

# CATALOG OF EVIDENCE-BASED ENVIRONMENTAL STRATEGIES TO PREVENT UNDERAGE DRINKING IN HAWAI'I

Adapted with Permission from
Catalog of Environmental Prevention Strategies
by University of Wyoming—Wyoming Survey & Analysis Center

August 31, 2017 Revised October 12, 2018

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# Catalog of Evidence-Based Environmental Strategies to Prevent Underage Drinking in Hawai'i

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Adapted with permission from

Catalog of Environmental Prevention Strategies †

(WYSAC Report DER-1248)

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† The original catalog was created and is owned by the University of Wyoming—Wyoming Survey & Analysis Center and the Wyoming Department of Health, and is being used with their permission. Unauthorized use of any tools in whole or in part without express permission is prohibited. Wyoming's catalog included environmental prevention strategies for alcohol, tobacco, and other drugs, and presented policies and practices specific to Wyoming.

\* Adaptations to this catalog included presenting policies and practices specific to Hawai'i, reassessing alcohol-related prevention strategies based on latest research, and adding two strategies, namely "Use & Lose Laws" and "Restrict Alcohol Advertising on Off-Premise Retail Outlets." The authors assume all responsibilities for the contents of this publication. For questions or feedback, please email <a href="mailto:SPFhi@hawaii.edu">SPFhi@hawaii.edu</a>.

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### **Background**

Use of alcohol imposes a huge burden on the state of Hawai'i. Increasing community efforts to combat the issue, Hawai'i Department of Health, Alcohol and Drug Abuse Division (ADAD) received the Strategic Prevention Framework Partnerships for Success (SPF-PFS) Grant from the Substance Abuse and Mental Health Services Administration. Hawai'i PFS is a multi-year project for enhancing local substance abuse prevention system and addressing underage drinking prevention via an environmental approach. This catalog aims to provide information on the effectiveness of environmental strategies for underage drinking prevention.

#### Description of work

This catalog is adapted from the Catalog of Environmental Prevention Strategies of the Wyoming Survey & Analysis Center (WYSAC) at the University of Wyoming, published in October 2012, under contract to the Public Health Division of the Wyoming Department of Health. The WYSAC's catalog contains a comprehensive collection of environmental prevention strategies that address alcohol and substance abuse issues. The easy-to-use catalog presents the effectiveness of each strategy based on literature review and provides related information on Wyoming policies where available.

The University of Hawai'i, Center on the Family, received permission from The Wyoming Survey & Analysis Center (WYSAC) by representatives Humphrey Costello and Rodney Wambeam to update its catalog for use with Hawai'i's Partnerships for Success project. This catalog focuses solely on underage drinking prevention and is updated with new evidence from the latest literature and related Hawai'i policies and practices where available.

#### **Environmental strategies for prevention**

Environmental prevention strategies focus on changing aspects of the environment that contribute to the use of underage drinking including, but not limited to, norms tolerant of use and abuse, policies enabling use and abuse, lack of enforcement of laws designed to prevent use and abuse, and inadequate negative sanctions for use and abuse. Environmental prevention strategies can change public laws, initiate policies and influence practices to create environments that decrease the probability of substance use in the general population (SAMHSA, 2010; Wisconsin Clearinghouse for Prevention Resources, n.d.).

Altering the environment can affect both the availability of alcohol and the norms surrounding substance use and abuse. Research evaluating the effectiveness of specific environmental strategies, as well as multi-component interventions, has shown that environmental prevention strategies can be effective (Surgeon General's Report, 2016; Barbour et al., 2003; Community Guide, 2011).

#### **Causal Domains**

Following the path-breaking work of Birckmayer, Holder, Yacoubian, and Friend (2004), environmental strategies are organized by the pertinent causal domain from the general causal domain prevention model, made up of seven domains. These include availability (economic availability, retail availability, social availability), community norms, enforcement, promotion and media, and individual factors (which are not included in this catalog). The general causal model is intended to assist prevention professionals by helping explain the complexities associated with underage drinking and illuminate multiple intervention points within the system (Birckmayer et al., 2004). The following section contains a description of each causal domain.

#### **Availability**

Disrupting the availability of alcohol is one way to prevent underage drinking. If a substance is not available, the substance cannot be used and problems associated with use are likely to diminish. The availability of alcohol depends on its price, its supply through retail means, and the supply of alcohol through other social outlets, such as family and friends (Birckmayer et al., 2004). Thus, availability is further broken down into three separate domains: economic availability, retail availability, and social availability. While these domains are dynamic, individually they each provide a potential point of intervention to prevent underage drinking.

#### Economic availability

As a general rule, the demand for a good is dependent on the price of the good. The demand for some goods is extremely sensitive to price, whereas the demand for other goods remains relatively stable despite fluctuations in price. In the case of alcohol, there is a wide range of evidence from econometric research that demonstrates price is strongly associated with alcohol use and related problems. A higher price is associated with lower use (Birckmayer et al., 2004). Environmental prevention strategies that focus on increasing the price of alcohol are categorized under economic availability.

#### Retail availability

Retail availability refers to the accessibility of alcohol through retail markets, which include formal markets such as restaurants, bars, and other legal venues, as well as illegal markets such as unlicensed businesses (Birckmayer et al., 2004). Restricting retail availability limits consumers' access to alcohol, thereby limiting use. Restricting retail availability can be achieved through multiple environmental prevention strategies. Strategies that impose restrictions on the purchaser include requiring a minimum age for purchase of alcohol or entry into retail outlets. Prevention strategies targeting the physical availability of alcohol within retail markets include limiting the density of retail outlets, restricting the hours of retail operation and limiting conditional use permits. Finally, prevention strategies may also restrict the seller/server of the substance through liability laws and seller/server training requirements.

#### Social availability

Social availability refers to the procurement of alcohol through "social" sources outside of retail markets, including family, friends, and other acquaintances (Birckmayer et al., 2004). Unlike retail availability, social availability does not rely on the exchange of money or goods for the product and is not regulated at the state or local level. Therefore, interventions that are effective in the retail market may not be effective in social markets. Examples of environmental prevention strategies that aim to restrict social availability are social host laws. Because social availability of a substance occurs outside regulated markets, it is much more difficult to measure the amount of product available and the extent to which it is reaching the consumer.

#### **Enforcement**

Public policies, laws, and regulations governing alcohol availability, promotion, and use rely on active enforcement for effective implementation. Enforcement may include surveillance of alcohol sales at retail outlets, graduated license policies, issuing penalties and fines for violations, community policing of local ordinances, and providing incentives for upholding alcohol-related policies. While it remains unclear whether actual enforcement or simply the perceived threat of enforcement motivates individuals to comply with laws related to alcohol, research shows that as the likelihood of detection, arrest, and/or citation increases, so does compliance (Birckmayer et al., 2004). Enforcement prevention strategies take many forms. Strategies focused on impaired driving include the use of sobriety checkpoints, and zero tolerance of blood alcohol concentration laws for those under age 21. Enforcement efforts aimed at preventing underage drinking include compliance checks and graduated license policies. Enforcement policies focused on the prevention of alcohol use and abuse are associated with increased reductions in alcohol use and related problems (Birckmayer et al., 2004).

#### Promotion and media

In addition to availability, use of alcohol is influenced by promotion of substance use and abuse in the media. Here, promotion refers to increased consumer exposure to a product through advertisements, discounts, and/or event sponsorship. For example, many alcohol companies depict enjoyable use of their product through different promotional methods in order to recruit new users and retain current users, while improving attitudes about overall product use (Birckmayer et al., 2004). Environmental prevention strategies can impose restrictions on the promotion of alcohol and can use monitoring data of alcohol promotions to advocate for restrictions. Restrictions can limit where advertisements are located, including restrictions in public places, sporting and other community events sponsorships, and on the exterior of off-premise outlets, the type of media used to display the advertisement, and when the advertisements are viewed. Environmental prevention strategies may also include the use of counter-marketing campaigns and media literacy. Mitigating the promotion of alcohol provides a point of intervention beyond the scope of availability.

#### **Community norms**

Norms shape the level of acceptance of alcohol within a community. This level of community acceptance is translated into individual use of the substance through the collective desire to conform to social and group norms (Birckmayer et al., 2004). Norms can vary across different social groups and may reflect differing levels of acceptable substance use between social groups. Public policies, laws, and regulations are based on norms and ultimately affect the availability and promotion of substances within a community (Birckmayer et al., 2004). In this way, the availability, promotion, and norms surrounding alcohol all interact to determine the level of use and associated problems within a community. Active coalition building is one example of an environmental prevention strategy that focuses on changing community norms around the use of alcohol. For example, a key component of Communities Mobilizing for Change on Alcohol (CMCA), a community-organizing program designed to reduce teens' access to alcohol, is to communicate a clear message to the community that underage drinking is inappropriate and unacceptable (NREPP, 2012). While it remains difficult to accurately measure community norms surrounding underage drinking, more research is necessary to determine the link between community norms and underage drinking.

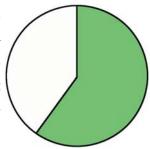
#### **Individual factors**

Individual factors make-up the seventh, and final, domain in the general causal domain model. However, because the objective of this catalog is to assess environmental prevention strategies, strategies that target individual factors are not included in this document.

# How to Use This Document

This version of the catalog is adapted for use in Hawai'i for coalitions and prevention professionals interested in selecting evidence-based environmental prevention strategies targeting underage drinking.

Each strategy entry includes a strategy name, description of the strategy, and discussion of effectiveness. An easy-to-read composite indicator displays the level of effectiveness and strength of the evidence based on the available literature. In the example on the right, the green color indicates "effective," and a 5/8 pie indicates that the evidence was based on numerous studies. More details on how to read the composite indicator are provided on pages 10–12.



Most strategies also include a description of the related Hawai'i law. Each entry also has a table that shows the domain about each strategy.

The back page of each catalog entry lists references for the evidence base and suggestions for further reading to help community prevention professionals learn more about specific strategies when making a decision about which strategies to implement in their communities.

Finally, this catalog presents information current at the time of publication, but research on prevention continues to be published; similarly, prevention strategies employed in Hawai'i change and evolve. The authors welcome feedback and information that would help us update the catalog in the future.

### Assessing the Strength of the Evidence

#### Approach for literature review

WYSAC researchers began the literature review by searching for environmental prevention strategies indexed in the Cochrane database, the National Registry of Evidence-based Programs and Practices (NREPP) registry, and *The Community Guide to Preventive Services*. If a systematic review could be located in any one of these sources, researchers moved on to review the next strategy. If no evidence could be located, they continued by searching The MayaTech Corporation's *Environmental Strategies Selection Guide* for relevant articles (Pettibone, Kowalczyk, & Laestadius, 2006). Again, if no evidence could be located, they searched databases: PubMed/Medline, CINAHL (EBSCOhost), and PsycInfo (EBSCOhost). If they still did not have sufficient evidence, they searched Google Scholar and retrieved the most up-to-date, and highly-cited articles. Finally, in the event that no articles or literature could be located, they performed a Google search for grey literature.

In an effort to locate the most prominent and recent publications, researchers searched for articles published after 1999. However, if no articles were located, they looked further back in the literature. This review process was not designed to be an exhaustive search of the literature, but to find the most prominent, current articles on each strategy.

The Center on the Family team searched for more current literature and began with the Surgeon General's report (2016), *The Community Guide, Alcohol: No ordinary commodity* book (2010), the Maryland Collaborative to reduce college drinking and related problems (2013), and through PubMed/Medline.

#### **Evidence sources**

O No evidence found

This evidence category indicates that there is inadequate research to evaluate the effectiveness of the strategy. A strategy with no evidence may be relatively new and not yet evaluated, or the peer-reviewed articles on the strategy may lack quantitative analysis of outcomes.

Grey literature

Grey literature refers to written material that is produced by an institute and/or organization that has not been published in peer-reviewed, academic journals.

Single published study

This evidence category refers to a single published study that appeared in a peer-reviewed, academic journal.

Numerous published studies

This evidence category refers to strategies with evidence from multiple studies that have appeared in peer-reviewed, academic journals.

Systematic review

A systematic review is a critical assessment and evaluation of all research studies that address a particular issue (US Department of Health and Human Services, n.d.). In most cases, researchers use an organized method of locating, assembling, and evaluating a given body of literature on a particular topic using a set of specific criteria (US Department of Health and Human Services, n.d.).

### Assessing the Strength of the Evidence

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#### Meta-analysis

Meta-analysis refers to a method of combining data from multiple research studies that is similar to a systematic review, but which includes a statistical process that combines findings from individual studies (US Department of Health and Human Services, n.d.).



#### Cochrane Review

Cochrane Reviews are systematic reviews published by the Cochrane Collaboration—an international network of healthcare professionals that prepares, maintains, and promotes the accessibility of systematic reviews on a range of health topics. Cochrane Reviews cover primary research in human health care and health policy, and are internationally recognized as the highest standard in evidence-based health care (The Cochrane Collaboration, 2012).

#### Community Guide

The Guide to Community Preventive Services (The Community Guide) is a resource for information on evidence -based prevention strategies, recommendations, and findings about what works to improve public health. The Community Guide represents a credible resource based on a scientific systematic review process that provides answers to questions that are critical to public health (The Guide to Community Preventive Services, 2012).



#### **NREPP**

The National Registry of Evidence-based Programs and Practices (NREPP) is a service of the Substance Abuse and Mental Health Services Administration (SAMHSA) that provides a searchable online registry of mental health and substance abuse interventions that have been reviewed and rated by independent reviewers. The purpose of NREPP is to assist the public in identifying scientifically-based approaches to preventing and treating mental and/or substance use disorders that can be readily disseminated to the field (National Registry of Evidence-base Programs and Practices, 2012).

Two additional sources are also key in finding the effectiveness of environmental strategies. These are the 2010 book *Alcohol. No ordinary commodity: Research and public policy* and the Surgeon General's 2016 report, *Facing addiction in America: The Surgeon General's report on alcohol, drugs, and health.* 

# Assessing the Effectiveness of the Evidence

#### Indicator of effectiveness

After performing the literature review, WYSAC researchers found that multiple studies evaluating the same strategy often had different research designs, and/or evaluated different substances, age groups/populations, and outcomes. Some studies evaluated strategies individually, whereas others evaluated strategies as part of multi-component interventions that included several additional strategies. Therefore, they had to determine a way to assess the effectiveness of the evidence that could account for variations in how the strategies were evaluated.

To address the complexity of evaluating the effectiveness of the evidence, researchers developed a color-coded indicator. The color of the indicator represents the effectiveness of the strategy based on the available literature. The following provides a description of each color-indicator:



A green indicator implies that for the specific substance, population, and/or outcome evaluated in the literature, the strategy was found to have a statistically significant (p<.05) effect in the desired direction.

# Varied evidence of effectiveness

A yellow indicator implies that the evidence base has varied results regarding the effectiveness of the strategy. For example, research may support the effectiveness of the strategy when used for one substance, but not for another, or for one population, but not another. Additionally, research may support the effectiveness of the strategy when evaluated for one outcome, but not for another. A yellow indicator may also signal that the strategy was found to be effective as part of a multi-component intervention, but not as a stand alone approach, or vice versa. A strategy with a yellow indicator implies further investigation is necessary to determine if the strategy is effective for the desired substance, outcome, and/or population.

# Not effective

A red indicator implies that the strategy was not found to have a significant effect in the desired direction for any of the substances, outcomes, and/or populations reviewed in the evidence base.

Although the indicator is intended to reflect the effectiveness of a given strategy based on the most-prominent and current literature available, it should not be viewed as a static, unchanging symbol indicating the usefulness of all environmental prevention strategies. When selecting a prevention strategy, a prevention professional must consider the level of readiness of their community, the cost-effectiveness of each strategy, and the current prevention programming available in their community. We hope this catalog serves as a first step toward identifying evidence-based environmental prevention strategies that may work within a specific community for a specific goal.

# REFERENCES

- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., . . . Rossow, I. (2010). *Alcohol: no ordinary commodity: research and public policy*. (2nd ed.). New York, NY: Oxford University Press.
- Birckmayer, J.D., Holder, H.D., Yacoubian, G.S., & Friend, K.B. (2004). A general causal model to guide alcohol, tobacco, and illicit drug prevention: Addressing the research evidence. *Journal of Drug Education*, *34*(2):121-153.
- The Cochrane Collaboration. (2012). About Us. Retrieved from: http://www.cochrane.org/about-us
- Guide to Community Preventive Services. (2011). Preventing excessive alcohol consumption: enhanced enforcement of laws prohibiting sales to minors. Retrieved from: www.thecommunityguide.org/alcohol/ lawsprohibitingsales.html
- Guide to Community Preventive Services. (2011). Preventing excessive alcohol consumption: regulation of alcohol outlet density. Retrieved from: www.thecommunityguide.org/alcohol /outletdensity.html
- Guide to Community Preventive Services. (2011). Reducing alcohol-impaired driving: maintaining current minimum legal drinking age laws. Retrieved from: https://www.thecommunityguide.org/findings/motor-vehicle-injury-alcohol-impaired-driving-maintaining-current-minimum-legal-drinking-age
- Guide to Community Preventive Services. (2012). What is The Community Guide? Retrieved from: http://www.thecommunityguide.org/about/index.html
- Maryland Collaborative to Reduce College Drinking and Related Problems. (2013). Reducing alcohol use and related problems among college students: a guide to best practices. Retrieved from: http://marylandcollaborative.org/resources/best-practices/
- National Registry of Evidence-based Programs and Practices. (2012). Communities mobilizing for change on alcohol (CMCA). Retrieved from: https://www.crimesolutions.gov/ProgramDetails.aspx?ID=269
- Pettibone, K., Kowalczyk, S., & Laestadius, L. (2006). Environmental strategies: selection guide, reference list, and examples of implementation guidelines. Retrieved from: http://www.drugs.indiana.edu/spf/docs/ENV\_ST.Environmental%20Strategies%20Binder.pdf
- Substance Abuse and Mental Health Services Administration. (2010). Frequently asked questions: capacity building for substance abuse (SA) and HIV prevention services for at-risk racial/ethnic minority young adults. Retrieved from: https://www.samhsa.gov/grants/grant-announcements/sp-16-004
- 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. Retrieved from: https://addiction.surgeongeneral.gov/surgeon-generals-report.pdf
- US Department of Health and Human Services. (n.d.). Effective health care program, glossary of terms: Meta-analysis. Retrieved from: http://effectivehealthcare.ahrq.gov/glossary-of-terms/?pageaction=showterm&termid=39.
- Wechsler, H., Lee, J., Nelson, T. F., & Kuo, M. (2002). Underage college students' drinking behavior, access to alcohol, and the influence of deterrence policies. *Journal Of American College Health*, 50(5), 223
- Wisconsin Clearinghouse for Prevention (n.d). Environmental strategies. Retrieved from: http://wch.uhs.wisc.edu/01-Prevention/01

# REFERENCES FOR UNDERAGE DRINKING LAWS & POLICIES: HAWAI'I

The following are sources to learn about current Hawai'i laws, rules, and policies pertaining to alcohol and underage drinking.

- The **Hawai'i State Legislature** webpage allows users to search the Hawai'i Revised Statutes by law number or keyword. http://www.capitol.hawaii.gov/
- Each county's **Liquor Commission** website offers much information online. For example, the Honolulu Liquor Commission offers a downloadable pdf file of Hawai'i state laws related to alcohol as well as another document on the Honolulu Liquor Commission rules pertaining to alcohol in Honolulu County. If you can't find what you need from the county liquor commission's website, you can contact them to request information.

Honolulu Liquor Commission: https://www.honolulu.gov/liq.html

Maui Liquor Control Commission: http://co.maui.hi.us/186/Liquor-Control-Commission

Kaua'i Department of Liquor Control: http://www.kauai.gov/Liquor

Hawai'i (County) Department of Liquor Control: http://www.hawaiicounty.gov/liquor-control/

 National Institute on Alcohol Abuse and Alcoholism's (NIAAA) Alcohol Policy Information System (APIS) dataset (2013).

The Alcohol Policy Information System (APIS) provides detailed information on a wide variety of alcohol-related policies in the United States at both State and Federal levels. Detailed state-by-state information is available for alcohol-related policies. APIS also provides a variety of informational resources of interest to alcohol policy researchers and others involved with alcohol policy issues.

https://alcoholpolicy.niaaa.nih.gov/Home.html

• STOP Act report (Sober Truth On Preventing Underage Drinking)

This 2015 report includes the results of the STOP Act survey for Hawai'i (and also the rest of the U.S.) about our laws, policies, drinking prevention programs, and enforcement, including dram shop liability and social host civil liability.

The report also highlights updated epidemiological data about underage drinking in America and about the activities of federal agencies working for underage drinking prevention.

- Substance Abuse and Mental Health Services Administration's (SAMHSA) Report to Congress on the Prevention and Reduction of Underage Drinking. Volume 1 (December 2015). https://www.stopalcoholabuse.gov/media/ReportToCongress/2015/report\_main/2015\_RTC\_Volume\_I.pdf
- Insurance Institute for Highway Safety (IIHS) (2013)

This website provides information about graduated driver licenses (GDL), requirements by state, and a GDL crash reduction calculator. http://www.iihs.org/iihs/topics/laws/graduatedlicenseintro

# List of Environmental Strategies for Underage Drinking Prevention

Strategy Name	Indicator	Used in HI	Page #
Economic Availability			
Increasing Price or Taxes on Alcohol		✓	17
Restricting Happy Hours/Discounts		Х	19
Retail Availability			
Administrative Penalties/License Sanctions		✓	21
Checking ID for Alcohol Sales		✓	23
Commercial Host (Dram Shop)/Beverage Servers' Legal Liability		✓	25
Conditional Use Permits/Land Use Ordinances for Alcohol Outlets		Х	27
Limiting Density and Restricting the Location of Alcohol Retail Outlets		✓	29
Minimum Age of Bartender		✓	31
Responsible Beverage Service Training		✓	33
Social Availability			
Social Host Liability		Х	35
Community Norms			
Communities Mobilizing for Change on Alcohol		✓	37

# LIST OF ENVIRONMENTAL STRATEGIES FOR UNDERAGE DRINKING PREVENTION

Strategy Name	Indicator	Used in HI	Page #
Enforcement			
Appropriate Penalties for Minors in Possession of Alcohol		✓	39
Compliance Checks of Alcohol Retailers		✓	41
Minimum Age of Purchase for Alcohol		✓	43
Policies to Reduce Drinking and Driving/ DUI Enforcement			
Graduated Driver's License Policies		✓	45
Sobriety Checkpoints		✓	47
Use & Lose Laws		<b>√</b>	49
Zero Tolerance Laws/Blood Alcohol Concentration		✓	51
Youth Exposure to Alcohol Advertising and Promotions			
Counter-Advertising Campaign with Youth Participation		✓	53
Media Literacy		✓	55
Restrict Alcohol Advertising on Off-Premise Retail Outlets		✓	57

# INCREASING PRICE OR TAXES ON ALCOHOL

#### **Description of Strategy**

Interventions to increase the price for alcohol products through municipal, state, or federal legislation raise the excise tax on these products. Alcohol excise taxes affect the price of alcohol and are intended to reduce alcohol-related harms, raise revenue, or both. Alcohol taxes are implemented at the state and federal level, and are beverage-specific (i.e., they differ for beer, wine, and spirits). These taxes are usually based on the amount of beverage purchased (not on the sales price), so their effects can erode over time due to inflation if they are not adjusted regularly (Guide to Community Preventive Services, 2007).

Recommendations for an ideal tax policy would include taxes to be 33%-50% of total price, or if taxes were based on ethanol content (Nelson et al., 2013). Other strategies include increasing liquor licensing fees for retailers and infraction penalties for violations of alcohol laws and regulations (Hoover, 2005). Evidence generally supports that increasing alcohol taxes can result in net cost savings (SAMHSA, 2016). The Institute of Medicine (2004) recommended the raising of taxes on alcohol to reduce underage consumption and raise revenues for underage drinking prevention as one of their top strategies. Raising the price of alcohol is recommended as evidence-based in the 2016 Surgeon General's report and Alcohol: No Ordinary Commodity (2010). Another strategy is to raise the price of the liquor license fees.

#### Hawai'i's Alcohol Pricing Policies

Source: the STOP report 2015.

Beer (5% alcohol): Specific excise tax is \$0.93/gallon. Note: \$0.54/gallon for containers of 7 gallons or more. Wine (12% alcohol): Specific excise tax: is \$1.38/gallon. Spirits (40% alcohol): Excise tax is \$5.98/gallon. Wholesale pricing restrictions exist for Beer, alcohol, wine, and spirits. The Retailer credit for beer, wine or spirits are restricted—30 days maximum.

Currently, Hawai'i has not raised liquor license fees in the past 12 years. However, with limited evidence on the effectiveness, it is undetermined as to how much the license fee would have to be raised to make a difference on the price of purchase of alcohol (M. Sparks, personal communication, June 2017).

#### **Discussion of effectiveness**

Evidence shows that raising the price of alcohol is effective in reducing excessive alcohol consumption, adolescent drinking, alcoholimpaired driving, and mortality from liver cirrhosis (Elder et al., 2010). Evidence supports a strong efficacy rating that raising the price of alcohol was strongly associated with adults and youth in regards to binge drinking and alcohol-impaired driving (Nelson et al., 2013). Studies reviewed for the Community Guide (2013) provided consistent evidence that increases in alcohol prices and alcohol taxes are associated with decreases in both excessive alcohol consumption and related harms. Although these effects were not restricted to a particular demographic group, there is some evidence that they apply to groups with a high prevalence of excessive alcohol consumption (e.g., young men).

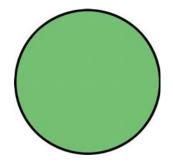
Evidence strongly supports youth are particularly price-sensitive; research on the impact of beer prices indicated reductions in underage and binge drinking in youth (University of Wisconsin Population Health Institute, 2017). Evidence supports that policies increase the price for distilled spirits shifts consumption to lower-alcohol content beverages, resulting in reduced amount of pure alcohol consumption (Babor et al., 2003).

Furthermore, setting a minimum price of alcohol is another effective way to reduce consumption. Evidence suggests that price increases for alcopops result in less consumption of alcopops by young drinkers from a few studies in other countries (Babor et al., 2010; Chikritzhs et al., 2009).

Target substance(s): Alcohol
Used in Hawai'i: Yes

Other names/examples: None

#### Indicator of Effectiveness and Strength of Evidence



#### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

#### Strength of evidence:

No evidence found
Grey literature
Single published study

**NREPP** 

Numerous published studies

Systematic review, meta-analysis

Cochrane Review, Community Guide,

Causal Domain

Economic availability

Retail availability

Social availability

Promotion & media

Enforcement

Community norms

# INCREASING PRICE OR TAXES ON ALCOHOL

#### References for description of strategy

- Community Preventive Services Task Force. (2013, September 24). Preventing excessive alcohol consumption: Increasing alcohol taxes. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/Alcohol-Increasing-Alcohol-Taxes 0.pdf
- National Research Council and Institute of Medicine. (2004). *Reducing underage drinking: a collective responsibility*. Washington, DC: The National Academies Press.

#### **Evidence** base

- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., . . . Rossow, I. (2010). *Alcohol: no ordinary commodity: research and public policy*. (2nd ed.). New York, NY: Oxford University Press.
- Chikritzhs, T.N., Dietze, P.M., Allsop, S.J., Daube, M.M., Hall, W.D. & Kypri, K. (2009). The "alcopops" tax: heading in the right direction. *Medical Journal of Australia 190*, 294-5.
- Elder, R. W., Lawrence, B., Ferguson, A., Naimi, T. S., Brewer, R. D., Chattopadhyay, S. K., . . . 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. https://doi.org/10.1016/j.amepre.2009.11.005
- Guide to Community Preventive Services. (2013, September 24). Preventing excessive alcohol consumption: increasing alcohol taxes. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/Alcohol-Increasing-Alcohol-Taxes\_0.pdf
- Nelson, T. F., Xuan, Z., Babor, T. F., Brewer, R. D., Chaloupka, F. J., Gruenewald, P. J., . . . Reynolds, R. (2013). Efficacy and the strength of evidence of US alcohol control policies. *American Journal of Preventive Medicine*, 45(1), 19-28. https://doi.org/10.1016/j.amepre.2013.03.008
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2016, September). Report to Congress on the prevention and reduction of underage drinking (Vol. 1). Retrieved from: https://media.saa.icfcloud.com/ReportToCongress/2016/report main/2016 RTC Volume%20I 508.pdf
- 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. Retrieved from: https://addiction.surgeongeneral.gov/surgeon-generals-report.pdf
- University of Wisconsin Population Health Institute, County Health Rankings and Roadmaps. (2017). Alcohol Taxes. Retrieved from http://www.countyhealthrankings.org/policies/alcohol-taxes
- 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
- Wagenaar, A. C., Salois, M. J., & Komro, K. A. (2009). Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies. *Addiction*, 104(2),179-190. https://doi.org/10.1111/j.1360-0443.2008.02438.x
- Weitzman, E. R., Nelson, T. F., & Wechsler, H. (2003). Taking up binge drinking in college: the influences of person, social group, and environment. *Journal of Adolescent Health*, 32(1), 26-35. https://doi.org/10.1016/S1054-139X(02)00457-3

#### **Further reading**

- Alcohol Justice (2011, July). Increasing alcohol taxes—myth v. reality. Retrieved from: http://alcoholjustice.org/images/stories/11MI0701\_taxmyth\_1.pdf
- Cook, P. J., & Moore, M. J. (2002). The economics of alcohol abuse and alcohol-control policies. *Health Affairs*, 21(2), 120–133. https://doi.org/10.1377/hlthaff.21.2.120

# RESTRICTING HAPPY HOURS/DISCOUNTS

#### **Description of strategy**

Drink promotions such as happy hour may contribute to the excessive and rapid consumption of alcohol. These practices include price reduction on certain drinks for a specific time period and theme nights where certain people receive free drinks. Happy hour restrictions aim to reduce alcohol availability through restriction of these promotional activities (WyPTAC, 2009).

#### Hawai'i Revised Statute (HRS)

Hawai'i state law does not literally refer to happy hour or drink specials, but applies statutes to regulate happy hours. Under HRS §281-78.5:

- (a) alcohol licensees are prohibited from engaging in practices that promote the excessive consumption of alcoholic beverages.
- (b) The various county liquor commissions are required to promote and enact regulations to prohibit practices that promote excessive alcohol consumption.
- (c) Any person who violates the section or any rule adopted by the commission pursuant to this chapter shall be guilty of a violation for each separate offense. Each date of violation shall constitute a separate offense.

From the Honolulu Liquor Commission for the County of Honolulu: §3-84-78.51. Practices to Promote Consumption of Liquor, Prohibited:

- (a) No licensee shall promote the **excessive** consumption of liquor, or sell or offer to sell any liquor to any person who appears to be intoxicated from excessive intoxicating liquor.
- (b) No **licensee** of any on-premises licensed to sell liquor for consumption shall: (1) Sell, advertise or offer to sell "all the liquor you can drink" for a fixed price. (2) Encourage or permit any game or contest that involves the consumption of liquor or the awarding of liquor as a prize.

**Check with the Liquor Commission of each county** for their rules related to happy hours, discounts, or promotion of excessive drinking.

#### Discussion of effectiveness

The limited evidence on the efficacy of happy hour restrictions is varied. Variations of effectiveness are dependent on the availability of alternative forms of cheaper alcohol (Babor et al., 2010).

The Maryland Collaborative, (2013) identified that most on and off campus alcohol outlets market happy hour to college students. When actively enforced, reducing or prohibiting these types of promotions can reduce alcohol problems among college populations. A study on underage college students who took advantage of happy hours, low priced or special promotions found "the more likely they report that they drink" (Paek & Hove, 2012). One study conducted in the Netherlands found higher levels of adolescent drinking when happy hour discounts were available (Van Hoof, van Noordenburg, & Jong, 2008). An early observational study did not find a significant difference in alcohol consumption before the happy hour ban compared to after the implementation of the happy hour ban (Smart & Adlaf, 1986).

A study focused on colleges in the United States, examined on and off-premise alcohol outlets near their campus residence found associations that low and frequent alcohol price promotions resulted in higher self-reports of binge drinking by college students (Kuo et al., 2002).

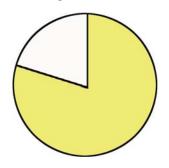
A systematic review found that restricting drink specials decreased excessive alcohol consumption and related problems decrease, especially among young adults when alcohol prices increase (University of Wisconsin Population Health Institute, 2014).

Another college study provided additional evidence that policies limiting happy hour and sale of beer by the pitcher in addition to higher beer excise tax reduced alcohol use among college students (Williams, Powell, Wechsler, 2002). The Institute of Medicine [IOM] recommended that colleges can implement protective measures through campus alcohol policies such as (restriction of kegs at oncampus parties), legal regulations, alcohol server training programs, and the restriction of low-cost alcohol promotions or "happy hours." Currently, other states and local governments have adopted policies limiting price -related promotions in on-premise establishments (IOM, 2004).

Target substance(s): Alcohol
Used in Hawai'i: No

Other names/examples: None

#### Indicator of Effectiveness and Strength of Evidence



#### Indicator of effectiveness:

Not effective

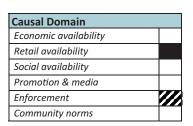
Varied evidence of effectiveness

Effective

#### Strength of evidence:

NREPP

No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis
Cochrane Review, Community Guide,



# RESTRICTING HAPPY HOURS/DISCOUNTS

#### References for description of strategy

- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., . . . Rossow, I. (2010). Alcohol: no ordinary commodity: research and public policy. (2nd ed.). New York, NY: Oxford University Press.
- City and County of Honolulu. (2017, April 3). *Rules of the Liquor Commission*. Retrieved from: http://www.honolulu.gov/rep/site/bfsliq/rules/LIQ\_Rules\_Website\_Version\_032717.pdf
- WyPTAC. (2009). Wyoming's prevention framework to reduce the misuse of alcohol: community implementation workbook. Laramie, WY: Wyoming Prevention Technical Assistance Consortium.

#### **Evidence** base

- Maryland Collaborative. (2013). Reducing alcohol use and related problems among college students: a guide to best practices. College Park:

  Maryland Department of Health and Mental Hygiene. Retrieved from: http://marylandcollaborative.org/content/uploads/Guide-to-Best-Practice\_FINAL.pdf
- Paek, H.J. & Hove, T. (2012). Determinants of underage college student drinking: implications for four major alcohol reduction strategies. *Journal of Health Communication*, *17*(6):659-676. http://doi.org/10.1080/10810730.2011.635765
- Roberts, M. (2006). Prevention tactics: Underage binge drinking: a community's problem, a community's solution. Community Prevention Institute, 8(14). Retrieved from: http://www.cars-rp.org/publication/underage-binge-drinking/
- Smart, R. G., & Adlaf, E. M. (1986). Banning happy hours: the impact on drinking and impaired-driving charges in Ontario, Canada. *Journal of Studies on Alcohol*, 47(3), 256–258. https://doi.org/10.15288/jsa.1986.47.256
- University of Wisconsin Population Health Institute, County Health Rankings and Roadmaps. (2017). Drink special restrictions. Retrieved from: http://www.countyhealthrankings.org/policies/drink-special-restrictions
- Van Hoof, J., Van Noordenburg, M., & de Jong, M. (2008). Happy hours and other alcohol discounts in cafés: prevalence and effects on underage adolescents. *Journal of Public Health Policy*, *29*(3), 340–352. https://doi.org/10.1057/jphp.2008.2
- Wechsler, H., Lee, J., Nelson, T. F., & Kuo, M. (2002). Underage college students' drinking behavior, access to alcohol, and the influence of deterrence policies. *Journal Of American College Health*, *50*(5), 223. https://doi.org/10.1080/07448480209595714

#### **Further reading**

National Highway Traffic Safety Administration. (2005, February). Preventing over-consumption of alcohol-sales to the intoxicated and "happy hour" (drink special) laws. Retrieved from: http://www.nllea.org/documents/PreventingOverconsumptionNHTSA.pdf

# ADMINISTRATIVE PENALTIES/LICENSE SANCTIONS

#### **Description of strategy**

An administrative penalty is a legal mechanism that allows a local governing body to penalize alcohol license holders for failing to comply with state laws or local ordinances relating to the sales of alcohol. It usually involves a monetary fine or the suspension or revocation of an alcohol license. In Hawai'i, it is administered by the county liquor commission or adjudication board, rather than the court system. It is imposed upon the license holder.

Administrative penalties are intended to provide an alternative enforcement mechanism that is more cost-effective, timely and practical than prosecuting servers and sellers through the court system. It provides an alternative to criminal prosecution, but does not necessarily replace criminal prosecution (some communities pursue both prosecution and administrative penalties). Administrative penalties can be written and passed as a local ordinance or state law (University of Minnesota Alcohol Epidemiology Program, 2011).

#### Hawai'i law

See Liquor Commission rules in each county to find out their sanctions for licensee violations. Some questions to consider: Are the sanctions—fines or suspension or revocation—higher for repeated offenses? What type of enforcement data does the Liquor Commission have for each county? These data and information on sanctions may inform future advocacy efforts.

The retailer has a defense to a charge of furnishing to a minor if, in making the sale or allowing the consumption of liquor by a minor. The retailer was misled by the appearance of the minor and the attending circumstances into honestly believing that the minor purchasing was of legal age, and if the retailer can prove that he or she acted in good faith—also known as affirmative defense. The retailer must prove this.

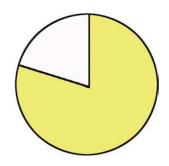
#### Discussion of effectiveness

There is limited evidence to evaluate the effectiveness of administrative penalties as an independent prevention strategy to prevent the sale of alcohol to underage youth. Evidence does suggest that graduated administrative penalties work as an enforcement mechanism for compliance checks and responsible beverage service training (Mosher, Toomey, Good, Harwood, & Wagenaar, 2002). However, this evidence was based on qualitative analysis and did not provide quantitative results.

Research does suggest, however, that graduated administrative penalties when combined with responsible beverage service training should be provided with active surveillance of training programs, monitor and track which licensees and servers have completed the training, and establish a framework for imposing penalties on violators through suspension or revocation of a certification or license to sell or serve alcohol (Wagenaar & Tobler, 2007).

Target substance(s): Alcohol
Used in Hawai'i: Yes
Other names/examples: None

#### Indicator of Effectiveness and Strength of Evidence



#### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

#### Strength of evidence:

No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis
Cochrane Review, Community Guide,
NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

# ADMINISTRATIVE PENALTIES/LICENSE SANCTIONS

#### References for description of strategy

- City and County of Honolulu. (2017, April 3). *Rules of the Liquor Commission*. Retrieved from: http://www.honolulu.gov/rep/site/bfsliq/rules/LIQ\_Rules\_Website\_Version\_032717.pdf
- University of Minnesota Alcohol Epidemiology Program. (2011). Policies to reduce commercial access to alcohol. Retrieved from: http://www.aep.umn.edu/wp-content/uploads/2012/04/Commercial-Access-Policies.pdf

#### **Evidence** base

- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., . . . Rossow, I. (2010). Alcohol: no ordinary commodity: research and public policy. (2nd ed.). New York, NY: Oxford University Press.
- Mosher, J. F., Toomey, T. L., Good, C., Harwood, E., & Wagenaar, A. C. (2002). State laws mandating or promoting training programs for alcohol servers and establishment managers: an assessment of statutory and administrative procedures. *Journal of Public Health Policy*, 90-113. https://doi.org/10.2307/3343120
- Sloan, F. A., Reilly, B. A., & Schenzler, C. (1994). Effects of prices, civil and criminal sanctions, and law enforcement on alcohol-related mortality. *Journal of Studies on Alcohol and Drugs*, *55*(4), 454. https://doi.org/10.15288/jsa.1994.55.454
- Wagenaar, A. C., & Wolfson, M. (1995). Deterring sales and provision of alcohol to minors: a study of enforcement in 295 counties in four states. *Public Health Reports*, 110(4), 419.
- Wagenaar, A. C., & Tobler, A. L. (2007). Alcohol sales and service to underage youth and intoxicated patrons: effects of responsible beverage service training and enforcement interventions. *Transportation Research Circular*, (E-C123), 141-163

#### **Further reading**

- Toomey, T. L., Lenk, K. M., & Wagenaar, A. C. (2007). Environmental policies to reduce college drinking: an update of research findings. *Journal of Studies on Alcohol and Drugs*, 68(2), 208. https://doi.org/10.15288/jsad.2007.68.208
- Toomey, T. L., & Wagenaar, A. C. (1999). Policy options for prevention: the case of alcohol. *Journal of Public Health Policy, 20*(2), 192–213. https://doi.org/10.2307/3343211
- University of Minnesota Alcohol Epidemiology Program. (2011). Policies to reduce commercial access to alcohol. Retrieved from: http://www.aep.umn.edu/wp-content/uploads/2012/04/Commercial-Access-Policies.pdf

# CHECKING IDS FOR ALCOHOL SALES

#### **Description of strategy**

Employees at retail outlets that sell alcohol are responsible for checking the identification of customers who attempt to purchase alcohol. Age identification policies are written guidelines at stores, bars, and restaurants that provide employees with instructions on checking age identification of customers attempting to buy alcohol to make sure they are age 21. Consistent use of these guidelines may reduce illegal sales of alcohol to underage youth by encouraging employees to refuse to sell to any customer who does not have a valid ID showing they are of age and by increasing employees detection of fake IDs (University of Minnesota Alcohol Epidemiology Program, 2009).

It is illegal for youth under age 21 to use fake identification (ID) to purchase alcohol—from the retailer side, from the makers/distributors of fake IDs, and their actual use by underage youth.

# Fake identification—support provisions for retailers

Several provisions help retailers to detect fake IDs better.

- Implementing incentives for retailers to use scanners.
- Appearance of licenses for persons under age 21 has a special appearance.
- Immediate confiscation of suspicious ID by the retailer.
- Right for the retailer to sue minor for using a fake ID.

Laws about checking identification are strong if the state allows for general or for an affirmative defense to retailers who sell alcohol to underage purchasers based on a mistaken assessment of the purchaser's age.

#### Hawai'i law

According to the STOP Act, Hawai'i law currently has an administrative license revocation and includes the following provisions for retailers:

 General affirmative defense: The retailer came to a reasonable decision when claiming the affirmative defense for selling alcohol to a minor. Inspection of an ID card is not required.  Licenses for drivers under age 21 are easily distinguishable from those for drivers age 21 and older (STOP Act report, 2015).

According to the Honolulu Liquor Commission for the County of Honolulu §281-101.5 section c — Prohibitions involving minors; penalty: No minor shall falsify any identification or use any false identification or identification of another person or of a fictitious person for the purpose of buying or attempting to buy liquor or for the purpose of obtaining employment to sell or serve liquor on licensed premises.

#### **Discussion of effectiveness**

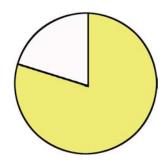
Studies which evaluated multicomponent alcohol prevention programs on college campuses found a significant reduction in alcohol access. Checking IDs for alcohol sales was a part of the program (Toomey, 2001; Wagenaar, 2000). The evidence is insufficient to evaluate checking IDs for alcohol sales as an independent prevention strategy.

The laws related to retailers and fake IDS used by those under age 21 are associated with an 11.9% decrease (statistically significant) in FARS ratios, which accounts for saving an estimated 301 lives nationally per year (Fell, Scherer, Thomas, & Voas, 2016). If all states had these laws, an estimated additional 40 lives per year potentially could be saved. These results were based on structural equation modeling of predictors on the outcome of FARS vehicular crash death ratios of drinking to non-drinking drivers under age 21.

The laws about fake IDs **for minors** was associated with a 5.3% decrease in beer consumption based on a structural equation modeling study (Fell, Scherer, Thomas, & Voas, 2016).

Target substance(s): Alcohol
Used in Hawai'i: Yes
Other names/examples: None

#### Indicator of Effectiveness and Strength of Evidence



#### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

#### Strength of evidence:

No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis
Cochrane Review, Community Guide, NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

This strategy is cross-referenced as both enforcement and to reduce retail availability.

# CHECKING ID FOR ALCOHOL SALES

#### References for description of strategy

- City and County of Honolulu. (2017, April 3). *Rules of the Liquor Commission*. Retrieved from: http://www.honolulu.gov/rep/site/bfsliq/rules/LIQ\_Rules\_Website\_Version\_032717.pdf
- University of Minnesota Alcohol Epidemiology Program. (2013). Checking age identification. Retrieved from: http://www.aep.umn.edu/wp-content/uploads/2012/04/comp\_check\_maunal\_updated\_2013.docx

#### **Evidence** base

- Fell, J. C., Scherer, M., Thomas, S., & Voas, R. B. (2016). Assessing the impact of twenty underage drinking laws. *Journal of studies on alcohol and drugs*, 77(2), 249-260. https://doi.org/10.15288/jsad.2016.77.249
- Substance Abuse and Mental Health Services Administration. (2016, September). Report to Congress on the prevention and reduction of underage drinking (Vol. 1). Retrieved from: https://media.saa.icfcloud.com/ReportToCongress/2016/report\_main/2016\_RTC\_Volume% 201\_508.pdf
- Toomey, T. L., Wagenaar, A. C., Gehan, J. P., Kilian, G., Murray, D. M., & Perry, C. L. (2001). Project ARM: Alcohol Risk Management to prevent aales to underage and intoxicated patrons. *Health Education & Behavior, 28*(2), 186–199.
- Wagenaar, A. C., Murray, D. M., Gehan, J. P., Wolfson, M., Forster, J. L., Toomey, T. L., ... Jones-Webb, R. (2000). Communities mobilizing for change on alcohol: outcomes from a randomized community trial. *Journal of Studies on Alcohol and Drugs, 61*(1), 85. https://doi.org/10.15288/jsa.2000.61.85

#### **Further reading**

National Association of Governors' Highway Safety Representatives. (2001). Community how to guides on underage drinking prevention: guide 5, enforcement. Washington, DC: National Highway Traffic Safety Administration. Retrieved from: http://www.nhtsa.gov/people/injury/alcohol/community%20guides%20html/Book5\_Enforcement.html#Shoulder%20tap

# COMMERCIAL HOST (DRAM SHOP)/BEVERAGE SERVERS' LEGAL LIABILITY

#### **Description of strategy**

Commercial host / Dram shop liability laws establish a drinking outlet's (owner or server) potential financial liability for serving alcohol to an intoxicated or underage person who later causes injury to a third party. Examples of harms may include death, injury or other damages.

Beverage servers' legal liability can be increased through dram shop liability laws.

Dram shop laws are strong if they are common law and/or statutory law.

Some states impose restrictions on dram shop liability by capping the amount of compensation allowed in suits, by increasing the evidence required to demonstrate responsibility, or by imposing statutes of limitations (Guide to Community Preventive Services, 2010). The laws are weaker if there are any limitations on who may be sued, or for limitations of recoverable amounts, or standards of proof, or imposing statutes of limitation.

Saltz (2011) suggested that coalitions could publicize liability lawsuits as a way to use awareness of exposure to liability as a motivator. One study found that after publicity about two lawsuits against on-premises alcohol outlets in 1983 and 1984, single-vehicle nighttime crashes decreased at least 5% (Wagenaar & Holder, 1991). Saltz also suggested working with insurance companies to define risk management and to offer discounts to on-premise outlets that comply with them.

#### Hawai'i law

Hawai'i has no state statutory liability. The courts recognize common law dram shop liability (STOP Act report, 2015).

Hawai'i Revised Statues Section 0281-0078 The person injured may file a private legal and civil litigation against the alcohol retailer for selling/serving alcohol to an individual while under the influence of liquor.

- a person under age 21
- a person is known to be a "habitual drunkard"
- a person who will consume the alcohol in a vehicle traveling on a public street.

#### **Discussion of effectiveness**

Evidence from the number and consistency of findings strongly support increasing beverage servers' legal liability/dram shop liability for preventing and reducing alcohol-related harms (Guide to Community Preventive Services, 2013).

Dram shop liability is associated with a decline in motor vehicle deaths (Surgeon General, 2016; Babor et al., 2010).

One study quantified the estimated percent decrease and lives saved by dram shop liability laws (Fell, Scherer, Thomas, & Voas, 2016). These results were based on structural equation modeling of predictors on the outcome of FARS vehicular crash death ratios of drinking to non-drinking drivers under age 21. Dram shop liability laws are associated with a 2.5% decrease (statistically significant) in FARS ratios, which means an estimated 64 lives saved nationally per year. If all states had this law, nine more lives are estimated to be saved.

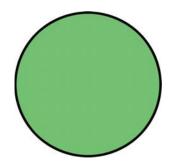
One study found increasing liability was related to lower self-reported probability of heavy episodic drinking and drunk driving among all drinkers, but did not reduce the probability of these among heavy drinkers (Stout, Sloan, Liang, & Davies, 2000).

General tort reform efforts or attempts to limit the liability of commercial alcohol outlets may serve as barriers to maximally effective dram shop laws. For example, a survey of proprietors of alcohol outlets suggests that in states with stronger liability, owners perceive a greater risk of lawsuits for service to intoxicated patrons. Many of the studies on which this review is based were done before these restrictions were passed in many areas, and further research is needed to accurately estimate their influence on the effectiveness of dram shop laws (Community Guide, 2013).

Dram shop liability is useful because onpremise alcohol outlets have been strongly associated with binge drinking and risk behaviors (Rammohan et al., 2011). These laws also help create a norm of responsible beverage service and encourages investment in server training and other primary prevention (Community Guide, 2013). Target substance(s): Alcohol
Used in Hawai'i: Yes

Other names/examples: Dram shop liability

#### Indicator of Effectiveness and Strength of Evidence



#### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

#### Strength of evidence:

No evidence found

Grey literature

Single published study

Numerous published studies

Systematic review, meta-analysis

Cochrane Review, Community Guide, NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

# COMMERCIAL HOST (DRAM SHOP)/BEVERAGE SERVERS' LEGAL LIABILITY

#### References for description of strategy

- Guide to Community Preventive Services. (2013, September 24). Preventing excessive alcohol consumption: dram shop liability. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/Alcohol-Dram-Shop.pdf
- Saltz, R. F. (2011). Enlisting bars and restaurants in the prevention of intoxication and subsequent harms: why it matters. *American Journal of Preventive Medicine*, 41(3), 353-354. https://doi.org/10.1016/j.amepre.2011.06.028

#### **Evidence base**

- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., . . . Rossow, I. (2010). Alcohol: no ordinary commodity: research and public policy. (2nd ed.). New York, NY: Oxford University Press.
- Fell, J. C., Scherer, M., Thomas, S., & Voas, R. B. (2016). Assessing the impact of twenty underage drinking laws. *Journal of Studies on Alcohol and Drugs*, 77(2), 249-260. https://doi.org/10.15288/jsad.2016.77.249
- Guide to Community Preventive Services. (2013, September 24). Preventing excessive alcohol consumption: dram shop liability. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/Alcohol-Dram-Shop.pdf
- Rammohan, V., Hahn, R. A., Elder, R., Brewer, R., Fielding, J., Naimi, T. S., ... Zometa, C. (2011). Effects of dram shop liability and enhanced over service law enforcement initiatives on excessive alcohol consumption and related harms: two community guide systematic reviews. *American Journal of Preventive Medicine*, *41*(3), 334–343. https://doi.org/10.1016/j.amepre.2011.06.027
- Stout, E. M., Sloan, F. A., Liang, L., & Davies, H. H. (2000). Reducing harmful alcohol-related behaviors: effective regulatory methods. *Journal of Studies on Alcohol and Drugs*, 61(3), 402. https://doi.org/10.15288/jsa.2000.61.402
- U.S. Department of Health and Human Services, Office of the Surgeon General. (2016, November). Facing addiction in America: the Surgeon General's report on alcohol, drugs, and health. Retrieved from: https://addiction.surgeongeneral.gov/surgeon-generals-report.pdf
- Wagenaar, A. C., & Holder, H. D. (1991). Effects of alcoholic beverage server liability on traffic crash injuries. *Alcoholism: Clinical and Experimental Research*, 15(6), 942-947. https://doi.org/10.1111/j.1530-0277.1991.tb05194.x

#### **Further reading**

Holder, H. D., Janes, K., Mosher, J., Saltz, R., Spurr, S., & Wagenaar, A. C. (1993). Alcoholic beverage server liability and the reduction of alcohol-involved problems. *Journal of Studies on Alcohol and Drugs*, 54(1), 23–36. https://doi.org/10.15288/jsa.1993.54.23

# CONDITIONAL USE PERMITS/LAND USE ORDINANCES FOR ALCOHOL OUTLETS

#### **Description of strategy**

Local regulatory authority can identify the appropriate locations within their jurisdiction where alcohol may be sold or consumed and how it may be distributed and marketed by way of conditional use permits and land use ordinances (Ashe, Jernigan, Kline, & Galaz, 2003).

Conditional use permits sometimes called "special use permits" or "special exceptions," is a zoning exception. Whereby the government makes exceptions for specific uses of land otherwise not permitted within the particular zoning district as long as the property owner meets certain conditions and will not negatively impact the surrounding properties (Fulton, 1999). Limiting the number of local conditional use permits for alcohol-related purposes reduces the retail availability of alcohol within a community. This strategy relies on local regulatory and land use powers to decrease the retail availability of alcohol (Mosher & Reynolds, 1999).

A conditional use permit is designed to allow flexibility within the zoning laws to allow uses otherwise prohibited in the specific district for the benefit of the neighborhood.

**Deemed approved ordinances** target existing grocery stores, liquor stores, and specialty stores, which sell alcoholic beverages to take home. "Deemed approved" literally refers to the businesses which are already legally operating at the time a new ordinance regulating local alcohol sales is adopted. Violations of the ordinance are handled through the city or county level (Center on Alcohol Marketing and Youth [CAMY], 2011).

Hawai'i law (Source: STOP Act report, 2015)

Hawai'i law does not place any distance limitation for new alcohol outlets near colleges and universities.

Prohibitions against new alcohol outlet (beer, wine, and spirits) sitting near primary and secondary schools:

- None for Off-premises outlets
- On-premises outlets are prohibited from being within 500 feet, if 40 percent of registered voters or property owners within the area protest.

Note: Exceptions include (1) designated re-

sort areas; (2) hotel or condominium hotel liquor licenses.

#### **Discussion of effectiveness**

A study looking at eight local alcohol policies, including conditional use permits, found that none of the local alcohol-policy ratings were associated with adolescent drinking, but overall outlet density was positively related to alcohol use and heavy drinking (Paschall, Grube, Thomas, Cannon, & Treffers, 2012).

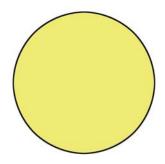
A 2003 review of land use planning literature suggests that land use regulations are an effective public health advocacy tool to lessen negative effects of alcohol retail outlets in neighborhoods but the review does not provide a quantitative assessment of the effectiveness (Ashe, Jernigan, Kline, & Galaz, 2003). These authors conclude that a robust set of research studies demonstrate the link between alcohol availability and alcoholrelated problems. The work of Gorman et al., (2001) suggested to Ashe et al., (2003) the importance of examining alcohol availability in the smallest units possible, including census tracts or even census blocks to be able to see the effects of density on alcohol consumption and consequences; and that zoning decisions for an individual neighborhood outlet can be important.

Furthermore, court decisions affirm that a local government, in pursuit of public health goals, may employ land use law to influence alcohol availability. While there is limited evidence evaluating the effectiveness of conditional use permits and land use ordinances on alcohol-related outcomes, they can reduce the retail availability of alcohol (Mosher & Reynolds, 1999). For more information on strategies that reduce retail availability; see the previous section "Limit and Restrict the Location and Density of Alcohol Retail Outlets."

Target substance(s): Alcohol
Used in Hawai'i: No

Other names/examples: Alcohol Permit Processing, Special use permits, Special exceptions to zoning laws.

#### Indicator of Effectiveness and Strength of Evidence



#### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

#### Strength of evidence:

No evidence found
Grey literature
Single published study

NREPP

Numerous published studies

Systematic review, meta-analysis

Cochrane Review, Community Guide,

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

### CONDITIONAL USE PERMITS/LAND USE ORDINANCES FOR ALCOHOL OUTLETS

#### References for description of strategy

- Ashe, M., Jernigan, D., Kline, R., & Galaz, R. (2003). Land use planning and the control of alcohol, tobacco, firearms, and fast food restaurants. American Journal of Public Health, 93(9), 1404–1408. https://doi.org/10.2105/AJPH.93.9.1404
- Fulton, W. (1999). Guide to California Planning. (2nd ed.). Point Arena, CA: Solano Press Books.
- Mosher, J.F. & Reynolds, B. (2013, August). How to use local regulatory and land use powers to prevent underage drinking. Retrieved from: http://www.pire.org/documents/UDETC/other-support/LocalRegulLanduse.pdf

#### **Evidence base**

- Ashe, M., Jernigan, D., Kline, R., & Galaz, R. (2003). Land use planning and the control of alcohol, tobacco, firearms, and fast food restaurants. American Journal of Public Health, 93(9), 1404–1408. https://doi.org/10.2105/AJPH.93.9.1404
- Mosher, J.F. & Reynolds, B. (2013, August). How to use local regulatory and land use powers to prevent underage drinking. Retrieved from: http://www.pire.org/documents/UDETC/other-support/LocalRegulLanduse.pdf
- Paschall, M. J., Grube, J. W., Thomas, S., Cannon, C., & Treffers, R. (2012). Relationships between local enforcement, alcohol availability, drinking norms, and adolescent alcohol use in 50 California cities. *Journal of Studies on Alcohol and Drugs*, 73(4), 657. https://doi.org/10.15288/jsad.2012.73.657

#### **Further reading**

- Mosher, J. F., Cannon, C., & Treffers, R. (2009). Reducing community alcohol problems associated with alcohol sales: the case of deemed approved ordinances in California. Retrieved from: http://www.venturacountylimits.org/resources/article/B881CB/reducing-community-alcohol-problems-associated-with-alcohol-sales-the-case-of-deemed-approved-ordinances-in-california
- Prevention by Design. Model conditional use permit (CUP) for alcohol outlets. (1998). Retrieved from: http://socrates.berkeley.edu/~pbd/pdfs/modelcup.pdf
- Thomas, S., Paschall, M. J., Grube, J. W., Cannon, C., & Treffers, R. (2012). Underage alcohol policies across 50 California cities: an assessment of best practices. *Substance Abuse Treatment, Prevention, and Policy*, 7(1), 26. https://doi.org/10.1186/1747-597X-7-26

### LIMITING DENSITY AND RESTRICTING THE LOCATION OF ALCOHOL RETAIL OUTLETS

#### **Description of strategy**

Alcohol outlet density indicates the number of physical locations where alcohol is sold per population or geographic area (such as a square mile, census tract, or city block). It is often regulated at the local level through zoning and business licensing. State alcohol control agencies can also stipulate density levels. Regulations can either reduce alcoholic beverage outlet density or limit the increase of alcoholic beverage outlet density in an area (Guide to Community Preventive Services, 2007). Regulating the number of alcohol outlets per unit of area may decrease the retail availability of alcohol, which may lead to a decrease in excessive consumption of alcohol and its related harms.

To accomplish this outcome, the environmental strategy can include strengthening local authority to regulate density. Deemed approved ordinances and conditional use permit ordinances are tools that can be used to affect density and proximity to schools and universities.

#### Hawai'i law

According to the STOP Act, Hawai'i laws restrict on-premise outlets near primary and secondary schools (SAMHSA, 2015).

The following Hawai'i laws guide the Liquor Commissions, however, check with the Liquor Commission for your county for the rules related to licensing, location, and density.

HRS §281-62 "The liquor commission may permit the reduction or the increase in the area of the licensed premises of any licensee without publication of notice at a public hearing; provided that, where an increase in premises may significantly impact the public, the commission may require hearings pursuant to sections 281-39.5 & 281-57 to 281-60.

§281-61 Renewals. (a) Other than for good cause, the renewal of an existing license shall be granted upon the filing of an application; unless there are complaints from the public, the commission's investigators, from adjudications of the commission, or the liquor control adjudication board, about noise from patrons leaving the outlet that disturbs residents in the neighborhood or that noise from the premises or adjacent related outdoor areas exceed state or county noise standards or intrudes into nearby residential units, the

commission may deny the renewal application or withhold the license until corrective measures are taken.

(b) The commission or board, pursuant to section 281-17, at the time of renewal or at any time, may revoke, suspend, or place conditions or restrictions on any license issued under this chapter for the purpose of preventing activities within the licensed premises or adjacent areas that are potentially injurious to the health, safety, and welfare of the public and neighborhood including but not limited to criminal activity...upon proper notice to the licensee, and a hearing before the commission pursuant to chapter 91.

#### **Discussion of effectiveness**

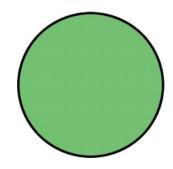
Evidence strongly suggests restricting the location and density of alcohol retail outlets is an effective local policy to decrease excessive alcohol consumption, alcohol-related crashes, and hospitalizations (Guide to Community Preventive Services, 2013). Increase in the number of retail alcohol outlets in an area and high density is associated with an increase in alcohol-related problems in that area, e.g., violence, crime, and injuries (HHS Office of the Surgeon General, 2016; WHO, 2010).

High density is related to the initiation of underage drinking during early teen ages, especially when youth have limited mobility (Chen, Grube, & Gruenewald, 2010). Bar density was related to youth drinking, but offpremise outlet density was not (Paschall, Grube, Thomas, Cannon, & Treffers, 2012).

Evidence from a national study in New Zealand identified that outlet density is related to rates of heavy episodic drinking amongst youth and young adults (Kypri et al., 2008). The work of Gorman et al., (2001) suggested to Ashe et al., (2003) the importance of examining alcohol availability in the smallest units possible, including census tracts or even blocks to be able to see the effects of density on alcohol consumption and consequences; and the impact of zoning decisions for an individual neighborhood outlet.

Target substance(s): Alcohol
Used in Hawai'i: Yes
Other names/examples: None

#### Indicator of Effectiveness and Strength of Evidence



#### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

#### Strength of evidence:

No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis
Cochrane Review, Community Guide,

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

### LIMITING DENSITY AND RESTRICTING THE LOCATION OF ALCOHOL RETAIL OUTLETS

#### References for description of strategy

- Guide to Community Preventive Services. (2013, September 24). Preventing excessive alcohol consumption: regulation of alcohol outlet density. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/Alcohol-Outlet-Density.pdf
- Task Force on Community Preventive Services (2009). Recommendations for reducing excessive alcohol consumption and alcohol-related harms by limiting alcohol outlet density. Retrieved from: https://www.thecommunityguide.org/sites/default/files/publications/Alcohol-AJPM-recs-outlet.pdf
- World Health Organization (2010). Global strategy to reduce the harmful use of alcohol. Retrieved from: http://www.who.int/substance\_abuse/msbalcstragegy.pdf

#### **Evidence base**

- Ashe M, Jernigan D, Kline R, Galaz R. (2003). Land use and planning and the control of alcohol, tobacco, firearms, and fast food restaurants. American Journal of Public Health 93:1404–1408. https://doi.org/10.2105/AJPH.93.9.1404
- Babor, T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, Grube, J., . . . Rossow, I. (2010). *Alcohol: no ordinary commodity: research and public policy*. (2nd ed.). New York, NY: Oxford University Press.
- Campbell, C. A., Hahn, R. A., Elder, R., Brewer, R., Chattopadhyay, S., Fielding, J., ... 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. https://doi.org/10.1016/j.amepre.2009.09.028
- Chen, M.-J., Gruenewald, P. J., & Remer, L. G. (2009). Does alcohol outlet density affect youth access to alcohol? *Journal of Adolescent Health*, 44(6), 582–589. https://doi.org/10.1016/j.jadohealth.2008.10.136
- Chen, M.J., Grube, J. W., & Gruenewald, P.J. (2010). Community alcohol outlet density and underage drinking. *Addiction*. 105(2): 270-278. https://doi.org/10.1111/j.1360-0443.2009.02772.x
- Guide to Community Preventive Services. (2013, September 24). Preventing excessive alcohol consumption: regulation of alcohol outlet density. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/Alcohol-Outlet-Density.pdf
- Holder, H. D., Gruenewald, P.J., Ponicki, W.R., Treno, A.J., Grube, J.W., Saltz, R.F., ... Roeper, P.(2000). Effect of community-based interventions on high-risk drinking and alcohol-related injuries. *Journal of the American Medical Association*, 284(18), 2341-2347. https://doi.org/10.1001/jama.284.18.2341
- Paschall, M. J., Grube, J. W., Thomas, S., Cannon, C., & Treffers, R. (2012). Relationships between local enforcement, alcohol availability, drinking norms, and adolescent alcohol use in 50 California cities. *Journal of Studies on Alcohol and Drugs*, 73(4), 657-665. https://doi.org/10.15288/jsad.2012.73.657
- 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. https://doi.org/10.1093/alcalc/agp054
- 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. Retrieved from: https://addiction.surgeongeneral.gov/surgeon-generals-report.pdf
- World Health Organization (2010). Global strategy to reduce the harmful use of alcohol. Retrieved from: http://www.who.int/substance\_abuse/msbalcstragegy.pdf
- 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), 1059-69. https://doi.org/10.1111/add.12139

#### **Further reading**

- Alcohol Justice. (2011). Alcohol outlet density and public health. Retrieved from: http://alcoholjustice.org/images/stories/11MI0705\_outletdensity\_3.pdf
- Promise Neighborhoods Research Consortium. (n.d.). Policy factsheet: alcohol outlet density. Retrieved from: http://promiseneighborhoods.org/policies/alcohol-outlet-density/

### MINIMUM AGE OF BARTENDERS

#### **Description of strategy**

Age of seller/server requirements establish the minimum age necessary for servers and clerks at alcohol establishments to legally serve or sell alcohol. State laws specify this requirement. In most states, seller/servers of alcohol must be at least 18 years old, but younger employees may be allowed to stock coolers with alcohol, bag purchased alcohol or clear alcoholic beverages from tables. Minimum age of seller/server policies may reduce the likelihood that underage people will obtain alcohol from peers working at alcohol establishments. (University of Minnesota Alcohol Epidemiology Program, 2009).

Stronger laws require a minimum age of 21 for on-premise servers for all types of alcohol and bartenders for off-premise sellers. A stronger recommendation is for a manager to be present when an underage youth serves on-premise or is a bartender or is an off-premise seller.

#### Hawai'i law

The minimum age for **off-premises sellers** is age 18 for beer, wine and spirits and a manager/supervisor must be present.

The Minimum age for **on-premises servers and bartenders** is 18 in Hawai'i, and a manager or supervisor must be present.

Note: Liquor can be sold or served by persons 18 to 20 years old only in licensed establishments where selling or serving the intoxicating liquor is part of the minor's employment, and where there is proper supervision of these minor employees to ensure that the minors shall not consume the intoxicating liquor.

Persons below age 18 may sell or serve liquor in individually specified licensed establishments found to be otherwise suitable by the liquor commission in which an approved program of job training and employment for dining room waiters and waitresses is being conducted in cooperation with the University of Hawai'i, the state community college system, or a federally sponsored personnel development and training program, under arrangements that ensure proper control and supervision of employees.

#### **Discussion of effectiveness**

Laws requiring a minimum age of 21 for bartenders were associated with lower alcoholrelated fatalities (Fell, Scherer, Thomas, & Voas, 2016). These laws were associated with a 4.1% decrease (statistically significant) in FARS ratios, which accounted for saving an estimated 57 lives nationally per year (Fell et al., 2016). If all states enacted this requirement, an additional estimated 64 lives potentially would be saved each year. These results were based on structural equation modeling of predictors on the outcome of FARS vehicular crash death ratios of drinking to non-drinking drivers under age 21. In this same study, the ages of the sellers and servers did not have this same effect.

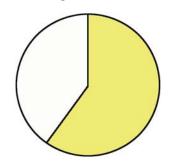
The law requiring bartenders to be at least age 21 is associated with a 4.3% decrease in beer consumption based on a structural equation modeling study (Fell, Scherer, Thomas, & Voas, 2016).

The effectiveness of minimum age of seller/ server requirements is unclear. The evidence is mixed for alcohol-related outcomes: two studies found that the age of server was not associated with sales of alcohol to underage youth. Another study found alcohol use and underage student binge drinking rates were significantly lower for states that have laws establishing 21 as the minimum age to sell alcohol (Britt, Toomey, Dunsmuir, & Wagenaar, 2006; Freisthler, Gruenewald, Treno, & Lee, 2003; Wechsler, Lee, Nelson, & Kuo, 2002). A systematic review (University of Wisconsin Population Health Institute, 2017) found insufficient evidence to determine if minimum age requirements for servers and sellers of alcohol reduce underage drinking. The review did find some evidence that underage sellers were more likely to sell alcohol to underage or intoxicated customers.

Target substance(s): Alcohol, Used in Hawai'i: Yes

Other names/examples: None

#### Indicator of Effectiveness and Strength of Evidence



#### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

#### Strength of evidence:

No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis
Cochrane Review, Community Guide,
NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

### MINIMUM AGE OF BARTENDERS

#### References for description of strategy

- University of Minnesota Alcohol Epidemiology Program. (2009). Policies to reduce commercial access to alcohol. Retrieved from: http://www.aep.umn.edu/wp-content/uploads/2012/04/Commercial-Access-Policies.pdf
- University of Wisconsin Population Health Institute, County Health Rankings and Roadmaps. (2014). Drink special restrictions. Retrieved from http://www.countyhealthrankings.org/policies/drink-special-restrictions

#### **Evidence base**

- Britt, H., Toomey, T. L., Dunsmuir, W., & Wagenaar, A. C. (2006). Propensity for and correlates of alcohol sales to underage youth. *Journal of Alcohol and Drug Education*, 50(2), 25–42.
- Fell, J, Scherer, M, Thomas, S., & Voas, R. (2016). Assess the impact of twenty underage drinking laws. *Journal of Studies on Alcohol and Drugs*, 77, 249-260. https://doi.org/10.15288/jsad.2016.77.249
- 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. https://doi.org/10.1097/01.ALC.0000057043.04199.B7
- Wechsler, H., Lee, J., Nelson, T. F., & Kuo, M. (2002). Underage college students' drinking behavior, access to alcohol, and the influence of deterrence policies. *Journal Of American College Health*, *50*(5), 223. https://doi.org/10.1080/07448480209595714

#### **Further reading**

Alcohol Policy Information System, National Institute for Alcohol Abuse and Alcoholism. (n.d.). Underage drinking: minimum ages for on-premises servers and bartenders. Retrieved from: http://www.alcoholpolicy.niaaa.nih.gov/Minimum\_Ages\_for\_On-Premises\_Servers\_and\_Bartenders.html

# RESPONSIBLE BEVERAGE SERVICE TRAINING

#### **Description of strategy**

Responsible Beverage Service (RBS) Training gives owners, managers, and staff (servers and sellers) of establishments the knowledge and skills to help them fulfill the legal requirements and to serve or sell alcohol responsibly. Training programs for managers and owners often provide guidance on implementation of service policies and practices. Training programs for servers may address how to check IDs and serving practices to reduce the likelihood of excessive consumption, to identify and respond to early signs of rapid or excessive consumption, to identify intoxicated patrons and refuse service to them, and to intervene to prevent intoxicated patrons from driving (Guide To Community Preventive Services, 2012).

Strong, effective responsible beverage service programs include at least four hours of training for managers, servers, and sellers, with role-playing to build skills to refuse alcohol to underage or intoxicated persons includes physiological effects of alcohol and related social problems, state legal requirements, and how managers can develop and implement policies to support responsible server practices (Mosher, Toomey, Good, Harwood, & Wagenaar, 2002).

Strong laws require mandatory training for managers, servers, and sellers, less strong is mandatory training just for managers, and even less strong is required training just for the licensee. Strong laws include new as well as existing licensees. Somewhat strong also is adding incentives for a voluntary program, such as dram shop insurance discounts.

#### Hawai'i law

No state law requires beverage service training. Each county's Liquor Commission has requirements.

#### **Discussion of effectiveness**

RBS should be paired with compliance checks. After managers, owners, and servers were trained in RBS and were aware of enforcement, intoxicated patrons dropped from 44 to 27% in a study of two locations, and average BAC decreased from 0.097 to 0.059 g/dL pre- to post-intervention (Fell, Fisher, Yao, & McKnight, 2017). This combined strategy has the potential to help reduce impaired driving since half of the arrested drivers had

their last drink at a licensed outlet (Fell et al., 2017). More research is needed to assess the effects of enforcement along with training programs (Toomey et al., 2008).

A study of a multi-component intervention of five combined environmental strategies including RBS and compliance checks found they reduced the amount of alcohol consumed, alcohol-related car crashes, injuries, violence, and assaults (Holder et al., 2000). Other components included community mobilization, expanded enforcement of drinking and driving, and zoning restrictions.

Requiring RBS laws saves lives. A 3.8% decrease (statistically significant) in FARS ratios, suggests RBS saved an estimated 83 lives nationally per year (Fell, Scherer, Thomas, & Voas, 2016). If all 50 states required RBS, 28 more lives possibly could be saved/year. These results were based on structural equation modeling of predictors on the outcome of FARS vehicular crash death ratios of drinking to non-drinking drivers under age 21.

RBS Training increased desired serving behaviors of servers in RBS-trained communities at 15-month and four-year follow-up compared to untrained servers in comparison communities (Buka & Birdthistle, 1999).

The law requiring RBS training is associated with a 6.8% *increase* in beer consumption in the same study (Fell et al., 2016).

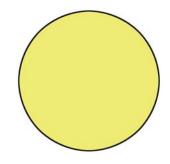
RBS had insufficient evidence to determine the effectiveness of reducing excessive alcohol consumption and related harms in communities (Guide to Community Preventive Services, 2012; Ker & Chinnock, 2008; Stockwell, 2001), although recommended for all sellers and servers by Institute of Medicine (2004).

Mosher et al., (2002) found that RBS programs varied greatly and few included all optimum components of effective programs. Thus, studies could be about weak versions of RBS programs. For example, a study of a management-only training program to implement responsible policies (Toomey et al., (2008), found a 23% reduction in sales to intoxicated patrons at one-month follow-up, the effect was not sustained at a three-month follow-up. A confounding factor was turnover as many managers they trained no longer worked in the same outlet.

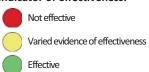
Target substance(s): Alcohol
Used in Hawai'i: Yes

Other names/examples: None

#### Indicator of Effectiveness and Strength of Evidence



#### Indicator of effectiveness:



#### Strength of evidence:

361611	Buil of Cylachice.
	No evidence found
	Grey literature
	Single published study
	Numerous published studies
•	Systematic review, meta-analysis
	Cochrane Review, Community Guide NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

# RESPONSIBLE BEVERAGE SERVICE TRAINING

#### References for description of strategy

Guide to Community Preventive Services. (2012, January 17). Preventing excessive alcohol consumption: responsible beverage service training. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/Alcohol-Beverage-Service-Training.pdf

#### **Evidence** base

- Buka, S. L. & Birdthistle, I. J. (1999). Long-term effects of a community-wide alcohol server training intervention. *Journal of Studies on Alcohol and Drugs*, 60(1), 27. https://doi.org/10.15288/jsa.1999.60.27
- Fell, J. C., Fisher, D. A., Yao, J., & McKnight, A. S. (2017). Evaluation of a responsible beverage service and enforcement program: effects on bar patron intoxication and potential impaired driving by young adults. *Traffic Injury Prevention*, 1-9. https://doi.org/10.1080/15389588.2017.1285401
- Fell, J, Scherer, M, Thomas, S., & Voas, R. (2016). Assess the impact of twenty underage drinking laws. *Journal of Studies on Alcohol and Drugs*, 77, 249-260. https://doi.org/10.15288/jsad.2016.77.249
- Guide to Community Preventive Services. (2012, January 17). Preventing excessive alcohol consumption: responsible beverage service training. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/Alcohol-Beverage-Service-Training.pdf
- Holder, H. D., Gruenewald, P.J., Ponicki, W.R., Treno, A.J., Grube, J.W., Saltz, R.F., Voas, R.B., Reynolds, R., Davis, J., Sanchez, L., Gaumont, G., Roeper, P. (2000). Effect of community-based interventions on high-risk drinking and alcohol-related injuries. *Journal of the American Medical Association*, 284(18), 2341-2347. https://doi.org/10.1001/jama.284.18.2341
- Ker, K., & Chinnock, P. (2008). Interventions in the alcohol server setting for preventing injuries. *Cochrane Database of Systematic Reviews*, (3). https://doi.org/10.1002/14651858.CD005244.pub3
- Stockwell, T. (2001). Responsible alcohol service: lessons from evaluations of server training and policing initiatives. *Drug and Alcohol Review*, 20(3), 257-265.\* https://doi.org/10.1080/09595230120079567
- Toomey, T. L., Erickson, D. J., Lenk, K. M., Kilian, G. R., Perry, C. L., & Wagenaar, A. C. (2008). A randomized trial to evaluate a management training program to prevent illegal alcohol sales. *Addiction*, 103(3), 405-413. https://doi.org/10.1111/j.1360-0443.2007.02077.x
- Toomey, T. L., & Wagenaar, A. C. (2002). Environmental policies to reduce college drinking: options and research findings. *Journal of Studies on Alcohol,* (Suppl. 14), 193-205. https://doi.org/10.15288/jsas.2002.s14.193

#### **Further reading**

- Moskowitz, H. (2007). Detecting alcohol impairment by observation of intoxication. *Traffic Safety and Alcohol Regulation*, 164. Retrieved from: http://www.nabca.org/assets/docs/status-of-14.pdf#page=170
- Wagenaar, A. C., & Tobler, A. L. (2007). Alcohol sales and service to underage youth and intoxicated patrons: effects of responsible beverage service training and enforcement interventions. *Transportation Research Circular*, (E-C123), 141-163.

### SOCIAL HOST LIABILITY

#### **Description of strategy**

Under social host liability laws, adults who serve or provide alcohol to minors or to persons who are obviously intoxicated can be held liable if a person who is provided alcohol is killed or injured, or kills or injures another person. In some states, social host liability is covered under dram shop laws. Social host civil liability refers to laws allowing an injured third party to sue social hosts for injuries caused by their drinking guests. Social host laws vary from state-to-state.

Laws about hosting underage drinking parties are strong if include negligence, or recklessness at various property types — outdoor, residence or other, and for possession, consumption, or for intention to possess or consume. The strongest social host laws are common law, common law and statutory law, or statutory law with no limitations.

Social host laws are considered weaker if they exempt family or a resident of a household, if they require knowledge or an overt act. The law is weaker if they include limitations on who may be sued, or limitation on elements or standards of proof.

Some communities have "response costrecovery ordinances" where fines to party hosts will cover costs of enforcement and emergency medical services (Paschall, Lipperman-Kreda, Grube, & Thomas, 2014).

#### Hawai'i law — Social Host Liability Laws

HRS§712-1250.5 A person, including any licensee as defined in section 281-1, commits the offense of promoting intoxicating liquor to a person under the age of twenty-one if the person recklessly:

- a) Sells or offers for sale, influences the sale, serves, delivers, or gives to a person intoxicating liquor, and the person receiving the intoxicating liquor is a person under the age of twenty-one; or
- b) Permits a person to possess intoxicating liquor while on property under his control, and the person possessing the intoxicating liquor is a person under the age of twentyone. Social host statutory liability requires that a social host must be 21 years old. Residence, outdoor, other types of properties are covered by this liability law. Exception(s): Family (SAMHSA STOP ACT report, 2015).

The law was amended in 2013 by requiring a "reckless rather than a "knowing state" of mind for the misdemeanor crime of promoting intoxicating liquor to a person under twenty-one. Amendments to this law sought to increase compliance with the law by necessitating identification checks, at minimum, for those that hold liquor licenses, as well as hold accountable those persons who allow or influence the sale, possession, or consumption of alcohol to a person under twenty-one.

#### **Discussion of effectiveness**

The Surgeon General's Report (2016) said that the effect of social host liability was merging to reduce motor vehicle crashes and other alcohol problems.

The social host civil liability law is associated with a 1.78% decrease (statistically significant) in FARS ratios, which accounts for saving an estimated 29 lives nationally per year (Fell, Scherer, Thomas, & Voas, 2016). If all 50 states had a social host civil liability law, an additional 16 lives potentially could be saved. These results are based on structural equation modeling of predictors on the outcome of FARS vehicular crash death ratios of drinking to non-drinking drivers under age 21.

Another study estimated the effect of social host laws involving 18-20 year-olds and found a reduction in drunk driving traffic fatalities by 9% (Dills, 2010). It was thought that the reduction was from a decrease in drunk driving rather than from drinking less. Further, a systematic review identified these laws might reduce heavy episodic drinking and drunk driving among adolescents drinkers.

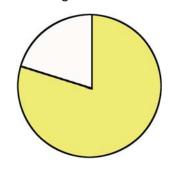
A study of the effects of social host laws on underage drinking in 50 California cities concluded that social host laws with strict liability and civil penalties imposed administratively may be associated with less frequent underage drinking in private settings, among teens who already drink alcohol (Paschall, Lipperman-Kreda, Grube, & Thomas, 2014).

However, a 2012 review of the research on current social host liability policies found that social host policies are variable and enforcement is not consistent. More research is required to develop a measure of policy strength (Wagoner et al., 2012).

Target substance(s): Alcohol
Used in Hawai'i: No

Other names/examples: Controls on alcohol service at private parties, Laws against adult provision of alcohol, Parents who host, Social host ordinance

#### Indicator of Effectiveness and Strength of Evidence



#### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

#### Strength of evidence:

No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis
Cochrane Review, Community Guide,

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

# SOCIAL HOST LIABILITY

#### References for description of strategy

- City and County of Honolulu. (2017, March). *Rules of the Liquor Commission*. Retrieved from: https://www.honolulu.gov/rep/site/bfsliq/rules/LIQ\_Rules\_Website\_Version\_032717.pdf
- National Highway Traffic Safety Administration. (2011). Digest of impaired driving and selected beverage control laws. Retrieved from: www.nhtsa.gov/staticfiles/nti/pdf/811456.pdf
- University of Minnesota Alcohol Epidemiology Program. (2009). Policies to reduce social access to alcohol. Retrieved from: http://www.aep.umn.edu/wp-content/uploads/2012/04/Social-Access-Policies.pdf

#### **Evidence base**

- Davies, H. H., Liang, L., Sloan, F. A., & Stout, E. M. (2000). Reducing harmful alcohol-related behaviors: effective regulatory methods. *Journal of Studies on Alcohol and Drugs*, 61(3), 402. https://doi.org/10.15288/jsa.2000.61.402
- Dills, A. K. (2010). Social host liability for minors and underage drunk-driving accidents. *Journal of Health Economics*, 29(2), 241–249. https://doi.org/10.1016/j.jhealeco.2009.12.001
- Fell, J, Scherer, M, Thomas, S., & Voas, R. (2016). Assess the impact of twenty underage drinking laws. *Journal of Studies on Alcohol and Drugs*, 77, 249-260. https://doi.org/10.15288/jsad.2016.77.249
- Paschall, J., Lipperman-Kreda, S., Grube, J., & 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, 901-907. https://doi.org/10.15288/jsad.2014.75.901
- Saltz, R. F., Paschall, M. J., McGaffigan, R. P., & Nygaard, P.M. O. (2010). Alcohol risk management in college settings: the safer California universities randomized trial. *American Journal of Preventive Medicine*, *39*, 491-499. https://doi.org/10.1016/j.amepre.2010.08.020
- Substance Abuse and Mental Health Services Administration. (2016, September). Report to Congress on the prevention and reduction of underage drinking (Vol. 1). Retrieved from: https://media.saa.icfcloud.com/ReportToCongress/2016/report\_main/2016\_RTC\_Volume% 201\_508.pdf
- Wagoner, K., Francisco, V., 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. https://doi.org/10.2190/DE.42.1.f
- Whetten-Goldstein, K., Sloan, F. A., Stout, E., & Liang, L. (2000). Civil liability, criminal law, and other policies and alcohol-related motor vehicle fatalities in the United States: 1984–1995. *Accident Analysis & Prevention*, *32*(6), 723–733. https://doi.org/10.1016/S0001-4575(99)00122-0

#### **Further reading**

- Applied Research for Community Health and Safety. (2009). Holding adults accountable for underage drinking at house parties through social host laws. San Bernardino, CA: Institute for Public Strategies. Retrieved from: http://www.publicstrategies.org/PDF/20091015\_Social\_Host\_While\_Paper\_Final\_R3.pdf
- Institute for Public Strategies. (2005, June). Adult accountability for underage drinking: the case for social host laws. Retrieved from: http://venturacountylimits.org/resource\_documents/VCLIB01\_adultAcct.pdf
- University of Minnesota Alcohol Epidemiology Program. (2009). Open house assembly. Retrieved from: http://www.aep.umn.edu/wp-content/uploads/2012/04/Open-House-Assembly.pdf
- University of Wisconsin Population Health Institute, County Health Rankings and Roadmaps. (2017). Sales to intoxicated persons. Retrieved from http://www.countyhealthrankings.org/policies/social-host-laws
- Ventura County Behavioral Health Department. (2005). Model social host liability ordinance. Retrieved from: http://www.ca-cpi.org/SIG\_subsite/SIG\_Documents/Resources/VCL\_MSHLO\_web2.pdf

## COMMUNITIES MOBILIZING FOR CHANGE ON ALCOHOL

### **Description of strategy**

Communities Mobilizing for Change on Alcohol (CMCA) is a community-organizing program designed to reduce youth (13 to 20 years of age) access to alcohol by changing community policies and practices. CMCA seeks both to limit youths' access to alcohol and to communicate to the community that underage drinking is inappropriate and unacceptable. It employs social-organizing techniques to address legal, institutional, social and health issues related to underage drinking. The goals of these organizing efforts are to eliminate illegal alcohol sales to minors, obstruct the provision of alcohol to youth, and ultimately reduce alcohol use by teens. The program involves community members in seeking and achieving changes in local public policies and the practices of community institutions that can affect youths' access to alcohol (National Registry of Evidencebased Programs and Practices, 2012).

### **Discussion of effectiveness**

This strategy is most effective when community organizing is combined with the responsible beverage service training and compliance checks (M. Sparks, personal communication, 2017). The Community guide considered the use of multicomponent interventions in combination with community mobilization. General evidence supports that multicomponent programs with community mobilizations can impact the reduction of alcoholrelated driving (Community guide, 2013). Through a comprehensive community-based approach, local communities have the potential for success in restructuring the drinking environment. Multiple strategies can create positive secondary effects to reducing alcohol consumption and alcohol-related harms (e.g., alcohol-related injuries and violence) (Babor et al., 2010).

The Institute of Medicine (2004) recommended comprehensive community—based approaches that can be tailored to the specific problems and resources in a community.

It is recommended that CMCA processes identify that community organizations should prioritize community norms, with an essential focus on evaluating changes as an ongoing basis with a priority to assess public and

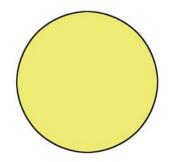
institutional policies. Additional considerations are adequate time to gain community consensus, obtain a core leadership group that can build and mobilize community members to support local policy change. Organizers may want to start with communities that demonstrate readiness to change and are knowledgeable on prevention policies to changing local policy (Pennsylvania Liquor Control Board, 2016).

The current literature provides varied evidence on the effectiveness of CMCA. The National Registry of Evidence-based Programs and Practices systematic review found a significant decrease in alcohol access at onsite retail outlets (bars and restaurants), but not for off-site retail outlets (liquor stores) (National Registry of Evidence-based Programs and Practices, 2012).

Evidence generally supports the effectiveness of CMCA for youth, specifically for ages 18-20 years old. Evaluations outcomes of CMCA showed a reduced likelihood of adolescents from purchasing alcohol, drinking in a bar, consuming alcohol, furnishing alcohol to minors, or being arrested for driving under the influence. However, the evidence is not supportive of the effectiveness of CMCA for youth age 15-17 years old (National Registry of Evidence-based Programs and Practices, 2012; Wagenaar, Murray, & Toomey, 2000; Wagenaar et al., 2000).

Target substance(s): Alcohol
Used in Hawai'i: Yes
Other names/examples: None

### Indicator of Effectiveness and Strength of Evidence



### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

### Strength of evidence:

No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis

Cochrane Review, Community Guide, NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

## COMMUNITIES MOBILIZING FOR CHANGE ON ALCOHOL

### References for description of strategy

- Guide to Community Preventive Services. (2013). Motor vehicle injury-alcohol impaired driving: multicomponent interventions with community mobilization. Retrieved from: https://www.thecommunityguide.org/findings/motor-vehicle-injury-alcohol-impaired-driving-multicomponent-interventions-community
- National Registry of Evidence-based Programs and Practices. (2012). Communities Mobilizing for Change on Alcohol (CMCA). Substance Abuse and Mental Health Services Administration. Retrieved from: https://www.crimesolutions.gov/ProgramDetails.aspx?ID=269

### **Evidence** base

- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., . . . Rossow, I. (2010). Alcohol: no ordinary commodity: research and public policy. (2nd ed.). New York, NY: Oxford University Press.
- National Registry of Evidence-based Programs and Practices. (2012). Communities Mobilizing for Change on Alcohol (CMCA). Substance Abuse and Mental Health Services Administration. Retrieved from: https://www.crimesolutions.gov/ProgramDetails.aspx?ID=269
- Pennsylvania Liquor Control Board. (2016). Reducing accessibility fact sheets: communities mobilizing for change on alcohol. Retrieved from: http://www.dontletminorsdrink.com/downloads/Cmca.pdf
- Shults, R. A., Elder, R. W., Nichols, J. L., Sleet, D. A., Compton, R., Chattopadhyay, S. K., & Task Force on Community Preventive Services. (2009). Effectiveness of multicomponent programs with community mobilization for reducing alcohol-impaired driving. *American Journal of Preventive Medicine*, *37*(4), 360-371. https://doi.org/10.1016/j.amepre.2009.07.005
- Wagenaar, A. C., Murray, D. M., & Toomey, T. L. (2000). Communities Mobilizing for Change on Alcohol (CMCA): effects of a randomized trial on arrests and traffic crashes. *Addiction*, *95*(2), 209–217. https://doi.org/10.1046/j.1360-0443.2000.9522097.x
- Wagenaar, A. C., Murray, D. M., Gehan, J. P., Wolfson, M., Forster, J. L., Toomey, T. L., . . . Jones-Webb, R. (2000). Communities mobilizing for change on alcohol: outcomes from a randomized community trial. *Journal of Studies on Alcohol and Drugs, 61*(1), 85. https://doi.org/10.15288/jsa.2000.61.85

- University of Minnesota Alcohol Epidemiology Program. (2014). Communities Mobilizing for Change on Alcohol. Retrieved from: http://www.aep.umn.edu/wp-content/uploads/2012/04/CMCA-2PG-SUMMARY\_UPDATED\_2014.pdf
- Wagenaar, A. C., Gehan, J. P., Jones-Webb, R., Toomey, T. L., and Forster, J.L. (1999). Communities mobilizing for change on alcohol: lessons and results from a 15-community randomized trial. *Journal of Community Psychology, 27* (3),315–326. https://doi.org/10.1002/(SICI)1520-6629(199905)27:3<315::AID-JCOP6>3.0.CO;2-1

### Appropriate Penalties for Minors in Possession of Alcohol

### **Description of strategy**

The majority of states have laws that prohibit minors from purchasing, possessing, and/or using alcohol products. Of those states, over 75 percent enacted laws that impose sanctions upon minors who violate the purchase, use, and/or possession laws. Penalties vary by state and range from confiscation of the product to fixed or graduated monetary fines, participation in alcohol education programs or community service, suspension of driving privileges, and/or imprisonment (National Cancer Institute, n.d).

Possession and consumption laws are stronger if there are no exceptions. Common exceptions found in some laws (in order of most weak to least weak) are:

- for a private location,
- any private residence,
- parental and/or spousal exception not conditional on location,
- or parent/guardian home only

False Identification for Obtaining Alcohol: The use of a false ID to obtain or attempt to purchase alcohol is a criminal offense. The penalty may include driver's license suspension through a judicial procedure. The law is stronger if they have administrative or both administrative and judicial sanctions.

### Hawai'i law

HRS 281-101.5 Possession, consumption of alcohol: Hawai'i state law states that no minor shall consume or purchase liquor and no minor shall consume or have it in their possession in any public place, public gathering, or public amusement, at any public beach or public park, or in any motor vehicle on a public highway. Exceptions include employment delivering alcohol, religious ceremonies, or part of a law enforcement activity. Consumption of alcohol is prohibited with the exception of a private location. Internal possession is not explicitly prohibited. 'Consume' includes the ingestion of liquor."

According to the STOP act (2015), laws that prohibit minors from having alcohol in their bodies, but do so without reference to a blood, breath, or urine test, are not considered as prohibiting Internal possession (SAMHSA, 2015).

Penalties in Hawai'i: All persons, regardless of age found in violation will be "sentenced to 75 hours of community service work and an 8-12 hour program of alcohol education and counseling. The program cost shall be made by the offender or the offender's parent or guardian. Further, Hawai'i makes driver's license suspension or revocation a discretionary penalty by Family Court for minors below age 18 with an alcohol violation. For violators ages 18 through 20, license suspension or revocation is mandatory. For both age groups, the length of the suspension or revocation of driver's license is a minimum of 180 days, and the maximum is not specified.

At the discretion of the sentencing court, exceptions include, driving to and from school, school-sponsored activities, and employment.

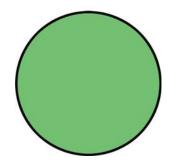
### **Discussion of effectiveness**

Evidence on the effectiveness of applying appropriate penalties for minors in possession of alcohol suggests the presence of such laws is associated with lower numbers of alcohol-related crashes (Fell, Fisher, Voas, Blackman, & Tippetts, 2008).

The law prohibiting possession of alcohol for those under age 21 is associated with a 7.7% decrease (statistically significant) in FARS ratios, which accounts for saving an estimated 231 lives nationally per year (Fell, Scherer, Thomas, & Voas, 2016). These results are based on structural equation modeling of predictors on the outcome of FARS vehicular crash death ratios of drinking to non-drinking drivers under age 21.

Target substance(s): Alcohol
Used in Hawai'i: Yes
Other names/examples: None

### Indicator of Effectiveness and Strength of Evidence



### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

### Strength of evidence:

No evidence found
Grey literature
Single published study

Numerous published studies

Systematic review, meta-analysis

Cochrane Review, Community Guide,
NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

### Appropriate Penalties for Minors in Possession of Alcohol

### References for description of strategy

City and County of Honolulu. (2017, March). Rules of the Liquor Commission. Retrieved from: http://www.honolulu.gov/liq/liqlawsrules.html

Substance Abuse and Mental Health Services Administration (SAMHSA). (2016, September). Report to Congress on the prevention and reduction of underage drinking (Vol. 1). Retrieved from: https://media.saa.icfcloud.com/ReportToCongress/2016/report\_main/2016\_RTC\_Volume%20I\_508.pdf

### **Evidence base**

- Fell, J. C., Fisher, D. A., Voas, R. B., Blackman, K., & Tippetts, A. S. (2008). The relationship of underage drinking laws to reductions in drinking drivers in fatal crashes in the United States. *Accident Analysis & Prevention*, 40(4), 1430–1440. https://doi.org/10.1016/j.aap.2008.03.006
- Fell, J, Scherer, M, Thomas, S., & Voas, R. (2016). Assessing the impact of twenty underage drinking laws. *Journal of Studies on Alcohol and Drugs*, 77, 249-260. https://doi.org/10.15288/jsad.2016.77.249

## COMPLIANCE CHECKS OF ALCOHOL RETAILERS

### **Description of strategy**

A compliance check is a tool used to identify alcohol establishments that sell to underage youth and to increase retailer compliance with prohibitions on alcohol sales to minors. Compliance checks help to enforce state criminal statutes and/or local administrative ordinances. They also identify, warn, and educate alcohol establishments that serve or sell alcohol to underage youth.

Compliance checks can be mandated by a local ordinance. Typically the ordinance will outline the standards for conducting the checks, the people or agencies responsible for conducting the checks, and the penalties for establishments, servers, and sellers who illegally sell or serve alcohol to underage youth. Compliance checks also may be voluntarily implemented by law enforcement or licensing authorities.

Compliance checks typically follow a standard procedure or protocol. Initially, alcohol licensees are informed that compliance checks will occur at various times throughout the year and about potential penalties for selling alcohol to underage youth.

During the check, an enforcement agent (police officer or another authorized person) waits inside or outside the premises while the minor attempts to purchase or order an alcoholic beverage. If the alcohol establishment sells alcohol to the young person, the enforcement agent issues a citation. The police officer may charge the server or seller who sold the alcohol (when compliance checks are used to enforce state laws governing servers and sellers), or the officer may issue an administrative citation, which is imposed upon the alcohol license holder rather than the individual server or seller (when compliance checks are used to enforce local administrative ordinances). Because administrative charges are easier, faster, and less expensive to prosecute, they can be the best option and in some communities the only option-for penalizing alcohol establishments (University of Minnesota Alcohol Epidemiology Program, 2011).

#### Discussion of effectiveness

Alcohol compliance checks as part of a multicomponent intervention were generally found to be effective at reducing underage sales (The Community Guide, 2014; Wagenaar, Toomey, & Erickson, 2005; Saltz, Welker, Paschall, Feeney, & Fabiano, 2009).

A systematic review of evaluated studies found that compliance checks reduced the percentage of underage alcohol buying attempts and sales of alcohol to youth decoys by more than 40 percent (Elder et al., 2007). A comprehensive approach should be taken to reduce drinking opportunities in both retail and social access amongst youth. The IOM and the Maryland Collaborative to Reduce College Drinking and Related Problems (2013), regarded compliance checks as effective if frequent. Recommending that compliance checks should check all outlets in jurisdictions, media campaigns should be used to publicize enforcement and compliance and license revocation to increase deterrence. Follow-ups should also be made to noncompliant outlets. Other components may include rewarding retailers with recognition for complying with the law (Institute of Medicine, 2004).

The Community Guide (2014), also recommended increasing the frequency of compliance checks. The Surgeon General's Report (2016) regarded compliance checks as evidence-based.

Evidence supports that effective compliance checks occur when they are scheduled to cover retailers at least two to three times a year, provide advance notification to retailers, use tested and effective protocols, build community support for compliance with the law, and penalize the license holder when appropriate rather than targeting the clerk or server. Additionally, compliance checks should be conducted systematically over a period of time (Wisconsin Alcohol Project, 2013).

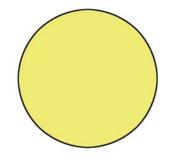
Furthermore, high levels of turnover or change of employees amongst retail outlets require an ongoing need for employee education efforts and vigilance to reinforce compliance rates in acceptable ranges.

Target substance(s): Alcohol

Used in Hawai'i: Yes

Other names/examples: Covert underage buyers or decoy programs

### Indicator of Effectiveness and Strength of Evidence



### Indicator of effectiveness:

Not effective
Varied evidence of effectiveness
Effective

### Strength of evidence:

Strength of evidence.
No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis
Cochrane Review, Community Guide NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

### COMPLIANCE CHECKS OF ALCOHOL RETAILERS

### References for description of strategy

- National Research Council and Institute of Medicine. (2004). *Reducing underage drinking: a collective responsibility*. Washington, DC: The National Academies Press.
- University of Minnesota Alcohol Epidemiology Program. (2011). Compliance Checks. Retrieved from: http://www.epi.umn.edu/alcohol/policy/compchks.shtm

#### **Evidence base**

- Elder, R. W., Lawrence, B., Janes, G., Brewer, R. D., Toomey, T. L., Hingson, R. W., . . . Fielding, J. (2007). Enhanced enforcement of laws prohibiting sale of alcohol to minors. *Traffic Safety and Alcohol Regulation*, 181-188
- Maryland Collaborative to Reduce College Drinking and Related Problems. (2013). *Reducing alcohol use and related problems among college students: a guide to best practices*. Retrieved from: http://marylandcollaborative.org/resources/best-practices/
- Saltz, R. F., Welker, L. R., Paschall, M. J., Feeney, M. A., & Fabiano, P. M. (2009). Evaluating a comprehensive campus-community prevention intervention to reduce alcohol-related problems in a college population. *Journal of Studies on Alcohol and Drugs*. (Suppl. 16), 21–27. https://doi.org/10.15288/jsads.2009.s16.21
- The Community Preventive Services Task Force. The Community Guide on Enhanced Enforcement of laws prohibiting sale of alcohol to minors. (2014, April 15). Retrieved from: https://www.thecommunityguide.org/findings/alcohol-excessive-consumption-enhanced-enforcement-laws-prohibiting-sales-minors
- U.S. Department of Health and Human Services (HHS), Office of the Surgeon General. (2016). Facing addiction in America: the Surgeon General eral's report on alcohol, drugs, and health. Washington, DC: HHS.
- Wagenaar, A. C., Toomey, T. L., & Erickson, D. J. (2005). Preventing youth access to alcohol: Outcomes from a multi-community time-series trial. *Addiction*, 100(3), 335–345. https://doi.org/10.1111/j.1360-0443.2005.00973.x
- Wolfson, M., Wagoner, K., DuRant, R., Champion, H., Ip, E., Mccoy, T., . . . Martin, BA. (2007). Impact of a group-randomized trial to reduce high risk drinking by college students. *Alcoholism: Clinical and Experimental Research*, *31*(6 Suppl. 2), 115A. \*\*\*SEEMS TO BE A MORE RECENT STUDY

- National Association of Governors' Highway Safety Representatives. (2001). Community how to guides on underage drinking prevention: Guide 5, Enforcement. Washington, DC: National Highway Traffic Safety Administration. Retrieved from: http://www.nhtsa.gov/people/injury/alcohol/community%20guides%20html/Book5\_Enforcement.html#Shoulder%20tap
- University of Wisconsin Population Health Institute, County Health Rankings and Roadmaps. (2017). Enhance enforcement of laws prohibiting alcohol sales to minors. Retrieved from: http://www.countyhealthrankings.org/policies/enhanced-enforcement-laws-prohibiting-alcohol-sales-minors
- Wisconsin Alcohol Policy Project (2013). Alcohol age compliance checks. Retrieved from: https://law.wisc.edu/wapp/alcoholagecomplianceguidelines.pdf

### MINIMUM AGE OF PURCHASE FOR ALCOHOL

### **Description of strategy**

The Minimum Legal Purchase Age (MLPA) and Minimum Legal Drinking Age (MLDA) specify an age below which purchase or public consumption of alcoholic beverages is illegal. In the United States, the MLDA is 21 years old for alcoholic beverages.

Minors obtain alcohol from two major sources: retail sources and social sources, such as acquaintances, relatives, and friends. The MLPA and MLDA to age 21 has reduced youth access to alcohol in the retail market.

### Hawai'i law

To purchase alcohol in Hawai'i, one must be at least age 21. Youth can purchase alcohol for law enforcement purposes, such as when they are part of compliance checks. Hawai'i's law is considered strong using Fell's 2016 scoring (Fell et al. 2016).

HRS §281-101.5 Prohibitions involving minors; penalty: (b) no minor shall consume or have liquor in the minor's possession or custody in any public place, public gathering, or public amusement, at any public beach or public park, or in any motor vehicle on a public highway. This subsection shall not apply

- (1) Possession or custody of liquor by a minor in the course of delivery, pursuant to the direction of the minor's employer lawfully engaged in business necessitating the delivery;
- (2) Possession, custody, or consumption of liquor by a minor in connection with the minor's authorized participation in religious ceremonies requiring such possession, custody, or consumption; or
- (3) Any person between the ages of eighteen and twenty, who is participating in a controlled purchase as part of a law enforcement activity or a study authorized by the department of health to determine the level of incidence of liquor sales to minors.

Any person under age eighteen who violates this section shall be subject to the jurisdiction of the family court. Any person age eighteen to twenty-one who violates subsection (b) or (c) shall be guilty of a petty misdemeanor. The court shall order that any person under twenty-one years of age found to be in violation of this section shall have, in addition to any other disposition or sentencing provision permitted by law, the person's license to operate a motor vehicle, or the person's ability to obtain a license to operate a motor vehicle.

### **Discussion of effectiveness**

Evidence supports the effectiveness of maintaining a minimum age of 21 for the purchase of alcohol in reducing underage use. Evidence also found that MLDA is related to alcohol-related traffic crashes; traffic fatalities go up as the drinking age is lowered (Guide to Community Preventive Services, 2000; McCartt, Hellinga, & Kirley, 2010; Wagenaar & Toomey, 2002).

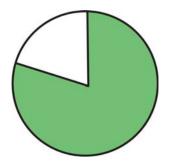
The law prohibiting the purchase of alcohol for those under age 21 is associated with a 4.2% decrease in FARS ratios (which is statistically significant), which accounts for saving an estimated 98 lives nationally per year (Fell, Scherer, Thomas, & Voas, 2016). These results are based on structural equation modeling of predictors on the outcome of FARS vehicular crash death ratios of drinking to non-drinking drivers under age 21. Evidence from a systematic review further supports that the current MLDA reduces alcoholimpaired driving and alcohol-related crashes (University of Wisconsin Population Health Institute, 2014).

A past multistate study found that adolescents raised in states with a drinking age of 21 relative to younger ages were less likely to drink when they were under age 21 and later ages of 21 to 25 (O'Malley and Wagenaar, 1991).

Research from Wagenaar and Toomey (2002), identified 33 higher quality studies of MLDA and alcohol consumption and found that a higher legal drinking age is an effective strategy which led to reduced alcohol consumption and drinking problems.

Target substance(s): Alcohol
Used in Hawai'i: Yes
Other names/examples: None

### Indicator of Effectiveness and Strength of Evidence



### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

### Strength of evidence:

No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis
Cochrane Review, Community Guide,
NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

## MINIMUM AGE OF PURCHASE FOR ALCOHOL

### References for description of strategy

- City and County of Honolulu. (2017, April 3). *Rules of the Liquor Commission*. Retrieved from: http://www.honolulu.gov/rep/site/bfsliq/rules/LIQ Rules Website Version 032717.pdf
- Guide to Community Preventive Services. (2013, September 24). Reducing alcohol-impaired driving: maintaining current minimum legal drinking age laws. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/MVOI-AID-Maintaining-MLDA.pdf

#### **Evidence base**

- Fell, J, Scherer, M, Thomas, S., & Voas, R. (2016). Assessing the impact of twenty underage drinking laws. *Journal of Studies on Alcohol and Drugs*, 77, 249-260. https://doi.org/10.15288/jsad.2016.77.249
- Guide to Community Preventive Services. (2013, September 24). Reducing alcohol-impaired driving: maintaining current minimum legal drinking age laws. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/MVOI-AID-Maintaining-MLDA.pdf
- 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. https://doi.org/10.1016/j.jsr.2010.01.002
- Toomey, T.L. & Wagenaar, A.C. (2002). Environmental policies to reduce college drinking: options and research findings. *Journal of Studies on Alcohol, Supplement 14*, 193-205. https://doi.org/10.15288/jsas.2002.s14.193
- University of Wisconsin Population Health Institute, County Health Rankings and Roadmaps (2017). Minimum drinking age laws. Retrieved from http://www.countyhealthrankings.org/policies/minimum-drinking-age-laws
- 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. https://doi.org/10.15288/jsas.2002.s14.206

- National Institute for Alcohol Abuse and Alcoholism. (2002, April). A call to action: recommendations for addressing excessive college drinking. Retrieved from: https://www.collegedrinkingprevention.gov/media/taskforcereport.pdf
- Promise Neighborhoods Research Consortium. (2010). Policy factsheet: enforcement of minimum legal drinking age (MLDA) laws. Retrieved from: http://promiseneighborhoods.org/policies/enforcement-minimum-legal-drinking-age-mdla-laws/

## GRADUATED DRIVER'S LICENSE POLICIES

### **Description of strategy**

All 50 states and DC have three-stage Graduated Driver Licensing (GDL) regulations. These regulations consist of a supervised learner's period; an intermediate license, and a license with full privileges.

The intent of GDL laws is to reduce teens' high risk by making sure they gradually build up driving experience under lower-risk and monitored conditions, as they mature and develop skills. That means limiting nighttime driving, restricting teen passengers, and making sure teens acquire supervised practice.

Teenage drivers have the highest crash risk per mile traveled, compared with drivers in other age groups. Young drivers tend to overestimate their driving abilities and underestimate the dangers on the road.

According to the Insurance Institute for Highway Safety, 2016; best practices for strong GDL laws include: Permit age of at least 16, minimum of 65 supervised practice hour, 8 p.m. night driving restriction, ban on all teen passengers, minimum age of 17 to be eligible for a license.

The strongest law for GDL prohibits nighttime driving after 10 pm or earlier (less strong if restriction starts between 10 pm and midnight, even weaker if later than midnight).

Core components of GDL laws in reducing teen crashes particularly should focus on passenger and night driving restrictions.

The Institute of Medicine (2004) recommended GDL enforcement for all 50 states.

### Hawai'i law

The Insurance Institute for Highway Safety, 2017, recognizes Hawai'i law for Graduated Driver's License on the following:

### To get a learner's permit:

• Must be at least 15 1/2 years minimum.

# To advance to an intermediate or restricted license:

- Must have 50 hours minimum of supervised driving, 10 of which must be at night.
- Must have completed driver education if under age 18.
- Had learner stage permit for at least 6 months.
- Must be at least age 16.

### With intermediate or restricted license:

- Can drive unsupervised before 11 p.m.
- Prohibited from driving between 11 p.m. and 5 a.m.
- No more than one passenger under 18 years can ride with them except household members, unless accompanied by parent or guardian.
- Primary enforcement of night-driving rule and passenger-restriction rule.

To apply for a License and lift above restrictions:

• Must be at least age 17

### **Discussion of effectiveness**

The evidence generally supports the effectiveness of graduated license policies as a prevention strategy to reduce alcohol-related outcomes.

Research has shown that states with the strongest Graduated Driver's License laws have bigger reductions in teen driver deaths than states with weak laws (Insurance Institute for Highway Safety, Highway Loss Data Institute, 2016). Furthermore, some states could halve or more than halve their rates of fatal crashes among 15-17 year-olds if they adopted the strongest GDL provisions.

A 2007 systematic review of studies on graduated license policies found that implementation of GDL regulations can reduce youngest drivers' crash rates 20-40 percent (Shope, 2007).

A 2012 study found restrictive GDL laws were associated with decreased driving after drinking alcohol, and riding in a car with a driver who had been drinking alcohol among high school youth (Cavazos-Rehg et al., 2012).

A 2010 national study found that delaying the permit age by one year (from 15-16) and delaying licensure age by one year (from 16-17) was associated with a 13 percent reduction in fatal crash rates among 15-17 year-olds (McCartt et al., 2010). Furthermore, evidence supports that a restriction prohibiting any teenage passenger had a larger benefit, (21% reduction in fatal crash rate) than a restriction allowing one teenage passenger (7% reduction in fatal crash rate), compared with restrictions allowing two or more passengers or no restriction (McCartt et al., 2010).

Target substance(s): Alcohol Used in Hawai'i: Yes

Other names/examples: None

Indicator of Effectiveness and Strength of Evidence

#### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

### Strength of evidence:

No evidence found

Grey literature

Single published study

Numerous published studies

Systematic review, meta-analysis

Cochrane Review, Community Guide, NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

### GRADUATED DRIVER'S LICENSE POLICIES

### References for description of strategy

Dee, T. S., Grabowski, D. C., & Morrisey, M. A. (2005). Graduated driver licensing and teen traffic fatalities. *Journal of Health Economics*, 24 (3), 571-589. https://doi.org/10.1016/j.jhealeco.2004.09.013

#### **Evidence base**

- Cavazos-Rehg, P. A., Krauss, M. J., Spitznagel, E. L., Chaloupka, F. J., Schootman, M., Grucza, R. A., & Bierut, L. J. (2012). Associations between selected state laws and teenagers' drinking and driving behaviors. *Alcoholism: Clinical and Experimental Research*, 36(9), 1647-1652. https://doi.org/10.1111/j.1530-0277.2012.01764.x
- Dee, T. S., Grabowski, D. C., & Morrisey, M. A. (2005). Graduated driver licensing and teen traffic fatalities. *Journal of Health Economics*, 24 (3), 571-589. https://doi.org/10.1016/j.jhealeco.2004.09.013
- Foss, R. D., Feaganes, J. R., & Rodgman, E. A. (2001). Initial effects of graduated driver licensing on 16-year-old driver crashes in North Carolina. *Journal of the American Medical Association, 286*(13), 1588–1592. https://doi.org/10.1001/jama.286.13.1588
- Insurance Institute for Highway Safety, Highway Loss Data Institute. (2016). Q&As: graduated driver licensing. Retrieved from http://www.iihs.org/iihs/topics/t/teenagers/qanda#teenagers--graduated-driver-licensing
- McCartt, A. T., Teoh, E. R., Fields, M., Braitman, K. A., & Hellinga, L. A. (2010). Graduated licensing laws and fatal crashes of teenage drivers: a national study. *Traffic Injury Prevention*, 11(3), 240–248. https://doi.org/10.1080/15389580903578854
- Russell, K. F., Vandermeer, B., & Hartling, L. (2011). Graduated driver licensing for reducing motor vehicle crashes among young drivers. The Cochrane Library.
- Shope, J. T. (2007). Graduated driver licensing: review of evaluation results since 2002. *Journal of Safety Research, 38*(2), 165–175. https://doi.org/10.1016/j.jsr.2007.02.004
- Williams, A. F., McCartt, A. T., & Sims, L. B. (2016). History and current status of state graduated driver licensing (GDL) laws in the United States. Journal of safety research, 56, 9-15. https://doi.org/10.1016/j.jsr.2015.11.006

- Branche, C., Williams, A. F., & Feldman, D. (2002). Graduated licensing for teens: why everybody's doing it. *Journal of Law, Medicine, and Ethics, 30, 146*.
- Hedlund, J., & Compton, R. (2004). Graduated driver licensing research in 2003 and beyond. *Journal of Safety Research*, 35(1), 5-11. https://doi.org/10.1016/j.jsr.2003.10.004
- McKnight, A. J., & Peck, R. C. (2002). Graduated driver licensing: what works? *Injury Prevention*, 8(Suppl. 2), ii32-ii38. https://doi.org/10.1136/ip.8.suppl\_2.ii32
- National Highway Traffic Safety Administration. (n.d.). Teen drivers: Graduated driver licensing. Retrieved from: https://one.nhtsa.gov/Driving-Safety/Teen-Drivers/Teen-Drivers-Education/Teen-Drivers-—Graduated-Driver-Licensing

## SOBRIETY CHECKPOINTS

### **Description of strategy**

Publicized sobriety checkpoint programs are meant to be highly visible and increase the public's perceived risk of arrest while also arresting any alcohol-impaired drivers who are identified at checkpoints (Guide to Community Preventive Services, 2016). An ideal state policy would permit sobriety checkpoints to be implemented monthly (Nelson et al., 2013).

At sobriety checkpoints, law enforcement officers use a system to stop drivers to assess their level of alcohol impairment. Two types of sobriety checkpoints are (1) random breath-testing (RBT) checkpoints where officers randomly select and test drivers for blood alcohol levels; and (2) selective breath-testing (SBT) checkpoints where officers must have reason to suspect a driver has been drinking before testing. Most of the studies found and examined in the Guide to Community Preventive Services (2016) were SBT.

One tool used in conjunction with sobriety checkpoints is the passive breath sensor. Passive breath sensors or passive alcohol sensors are small electronic devices, usually built into police flashlights or clipboards that can detect alcohol in the ambient air of a vehicle. The sensors are quick, objective, and provide another source of detection to the officer which may aid in the identification of drunken drivers (Voas & Fell, 2011). Currently, the sensors can only detect the presence of alcohol, not the level of alcohol present.

Publicizing the possibility of sobriety checkpoints is an integral part of this intervention, so the public will have a perceived risk of arrest if they drink and drive (The Community Guide, 2016).

The Institute of Medicine (2014) recommended routine sobriety checkpoints.

As of 2015, 39 states permit law enforcement officers to conduct publicized random breath testing checkpoints. Each state is specific to the frequency and processes of how RBT is conducted (Insurance Institute for Highway Safety, 2017).

**Hawai'i law:** HRS 286-162.5 and 286-162.6.

The chief of police in any county establishing an intoxication and drug control roadblock

program shall specify the procedures to be followed in carrying out the program in rules adopted under chapter 91 provided that the procedures shall be in conformity with and not more intrusive than the standards and guidelines described in section 286-162.6. HRS Section 286-162.6 (1) Require either that all motor vehicles, or mopeds, or both, approaching roadblocks be stopped, or that certain motor vehicles, or mopeds, or both, be stopped by selecting motor vehicles, or mopeds, or both, in a specified numerical sequence or pattern. (2) Roadblocks be located at fixed locations for a maximum 3 hour periods.(3) (A) Provide proper illumination; (B) Off -road or otherwise safe and secure holding areas for motor vehicles, or mopeds, or both, involved in any roadblock stop; (C) Uniformed police officers carrying proper identification; (D) Adequate advance warning of the fact and purpose of the roadblocks, either by sign posts, flares, or other alternative methods; (E) termination of roadblocks at the discretion of the police officer in charge where traffic congestion would otherwise result. (4) Provide for a sufficient quantity and visibility of uniformed officers and official vehicles to assure speedy compliance with the purpose of the roadblocks and to move traffic with a minimum of inconvenience.

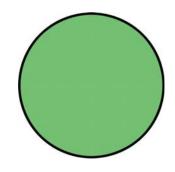
### **Discussion of effectiveness**

Evidence supports the use of sobriety checkpoints in reducing alcohol-impaired driving, alcohol-related crashes, and associated fatal and non-fatal injuries (Guide to Community Preventive Services, 2016). Evidence supports the effectiveness of sobriety checkpoints as a prevention strategy by itself as well as a part of a multi-component strategy (Clapp et al., 2005). Checkpoints are effective if they are consistent or frequent, visibly enforced, and include rigorous enforcement (Babor et al., 2010; Maryland collaborative, 2013). Random breath testing (RBT) of stopped drivers has substantially reduced traffic fatalities since it was introduced, particularly among 17 to 20-year-olds in an Australian study (Jiang et al., 2015). Preliminary studies suggest that sobriety checkpoints can be effective even with "low-staffing" if combined with sufficient publicity (Lacey, Ferguson, Kelley-Baker, & Rider, 2006).

Target substance(s): Alcohol
Used in Hawai'i: Yes

**Other names/examples:** Mobile command unit

### Indicator of Effectiveness and Strength of Evidence



### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

### Strength of evidence:

Effective

No evidence found

Grey literature

Single published study

Numerous published studies

Systematic review, meta-analysis

Cochrane Review, Community Guid

Cochrane Review, Community Guide, NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

## SOBRIETY CHECKPOINTS

### References for description of strategy

- Governors Highway Safety Association. (2012). Sobriety checkpoint laws. Retrieved from: http://www.ghsa.org/html/stateinfo/laws/checkpoint\_laws.html
- Guide to Community Preventive Services. (2014, March 20). Reducing alcohol-impaired driving: sobriety checkpoints. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/MVOI-AID-Sobriety-Checkpoints.pdf
- Rich, S. (n.d.). DUI checkpoints in Hawaii. Retrieved from: http://dui.drivinglaws.org/resources/dui-checkpoints-hawaii.htm
- Voas, R. B., & Fell, J. C. (2011). Preventing impaired driving opportunities and problems. Alcohol Research and Health, 34(2), 225–35.

#### **Evidence base**

- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., . . . Rossow, I. (2010). Alcohol: no ordinary commodity: research and public policy. (2nd ed.). New York, NY: Oxford University Press.
- Beck, K. H., & Moser, M. L. (2004). Exposure to the sobriety "Checkpoint Strikeforce" campaign in Maryland: impact on driver perceptions of vulnerability and behavior. *Traffic Injury Prevention*, *5*(2), 101–106. https://doi.org/10.1080/15389580490434908
- Clapp, J. D., Johnson, M., Voas, R. B., Lange, J. E., Shillington, A., & Russell, C. (2005). Reducing DUI among US college students: results of an environmental prevention trial. *Addiction*, 100(3), 327-334. https://doi.org/10.1111/j.1360-0443.2004.00917.x
- Fell, J. C., Lacey, J. H., & Voas, R. B. (2004). Sobriety checkpoints: evidence of effectiveness is strong, but use is limited. *Traffic Injury Prevention*, 5(3), 220–227. https://doi.org/10.1080/15389580490465247
- Guide to Community Preventive Services. (2014, March 20). Reducing alcohol-impaired driving: sobriety checkpoints. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/MVOI-AID-Sobriety-Checkpoints.pdf
- Insurance Institute for Highway Safety, Highway Loss Data Institute (2017). State court decision on the constitutionality of sobriety checkpoints.

  Retrieved from: http://www.iihs.org/iihs/topics/laws/checkpoints
- Jiang, H., Livingston, M., & Manton, E. (2015). The effects of random breath testing and lowering the minimum legal drinking age on traffic fatalities in Australian states. *Injury Prevention.* 21:77–83. https://doi.org/10.1136/injuryprev-2014-041303
- Lacey, J. H., Ferguson, S. A., Kelley-Baker, T., & Rider, R. P. (2006). Low-manpower checkpoints: can they provide effective DUI enforcement in small communities?. *Traffic Injury Prevention*, 7(3), 213-218. https://doi.org/10.1080/15389580600696686
- Maryland Collaborative to Reduce College Drinking and Related Problems. (2013). Reducing alcohol use and related problems among college students: a guide to best practices. Retrieved from: http://marylandcollaborative.org/resources/best-practices/
- Nelson, T. F., Xuan, Z., Babor, T. F., Brewer, R. D., Chaloupka, F. J., Gruenewald, P. J., ... & Reynolds, R. (2013). Efficacy and the strength of evidence of US alcohol control policies. *American journal of preventive medicine*, 45(1), 19-28. https://doi.org/10.1016/j.amepre.2013.03.008
- Saltz, R. F., Paschall, M. J., McGaffigan, R. P., & Nygaard, P.M. (2010). Alcohol risk management in college settings: the safer California universities randomized trial. *American Journal of Preventive Medicine*, *39*, 491-499. https://doi.org/10.1016/j.amepre.2010.08.020
- Shults, R. A., Elder, R. W., Sleet, D. A., Nichols, J. L., Alao, M. O., Carande-Kulis, V. G., ... & Task Force on Community Preventive Services. (2001).

  Reviews of evidence regarding interventions to reduce alcohol-impaired driving. *American Journal of Preventive Medicine*, 21(4), 66-88. https://doi.org/10.1080/15389580600696686

- Centers for Disease Control and Prevention. (2009). Research update: Sobriety checkpoints impaired driving motor vehicle safety injury center. Retrieved from: https://www.cdc.gov/motorvehiclesafety/calculator/factsheet/checkpoints.html
- Wisconsin Department of Public Instruction. (2002, December). Passive alcohol sensors: a study focusing on their use, performance, effectiveness, and policy implications for traffic enforcement. Retrieved from: http://www.wistatedocuments.org/cdm/singleitem/collection/

### USE & LOSE LAWS

### **Description of strategy**

### Use & Lose Laws refer to a loss of driving privileges for minors with alcohol violations

Use & Lose laws lead to an underage person who has an alcohol violation (such as attempting to purchase alcohol) to also have his or her driver's license suspended for some period of time, even if the person was not driving or near a car.

At the discretion of the court, the sanction often allows the person to drive to only school or work.

The use & lose laws are stronger if they include a mandatory license sanction for underage purchase, possession or consumption, and if the license sanction is for 91 days or longer, and pertains to everyone under age 21. Less strong is discretionary sanctions for some age groups for underage purchase, possession, and consumption (Fell et al., 2015).

### Hawai'i Use & Lose Laws

For minors below age 18 with an alcohol violation, Hawai'i makes license suspension or revocation a discretionary penalty by Family Court.

For violators ages 18 through 20, license suspension or revocation is mandatory.

Type(s) of violation leading to driver's license suspension, revocation, or denial for those under age 21 include:

- Underage purchase
- Underage possession
- Underage consumption

For both age groups, the length of the suspension or revocation of driver's license is a minimum of 180 days and the maximum is not specified.

At the discretion of the sentencing court, the person may be able to drive to and from school, school-sponsored activities, and employment.

### **Discussion of effectiveness**

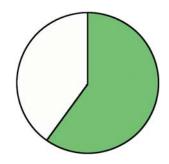
The Use & lose law for those under age 21 was associated with a 7.9% decrease in FARS ratios, which is statistically significant, and accounted for saving an estimated 170 lives nationally per year (Fell, Scherer, Thomas, & Voas, 2016). The same authors said that if all states adopted the maximum version of this law, an additional 47 lives could be saved. These results were based on structural equation modeling of predictors on the outcome of FARS vehicular crash death ratios of drinking to non-drinking drivers under age 21.

The Use & lose law was associated with a 7.0% decrease in beer consumption based on this same study (Fell, Scherer, Thomas, & Voas, 2016).

The nighttime restriction of the Use & and lose law did not show a statistically significant relationship with the under age 21 FARS ratios (Fell, Scherer, Thomas, & Voas, 2016).

Target substance(s): Alcohol
Used in Hawai'i: Yes
Other names/examples: None

### Indicator of Effectiveness and Strength of Evidence



### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

### Strength of evidence:

No evidence found
Grey literature
Single published study

Numerous published studies

Systematic review, meta-analysis

Cochrane Review, Community Guide,
NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

# USE & LOSE LAWS

### References for description of strategy

- Fell, J. C., Thomas, S., Scherer, M., Fisher, D. A., & Romano, E. (2015). Scoring the strengths and weaknesses of underage drinking laws in the United States. *World Medical & Health Policy*, 7(1), 28-58. https://doi.org/10.1002/wmh3.132
- Substance Abuse and Mental Health Services Administration. (2016, September). Report to Congress on the prevention and reduction of underage drinking (Vol. 1). Retrieved from: https://media.saa.icfcloud.com/ReportToCongress/2016/report\_main/2016\_RTC\_Volume% 20I\_508.pdf

### **Evidence base**

Fell, J. C., Scherer, M., Thomas, S., & Voas, R. B. (2016). Assessing the impact of twenty underage drinking laws. *Journal of Studies on Alcohol and Drugs*, 77(2), 249-260. https://doi.org/10.15288/jsad.2016.77.249

## ZERO TOLERANCE LAWS/BLOOD ALCOHOL CONCENTRATION

### **Description of strategy**

Zero-tolerance laws make it a criminal DUI offense for those under age 21 to drive with any detectable amount of alcohol in their system (Guide to Community Preventive Services, 2000). A blood alcohol concentration (BAC) from 0.00% to 0.02% is considered as zero, depending on the state. Even one glass of wine with dinner could lead to a DUI charge for a young driver.

BAC is a measure of the amount of alcohol in a person's bloodstream. Although BAC levels are commonly expressed in percent, state laws generally specify BAC levels as grams of alcohol per 100 milliliters of blood (abbreviated as grams per deciliter, g/dL).

Thirty-four states have BAC limits of 0.02, two have 0.01, and 15 states have 0.00 g/dL.

A per se impaired driving law indicates that drivers are considered intoxicated by the law if the BAC limit is exceeded and no additional proof of impairment is necessary to obtain a conviction. These laws pertain to drivers under age 21 of noncommercial cars, trucks, and motorcycles.

All 50 states and Washington D.C. have per se laws stating that it is a crime to drive with a BAC of .08 percent or higher for those of legal drinking age.

Penalties for underage drivers are strong if there is a mandatory administrative license sanction, followed by a discretionary one. The strongest law has an *administrative* license sanction for 91 days or longer, or at least 31 days. Somewhat strong is a mandatory *criminal* license sanction with a minimum of 91 days or longer. Less strong is a *discretionary* license sanction for as little as 31 days.

### Hawai'i law

According to the STOP Act report, 2015, Hawai'i law has a BAC limit at or above 0.02 g/dL as per se (conclusive) evidence of a violation for drivers under age 21. (SAMHSA, 2015).

HRS §281-44a requires all licensed premises to post a sign in or about the premises...notifying all customers and others of possible sanctions that may be imposed for operating a vehicle under the influence of an intoxicant...The sign shall be conspicuously positioned to be seen by an ordinarily observant person.

### **Discussion of effectiveness**

Evidence provides strong support for the effectiveness of lower blood alcohol concentration limits for reducing the rate of drunk driving and alcohol-related crashes, fatalities, and injuries (Fell & Voas, 2006).

The Community Preventive Services Task Force (2013) recommends the lower BAC for young or inexperienced drivers based on sufficient evidence of their effectiveness in reducing alcohol-related motor vehicle crashes: fatal crashes decreased by 24%, 17%, and 9% (3 studies); fatal and nonfatal injury crashes decreased by 17% and 4% (2 studies); crashes in which the investigating police officer believed that the driver had been drinking alcohol decreased by 11% (1 study).

The zero tolerance law for those under age 21 was associated with a 2.9% decrease (statistically significant) in FARS ratios, which accounts for saving an estimated 102 lives nationally per year (Fell, Scherer, Thomas, & Voas, 2016). These results were based on structural equation modeling of predictors on the outcome of FARS vehicular crash death ratios of drinking to non-drinking drivers under age 21.

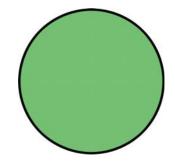
The law for zero tolerance BAC was associated with a 4.7% decrease in beer consumption based on a structural equation modeling study (Fell, Scherer, Thomas, & Voas, 2016).

The Institute of Medicine (2014) recommended enforcement of zero tolerance laws as well as media campaigns to increase young people's awareness of BAC limits and enforcement efforts and the consequences of violation.

Target substance(s): Alcohol Used in Hawai'i: Yes

Other names/examples: Per Se Law

### Indicator of Effectiveness and Strength of Evidence



### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

### Strength of evidence:

No evidence found
Grey literature
Single published study

**NREPP** 

Numerous published studies

Systematic review, meta-analysis

Cochrane Review, Community Guide,

Causal Domain

Economic availability

Retail availability

Social availability

Promotion & media

Enforcement

Community norms

## ZERO TOLERANCE LAWS/BLOOD ALCOHOL CONCENTRATION

### References for description of strategy

- City and County of Honolulu. (2017, April 3). *Rules of the Liquor Commission*. Retrieved from: http://www.honolulu.gov/rep/site/bfsliq/rules/LIQ Rules Website Version 032717.pdf
- Guide to Community Preventive Services. (2013, September 23). Reducing alcohol-impaired driving: lower BAC laws for young or inexperienced drivers. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/MVOI-AID-Lower-BAC.pdf

#### **Evidence base**

- Fell, J. C., Scherer, M., Thomas, S., & Voas, R. B. (2016). Assessing the impact of twenty underage drinking laws. *Journal of Studies on Alcohol and Drugs*, 77(2), 249-260. https://doi.org/10.15288/jsad.2016.77.249
- Fell, J. C., & Voas, R. B. (2006). The effectiveness of reducing illegal blood alcohol concentration (BAC) limits for driving: evidence for lowering the limit to. 05 BAC. *Journal of Safety Research*, 37(3), 233-243. https://doi.org/10.1016/j.jsr.2005.07.006
- Guide to Community Preventive Services. (2013, September 23). Reducing alcohol-impaired driving: lower BAC laws for young or inexperienced drivers. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/MVOI-AID-Lower-BAC.pdf
- Wagenaar, A. C., Maldonado-Molina, M. M., Ma, L., Tobler, A. L., & Komro, K. A. (2007). Effects of legal BAC limits on fatal crash involvement: analyses of 28 states from 1976 through 2002. *Journal of Safety Research*, 38(5), 493-499. https://doi.org/10.1016/j.jsr.2007.06.001
- Wagenaar, A. C., O'Malley, P. M., & LaFond, C. (2001). Lowered legal blood alcohol limits for young drivers: effects on drinking, driving, and driving-after-drinking behaviors in 30 states. *American Journal of Public Health*, 91(5), 801.

- Fell, J. C., & Voas, R. B. (2009). Reducing illegal blood alcohol limits for driving: effects on traffic safety. Retrieved from: http://trid.trb.org/view.aspx?id=1082971
- Guide to Community Preventive Services. (2013, September 24). Reducing alcohol-impaired driving: 0.08% blood alcohol concentration (BAC) laws. Retrieved from: https://www.thecommunityguide.org/sites/default/files/assets/MVOI-AID-BAC-Laws.pdf
- Mann, R. E., Macdonald, S., Stoduto, G., Bondy, S., Jonah, B., & Shaikh, A. (2001). The effects of introducing or lowering legal per se blood alcohol limits for driving: an international review. *Accident Analysis & Prevention*, *33*(5), 569–583. https://doi.org/10.1016/S0001-4575(00) 00077-4
- Pacific Institute for Research and Evaluation. (2000). A guide to zero tolerance and graduated licensing: two strategies that work. Retrieved from: http://www.popcenter.org/problems/drunk driving/PDFs/Presseur etal 1999.pdf

## COUNTER-ADVERTISING CAMPAIGN WITH YOUTH PARTICIPATION

### **Description of strategy**

Counter-marketing/advertising refers to the use of commercial marketing tactics to reduce underage drinking and to increase pro-health messages. Counter-advertising/ marketing campaign attempt to offset pro-alcohol marketing and influences. Producers of these campaigns test their concepts, messages, and final design especially with their target audience(s).

Problem: Previous reviews and studies show that exposure to alcohol marketing was associated with earlier drinking initiation and higher alcohol consumption among youth (Jernigan, Noel, Landon, Thornton, & Lobstein, 2017). These same authors reviewed 12 longitudinal studies published since 2008 and concluded that young people who have greater exposure to alcohol marketing are more likely to initiate alcohol use and drink at binge or hazardous levels. Younger adolescents were exposed to marketing at similar levels as older adolescents and young adults (Jernigan et al., 2017). Young people are exposed to ads through avenues including TV, internet, social media and YouTube.

Interpersonal discussions about alcohol use, expectations and advertising on social media may enhance the impact of the advertising on consumption and risky behaviors (Hoffman et al., cited in Jernigan et al., 2016).

### Youth participation in these campaigns

A best practice is to involve youth in a counter -advertising campaign that shows the alcohol industry manipulation of youth and adult hypocrisy (Jernigan, 2017; Zucker, Hopkins, Sly, Urich, et al., 2000). Social marketing principles dictate that we "sell" to the target audience things they want - like freedom, autonomy, independence, rebellion (Jernigan, 2017). He continued, "the brilliance of the tobacco counter-advertising campaigns lay in how they framed the "product" as freedom for youth from tobacco industry manipulation" and "tobacco as an addictive habit marketed by an adult establishment (Zucker et al., 2000). It is important to avoid using scare tactics or humiliation for various reasons as well as to not use information-only approaches (Institute of Medicine, 2004), and to use image-based ads (Blum, 1994).

### **Discussion of effectiveness**

It is well established that youth under age 21 are exposed to alcohol ads and this exposure is related to consumption, heavy drinking, and brand preference (Jernigan et al., 2016; Siegel, Ross, Albers, DeJong, King, Naimi, Jernigan, 2016). In their review, they found evidence of an association between marketing exposure and youth drinking behavior in multiple population groups, cultures, and nationalities among a range of younger age groups.

The lessons learned in tobacco counteradvertising are the most reliable evidence we have of what can work in a youth-focused media campaign. An example of effectively working with youth to develop a marketing campaign is Florida's effective anti-tobacco "truth" campaign (Zucker, Hopkins, et al., 2000). The campaign utilized media as a component with an anti-tobacco industry approach to convey factual information and encourage youth to change norms about smoking. A longitudinal study found evidence of a dose-response effect, higher levels of campaign exposure were associated with a lowered likelihood of smoking initiation, and among current smokers, and progression to established smoking (Allen, J. A., Vallone, D., Vargyas, E., & Healton, C. G., 2009).

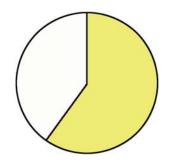
A CDC panel of marketing experts developed recommendations for effective youth countermarketing recommended portrayal of a tobacco-free lifestyle as the majority lifestyle, offer youth empowerment and control, portray smoking as unacceptable and undesirable, and to use a variety of voices (McKenna, Gutierrez, McCall, 2000).

In the process of developing the campaign, media literacy is increased. Those viewing the campaign also gain some media literacy skills by best understanding the source of the ads. The extent of the effectiveness is affected by how much exposure can be obtained for the print, digital, or video ads. The counter-ads can be controversial which can also be used to get more media exposure. For example, if a station refuses to air an ad, that story may be pitched to local media or used in social media. The link below shows a collaboration with Baltimore city youth, Oliver Community Association, and Behavioral Health System Baltimore to develop counter ad campaigns. https://vimeo.com/99574619

Target substance(s): Alcohol
Used in Hawai'i: Yes

Other names/examples: None

### Indicator of Effectiveness and Strength of Evidence



### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

### Strength of evidence:

No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis
Cochrane Review, Community Guide,
NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

## Counter-Advertising Campaign with Youth Participation

### References for description of strategy

- Agostinelli, G., & Grube, J. W. (2002). Alcohol counter-advertising and the media. Alcohol Research & Health, 26(1), 15-21.
- Centers for Disease Control and Prevention. (2003). Designing and implementing an effective tobacco counter-marketing campaign. Retrieved from: https://www.cdc.gov/tobacco/stateandcommunity/counter-marketing/pdfs/tobacco\_cm\_manual.pdf
- Center on Alcohol Marketing and Youth. (2012). State laws to reduce the impact of alcohol marketing on youth: current status and model policies. Retrieved from: http://www.camy.org/\_docs/research-to-practice/promotion/legal-resources/state-ad-laws/
  CAMY\_State\_Alcohol\_Ads\_Report\_2012.pdf
- Blum, A. (1994). Paid counter-advertising: proven strategy to combat tobacco use and promotion. *American Journal of Preventive Medicine*. 10 (3).
- McKenna, J., Gutierrez, K. & McCall, K. (2000). Strategies for an effective youth counter-marketing program: recommendations from commercial marketing experts. *Journal of Public Health Management & Practice*. *6*(3), 7-13.

### **Evidence base**

- Allen, J. A., Vallone, D., Vargyas, E., & Healton, C. G. (2009). The truth campaign: using counter marketing to reduce youth smoking. *The New World of health promotion, new program development, implementation and evaluation*. Sudbury, MA: Jones and Bartlett Publishers.
- 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*. 1:7-20. https://doi.org/10.1111/add.13591
- Siegel, Ross, Albers, DeJong, King, Naimi, Jernigan. (2016). The relationship between exposure to brand-specific alcohol advertising and brand-specific consumption among underage drinkers. *American Journal of Drug and Alcohol Abuse*. 42(1), 4-14. https://doi.org/10.3109/00952990.2015.1085542
- Zucker, D., Hopkins, R., Sly, D., Urich, J., Kershaw, J., & Solari, S. (2000). Florida's "truth" campaign: a counter-marketing, anti-tobacco media campaign. *Journal of Public Health Management Practice*. 6(3), 1-6.

# MEDIA LITERACY

### **Description of strategy**

Media literacy helps people ask questions about what they watch, see, hear, and read. It helps them critically assess how the mass media normalize, glamorize, and create role models for unhealthy lifestyles and behaviors, such as smoking. Media literacy involves examining the techniques, technologies, and institutions involved in media production; critically analyzing media messages, and recognizing the role that audiences play in attaching a meaning to those messages. The idea is that teaching people to recognize how a message tries to influence them will lessen the impact of that message. On a broader level, media literacy can be viewed as a form of protection or "inoculation" against unhealthy behaviors shown in the media (Centers for Disease Control and Prevention, 2003).

The National Research Council and the Institute of Medicine (2004) recommended that alcohol ads should not be placed where a significant portion of the audience is underage, and should not use marketing practices with substantial underage appeal.

Media Ready (MR) program was developed for middle school students after studying effective existing media literacy programs and to fill gaps (Kupersmidt, Scull, & Benson, 2012). It was designed to last long enough to provide multiple chances to practice the skills about alcohol and tobacco ads.

The Media Ready program was developed by innovation Research & Training under a contract funded by the NC-DHHS/Federal OJJDP Enforcing Underage Drinking Laws Program. Media Ready is the product of the collaboration of leading child, clinical and developmental psychologists who are also substance abuse prevention scientists and experienced educators.

### **Discussion of effectiveness**

Evidence of effectiveness suggests that media literacy is an effective strategy for alcohol-related behaviors (Jeong, Cho, & Hwang, 2012). Media literacy programs were found to have significant positive results to increase critical analysis of media messages about alcohol in youth (Kupersmidt, Scull, & Benson, 2012).

The Media Ready program helps young teens to more actively examine media messages to deconstruct and process them, and these critical thinking skills may promote healthier decision making about intent to use alcohol (Kupersmidt, Scull, & Benson, 2012). A short-term randomized efficacy trial, suggested that media ready program may be a more effective preventive approach for boys, since those in the intervention group reported less intention to use alcohol (Kupersmidt, et al., 2012).

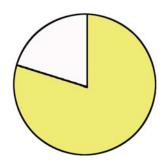
Future key considerations should be considered when developing media literacy programs and should be considered:

- Media literacy programs need to address the wide spectrum of avenues for alcohol advertising, including those which are less visible to regulators
- Cultural relevance should be a high priority for alcohol media literacy programs
- Consider gender differences when designing a program

Target substance(s): Alcohol
Used in Hawai'i: Yes

Other names/examples: None

### Indicator of Effectiveness and Strength of Evidence



### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

### Strength of evidence:

No evidence found

Grey literature

Single published study

Numerous published studies

Systematic review, meta-analysis

Cochrane Review, Community Guide, NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

### MEDIA LITERACY

### References for description of strategy

Centers for Disease Control and Prevention. (2003). Designing and implementing an effective tobacco counter-marketing campaign. Retrieved from: https://www.cdc.gov/tobacco/stateandcommunity/counter-marketing/pdfs/tobacco\_cm\_manual.pdf

#### **Evidence base**

- Bergsma, L.J., & Carney, M.E. (2008). Effectiveness of health-promoting media literacy education: a systematic review. *Health Education Research*, 23(3), 522-542. https://doi.org/10.1093/her/cym084
- Hindmarsh, C. S., Jones, S. C., & Kervin, L. (2015). Effectiveness of alcohol media literacy programmes: a systematic literature review. *Health education research*, *30*(3), 449-465. https://doi.org/10.1093/her/cyv015
- Kupersmidt, Scull, & Benson. (2012). Improving media message interpretation processing skills to promote healthy decision making about substance use: the effects of the middle school media ready curriculum. *Journal of Health Communication, 17, 546-563*. https://doi.org/10.1080/10810730.2011.635769
- Jeong, S.H., Cho, H., & Hwang, Y. (2012). Media literacy interventions: a meta-analytic review. *Journal of Communication*, 32, 454-472. https://doi.org/10.1111/j.1460-2466.2012.01643.x
- Weintraub Austin, E., & Johnson, K.K. (1997). Effects of general and alcohol-specific media literacy training on children's decision making about alcohol. *Journal of Health Communication*, 2, 17-42. https://doi.org/10.1080/108107397127897

### **Further reading**

Center for Media Literacy. Retrieved from: http://www.medialit.org/

- Centers for Disease Control and Prevention. (2003). Designing and implementing an effective tobacco counter-marketing campaign. Retrieved from: https://www.cdc.gov/tobacco/stateandcommunity/counter-marketing/pdfs/tobacco\_cm\_manual.pdf
- The Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration; The Office on Smoking and Health, Centers for Disease Control and Prevention; The American Academy of Pediatrics; and National Education Association Health Information Network. *MediaSharp: Analyzing tobacco and alcohol messages*. (n.d.). Retrieved from: http://www.accessexcellence.org/HHQ/CDC/mediaSharp.pdf
- Weintraub Austin, E., & Johnson, K.K. (1997). Effects of general and alcohol-specific media literacy training on children's decision making about alcohol. *Journal of Health Communication*, 2, 17-42. https://doi.org/10.1080/108107397127897

### RESTRICT ALCOHOL ADVERTISING ON OFF-PREMISE RETAIL OUTLETS

### **Description of strategy**

A best practice is to have strict limitations on advertising on the inside or outside of retail alcohol outlet windows to no more than 15 percent of the space or equivalent (Center on Alcohol Marketing and Youth, 2012). The limit pertains to all advertising, not only alcohol ads. This best practice would allow law enforcement personnel outside to have a clear and unobstructed view of the interior of the premises, including the area with the cash registers. This restriction prevents outlets from being a large outdoor advertisement for alcohol.

In addition, the alcohol industry should not use marketing practices with substantial youth appeal (National Research Council and Institute of Medicine, 2004).

A first step is to do an environmental scan of the amount of advertising on the outside of retail outlets and in particular on the windows. The promotion section of the assessment tool — Off-premise (store) environmental scan, D3 from the Community Assessment Training binder can be used to help document the current situation. Involve youth in this data gathering to raise their awareness and critical thinking about this area. After monitoring and collecting the data, educate the community on the existing situation. The data collection and awareness are preparation for future advocacy for policy changes.

If problems are found with any retailer's extent of or youth appeal of their advertising, the Friday Night Live toolkit contains suggestions on how to approach the retailer to ask for changes. The toolkit offers steps to engage youth to help with this strategy of examining retail signage and for policy change. http://www.fridaynightlive.org/wp-content/uploads/FNL-Lee-Law-toolkit-draft\_v2.pdf

### Hawai'i law

Hawai'i law has regulated outdoor advertising without regard to advertising content, this received a best practice rating (CAMY, 2012).

HRS §281-44 (b) The Liquor Commission may prescribe the character and extent of all other advertisements, posters, or signs which may be posted or maintained in or about the licensed premises.

### **Discussion of effectiveness**

It is well-established that youth under age 21 are exposed to alcohol ads and exposure is related to consumption, heavy drinking, and brand preference (Jernigan, Noel, Landon, Thornton, & Lobstein, 2017).

For example, a 2007 longitudinal study found underage youth who were exposed to alcohol advertising around schools at the end of sixth grade were associated with an increased alcohol-use intention at the end of eighth grade. Although this study found no impact on drinking behaviors, this study found evidence that an increased exposure to alcohol advertising is associated with a greater influence and intention to drink. This was also true for nonusers of alcohol (Pasch et al., 2007). Two studies support some evidence that restricting the content and placement of alcohol advertising may reduce underage and excessive drinking, however further evidence is needed to confirm effects (University of Wisconsin County Health Rankings, 2014).

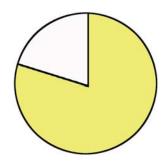
A 2006 national study, found evidence that for every additional ad a young person saw he or she drank 1% more. For each additional dollar per capita spent on alcohol advertising in a local market (above the national average of \$6.80 per capita), young people drank 3% more, thus contributing to the fact that greater exposure to alcohol advertising contributes to an increase in drinking among underage youth (Snyder, Milici, Slater, Sun, & Strizhakova, 2006).

Underage youth were more than five time more likely to consume brands that advertise on national TV and 36% more likely to consume brands that advertise in national magazines, which suggest that alcohol advertising influences brand choice among youth who consume alcohol (Siegel, Ross, Albers, DeJong, King, Naimi, Jernigan, 2016).

Future research and evidence are needed to further recommend the implementation of alcohol advertising restrictions as advertising bans or restrictions may contribute to a further shifting marketing activities into less-regulated media such as the internet (Siegfried et al., 2013; Babor, 2010).

Target substance(s): Alcohol
Used in Hawai'i: Yes
Other names/examples: None

### Indicator of Effectiveness and Strength of Evidence



### Indicator of effectiveness:

Not effective

Varied evidence of effectiveness

Effective

### Strength of evidence:

No evidence found
Grey literature
Single published study
Numerous published studies
Systematic review, meta-analysis
Cochrane Review, Community Guide,
NREPP

Causal Domain	
Economic availability	
Retail availability	
Social availability	
Promotion & media	
Enforcement	
Community norms	

### RESTRICT ALCOHOL ADVERTISING ON OFF-PREMISE RETAIL OUTLETS

### References for description of strategy

- California Friday Night Live. (2013). Using the Lee Law to reduce youth exposure to alcohol retail outlet advertising. Retrieved from: http://www.fridaynightlive.org/wp-content/uploads/FNL-Lee-Law-toolkit-draft\_v2.pdf
- Centers for Disease Control and Prevention. (2003). Designing and implementing an effective tobacco counter-marketing campaign. Retrieved from: https://www.cdc.gov/tobacco/stateandcommunity/counter-marketing/pdfs/tobacco\_cm\_manual.pdf
- Center on Alcohol Marketing and Youth. (2012). State laws to reduce the Impact of alcohol marketing on youth: current status and model policies. Retrieved from: http://www.camy.org/\_docs/research-to-practice/promotion/legal-resources/State%20Ad%20Laws/
  State\_Alcohol\_Advertising\_Laws\_2012

### **Evidence base**

- Anderson, P., De Bruijn, A., Angus, K., Gordon, R., & Hastings, G. (2009). Impact of alcohol advertising and media exposure on adolescent alcohol use: a systematic review of longitudinal studies. *Alcohol and alcoholism*, 44(3), 229-243. https://doi.org/10.1093/alcalc/agn115
- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., Grube, J., . . . Rossow, I. (2010). Alcohol: no ordinary commodity: research and public policy. (2nd ed). New York, NY: Oxford University Press.
- Pasch, K. E., Komro, K. A., Perry, C. L., Hearst, M. O., & Farbakhsh, K. (2007). Outdoor alcohol advertising near schools: what does it advertise and how is it related to intentions and use of alcohol among young adolescents?. *Journal of studies on alcohol and drugs*, 68(4), 587-596. https://doi.org/10.15288/jsad.2007.68.587
- Jernigan, D., Noel, J., Landon, J., Thornton, N., & Lobstein, T. (2016). Alcohol marketing and youth alcohol consumption: a systematic review of longitudinal studies published since 2008. *Addiction*. 7-20. https://doi.org/10.1111/add.13591
- Siegel, Ross, Albers, DeJong, King, Naimi, Jernigan, (2016). The relationship between exposure to brand-specific alcohol advertising and brand-specific consumption among underage drinkers. *American Journal of Drug and Alcohol Abuse*. 42(1), 4-14. http://doi.org/10.3109/00952990.2015.1085542
- Siegfried, N., Pienaar, D., Ataguba, J., Volmink, J., Kredo, T., Jere, M., & Parry, C. (2013). Restricting or banning alcohol advertising to reduce alcohol consumption in adults and adolescents. *Cochrane Database of Systematic Reviews*. https://doi.org/10.1002/14651858.CD010704.pub2
- 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:10.1001/archpedi.160.1.18
- University of Wisconsin Population Health Institute, County Health Rankings and Roadmaps. (2017). Alcohol advertising restrictions. Retrieved from: http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/alcohol-advertising-restrictions

- National Research Council, Institute of Medicine, Division of Behavioral and Social Sciences and Education, Board on Children, Youth, and Families, Committee on Developing a Strategy to Reduce and Prevent Underage Drinking. (2004). Reducing underage drinking: a collective responsibility. Washington, DC: National Academies Press.
- State laws to reduce the impact of alcohol marketing on youth: Current status and model policies. (2012). Center on Alcohol Marketing and Youth, John Hopkins Bloomberg School of Public Health. Baltimore, MD. Available at: http://www.camy.org/action/Legal\_Resources/State%20Ad%20Laws/CAMY\_State\_Alcohol\_Ads\_Report\_2012.pdf