcr.v40.2.01</u>
- <sup>29</sup> Abbey, A., Zawacki, T., Buck, P. O., Clinton, A. M., & McAuslan, P. (2001). Alcohol and sexual assault. *Alcohol Research & Health: The Journal of the National Institute on Alcohol Abuse and Alcoholism*, 25(1), 43-51. <u>https://www.ncbi.nlm.nih.gov/pmc/</u> articles/PMC4484576/
- <sup>30</sup> Centers for Disease Control and Prevention. (2010). National Intimate Partner and Sexual Violence Survey. <u>https://www.cdc.gov/violenceprevention/</u> pdf/nisvs\_report2010-a.pdf
- <sup>31</sup> National Highway Traffic Safety Adminstration. Drunk driving. <u>https://www.nhtsa.gov/risky-driving/</u> drunk-driving#age-5056
- <sup>32</sup> Slade, T., Chapman, C., Swift, W., Keyes, K., Tonks, Z., & Teesson, M. (2016). Birth cohort trends in the global epidemiology of alcohol use and alcoholrelated harms in men and women: Systematic review and metaregression. *BMJ Open*, 6(10), e011827. <u>https://doi.org/10.1136/bmjopen-2016-011827</u>
- <sup>33</sup> Centers for Disease Control and Prevention. (n.d.). 1991–2019 High School Youth Risk Behavior Survey Data. <u>http://nccd.cdc.gov/youthonline/</u>
- <sup>34</sup> Centers for Disease Control and Prevention. (2020). Excessive alcohol use is a risk to women's health. Division of Population Health, National Center for Chronic Disease Prevention and Health Promotion. <u>https://www.cdc.gov/alcohol/fact-sheets/womens-health.htm</u>
- <sup>35</sup> National Institute on Alcohol Abuse and Alcoholism. (1999). Are women more vulnerable to alcohol's effects? <u>http://pubs.niaaa.nih.gov/publications/aa46.htm</u>
- <sup>36</sup> World Health Organization. (2021). Alcohol is one of the biggest risk factors for breast cancer. <u>https://</u> www.who.int/europe/news/item/20-10-2021-alcoholis-one-of-the-biggest-risk-factors-for-breast-cancer
- <sup>37</sup> Atkinson, A. M., Sumnall, H., Begley, E., & Jones, L. (2019). A rapid narrative review of literature on gendered alcohol marketing and its effects: Exploring the targeting and representation of women. Institute of Alcohol Studies. <u>https://www.ias.org.uk/wp-content/</u> <u>uploads/2020/06/rp39102019.pdf</u>

- <sup>38</sup> Peralta, R. L., Victory, E., & Thompson, C. L. (2019). Alcohol use disorder in sexual minority adults: Age- and sex-specific prevalence estimates from a national survey, 2015–2017. *Drug Alcohol Depend*, 205, 107673. <u>https://doi.org/10.1016/j.</u> <u>drugalcdep.2019.107673</u>
- <sup>39</sup> Jones, C. M., Clayton, H. B., Deputy, N. P., Roehler, D. R., Ko, J. Y., Esser, M. B., Brookmeyer, K. A., & Hertz, M. F. (2020). Prescription opioid misuse and use of alcohol and other substances among high school students—Youth Risk Behavior Survey, United States, 2019. *Morbidity and Mortality Weekly Report, 69*(1), 38-46. <u>https://doi.org/10.15585/mmwr.su6901a5</u>
- <sup>40</sup> Medley, G., Lipari, R. N., Bose, J., Cribb, D. S., Kroutil, L. A., & McHenry, G. (2016). Sexual orientation and estimates of adult substance use and mental health: Results from the 2015 National Survey on Drug Use and Health. NSDUH Data Review. <u>https://www.samhsa.gov/data/sites/ default/files/NSDUH-SexualOrientation-2015/ NSDUH-SexualOrientation-2015/NSDUH-SexualOrientation-2015.htm</u>
- <sup>41</sup> National Institutes of Health. (n.d.). Substance use and SUDs in LGBTQ populations. https://nida.nih. gov/research-topics/substance-use-suds-in-lgbtqpopulations
- <sup>42</sup> Jun, H.-J., Webb-Morgan, M., Felner, J. K., Wisdom, J. P., Haley, S. J., Austin, S. B., Katuska, L. M., & Corliss, H. L. (2019). Sexual orientation and gender identity disparities in substance use disorders during young adulthood in a United States longitudinal cohort. *Drug and Alcohol Dependence*, 205, 107619. <u>https://doi.org/10.1016/j.drugalcdep.2019.107619</u>
- <sup>43</sup> Dick, D. M., & Agrawal, A. (2008). The genetics of alcohol and other drug dependence. *Alcohol Research & Health: The Journal of the National Institute on Alcohol Abuse and Alcoholism, 31*(2), 111-118. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/</u> PMC3860452/
- <sup>44</sup> Spivey, J. D., Lee, J. G., & Smallwood, S. W. (2018). Tobacco policies and alcohol sponsorship at lesbian, gay, bisexual, and transgender pride festivals: Time for intervention. *American Journal* of Public Health, 108(2), 187-188. <u>https://doi.org/10.2105/AJPH.2017.304205</u>
- <sup>45</sup> Speed, K. (2021). LGBTQ+ health disparities and targeting by big tobacco and alcohol. Counter Tools. <u>https://countertools.org/blog/lgbtq-health-disparitiesand-targeting-by-big-tobacco-and-alcohol/</u>
- <sup>46</sup> Witzig, R. (1996). The medicalization of race: Scientific legitimization of a flawed social construct. *Annals of Internal Medicine*, 125(8), 675-679. <u>https://doi.org/10.7326/0003-4819-125-8-199610150-00008</u>

- <sup>47</sup> U. S. Census Bureau. (2017). Race & ethnicity. https://www.cosb.us/home/showpublisheddocument/5935/637356700118370000#:~:text=The%20 Census%20Bureau%20defines%20race,Islander%2C%20or%20some%20other%20race
- <sup>48</sup> Caetano, R., & McGrath, C. (2005). Driving under the influence (DUI) among ethnic groups. *Accident Analysis and Prevention*, 37(2), 217-224. <u>https://doi.org/10.1016/j.aap.2004.07.004</u>
- <sup>49</sup> Kagawa, R. M. C., McCort, C. D., Schleimer, J., Pear, V. A., Charbonneau, A., Buggs, S. A. L., Wintemute, G. J., & Laqueur, H. S. (2021). Racial bias and DUI enforcement: Comparing conviction rates with frequency of behavior. *Criminology* & *Public Policy*, 20(4), 645-663. <u>https://doi. org/10.1111/1745-9133.12558</u>
- <sup>50</sup> LaVeist, T. A., & Wallace Jr, J. M. (2000). Health risk and inequitable distribution of liquor stores in African American neighborhood. *Social Science & Medicine*, 51(4), 613-617. <u>https://doi.org/10.1016/</u> <u>s0277-9536(00)00004-6</u>
- <sup>51</sup> Mack, R. (1997). Bringing down the walls of state pre-emption: California cities fight for local control of alcohol outlets. *African-American Law & Policy*, *3*, 295. <u>https://doi.org/10.15779/Z38KC95</u>
- <sup>52</sup> Espey, D. K., Jim, M. A., Cobb, N., Bartholomew, M., Becker, T., Haverkamp, D., & Plescia, M. (2014). Leading causes of death and all-cause mortality in American Indians and Alaska Natives. *American Journal of Public Health*, *104*(S3), S303-S311. <u>https://doi.org/10.2105/</u> <u>AJPH.2013.301798</u>
- <sup>53</sup> Brave Heart, M. Y. H., Chase, J., Elkins, J., & Altschul, D. B. (2011). Historical trauma among indigenous peoples of the Americas: Concepts, research, and clinical considerations. *Journal of Psychoactive Drugs*, 43(4), 282-290. <u>https://doi.org/ 10.1080/02791072.2011.628913</u>
- <sup>54</sup> Duran, E., & Duran, B. (1995). *Native American Postcolonial Psychology*. SUNY Press.
- <sup>55</sup> Mancall, P. C. (1997). *Deadly medicine: Indians and alcohol in early America*. Cornell University Press.
- <sup>56</sup> Spillane, S., Shiels, M. S., Best, A. F., Haozous, E. A., Withrow, D. R., Chen, Y., Berrington de González, A., & Freedman, N. D. (2020). Trends in alcohol-induced deaths in the United States, 2000– 2016. *JAMA Network Open*, 3(2), e1921451. <u>https:// doi.org/10.1001/jamanetworkopen.2019.21451</u>
- <sup>57</sup> Manson, S. M. (2020). Alcohol-induced deaths among American Indian and Alaska Native individuals -"Drinking was what I and others just did". *JAMA Network Open*, 3(2), e1921391. <u>https:// doi.org/10.1001/jamanetworkopen.2019.21391</u>

- <sup>58</sup> Alaniz, M. L., & Wilkes, C. (1995). Reinterpreting Latino culture in the commodity form: The case of alcohol advertising in the Mexican American community. *Hispanic Journal of Behavioral Sciences*, 17(4), 430-451. <u>https://doi.org/10.1177/07399863950174002</u>
- <sup>59</sup> Altman, D. G., Schooler, C., & Basil, M. D. (1991). Alcohol and cigarette advertising on billboards. *Health Education Research*, 6(4), 487-490. <u>https://doi.org/10.1093/her/6.4.487</u>
- <sup>60</sup> McKee, P., Jones-Webb, R., Hannan, P., & Pham, L. (2011). Malt liquor marketing in inner cities: The role of neighborhood racial composition. *Journal of Ethnicity in Substance Abuse*, 10(1), 24-38. <u>https:// doi.org/10.1080/15332640.2011.547793</u>
- <sup>61</sup> Jones-Webb, R., McKee, P., Hannan, P., Wall, M., Pham, L., Erickson, D., & Wagenaar, A. (2008). Alcohol and malt liquor availability and promotion and homicide in inner cities. *Substance Use & Misuse*, 43(2), 159-177. https://doi.org/10.1080/10826080701690557
- <sup>62</sup> Zapolski, T. C., Baldwin, P., Banks, D. E., & Stump, T. E. (2017). Does a crossover age effect exist for African American and Hispanic binge drinkers? Findings from the 2010 to 2013 National Study on Drug Use and Health. *Alcoholism: Clinical and Experimental Research*, *41*(6), 1129-1136. <u>https:// doi.org/10.1111/acer.13380</u>
- <sup>63</sup> Herd, D., & Grube, J. (1993). Drinking contexts and drinking problems among Black and White women. *Addiction*, 88(8), 1101-1110. <u>https://doi.org/10.1111/j.1360-0443.1993.tb02129.x</u>
- <sup>64</sup> Mulia, N., Ye, Y., Greenfield, T. K., & Zemore, S. E. (2009). Disparities in alcohol-related problems among White, Black, and Hispanic Americans. *Alcoholism: Clinical and Experimental Research*, *33*(4), 654-662. <u>https://doi.org/10.1111/j.1530-0277.2008.00880.x</u>
- <sup>65</sup> Collins, S. E. (2016). Associations between socioeconomic factors and alcohol outcomes. *Alcohol Research: Current Reviews*, 38(1), 83-94. <u>https://</u> www.ncbi.nlm.nih.gov/pmc/articles/PMC4872618/
- <sup>66</sup> Cerdá, M., Johnson-Lawrence, V. D., & Galea, S. (2011). Lifetime income patterns and alcohol consumption: Investigating the association between long- and short-term income trajectories and drinking. *Social Science & Medicine*, 73(8), 1178-1185. <u>https:// doi.org/10.1016/j.socscimed.2011.07.025</u>
- <sup>67</sup> Centers for Disease Control and Prevention. (2012). Vital signs: Binge drinking prevalence, frequency, and intensity among adults - United States, 2010. *Morbidity and Mortality Weekly Report (MMWR)*, *61*(1), 14-19. <u>https://www.cdc.gov/mmwr/preview/ mmwrhtml/mm6101a4.htm</u>

- <sup>68</sup> Patrick, M. E., Wightman, P., Schoeni, R. F., & Schulenberg, J. E. (2012). Socioeconomic status and substance use among young adults: A comparison across constructs and drugs. *Journal of Studies on Alcohol and Drugs*, *73*(5), 772-782. <u>https://doi. org/10.15288/jsad.2012.73.772</u>
- <sup>69</sup> Assari, S., & Lankarani, M. M. (2016). Education and alcohol consumption among older Americans: Black–White differences. *Frontiers in Public Health*, 4, 67. <u>https://doi.org/10.3389/fpubh.2016.00067</u>
- <sup>70</sup> Mair, C., Sumetsky, N., Gruenewald, P. J., & Lee, J. P. (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, 44*(8), 1636-1645. <u>https://doi.org/10.1111/acer.14387</u>
- <sup>71</sup> World Health Organization. (2019). *Global status* report on alcohol and health 2018. <u>https://www.</u> who.int/publications/i/item/9789241565639
- <sup>72</sup> Rehm, J., Rovira, P., Llamosas-Falcón, L., & Shield, K. D. (2021). Dose–response relationships between levels of alcohol use and risks of mortality or disease, for all people, by age, sex, and specific risk factors. *Nutrients*, *13*(8), 2652. <u>https://doi. org/10.3390/nu13082652</u>
- <sup>73</sup> Mokdad, A. H., Ballestros, K., Echko, M., Glenn, S., Olsen, H. E., Mullany, E., Lee, A., Khan, A. R., Ahmadi, A., & Ferrari, A. J. (2018). The state of US health, 1990–2016: Burden of diseases, injuries, and risk factors among US states. *JAMA*, *319*(14), 1444-1472. <u>https://doi.org/10.1001/jama.2018.0158</u>
- <sup>74</sup> Greenfield, T. K., Karriker-Jaffe, K. J., Kaplan, L. M., Kerr, W. C., & Wilsnack, S. C. (2015). Trends in alcohol's harms to others (AHTO) and co-occurrence of family-related AHTO: The four US National Alcohol Surveys, 2000–2015. *Substance Abuse: Research and Treatment, 9*(Suppl 2), 23-31. https://doi.org/10.4137%2FSART.S23505
- <sup>75</sup> Sudhinaraset, M., Wigglesworth, C., & Takeuchi, D. T. (2016). Social and cultural contexts of alcohol use: Influences in a social–ecological framework. *Alcohol Research: Current Reviews*, 38(1), 35-45. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC4872611/</u>
- <sup>76</sup> Klingemann, H., & World Health Organization. (2001). Alcohol and its social consequences - the forgotten dimension by Harald Klingemann. <u>https://</u> apps.who.int/iris/handle/10665/108554
- <sup>77</sup> National Cancer Institute. (2021). Alcohol and cancer risk. National Institutes of Health. <u>https://</u> www.cancer.gov/about-cancer/causes-prevention/ risk/alcohol/alcohol-fact-sheet

- <sup>78</sup> Van Heertum, K., & Rossi, B. (2017). Alcohol and fertility: How much is too much? *Fertility research and practice*, 3(1), 1-7. <u>https://doi.org/10.1186/</u> <u>s40738-017-0037-x</u>
- <sup>79</sup> Nayak, M. B., Patterson, D., Wilsnack, S. C., Karriker-Jaffe, K. J., & Greenfield, T. K. (2019). Alcohol's secondhand harms in the United States: New data on prevalence and risk factors. *Journal* of Studies on Alcohol and Drugs, 80(3), 273-281. <u>https://doi.org/10.15288/jsad.2019.80.273</u>
- <sup>80</sup> Centers for Disease Control and Prevention. (2019). Excessive drinking is draining the economy. <u>https://www.cdc.gov/alcohol/features/excessive-drinking.</u> <u>html</u>
- <sup>81</sup> Gruenewald, P. J. (2011). Regulating availability: How access to alcohol affects drinking and problems in youth and adults. *Alcohol Research and Health*, *34*(2), 248-256. <u>https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC3860569/</u>
- <sup>82</sup> Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, *112*(1), 64-105. https://doi.org/10.1037/0033-2909.112.1.64
- <sup>83</sup> Substance Abuse and Mental Health Services Administration. (2019). *Risk and protective factors*. <u>https://www.samhsa.gov/sites/default/</u> <u>files/20190718-samhsa-risk-protective-factors.pdf</u>
- <sup>84</sup> Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J. W., Hill, L., Holder, H., Homel, R., Livingston, M., Österberg, E., Rehm, J., Room, R., & Rossow, I. (2010). *Alcohol: No ordinary commodity: Research and public policy* (2<sup>nd</sup> ed.). Oxford University Press. <u>https://doi.org/10.1093/acprof:oso/9780199551149.001.0001</u>
- <sup>85</sup> Elder, R. W., Lawrence, B., Ferguson, A., Naimi, T. S., Brewer, R. D., Chattopadhyay, S. K., Toomey, T. L., Fielding, J. E., & Task Force on Community Preventive Services. (2010). The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. *American Journal of Preventive Medicine*, *38*(2), 217-229. <u>https://doi.org/10.1016/j.amepre.2009.11.005</u>
- <sup>86</sup> Campbell, C. A., Hahn, R. A., Elder, R., Brewer, R., Chattopadhyay, S., Fielding, J., Naimi, T. S., Toomey, T., Lawrence, B., & Middleton, J. C. (2009). The effectiveness of limiting alcohol outlet density as a means of reducing excessive alcohol consumption and alcohol-related harms. *American Journal of Preventive Medicine*, 37(6), 556-569. <u>https://doi.org/10.1016/j.amepre.2009.09.028</u>

- <sup>87</sup> Hahn, R. A., Kuzara, J. L., Elder, R., Brewer, R., Chattopadhyay, S., Fielding, J., Naimi, T. S., Toomey, T., Middleton, J. C., & Lawrence, B. (2010). Effectiveness of policies restricting hours of alcohol sales in preventing excessive alcohol consumption and related harms. *American Journal* of Preventive Medicine, 39(6), 590-604. <u>https://doi.org/10.1016/j.amepre.2010.09.016</u>
- <sup>88</sup> Hahn, R. A., Middleton, J. C., Elder, R., Brewer, R., Fielding, J., Naimi, T. S., Toomey, T. L., Chattopadhyay, S., Lawrence, B., & Campbell, C. A. (2012). Effects of alcohol retail privatization on excessive alcohol consumption and related harms: A community guide systematic review. *American Journal of Preventive Medicine*, 42(4), 418-427. https://doi.org/10.1016/j.amepre.2012.01.002
- <sup>89</sup> Thomas, F. D., Blomberg, R., Darrah, J., Graham, L. A., Southcott, T., Dennert, R., Taylor, E., Treffers, R., Tippetts, S., & McKnight, S. (2022). *Evaluation of Utah's. 05 BAC Per Se Law.* National Highway Traffic Safety Administration. <u>https://doi.org/10.21949/1526050</u>
- <sup>90</sup> Xu, X., & Chaloupka, F. J. (2011). The effects of prices on alcohol use and its consequences. *Alcohol Research & Health: The Journal of the National Institute on Alcohol Abuse and Alcoholism, 34*(2), 236-245. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/</u> <u>PMC3860576/</u>
- <sup>91</sup> Cleveland, M. J., Feinberg, M. E., Bontempo, D. E., & Greenberg, M. T. (2008). The role of risk and protective factors in substance use across adolescence. *Journal of Adolescent Health*, 43(2), 157-164. <u>https://doi.org/10.1016/j.jadohealth.2008.01.015</u>
- <sup>92</sup> Chartier, K., & Caetano, R. (2010). Ethnicity and health disparities in alcohol research. *Alcohol Research & Health*, 33(1-2), 152. <u>https://www.ncbi.</u> <u>nlm.nih.gov/pmc/articles/PMC3887493/</u>
- <sup>93</sup> McEwen, B. S. (2004). Protection and damage from acute and chronic stress: Allostasis and allostatic overload and relevance to the pathophysiology of psychiatric disorders. *Annals of the New York Academy of Sciences, 1032*(1), 1-7. <u>https://doi.org/10.1196/annals.1314.001</u>
- <sup>94</sup> Budge, S. L., Thai, J. L., Tebbe, E. A., & Howard, K. A. (2016). The intersection of race, sexual orientation, socioeconomic status, trans identity, and mental health outcomes. *The Counseling Psychologist, 44*(7), 1025-1049. <u>https://doi.org/10.1177/0011000015609046</u>
- <sup>95</sup> O'Connell, M. E., Boat, T., & Warner, K. E. (2009). Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. The National Academies Press.

- <sup>96</sup> U.S. Department of Health and Human Services, Office of the Surgeon General. (2016). Facing addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health. <u>https://www.ncbi.</u> nlm.nih.gov/books/NBK424857/
- <sup>97</sup> Toumbourou, J. W., Stockwell, T., Neighbors, C., Marlatt, G., Sturge, J., & Rehm, J. (2007). Interventions to reduce harm associated with adolescent substance use. *The Lancet, 369*(9570), 1391-1401. <u>https://doi.org/10.1016/S0140-6736(07)60369-9</u>
- <sup>98</sup> Babor, T. F., Robaina, K., & Jernigan, D. (2015). The influence of industry actions on the availability of alcoholic beverages in the African region. *Addiction*, *110*(4), 561-571. <u>https://doi.org/10.1111/add.12832</u>
- <sup>99</sup> National Institute on Alcohol Abuse and Alcoholism. What is a standard drink? <u>https://www.niaaa.nih.gov/alcohols-effects-health/overview-alcohol-consumption/what-standard-drink</u>
- <sup>100</sup> Berkowitz, A. D. (2003). Applications of social norms theory to other health and social justice issues. In H. W. Perkins (Ed.), *The social norms approach to preventing school and college age substance abuse: A handbook for educators, counselors, and clinicians* (pp. 259-279). Jossey-Bass/Wiley.
- <sup>101</sup> Wilkinson, C., Livingston, M., & Room, R. (2016). Impacts of changes to trading hours of liquor licences on alcohol-related harm: A systematic review 2005–2015. *Public Health Research Practice, 26*(4), 2641644. <u>https://doi.org/10.17061/</u> phrp2641644
- <sup>102</sup> Sherk, A., Stockwell, T., Chikritzhs, T., Andréasson, S., Angus, C., Gripenberg, J., Holder, H., Holmes, J., Mäkelä, P., & Mills, M. (2018). Alcohol consumption and the physical availability of takeaway alcohol: Systematic reviews and meta-analyses of the days and hours of sale and outlet density. *Journal of Studies on Alcohol and Drugs*, *79*(1), 58-67. <u>https://doi.org/10.15288/jsad.2018.79.58</u>
- <sup>103</sup> Trangenstein, P. J., Subbaraman, M. S., Greenfield, T. K., Mulia, N., Kerr, W. C., & Karriker-Jaffe, K. J. (2020). Association between state-level alcohol availability and taxation policies on the prevalence of alcohol-related harms to persons other than the drinker in the USA, 2000–2015. *Drug and Alcohol Review*, 39(3), 255-266. <u>https://doi.org/10.1111/ dar.13041</u>
- <sup>104</sup> Jernigan, D. H., Sparks, M., Yang, E., & Schwartz, R. (2013). Using public health and community partnerships to reduce density of alcohol outlets. *Preventing Chronic Disease*, 10, E53. <u>https://doi.org/10.5888/pcd10.120090</u>

- <sup>105</sup> ChangeLab Solutions. (2019). Addressing alcohol outlet density at the local level. <u>http://alcohol-psr.</u> <u>changelabsolutions.org/alcohol-psr-faqs/local-</u> <u>authority-to-regulate-the-density-of-alcohol-outlets-faq/</u> addressing-alcohol-outlet-density-at-the-local-level/
- <sup>106</sup> ChangeLab Solutions. (2019). Legal aspects of state preemption of local authority to regulate outlet density. <u>http://alcohol-psr.changelabsolutions.org/alcohol-psr-faqs/local-authority-to-regulate-the-density-of-alcohol-outlets-faq/legal-aspects-of-state-preemption-of-local-authority-to-regulate-outlet-density/</u>
- <sup>107</sup> Grubesic, T. H., & Pridemore, W. A. (2011). Alcohol outlets and clusters of violence. *International Journal of Health Geographics*, 10, 30. <u>https://doi.org/10.1186/1476-072x-10-30</u>
- <sup>108</sup> Zhang, X., Hatcher, B., Clarkson, L., Holt, J., Bagchi, S., Kanny, D., & Brewer, R. D. (2015). Changes in density of on-premises alcohol outlets and impact on violent crime, Atlanta, Georgia, 1997–2007. *Preventing Chronic Disease*, *12*, 140317. http://dx.doi.org/10.5888/pcd12.140317
- <sup>109</sup> Scribner, R. A., MacKinnon, D. P., & Dwyer, J. H. (1995). The risk of assaultive violence and alcohol availability in Los Angeles County. *American Journal of Public Health*, 85(3), 335-340. <u>https://doi.org/10.2105/ajph.85.3.335</u>
- <sup>110</sup> Trangenstein, P. J., Sadler, R. C., Morrison, C. N., & Jernigan, D. H. (2020). Looking back and moving forward: The evolution and potential opportunities for the future of alcohol density meansurement. *Addiction Research & Theory*, 29(2), 117-128. https://doi.org/10.1080%2F16066359.2020.1751128
- <sup>111</sup> Popova, S., Giesbrecht, N., Bekmuradov, D., & Patra, J. (2009). Hours and days of sale and density of alcohol outlets: Impacts on alcohol consumption and damage: A systematic review. *Alcohol and Alcoholism, 44*(5), 500-516. <u>https://doi.org/10.1093/</u> <u>alcalc/agp054</u>
- <sup>112</sup> Ahern, J., Colson, K. E., Margerson-Zilko, C., Hubbard, A., & Galea, S. (2016). Predicting the population health impacts of community interventions: The case of alcohol outlets and binge drinking. *American Journal of Public Health*, *106*(11), 1938-1943. <u>https://doi.org/10.2105/</u> <u>ajph.2016.303425</u>
- <sup>113</sup> Brenner, A. B., Borrell, L. N., Barrientos-Gutierrez, T., & Diez Roux, A. V. (2015). Longitudinal associations of neighborhood socioeconomic characteristics and alcohol availability on drinking: Results from the Multi-Ethnic Study of Atherosclerosis (MESA). *Social Science & Medicine, 145*, 17-25. <u>https://doi.org/10.3109/10826</u> 084.2015.1027927

- <sup>114</sup> Morrison, C., Smith, K., Gruenewald, P. J., Ponicki, W. R., Lee, J. P., & Cameron, P. (2016). Relating off-premises alcohol outlet density to intentional and unintentional injuries. *Addiction (Abingdon, England)*, *111*(1), 56-64. <u>https://doi.org/10.1111/ add.13098</u>
- <sup>115</sup> Trangenstein, P. J., Eck, R. H., Lu, Y., Webster, D., Jennings, J. M., Latkin, C., Milam, A. J., Furr-Holden, D., & Jernigan, D. H. (2020). The violence prevention potential of reducing alcohol outlet access in Baltimore, Maryland. *Journal of Studies* on Alcohol and Drugs, 81(1), 24-33. <u>https://doi.org/10.15288/jsad.2020.81.24</u>
- <sup>116</sup> Berke, E. M., Tanski, S. E., Demidenko, E., Alford-Teaster, J., Shi, X., & Sargent, J. D. (2010). Alcohol retail density and demographic predictors of health disparities: A geographic analysis. *American Journal* of Public Health, 100(10), 1967-1971. <u>https://doi.org/10.2105/AJPH.2009.170464</u>
- <sup>117</sup> Romley, J. A., Cohen, D., Ringel, J., & Sturm, R. (2007). Alcohol and environmental justice: The density of liquor stores and bars in urban neighborhoods in the United States. *Journal of Studies on Alcohol and Drugs*, 68(1), 48-55. <u>https://doi.org/10.15288/jsad.2007.68.48</u>
- <sup>118</sup> Pollack, C. E., Cubbin, C., Ahn, D., & Winkleby, M. (2005). Neighbourhood deprivation and alcohol consumption: Does the availability of alcohol play a role? *International Journal of Epidemiology*, *34*(4), 772-780. <u>https://doi.org/10.1093/ije/dyi026</u>
- <sup>119</sup> Subbaraman, M. S., Mulia, N., Kerr, W. C., Patterson, D., Karriker-Jaffe, K. J., & Greenfield, T. K. (2020). Relationships between US state alcohol policies and alcohol outcomes: Differences by gender and race/ethnicity. *Addiction*, *115*(7), 1285-1294. https://doi.org/10.1111/add.14937
- <sup>120</sup> 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. <u>https://doi.org/10.1016/j. ssmph.2020.100669</u>
- <sup>121</sup> Fliss, M. D. (2021). Measuring and mapping alcohol outlet environment density, clusters, and racial and ethnic disparities in Durham, North Carolina, 2017. *Preventing Chronic Disease, 18*, E89. <u>https://doi. org/10.5888/pcd18.210127</u>
- <sup>122</sup> Xu, Y., Yu, Q., Scribner, R., Theall, K., Scribner, S., & Simonsen, N. (2012). Multilevel spatiotemporal change-point models for evaluating the effect of an alcohol outlet control policy on changes in neighborhood assaultive violence rates. *Spatial* and Spatio-temporal Epidemiology., 3(2), 121-128. https://doi.org/10.1016/j.sste.2012.04.005

- <sup>123</sup> Elder, R. W., Lawrence, B. A., Janes, G., Brewer, R. D., Toomey, T. L., Hingson, R. W., Naimi, T. S., Wing, S. G., & Fielding, J. (2007). Enhanced enforcement of laws prohibiting sale of alcohol to minors: Systematic review of effectiveness for reducing sales and underage drinking. *Transportation Research Circular, 2007*(E-C123), 181-188. <u>https://</u> www.trb.org/Publications/Blurbs/159420.aspx
- <sup>124</sup> Wagenaar, A. C., & Toomey, T. L. (2002). Effects of minimum drinking age laws: Review and analyses of the literature from 1960 to 2000. *Journal of Studies* on Alcohol, Supplement(14), 206-225. <u>https://doi.org/10.15288/jsas.2002.s14.206</u>
- <sup>125</sup> DeJong, W., & Blanchette, J. (2014). Case closed: Research evidence on the positive public health impact of the age 21 minimum legal drinking age in the United States. *Journal of Studies on Alcohol and Drugs*, 75(Suppl 17), 108-115. <u>https://doi.org/10.15288/jsads.2014.s17.108</u>
- <sup>126</sup> McCartt, A. T., Hellinga, L. A., & Kirley, B. B. (2010). The effects of minimum legal drinking age 21 laws on alcohol-related driving in the United States. *Journal of Safety Research*, 41(2), 173-181. <u>https://doi.org/10.1016/j.jsr.2010.01.002</u>
- <sup>127</sup> Carpenter, C., & Dobkin, C. (2011). The minimum legal drinking age and public health. *Journal of Economic Perspectives*, 25(2), 133-156. <u>https://doi.org/10.1257/jep.25.2.133</u>
- <sup>128</sup> Subbaraman, M. S., & Kerr, W. C. (2013). State panel estimates of the effects of the minimum legal drinking age on alcohol consumption for 1950 to 2002. *Alcoholism: Clinical and Experimental Research*, *37*(Suppl 1), E291-296. <u>https://doi. org/10.1111/j.1530-0277.2012.01929.x</u>
- <sup>129</sup> Serdula, M. K., Brewer, R. D., Gillespie, C., Denny, C. H., & Mokdad, A. (2004). Trends in alcohol use and binge drinking, 1985–1999: Results of a multi-state survey. *American Journal of Preventive Medicine*, 26(4), 294-298. <u>https://doi.org/10.1016/j.</u> <u>amepre.2003.12.017</u>
- <sup>130</sup> Norberg, K. E., Bierut, L. J., & Grucza, R. A. (2009). Long-term effects of minimum drinking age laws on past-year alcohol and drug use disorders. *Alcoholism: Clinical and Experimental Research*, 33(12), 2180-2190. <u>https://doi.org/10.1111/j.1530-0277.2009.01056.x</u>
- <sup>131</sup> National Highway Traffic Safety Administration. (2019). *Traffic safety facts 2017 data: Young drivers*. Department of Transportation. <u>https://crashstats.</u> <u>nhtsa.dot.gov/Api/Public/Publication/812753</u>

- <sup>132</sup> Community Preventive Services Task Force.
   (2006). Alcohol—excessive consumption: Enhanced enforcement of laws prohibiting sales to minors. <u>https://www.thecommunityguide.org/</u> findings/alcohol-excessive-consumption-enhancedenforcement-laws-prohibiting-sales-minors
- <sup>133</sup> World Health Organization. (2009). Evidence for the effectiveness and cost-effectiveness of interventions to reduce alcohol-related harm. <u>https://www.euro.</u>
   <u>who.int/\_\_\_data/assets/pdf\_\_file/0020/43319/E92823.</u>
   <u>pdf</u>
- <sup>134</sup> Yörük, B. K. (2014). Legalization of Sunday alcohol sales and alcohol consumption in the United States. *Addiction*, 109(1), 55-61. <u>https://doi.org/10.1111/</u> add.12358
- <sup>135</sup> Stehr, M. (2007). The effect of Sunday sales bans and excise taxes on drinking and cross—border shopping for alcoholic beverages. *National Tax Journal*, 60(1), 85-105. <u>https://www.jstor.org/ stable/41790375</u>
- <sup>136</sup> McMillan, G. P., & Lapham, S. (2006). Effectiveness of bans and laws in reducing traffic deaths: Legalized Sunday packaged alcohol sales and alcohol-related traffic crashes and crash fatalities in New Mexico. *American Journal of Public Health*, *96*(11), 1944-1948. <u>https://doi.org/10.2105/AJPH.2005.069153</u>
- <sup>137</sup> Han, S., Branas, C. C., & MacDonald, J. M. (2016). The effect of a Sunday liquor-sales ban repeal on crime: A triple-difference analysis. *Alcoholism: Clinical and Experimental Research*, 40(5), 1111-1121. <u>https://doi.org/10.1111/acer.13047</u>
- <sup>138</sup> Yörük, B. K., & Lee, J. (2018). Did legalization of Sunday alcohol sales increase crime in the United States? Evidence from seven states. *Journal of Studies on Alcohol and Drugs*, 79(6), 816-825. <u>https://doi.org/10.15288/jsad.2018.79.816</u>
- <sup>139</sup> Heaton, P. (2012). Sunday liquor laws and crime. Journal of Public Economics, 96(1-2), 42-52. <u>https://doi.org/10.1016/j.jpubeco.2011.08.002</u>
- <sup>140</sup> Community Preventive Services Task Force.
   (2014). Preventing excessive alcohol consumption: Privatization of retail alcohol sales. <u>https://www.</u> <u>thecommunityguide.org/sites/default/files/assets/</u> Alcohol-Privatization-of-Retail-Alcohol-Sales.pdf
- <sup>141</sup> The Community Guide. (n.d.). Task force recommends increasing alcohol taxes to prevent excessive alcohol use and other harms. Department of Health and Human Services. <u>https://www.</u> <u>thecommunityguide.org/content/increased-alcoholtaxes-can-prevent-excessive-alcohol-use-and-otherharms</u>

- <sup>142</sup> Xuan, Z., Chaloupka, F. J., Blanchette, J. G., Nguyen, T. H., Heeren, T. C., Nelson, T. F., & Naimi, T. S. (2015). The relationship between alcohol taxes and binge drinking: Evaluating new tax measures incorporating multiple tax and beverage types. *Addiction*, *110*(3), 441-450. <u>https://doi.org/10.1111/add.12818</u>
- <sup>143</sup> Naimi, T. S., Blanchette, J. G., Xuan, Z., & Chaloupka, F. J. (2018). Erosion of state alcohol excise taxes in the United States. *Journal of Studies* on Alcohol and Drugs, 79(1), 43-48. <u>https://doi. org/10.15288/jsad.2018.79.43</u>
- Gehrsitz, M., Saffer, H., & Grossman, M. (2021). The effect of changes in alcohol tax differentials on alcohol consumption. *Journal of Public Economics, 204*, 104520. <u>https://doi.org/10.1016/j.jpubeco.2021.104520</u>
- <sup>145</sup> Wagenaar, A. C., Livingston, M. D., & Staras, S. S. (2015). Effects of a 2009 Illinois alcohol tax increase on fatal motor vehicle crashes. *American Journal* of Public Health, 105(9), 1880-1885. <u>https://doi.org/10.2105/ajph.2014.302428</u>
- Staras, S. A. S., Livingston, M. D., Christou, A. M., Jernigan, D. H., & Wagenaar, A. C. (2014). Heterogeneous population effects of an alcohol excise tax increase on sexually transmitted infections morbidity. *Addiction (Abingdon, England), 109*(6), 904-912. https://doi.org/10.1111/add.12493
- <sup>147</sup> An, R., & Sturm, R. (2011). Does the response to alcohol taxes differ across racial/ethnic groups? Some evidence from 1984–2009 Behavioral Risk Factor Surveillance System. *Journal of Mental Health Policy and Economics, 14*(1), 13-23. <u>https://</u> www.ncbi.nlm.nih.gov/pmc/articles/PMC3089007/
- <sup>148</sup> Wagenaar, A. C., Tobler, A. L., & Komro, K. A. (2010). Effects of alcohol tax and price policies on morbidity and mortality: A systematic review. *American Journal of Public Health*, *100*(11), 2270-2278. https://doi.org/10.2105/AJPH.2009.186007
- <sup>149</sup> Daley, J. I., Stahre, M. A., Chaloupka, F. J., & Naimi, T. S. (2012). The impact of a 25-cent-perdrink alcohol tax increase. *American Journal of Preventive Medicine*, 42(4), 382-389. <u>https://doi. org/10.1016/j.amepre.2011.12.008</u>
- <sup>150</sup> Vandenberg, B., & Sharma, A. (2016). Are alcohol taxation and pricing policies regressive? Productlevel effects of a specific tax and a minimum unit price for alcohol. *Alcohol and Alcoholism*, *51*(4), 493-502. <u>https://doi.org/10.1093/alcalc/agv133</u>
- <sup>151</sup> Esser, M. B., Waters, H., Smart, M., & Jernigan, D. H. (2016). Impact of Maryland's 2011 alcohol sales tax increase on alcoholic beverage sales. *American Journal of Alcohol Abuse*, 42(4), 404-411. <u>https:// doi.org/10.3109/00952990.2016.1150485</u>

- <sup>152</sup> Pollack Porter, K., Frattaroli, S., & Pannu, H. (2018). Public health policy in Maryland: Lessons from recent alcohol and cigarette tax policies. The Abell Report. <u>https://abell.org/publication/publichealth-policy-in-maryland/</u>
- <sup>153</sup> Lavoie, M.-C., Langenberg, P., Villaveces, A., Dischinger, P. C., Simoni-Wastila, L., Hoke, K., & Smith, G. S. (2017). Effect of Maryland's 2011 alcohol sales tax increase on alcoholpositive driving. *American Journal of Preventive Medicine*, 53(1), 17-24. <u>https://doi.org/10.1016/j.</u> <u>amepre.2016.12.011</u>
- <sup>154</sup> Wagenaar, A. C., Maldonado-Molina, M. M., & Wagenaar, B. H. (2009). Effects of alcohol tax increases on alcohol-related disease mortality in Alaska: Time-series analyses from 1976 to 2004. *American Journal of Public Health*, 99(8), 1464– 1470. https://doi.org/10.2105/AJPH.2007.131326
- <sup>155</sup> LeClercq, J., Bernard, S., Mucciaccio, F., & Esser, M. B. (2021). Prospective analysis of minimum pricing policies to reduce excessive alcohol use and related harms in US states. *Journal of Studies* on Alcohol and Drugs, 82(6), 710-719. <u>https://doi.org/10.15288/jsad.2021.82.710</u>
- <sup>156</sup> Brennan, A., Purshouse, R., Taylor, K., Rafia, R., Booth, A., O'Reilly, D., Stockwell, T., Sutton, A., Wilkinson, A., & Wong, R. (2008). Modelling the potential impact of pricing and promotion policies for alcohol in England: Results from the Sheffield Alcohol Policy Model, version 2008 (1-1). Independent review of the effects of alcohol pricing and promotion: Part B. The University of Sheffield. <u>https://www. drugsandalcohol.ie/11602/1/DH 091364.pdf</u>
- <sup>157</sup> Anderson, P., O'Donnell, A., Kaner, E., Llopis, E. J., Manthey, J., & Rehm, J. (2021). Impact of minimum unit pricing on alcohol purchases in Scotland and Wales: Controlled interrupted time series analyses. *The Lancet Public Health*, 6(8), E557-E565. <u>https:// doi.org/10.1016/S2468-2667(21)00052-9</u>
- <sup>158</sup> Stockwell, T., Zhao, J., Martin, G., Macdonald, S., Vallance, K., Treno, A., Ponicki, W., Tu, A., & Buxton, J. (2013). Minimum alcohol prices and outlet densities in British Columbia, Canada: Estimated impacts on alcohol-attributable hospital admissions. *American Journal of Public Health*, 103(11), 2014-2020. https://doi.org/10.2105/AJPH.2013.301289
- <sup>159</sup> Zhao, J., Stockwell, T., Martin, G., Macdonald, S., Vallance, K., Treno, A., Ponicki, W. R., Tu, A., & Buxton, J. (2013). The relationship between minimum alcohol prices, outlet densities and alcohol-attributable deaths in British Columbia, 2002–09. *Addiction*, 108(6), 1059-1069. <u>https://doi.org/10.1111/add.12139</u>

- <sup>160</sup> Stockwell, T., Zhao, J., Marzell, M., Gruenewald, P. J., Macdonald, S., Ponicki, W. R., & Martin, G. (2015). Relationships between minimum alcohol pricing and crime during the partial privatization of a Canadian government alcohol monopoly. *Journal* of Studies on Alcohol and Drugs, 76(4), 628-634. https://doi.org/10.15288/jsad.2015.76.628
- <sup>161</sup> Zhao, J., & Stockwell, T. (2017). The impacts of minimum alcohol pricing on alcohol attributable morbidity in regions of British Colombia, Canada with low, medium and high mean family income. *Addiction*, *112*(11), 1942-1951. <u>https://doi.org/10.1111/add.13902</u>
- <sup>162</sup> Holmes, J., Meng, Y., Meier, P. S., Brennan, A., Angus, C., Campbell-Burton, A., Guo, Y., Hill-McManus, D., & Purshouse, R. C. (2014). Effects of minimum unit pricing for alcohol on different income and socioeconomic groups: A modelling study. *The Lancet, 383*(9929), 1655-1664. <u>https:// doi.org/10.1016/S0140-6736(13)62417-4</u>
- <sup>163</sup> League of Oregon Cities. (2021). OLCC increases minimum pricing. <u>https://www.orcities.org/</u> resources/communications/bulletin/olcc-increasesminimum-pricing#:~:text=The%20Oregon%20 Liquor%20Control%20Commission,sold%20for%20 less%20than%20%248.95.
- <sup>164</sup> McClure, A. C., Stoolmiller, M., Tanski, S. E., Engels, R. C., & Sargent, J. D. (2013). Alcohol marketing receptivity, marketing-specific cognitions, and underage binge drinking. *Alcoholism: Clinical and Experimental Research*, 37, E404-E413. <u>https:// doi.org/10.1111/j.1530-0277.2012.01932.x</u>
- <sup>165</sup> Hackbarth, D. P., Schnopp-Wyatt, D., Katz, D., Williams, J., Silvestri, B., & Pfleger, M. (2001). Collaborative research and action to control the geographic placement of outdoor advertising of alcohol and tobacco products in Chicago. *Public Health Reports*, *116*(6), 558-567. <u>https://doi.org/10.1093/phr/116.6.558</u>
- <sup>166</sup> Noel, J. K., Babor, T. F., & Robaina, K. (2017). Industry self-regulation of alcohol marketing: A systematic review of content and exposure research. *Addiction, 112*(Suppl 1), 28-50. <u>https://doi.org/10.1111/add.13410</u>
- <sup>167</sup> Carah, N., & Brodmerkel, S. (2021). Alcohol marketing in the era of digital media platforms. *Journal of Studies on Alcohol and Drugs*, *82*(1), 18-27. <u>https://doi.org/10.15288/jsad.2021.82.18</u>
- <sup>168</sup> Snyder, L. B., Milici, F. F., Slater, M., Sun, H., & Strizhakova, Y. (2006). Effects of alcohol advertising exposure on drinking among youth. *Archives of Pediatrics & Adolescent Medicine*, *160*(1), 18-24. https://doi.org/10.1001/archpedi.160.1.18

- <sup>169</sup> Anderson, P. (2007). Commercial communications and alcohol. Utrecht: National Foundation for Alcohol Prevention. <u>http://www.stap.nl/content/</u> <u>bestanden/elsa 4 report on impact.pdf</u>
- <sup>170</sup> Davis, J. P., Pedersen, E. R., Tucker, J. S., Dunbar, M. S., Seelam, R., Shih, R., & D'Amico, E. J. (2019). Long-term associations between substance use-related media exposure, descriptive norms, and alcohol use from adolescence to young adulthood. *Journal of Youth and Adolescence*, 48(7), 1311-1326. https://doi.org/10.1007/s10964-019-01024-z
- <sup>171</sup> Gentry, E., Poirier, K., Wilkinson, T., Nhean, S., Nyborn, J., & Siegel, M. (2011). Alcohol advertising at Boston subway stations: An assessment of exposure by race and socioeconomic status. *American Journal of Public Health*, *101*(10), 1936-1941. <u>https://doi.org/10.2105/AJPH.2011.300159</u>
- <sup>172</sup> Collins, R. L., Martino, S. C., Kovalchik, S. A., Becker, K. M., Shadel, W. G., & D'Amico, E. J. (2016). Alcohol advertising exposure among middle school-age youth: An assessment across all media and venues. *Journal of Studies on Alcohol and Drugs*, 77(3), 384-392. <u>https://doi.org/10.15288/</u> jsad.2016.77.384
- <sup>173</sup> Anderson, P. (2009). Is it time to ban alcohol advertising? *Clinical Medicine*, *9*(2), 121-124. https://doi.org/10.7861%2Fclinmedicine.9-2-121
- <sup>174</sup> Rossow, I. (2021). The alcohol advertising ban in Norway: Effects on recorded alcohol sales. *Drug* and Alcohol Review, 40(7), 1392-1395. <u>https://doi.org/10.1111/dar.13289</u>
- <sup>175</sup> Rammohan, V., Hahn, R. A., Elder, R., Brewer, R., Fielding, J., Naimi, T. S., Toomey, T. L., Chattopadhyay, S. K., Zometa, C., & Task Force on Community Preventive Services. (2011). Effects of dram shop liability and enhanced overservice law enforcement initiatives on excessive alcohol consumption and related harms: Two community guide systematic reviews. *American Journal of Preventive Medicine*, *41*(3), 334-343. <u>https://doi. org/10.1016/j.amepre.2011.06.027</u>
- <sup>176</sup> The Community Guide. (2010). Alcohol excessive consumption: Dram shop liability. <u>https://www.</u> <u>thecommunityguide.org/findings/alcohol-excessiveconsumption-dram-shop-liability</u>
- <sup>177</sup> County Health Rankings & Roadmaps. (n.d.). Dram Shop Liability Laws. <u>https://www.</u> countyhealthrankings.org/take-action-to-improvehealth/what-works-for-health/strategies/dram-shopliability-laws

- <sup>178</sup> Wagoner, K. G., Francisco, V. T., Sparks, M., Wyrick, D., Nichols, T., & Wolfson, M. (2012). A review of social host policies focused on underage drinking parties: Suggestions for future research. *Journal of Drug Education*, 42(1), 99-117. <u>https:// doi.org/10.2190/DE.42.1.f</u>
- <sup>179</sup> Paschall, M. J., Lipperman-Kreda, S., Grube, J. W., & Thomas, S. (2014). Relationships between social host laws and underage drinking: Findings from a study of 50 California cities. *Journal of Studies* on Alcohol and Drugs, 75(6), 901-907. <u>https://doi.org/10.15288/jsad.2014.75.901</u>
- <sup>180</sup> Freisthler, B., Gruenewald, P. J., Treno, A. J., & Lee, J. (2003). Evaluating alcohol access and the alcohol environment in neighborhood areas. *Alcoholism: Clinical and Experimental Research*, *27*(3), 477-484. <u>https://doi.org/10.1097/01.Alc.0000057043.04199.B7</u>
- <sup>181</sup> Saltz, R. F., & Stanghetta, P. (1997). A community-wide responsible beverage service program in three communities: Early findings. *Addiction*, 92, S237-S249. <u>https://doi. org/10.1111/j.1360-0443.1997.tb02994.x</u>
- <sup>182</sup> Herd, D. (2011). Voices from the field: The social construction of alcohol problems in inner-city communities. *Contemporary Drug Problems*, 38(1), 7-39. <u>https://doi.org/10.1177/009145091103800102</u>
- <sup>183</sup> Jernigan, D. H., & Wright, P. A. (1996). Media advocacy: Lessons from community experiences. *Journal of Public Health Policy*, *17*(3), 306-330. <u>https://doi.org/10.2307/3343268</u>
- <sup>184</sup> Substance Abuse and Mental Health Services Administration. (2021). Alcohol regulatory systems: Integrating support for public health and safety. <u>https://pttcnetwork.org/sites/pttc/files/2021-03/</u> <u>Alcohol-Regulatory-Policy-Guide-2021.-draft-3.-</u> <u>mfs.3.5.21\_508.pdf</u>
- <sup>185</sup> Open Secrets. (2020). Industry profile: Beer, wine & liquor. <u>https://www.opensecrets.org/federal-</u> lobbying/industries/summary?cycle=2019&id=N02
- <sup>186</sup> Babor, T. F., Robaina, K., & Noel, J. (2018). The role of the alcohol industry in policy interventions for alcohol-impaired driving. In National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice, Committee on Accelerating Progress to Reduce Alcohol-Impaired Driving Fatalities, Y. Negussie, A. Geller, & S. Teutsch (Eds.), *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem* (pp. 447-521). National Academies Press (US). <u>https://www.ncbi.nlm.nih.gov/books/ NBK500055/</u>

- <sup>187</sup> Vallone, D., Cantrell, J., Bennett, M., Smith, A., Rath, J. M., Xiao, H., Greenberg, M., & Hair, E. C. . (2018). Evidence of the impact of the truth FinishIt Campaign. *Nicotine and Tobacco Research*, 20(5), 543-551. https://doi.org/10.1093/ntr/ntx119
- <sup>188</sup> Allen, J. A., Duke, J. C., Davis, K. C., Kim, A. E., Nonnemaker, J. M., & Farrelly, M. C. (2015). Using mass media campaigns to reduce youth tobacco use: A review. *American Journal of Health Promotion*, 30(2), e71-e82. <u>https://doi.org/10.4278/ajhp.130510-LIT-237</u>
- <sup>189</sup> Miami Gardens Florida. (n.d.). About the city. <u>https://www.miamigardens-fl.gov/252/About-the-City</u>
- <sup>190</sup> Miami Gardens Florida. (n.d.). City demographics. <u>https://www.miamigardens-fl.gov/343/City-Demographics</u>
- <sup>191</sup> Oregon Liquor and Cannabis Commission. (n.d.). *About us.* <u>https://www.oregon.gov/olcc/Pages/</u> <u>About\_Us.aspx</u>
- <sup>192</sup> Slater, M. E., & Alpert, H. R. (2022). Apparent per capita alcohol consumption: National, state, and regional trends, 1977–2020. National Institute on Alcohol Abuse and Alcoholism. <u>https://pubs.niaaa.</u> nih.gov/publications/surveillance119/CONS20.htm
- <sup>193</sup> Substance Abuse and Mental Health Services Administration. (2021). 2019–2020 National Survey on Drug Use and Health: Model-based prevalence estimates (50 States and the District of Columbia). <u>https://www.samhsa.gov/data/report/2019-2020nsduh-state-prevalence-estimates</u>
- <sup>194</sup> Center for Behavioral Health Statistics and Quality. (2020). Substance Abuse and Mental Health Data Archive. <u>https://datafiles.samhsa.gov/</u>
- <sup>195</sup> ECONorthwest. (2021). Alcohol harms and economic burden – Interim report. <u>https://www.oregonrecovers.org/wp-content/uploads/2021/02/</u> OHA-Alcohol-Harms-Interim-Report\_FINAL.pdf
- <sup>196</sup> Oregon Liquor and Cannabis Commission. (2021). Commissioners address public health concerns, approve "floor pricing" - Industry and health experts split on outcomes and benefits. <u>https://www.oregon.gov/olcc/Docs/news/news\_releases/2021/</u> nr040821-Commission-Meeting-Alcohol.pdf
- <sup>197</sup> Oregon Liquor and Cannabis Commission. (2021). OLCC price floor: Summary of action. OLCC COVID RESPONSE: House Committee on Economic Development. <u>https://www.oregon.gov/olcc/Docs/commission\_minutes/2021/OLCC-Floor-Pricing-Overview.pdf</u>
- <sup>198</sup> Statistical Atlas. (2021). State Legislative District 45, Maryland.

- <sup>199</sup> Census Bureau. (2018). 2014–2018 ACS 5-Year Data Profile [SAS Data file]. <u>https://www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes/2018/5-year.html</u>
- <sup>200</sup> McCray, C. (2020). Commentary: Want to reduce crime? Challenge the status quo. AFRO. <u>https://afro. com/commentary-want-to-reduce-crime-challengethe-status-quo/</u>
- <sup>201</sup> Centers for Disease Control and Prevention. (2012). Introduction to program evaluation for public health programs: A self study guide. <u>https://www.cdc.gov/</u> evaluation/guide/index.htm
- <sup>202</sup> Centers for Disease Control and Prevention. (2013). National Center for Injury Prevention and Control Step by Step – Evaluating violence and injury prevention policies. <u>https://www.cdc.gov/injury/ pdfs/policy/brief%201-a.pdf</u>
- <sup>203</sup> McAteerm, C. (2020). What is equitable evaluation? Corona Insights. <u>https://www.coronainsights.</u> <u>com/2020/09/what-is-equitable-evaluation/</u>
- <sup>204</sup> The Equitable Evaluation Initiative. (2020). The equitable evaluation framework: Principles and co-learning. <u>https://www.equitableeval.org/</u> framework
- <sup>205</sup> Centers for Disease Control and Prevention. (n.d.). *Types of evaluations*. <u>https://www.cdc.gov/std/</u> Program/pupestd/Types%20of%20Evaluation.pdf
- <sup>206</sup> Community Anti-Drug Coalitions of America National Coalition Institute. (2019). *Planning primer: Developing a theory of change, logic models and strategic and action plans*. <u>https://www.cadca.</u> <u>org/resources/planning-primer-developing-theorychange-logic-models-and-strategic-and-action-plans</u>
- <sup>207</sup> National Institute on Drug Abuse. (2019). Monitoring the Future. <u>https://nida.nih.gov/research-topics/trends-statistics/monitoring-future</u>
- <sup>208</sup> Centers for Disease Control and Prevention. (2018). Adolescent and school health - data & documentation. <u>https://www.cdc.gov/healthyyouth/</u><u>data/yrbs/data.htm</u>
- <sup>209</sup> Centers for Disease Control and Prevention. (2020). Behavioral Risk Factor Surveillance System. <u>https://www.cdc.gov/brfss/brfssprevalence/</u>
- <sup>210</sup> Centers for Disease Control and Prevention. (2021). National Health and Nutrition Examination Survey. <u>https://www.cdc.gov/nchs/nhanes/index.htm</u>
- <sup>211</sup> Administration on Children Youth & Families. (2016). Qualitative research methods in program evaluation: Considerations for federal staff. <u>https://www.acf.hhs.gov/sites/default/files/documents/ acyf/qualitative\_research\_methods\_in\_program\_ evaluation.pdf</u>

<sup>212</sup> Community Anti-Drug Coalitions of America. (2019). Setting the context for a community coalition evaluation. National Coalition Institute. <u>https://</u> www.cadca.org/sites/default/files/resource/files/ evaluationprimer.pdf

## Glossary

Alcohol misuse: A pattern of drinking resulting in harm to one's health, interpersonal relationships, or ability to work. Alcohol misuse includes <u>binge and heavy drinking</u>, as well as underage drinking and drinking by pregnant people.

Alcohol use disorder: A chronic medical condition characterized by an impaired ability to stop or control alcohol use, despite adverse social, occupational, or health consequences.

**Binge drinking:** Consuming four or more standard drinks on an occasion for a woman, or five or more standard drinks on an occasion for a man. A standard drink is 12 fluid ounces of beer (5 percent alcohol), 8 to 9 fluid ounces of malt liquor (7 percent alcohol), 5 fluid ounces of wine (12 percent alcohol), or 1.5 fluid ounces of 80-proof distilled spirits (40 percent alcohol).

Cisgender: Individuals whose current gender identity is the same as the sex they were assigned at birth.

**Community-based participatory approach:** An approach that involves the engagement and equal participation of individuals affected by an issue or problem at hand and recognizes and appreciates the unique strengths and resources each person contributes. It is a cooperative, empowering, co-learning process that involves systems development and local community capacity-building.

**Community Stakeholders:** Members or organizations in a community that have a direct interest in the process and outcomes of a project, research study, or policy initiative.

**Culturally Responsive and Equitable Evaluation (CREE):** Evaluation that incorporates cultural, structural, and contextual factors (e.g., historical, social, economic, racial, ethnic, gender) using a participatory process that shifts power to individuals most impacted.

**Disability Adjusted Years of Life:** The disability-adjusted life year (DALY) is a measure of overall disease burden. One DALY represents the loss of the equivalent of one year of full health. DALYs for a disease or health condition are the sum of years of life lost due to premature mortality and years of healthy life lost due to disability from cases of the disease or health condition in a population.

**Evidence-based practices:** Interventions that are guided by the best research evidence with practice-based expertise, cultural competence, and the values of the persons receiving the services, that promote individual-level or population-level outcomes.

Fidelity: The extent to which an intervention is delivered as conceived and planned.

**Formative evaluation:** An evaluation that assesses the readiness of an organization or community to implement the intervention, articulates a theory of change, and determines the extent to which evaluators can assess an intervention in a reliable and credible fashion.

**Health inequities:** Differences in health status or in the distribution of healthcare and other resources between different population groups or geographic areas, arising from the social conditions in which people are born, grow, live, work, and age.

Heavy drinking: Consuming eight or more standard drinks per week for a woman, or 15 or more standard drinks per week for a man.

**Impact evaluation:** An evaluation that assesses an intervention's effectiveness in achieving its ultimate goals. Impact evaluations determine whether, and sometimes the extent to which, the newly implemented intervention led to changes in desired and unexpected outcomes.

**Indicators:** Quantitative or qualitative metrics that provide information to monitor performance, achievement, and accountability.

Intervention: A program, initiative, service, or policy designed to reduce excessive alcohol use and related harms.

**Lived experience:** Personal knowledge gained through direct, first-hand involvement. In the context of this report, lived experience refers to individuals who have experienced mental illness, substance use or substance use disorder, or homelessness.

**Male/female:** Terms used for an individual's sex assigned at birth based on physiological characteristics, including genitalia and chromosome composition.

**Man/woman:** Two genders with which a person may self-identify. Gender is a spectrum, in that there are many identities, and may include transgender, non-binary, or gender neutral.

**Minimum pricing:** A policy that sets a minimum price based on the amount of a specific alcoholic beverage type, regardless of alcohol content within that beverage (such as a liter of beer, wine, or liquor). For example, a 25-ounce bottle of wine that is 10 percent ABV will have the same minimum price as a 25-ounce bottle of wine that is 12 percent ABV.

**Minimum unit price:** A policy that sets a minimum price based on the amount of alcohol. Setting a minimum unit price makes stronger alcohol products more expensive. Retailers cannot sell alcohol for less than that price no matter where they are selling (e.g., bar, restaurant, liquor store).

**Nuisance ordinances:** Local ordinances that allow jurisdictions to regulate alcohol retailers who are consistently cited for their business practices, such as extensive advertising, loitering, or crime at their establishment.

Off-premises: Alcohol purchased through liquor, grocery, convenience, and other stores for consumption off-site.

On-premises: Alcohol served in bars and restaurants for consumption in these locations.

**Outcome evaluation:** An evaluation that collects baseline data and data at defined intervals (e.g., annually) during and after implementation of the intervention, to assess short- and long-term outcomes related to the targeted behaviors.

**Process (implementation) evaluation:** An evaluation that assesses the quality of an intervention's implementation and conditions that facilitate or create barriers to successful implementation. Process evaluation enables program managers and policymakers to assess whether they have implemented the intervention as planned, and whether and to what extent it reached the intended audience.

**Social determinants of health:** Conditions in the environments where people are born, live, learn, work, play, worship, and age that affect health.

**Social media influencer:** Individuals or groups who have a reputation as having expertise on certain topics, such as food, fashion, music, or pop culture. Influencers, who may be paid by commercial interests such as alcohol marketers, make regular posts on social media to generate interactions, and promote product purchasing by their large base of followers.

**Stakeholders:** Individuals, organizations, or communities that have a direct interest in the process and outcomes of a project, research, or policy endeavor/initiative.

**Standard drink:** One "standard" drink (or one alcoholic drink equivalent) contains roughly 14 grams of pure alcohol, which is found in 12 ounces of regular beer (usually about 5 percent alcohol); 5 ounces of wine (typically about 12 percent alcohol); 1.5 ounces of distilled spirits (about 40 percent alcohol).

**Substance misuse:** Use of any substance in a manner, situation, amount, or frequency that can cause harm to users or those around them. For some substances or individuals, any use would constitute misuse (e.g., underage drinking, injection drug use).

Substance use: Use—even one time—of alcohol or other drugs.

**Sustainability:** The process of building an adaptive and effective prevention system that achieves and maintains desired long-term results.

Transgender: Individuals whose gender identity differs from the sex they were assigned at birth.

**Under-resourced communities:** Population groups or geographic areas that experience greater obstacles to health, based on characteristics such as, but not limited to, race/ethnicity, socioeconomic status, age, gender, disability status, historical traumas, sexual orientation/gender identity, and/or location.

Universal interventions: Prevention efforts that focus on all people in a population.

## **APPENDIX 1: Acknowledgments**

This guide is based on the thoughtful input of SAMHSA staff and the Technical Expert Panel on Implementing Community-Level Policies to Reduce Alcohol Misuse from October 2021 through June 2022; two expert panel meetings were convened during this time.

#### **SAMHSA Staff**

**Brian Altman, JD**, National Mental Health and Substance Use Policy Laboratory

**Robert Baillieu, MD, MPH,** Center for Substance Abuse Treatment \*

**Jerry Campbell,** Center for Substance Abuse Prevention \*

**Tanya Geiger, PhD, MPH,** Center for Behavioral Health Statistics and Quality \*

**Kirk James, MD,** Center for Substance Abuse Treatment \*

**CAPT Donelle Johnson,** PhD, MHSA, National Mental Health and Substance Use Policy Laboratory \*

Krishnan Radhakrishnan, MD, PhD, MPH, National Mental Health and Substance Use Policy Laboratory \*

**Robert Vincent, MSEd,** Center for Substance Abuse Prevention \*

#### **Technical Expert Panel**

**Tom Babor, PhD, MPH,** University of Connecticut School of Medicine

Ruben Baler, PhD, National Institute on Drug Abuse

**Gregory Bloss, MA, MPP,** Division of Epidemiology and Prevention Research, National Institute on Alcohol Abuse and Alcoholism Marissa Esser, PhD, MPH, Alcohol Program, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Tiffany Hall, MPA, Recover Alaska

Beth Han, MD, PhD, MPH, National Institute on Drug Abuse

**David Jernigan, PhD,** Boston University School of Public Health

Elisabeth Kato, MD, MRP, Agency for Healthcare Research and Quality

Bill Kerr, PhD, Alcohol Research Group

Juliet Lee, PhD, Prevention Research Center, Pacific Institute for Research and Evaluation

Rod Robinson, MA, MAC, LAT, Bureau of Indian Affairs

Michael Sparks, MA, SparksInitiatives

#### **Contract Staff**

Alicia Sparks, PhD, MPH, Guide Lead, Abt Associates \* \*Members of Guide Planning Team

Photos are for illustrative purposes only. Any person depicted in a photo is a model.

Publication No. PEP22-06-01-006



SAMHSA's mission is to reduce the impact of substance use and mental illness on America's communities. 1-877-SAMHSA -7 (1-877-726-4727) •1-800-487-4889 (TDD) • www.samhsa.gov