

**Environmental Strategies Companion:
Review of Select Environmental Strategies Concerning the Seven
Intervening Variables Targeted by the State of North Carolina
Strategic Prevention Framework State Incentive Grant (SPF SIG)**

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Introduction

This document serves as a companion to the Environmental Strategies: Selection Guide, Reference List, and Examples of Implementation Guidelines Binder (“the Binder”) developed for the SPF project by MayaTech. The Binder was developed for the CSAP SPF SIG Evaluators Meeting in October 2006 and updated in May 2007 and again in November 2007. This document is not meant to replace the Binder, but to assist providers with their search to select an environmental strategy to address their targeted intervening variable(s).

Described herein are environmental strategies to reduce alcohol-related motor vehicle crashes that are identified as effective in the Binder’s effectiveness analysis (see Binder pages 16-36). These are not the only environmental strategies that can address the seven intervening variables targeted by the project, but they are the strategies most clearly supported by the MayaTech literature review. Information in this document for each strategy includes a description of the strategy, the purpose of the strategy, considerations for each strategy, and a brief statement of research findings. More information on each strategy can be found in the Binder, including a more complete description of the research findings and extensive reference lists on where to find further information.

The appendix to this document is a matrix matching intervening variables and contributing factors that are associated with environmental strategies listed in the Binder. Strategies listed in the matrix with a single asterisk are strategies described in this document for which research findings can be found in the Binder. The matrix was developed to assist providers in identifying strategies that are likely to address their targeted contributing factors. Further research can then confirm if the strategies are a good fit for the community’s capacities and needs.

A copy of this document and the Binder can be found on NC SPF SIG website at www.ncspfsig.org (on the Project Documents page).

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1. Intervening Variable: Easy Retail Access to Alcohol

A. Strategy: Responsible beverage service training (RBST)

Description: RBST, also known as "server training," refers to educating owners, managers, servers and sellers at alcohol establishments about strategies to avoid illegally selling alcohol to underage youth or intoxicated patrons. Training can be required by local or state law, or a law/ordinance may provide incentives for businesses that undergo training. In addition, some individual establishments may voluntarily implement training policies in the absence of any legal requirements or incentives.

Purpose: The goal of RBST is to decrease the number of illegal alcohol sales to underage youth and intoxicated patrons through education programs that:

- Help managers and servers/sellers understand state, community, and establishment-level alcohol policies and potential consequences for failing to comply with such policies (e.g., criminal or civil liability, job loss).
- Provide the necessary skills to comply with these policies

Considerations:

- RBS training can be obtained from several sources.
- Positive media coverage on establishments that have implemented an RBST program may help gain public support for server training.
- Without management training and support, changes in server or seller behavior are unlikely to be sustained.
- Some practices, such as allowing underage youth to enter the premises, may make reducing youth access to alcohol more difficult for alcohol servers or sellers.
- Due to high staff turnover in many establishments, owners and managers need to develop an ongoing system to train new employees. Training should include:
 - Clear, written policies concerning serving/selling practices of which employees are made aware and which are consistently enforced and
 - A monitoring system to ensure that all employees are adhering to responsible serving/selling practices.
- Some communities may think that only certain outlets need to receive server training or that a one-time training session is adequate to learn responsible beverage service.
- Commercial establishments are not the only location in which irresponsible serving practices can occur; hosts of private parties also need to be aware of their responsibility to the guests to whom they serve alcohol

Research findings: The general opinion of the research articles described in the Binder is that the training is effective; however, the effectiveness varies greatly by the type of training. Training that is focused on specific behaviors, repeated at intervals, and paired with an increase in enforcement of related alcohol laws appears to be more effective.

RBST References: Binder page 16

B. Strategy: Cops in Shops

Description: Agents, posing as either employees of the retailer or customers, are stationed inside the retailer's premises to apprehend underage persons when they attempt to buy alcoholic beverages. The agents also have a secondary, educational role, which is to share their expertise with the retailer's employees on such subjects as false or fake ID, the signs of intoxication, and the physical and behavioral characteristics of minors.

Purpose: The objective of the program is not just to apprehend underage buyers and hold them accountable for their acts; it is also to leave the retailer's employees with a better understanding of their legal responsibilities and with the knowledge necessary to fulfill them.

Considerations:

- Cops in Shops is a cooperative program that requires the willing participation of alcoholic beverage retailers.
- Posters, outdoor billboards, and other public service messages warn youth and adults that the program has been implemented in their community.
- In addition to providing instruction manuals and training videos to officers and retailers, The Council's program includes a strong public awareness campaign.
- The risk of getting caught is always present.

Research Findings: Several articles found this strategy to be effective in preventing youth access to alcohol. Cops in Shops programs appear to be effective at both reducing the number of adults willing to purchase alcohol for minors, and increasing the chance that minors attempting purchases will be apprehended.

Cops in Shops References: Binder page 36

2. Intervening Variable: Low Enforcement of Alcohol Laws

A. Strategy: Enforce impaired driving laws – sobriety checkpoints

Description: Sobriety checkpoints are traffic stops where law enforcement officers systematically select drivers to assess their level of alcohol impairment. Two types of sobriety checkpoints exist. Selective breath testing (SBT) checkpoints are the only type used in the United States. At these checkpoints, police must have a reason to suspect that drivers have been drinking before testing their blood alcohol levels. At random breath testing (RBT) checkpoints, all drivers who are stopped have their blood alcohol levels tested.

Purpose: The purpose of the checkpoint is to maximize the deterrent effect and increase the perception of “risk of apprehension” to motorists who operate a vehicle while impaired by alcohol or other drugs.

Considerations:

- Detailed guidelines on how to conduct a checkpoint are available.
- Important: the use of checkpoints alone will not maintain the perception of risk. Vigorous enforcement, public information and education need to be part of this program.
- Judicial support and involvement of prosecuting attorneys are essential

Research Findings: Several articles found this strategy to be effective in reducing alcohol-related crashes.

Sobriety Checkpoint References: Binder page 33

Variations to the Sobriety Checkpoint strategy include:

i. Combining Sobriety Checkpoints with Positive Passive Breath Sensors

Description: Passive alcohol sensors are sometimes used as a tool to assist law enforcement as part of random testing conducted at roadblocks or sobriety checkpoints.

Considerations:

- Passive alcohol sensors can be used by law enforcement and others for non-traffic applications.
- Existing case law and legal opinion have not identified a conflict between the correct use of passive alcohol sensors by law enforcement for traffic enforcement and the 4th Amendment to the U.S. Constitution.
- The use of passive alcohol sensors raises concerns about privacy rights and compliance with laws regulating searches and seizures.
- The public's perception of law enforcement use of passive alcohol sensors may provide a deterrent to impaired driving.
- Passive alcohol sensors, like other technology, can be abused or used improperly by their operators resulting in information that could incorrectly characterize the drinking status of the driver/suspect.
- Due to performance differences under varying environmental and weather conditions, there is a definite need for caution when considering the use of passive alcohol sensors for traffic law enforcement.

Research Findings: This strategy was found to be effective at increasing BAC detection rates but is unlikely to lead to detection of all alcohol impaired drivers at sobriety checkpoints due to performance problems (e.g. the sensor samples a mixture of ambient air and breath which dilutes the concentration of alcohol in the sample and wind can also affect the sample).

ii. Highly Visible Roadside Sobriety Checkpoints

Description: As with any criminal offense, the best way to deter impaired driving is through a highly visible effort by the entire criminal justice system – enforcement, prosecution, adjudication and sanctions – to reinforce the belief that violators are criminals and that it is likely that impaired drivers are at high risk of being caught, prosecuted and adjudicated. Every law enforcement agency has the legal ability to conduct saturation patrols and most States allow the use of small- and large-scale sobriety checkpoints.

Sobriety Checkpoint References: Binder page 33

B. Strategy: Compliance checks

Description: Compliance checks are a tool to identify alcohol establishments that sell alcohol to underage youth.

Purpose: The purpose of compliance checks is to enforce state criminal statutes, local administrative ordinances, or both, and to identify, warn and educate alcohol establishments that serve or sell alcohol to underage youth about the penalties associated with the provision of alcohol to underage youth.

Considerations:

- Compliance checks can motivate citizen participation and support. Citizen participants are often surprised by the ease with which youth can purchase alcohol and become motivated. In addition, law enforcement and retailers frequently work together.
- Compliance checks are not necessarily costly, and can cost \$10 per establishment. Sometimes there is increased cost to cover police time and transportation.
- Detailed guidelines on how to do compliance checks are readily available:
 - <http://www.udetc.org/documents/purchase.pdf>
 - <http://www.udetc.org/documents/reducealsal.pdf>
 - <http://www.epi.umn.edu/alcohol/policy/compchks.shtm>

Research Findings: Research indicates that compliance checks are effective at reducing alcohol sales to underage buyers.

Compliance Checks References: Binder page 30

C. Strategy: Shoulder tap programs

Description: Shoulder tap is an act, whereby, a minor asks an adult to purchase alcohol for him or her. Typically, the minor will loiter around a convenience store and solicit help from a passing adult stranger. This is also commonly known as a "Hey Mister". Communities seeking to curb the illegal avenue to alcohol use federal and state grants to conduct police sting operations to deter adult assistance. The programs may begin with

underage decoys in front of stores asking adults to buy alcohol and depending upon the answer, the decoy will give a green thank you card to adults who refuse and a red reprimand card to those who agree. Later stings in the area involve arrests and prosecution for furnishing alcohol to minors, an offense punished usually by probation or a fine.

Purpose: The goals of the program are to:

- Reduce underage consumption of, and access to, alcohol by deterring adults from furnishing to them outside of licensed premises,
- Expand the involvement of local law enforcement in enforcing underage drinking laws and
- Raise public awareness about the problem.

Research Findings: Shoulder tap enforcement programs appear to be an effective means of reducing the number of adults purchasing alcohol for minors. In one study, the use of minors as decoys, paired with working closely with the local police department and the media, yielded a strong reduction in the number of patrons willing to purchase alcohol for minors.

Shoulder Tap References: Binder page 32

D. Strategy: Apply appropriate penalties – zero tolerance

Description: Zero tolerance laws prohibit young persons from driving a vehicle while they have a BAC greater than 0.00 percent, 0.01 percent, or 0.02 percent.

Purpose: To prevent impaired driving among youth.

Considerations:

- See <http://www.udetc.org/documents/Guide2zero.pdf> for extensive information
- Having appropriate penalties for violations
- Well publicized enforcement campaigns
- Practical enforcement techniques
- Provision of support personnel and facilities where the juvenile offender can be handled

Research: Research indicates that zero tolerance laws are effective in reducing traffic crashes involving youth who have been drinking.

References: Binder page 34

3. Intervening Variable: Easy Social Access to Alcohol (parties, peers, family)

A. Strategy: Alcohol restrictions at community events

Description: Banning or minimizing access to and advertising for alcohol at community festivals and events.

Purpose: The purpose of including alcohol restrictions at community events is to minimize the consequences of excessive drinking. Problems such as injuries, fights and DUIs may be reduced by restricting alcohol sales at community events.

Considerations: Creating an ordinance that restricts or bans alcohol use on public property is not enough to solve the problems related to alcohol consumption—the restrictions must also be enforced. It is important for communities to work with law enforcement agencies to obtain their input and support for these policies.

Research Findings: A study suggests that events with more restrictions in place are less likely to have illegal sales to underage people. The most promising restriction seems to be restricting the number of servings per customer per sale.

Alcohol restrictions at public events References: Binder page 19

4. Intervening Variable: Low Perception of Risk of Alcohol Use

 **A. Strategy: Cops in Shops** (see *Easy Access to Alcohol* above)

B. Strategy: Media advocacy

Description: Media Advocacy is community organizing combined with strategic engagement of the media to promote the adoption of public policies. Example: A community coalition calling for the removal of alcohol advertising billboards near schools organizes a protest and press conference that gets widespread local news coverage.

Purpose: Media advocacy can focus attention on policy goals and keep them in the forefront of the public's attention. It allows the promotion of public debate and generates support for changes in community norms and policies. Community attitudes and practices are shaped by the conversations that take place within families and among the social networks in our everyday lives. Public policies reflect community leaders' understanding of those attitudes and practices. The news media play a powerful role in shaping those dialogues and policy decisions.

Considerations: Some ways to work with the press are:

- Speak to the media on the phone or in person
- Build a relationship with your local reporters
- Write a letter to the editor
- Get an Editorial Board Meeting
- Submit an op-ed (guest editorial)
- Hold a press conference
- Put out a press release

- Call radio talk shows

Research Findings: Studies suggest that media outreach can be an important means for public-interest nonprofits to further both their external and internal goals. The effectiveness of the news coverage ultimately depends on the type of coverage, and if the message is linked to a local environmental prevention strategy.

Media Advocacy References: Binder page 20

C. Strategy: Graduated licensing policies

Description: The graduated licensing system places certain restrictions on teens under the age of 18 who have learner permits and driver licenses.

Purpose: To reduce the number of teenage motor vehicle crashes and related fatalities.

Considerations: See <http://www.udetc.org/documents/Guide2zero.pdf> for extensive information on considerations.

Research: Research indicates that graduated licensing policies on the whole do appear to be an effective means of reducing the crash rate among teenagers. The length of the time a driver holds a permit before obtaining a license appears to be one of the more significant elements of the programs.

Graduated licensing policies References: Binder page 25

D. Strategy: Revoke license for impaired drivers

Description: Use of this sanction as a deterrence-based policy for reducing alcohol-impaired driving.

Purpose: To reduce alcohol impaired driving by increasing concern about the consequences and helping to rehab offenders.

Considerations: See http://profiles.nlm.nih.gov/NN/B/C/Y/B/_/nnbcyb.pdf for extensive information on considerations.

Research: Research indicates that revoking licenses for impaired drivers is among the most effective strategies available for deterring driving while intoxicated

Revoke license for impaired drivers References: Binder page 27

5. Intervening Variable: Social Norms Accepting and/or Encouraging Abusive Drinking (peer, family, community)

A. Strategy: Media advocacy (see *Low Perception of Risk of Alcohol Use*)

B. Strategy: Alcohol restrictions at community places (*see Easy Social Access to Alcohol*)

C Strategy: Social norms campaigns/social marketing

Description: Until recently, the predominant approach in the field of health promotion sought to motivate behavior change by highlighting risk. Sometimes called "the scare tactic approach" or "health terrorism," this method essentially hopes to frighten individuals into positive change by insisting on the negative consequences of certain behaviors. Essentially, the social norms approach uses a variety of methods to correct negative misperceptions (usually overestimations of use), and to identify, model, and promote the healthy, protective behaviors that are the actual norm in a given population. When properly conducted, it is an evidence-based, data-driven process, and a very cost-effective method of achieving large-scale positive results.

Purpose: To motivate behavior change.

Considerations:

- It is important to ensure that the campaign is easy to understand and presents information in a credible manner.
- It is suggested that the target audience is involved in the production of the social norms campaign materials.

Research: Research indicates that social norms campaigns are effective means of influencing norms regarding alcohol use. Findings, along with concurrent research in the field of Wellness regarding resilience—and identifying protective factors and protective behaviors—revolutionized the field of health promotion and spearheaded the development of the approach now widely known as social norms. For many years, prevention efforts had focused almost exclusively on the problems and deficits of particular populations. The work emerging from those employing the social norms approach, however, began to demonstrate the effectiveness of promoting the attitudinal and behavioral solutions and assets that are the actual norms in a given population.

Social Norms References: See Binder page 22

6. Intervening Variable: Promotion of Alcohol Use (advertising, movies, music)

A. Strategy: Media advocacy (*see Low Perception of Risk of Alcohol Use*)

7. Intervening Variable: Low or Discount Pricing of Alcohol

No strategies listed within the research effectiveness analysis in the Binder.

Appendix: Strategies Matrix Linking Data Project Variables to Binder Strategies

Note: Strategies with an asterisk are strategies listed within the research effectiveness analysis in the Binder (pages 16 – 36). The other strategies listed in this matrix also may have positive research support and/or be appropriate for your communities. The Binder lists references where more information is available on these approaches.

Intervening Variables	Contributing Factor from Data Project Report	Possible Strategy from the Binder
Retail Access	Low level of monitoring outlets	Checking age identification*
		Responsible beverage service training*
		Cops in Shops*
		Conditional use permits/Land use ordinance for alcohol outlets
	Low retailer compliance to ordinances	Compliance checks*
		Media advocacy*
Low enforcement of alcohol laws	Enforcement of drinking and driving not strict enough	Sobriety checkpoints*
		Compliance checks*
		Shoulder tap programs*
		Media advocacy*
		Get to know your state legislators
		Communities Mobilizing for Change on Alcohol
		Combine sobriety checkpoints with positive breath sensors
	Low enforcement of sales to minors	Highly visible sobriety checkpoints
		Checking age identification*
		Compliance checks*
Social access	Family, friends providing alcohol to youth	Media advocacy*
		Get to know your state legislators
	Belief that youth can get alcohol from home without parents knowing	Keg registration laws
		Alcohol restrictions at community events*
	Belief that parents in the community never provide alcohol at parties	Media advocacy*
		Party patrols
Perception of risk	Low perceived Risk of Alcohol Use	Sobriety checkpoints*
		Social host liability laws*
		Media advocacy*
		Cops in Shops*
	Low perceived risk of selling to	Cops in Shops*

Intervening Variables	Contributing Factor from Data Project Report	Possible Strategy from the Binder
	minors	Social host liability laws*
		Compliance checks*
		Shoulder tap programs*
		Responsible beverage service training*
		Media advocacy*
	Low perceived risk of drinking and driving	Sobriety checkpoints*
		Media advocacy*
		Combine sobriety checkpoints with positive passive breath sensors
		Highly visible sobriety checkpoints
	High perception that law enforcement does little to stop underage drinking	Media advocacy*
		Party patrols
		Apply appropriate penalties to minors -- Zero tolerance*
Developing alcohol units in law enforcement		
Norms concerning alcohol issues	Low adult community involvement	Media advocacy to increase community concern about abusive drinking
		Prohibition of alcohol sponsorship of public events
	Belief that underage drinking is a rite of passage and unlikely to change	Media advocacy*
		Social norms campaigns/social marketing*
	Low support for alcohol policies	Media advocacy*
Promotion	Low monitoring of alcohol advertising in the community	Media advocacy*
		Restrictions on alcohol advertising
		Alcohol advertising restrictions in public places
		Prohibition of alcohol sponsorship at public events
		Counter-marketing/counter-advertising campaigns
	Alcohol advertising at community events attended by children	Prohibition of alcohol sponsorship at public events
	Communities Mobilizing for Change on Alcohol	
Pricing	Discount pricing influences alcohol purchases	Bans on alcohol price promotions/happy hours
		Increase price or tax on alcohol
		Communities Mobilizing for Change on Alcohol