

Vermont Prevention of Binge Drinking Logic Model February 2013

The following table was developed from a synthesis of recent comprehensive literature reviews, including guides published by federal agencies, as well as federally-sponsored registries of evidence based practices and programs. The literature reviews were consulted to identify important intervening variables for binge drinking. The reviews, along with the federally-sponsored registries, were also used to identify specific evidence-based intervention strategies for preventing binge drinking. This logic model serves as the source for the development of logic models that are more tailored for different levels of the Vermont Prevention Model and/or specific grant programs.

Note: This model represents strategies designed to directly target the behavior of adults over the age of 21. Strategies that may be implemented earlier in the lifespan and may have longer term impacts on this population are addressed in the logic model for preventing underage drinking.

The strength of relationship between a given intervening variable and binge drinking is indicated beside the name of the variable using a rating scheme that is defined in Risk and Protective Factors Associated with Binge Drinking: Literature Review (2007-2012) from SAMHSA's CAPT Northeast Resource Team. The rating scheme is as follows:

✓✓✓ = **Strong relationship:** These factors have a clear, direct relationship to binge drinking that consistently persists even after accounting for a host of other variables that have been shown to relate to use by at least one peer-reviewed, published, meta-analysis or at least one peer-reviewed, published systematic review.

✓✓ = **Moderate relationship:** Meta-analyses of these risk factors may show less than a small effect size or systematic reviews of these risk factors may offer only limited examination of their relationship to binge drinking specifically, or may demonstrate an inconsistent relationship to binge drinking, or the relationship is supported in at least one quasi-systematic review.

✓ = **Weak relationship or insufficient research:** Research of the connection of these factors to binge drinking may be poorly designed, the relationship may be inadequately studied or at least one peer-reviewed, published meta-analysis or systematic review demonstrated that these factors are not related to use after accounting for other variables.

Ratings for most of the variables listed in the table were provided in the CAPT document. When additional sources also provided an assessment of any intervening variables, that information was translated into the same rating scheme and the combined input from all sources was then used to generate the final rating. Source documents for the ratings are referenced using numeric superscripts. In addition, those intervening variables that were ranked in the top five priority variables by Vermont prevention staff are flagged by a star★.

In the table provided here, the strategies are organized according to the intervening variables through which they are designed to work. Strategies that address multiple intervening variables are listed multiple times. The strategies are also characterized according to the type of approach used by each (e.g., communication campaigns, enforcement, parent education, etc.), the level of the approach as defined by the Vermont Prevention Model, and the partner agencies and organizations typically needed to help implement each strategy. Additionally, based on the source documents consulted, the strategies have been categorized into one of two strength of evidence levels:

- 1) Strategies that have been empirically shown to impact drinking related behaviors including binge drinking and drinking and driving (including alcohol related crashes and fatalities). **These strategies are listed in bold.**
- 2) Strategies that have been shown to affect one or more of the intervening variables identified, and/or have strong theoretical support for their potential effectiveness in addressing drinking behaviors, even though empirical evidence for their impact on drinking behaviors is still lacking or mixed.

One indication of the degree to which a strategy has been broadly recognized in the prevention field as being effective is the number of sources cited beside the name of the strategy (as designated by the numeric superscripts). The source list can be found at the end of this document.

Binge Drinking Intervening Variables

Intervening Variable	Intervention Approaches VT Prevention Model Level	Important Partners[^]	Examples of Evidence Based Practices/Programs
★ Retail Availability ^{1,2,6,9,10} ✓✓✓	Policy advocacy and adoption <i>Policies and Systems</i>	Legislators Municipal government Retailers Supportive community orgs	Maintaining MLDA^{1,2,4,6,7,9} Keeping state control over sales⁶ Outlet density restrictions^{1,2,6,7,16} Restricted days and hours of sale^{2,6,7} Dram shop liability^{6,7,9,16,15} Community Trials Intervention (community mobilization to work on policy and enforcement strategies)^{1,6,9,11} Lower levels of alcohol in beverages¹³ Types of retail outlets¹³
	Retailer education <i>Community</i>	VDLC Retailers	Responsible beverage service training (RBS)^{1,2,4,6,9,15}
★ Social Availability ^{1,2,10} ✓✓✓	Policy advocacy and adoption <i>Policies and Systems</i>	Municipal government Supportive community orgs	Restricting access at social events¹³ Restricted drinking locations¹³ Keg registration^{9,15} Lower levels of alcohol in beverages¹³ Auto ignition interlock devices¹⁵ Use licensed caterers for events at Greek organizations on college campuses⁴ Controlling or eliminating alcohol at sporting events/tailgating parties at colleges¹
	Server and public education <i>Community</i>	Public and private event organizers Caterers	Responsible beverage service training- including for social hosts on college campuses (RBS)^{1,2,4,6,9,15}
	Surveillance and enforcement <i>Community</i>	VDLC Local police agency Campus police/safety	Safer California Universities¹² (components can be implemented separately as below and are enhanced by the addition of fines for multiple hosting citations and media advocacy) <ul style="list-style-type: none"> • Party patrols • Sobriety checkpoints

			<ul style="list-style-type: none"> Compliance checks
Price ^{2,6,9} ✓✓✓	<p>Policy advocacy and adoption</p> <p><i>Policies and Systems</i></p>	<p>Legislators</p> <p>Municipal government</p> <p>Supportive community orgs</p>	<p>Restrictions on discount pricing and promotion, including on college campuses^{1,9,15,17}</p> <p>Increasing taxes on alcohol^{1,2,4,6,7,9,16}</p>
★College Norms & Influences (that protect against binge drinking) ^{1,9,10} ✓✓	<p>Advocacy and adoption of school-based policies</p> <p><i>Organizations</i></p>	Colleges	<p>Friday and/or weekend classes and exams¹</p> <p>Alcohol-free student activities^{1,4,9}</p> <p>Alcohol-free student housing^{1,4,9}</p> <p>Hiring salaried adults as RAs¹</p> <p>Controlling or eliminating alcohol at sporting events/tailgating parties¹</p> <p>Refusal of sponsorship gifts from alcohol industry¹</p> <p>Banning alcohol on campus^{1,9}</p> <p>Clear rules regarding sale, possession and use of alcohol on campus^{4,9,15}</p>
	<p>Enforcement</p> <p><i>Organizations</i></p>	<p>Colleges</p> <p>Local police agency</p>	<p>Consistently enforcing policies and sanctions when policies are violated^{1,9,15}</p> <p>Increased enforcement at campus-based events¹</p> <p>Parental notification⁹</p> <p>Safer California Universities¹² (components can be implemented separately as below and are enhanced by the addition of fines for multiple hosting citations and media advocacy)</p> <ul style="list-style-type: none"> Party patrols Sobriety checkpoints Compliance checks
	<p>Communications campaigns</p> <p><i>Policies and Systems</i></p> <p><i>Community</i></p>	Colleges	Informing new students and their parents about alcohol policies and penalties prior to arrival ^{1,9}
★Community Norms (that protect against binge drinking) ^{1,2} ✓	<p>Policy advocacy and adoption</p> <p><i>Policies and Systems</i></p> <p><i>Community</i></p>	<p>Municipal government</p> <p>Retailers</p> <p>Supportive community orgs</p>	<p>(See policy-based strategies for retail and social access).</p> <p>Community Trials Intervention (community mobilization to work on policy and enforcement strategies)^{1,6,9,11}</p>

Perceived negative and positive social consequences of drinking ^{1,9,10} ✓✓	Skills training <i>Individual</i>	Colleges Health care facilities Substance abuse treatment programs Military organizations	Alcohol Skills Training Program ¹ Challenging alcohol expectancies ^{1,16} BASICS ^{1,3,11} Electronic Screening and Brief Intervention (e-SBI) ^{7,9,16} PREVENT ⁹
Perceived negative and positive health consequences of binge drinking ¹⁰ ✓✓	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Colleges Retail outlets Social marketing experts Media outlets	Mass media counter-advertising ^{1,2} Warning labels ^{1,2}
	Screening and brief intervention <i>Individual</i>	Colleges Health care facilities Substance abuse treatment programs	Screening and brief advice in health care and other settings (e.g. colleges, workplaces) ^{6,16,15,17} BASICS ^{1,3,11} Motivational interviewing ^{1,8,9,16,17} *In Shape ¹¹ My Student Body ¹¹ ModerateDrinking.com/Moderation Management ¹¹ PRIME for Life ¹¹ *Team Awareness ¹¹ *Wellness Outreach at Work ¹¹ Electronic Screening and Brief Intervention (e-SBI) ^{7,9,16}
	Parent/family education programs (individual-focused) <i>Individuals</i>	Schools Churches Parent-child centers Supportive community orgs	*Project Rocking Horse ⁵
Perceived negative legal consequences of binge drinking ² ✓✓✓	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Colleges Retail outlets Social marketing experts Media outlets	Social marketing ⁶ Mass media counter-advertising ²
	Policy advocacy and adoption <i>Policies and Systems</i>	Legislators Municipal government Retailers Supportive community orgs	(See policy-based strategies for retail and social access). Also: Reductions in allowable levels of driver BAC ^{1,4,6} Administrative license revocation ^{1,6,9} Auto ignition interlock devices ⁶

	Visible enforcement <i>Community</i>	VDLC Local police agency	Increased enforcement of drinking and driving laws ^{6,16,17} Sobriety checkpoints ^{1,2,6,9,17}
	Media advocacy <i>Organizations</i>	Supportive community orgs Media outlets	Media advocacy ⁹
★ Normative Beliefs (perceived level of alcohol use by others, perceived level of approval/disapproval of binge drinking by others) ^{1,9} ✓✓	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Colleges Social marketing experts Media outlets	Social norms marketing ^{1,4,9,16,17} Mass media counter-advertising ²
★ Alcohol Promotion ^{1,2,6,9,10} ✓✓	Policy advocacy and adoption <i>Policies and Systems</i>	Legislators Municipal government (?) Supportive community orgs Retail outlets Colleges	Advertising restrictions ^{1,2,4,15} Warning labels ² Billboard bans ¹³ Restrictions on discount pricing and promotion, including on college campuses ^{1,9,15,17} Bans on promotions and sponsorships on college campuses ^{4,9}
	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Social marketing experts Media outlets	Mass media counter-advertising ²
★ Active coping and social support ^{8,9,10} ✓	Skills training <i>Individuals</i>	Workplaces Supportive community orgs Health care facilities	*Coping with Work and Family Stress ^{11, 14a} *Project Rocking Horse ⁵

^The underlying assumption is that community coalition coordinators and members will likely play a role in many of these approaches.

*This strategy addresses other health and wellness issues in addition to substance abuse prevention

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14a. Most promising evidence of effectiveness

14b. Mixed or emerging evidence of effectiveness

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17. *What Colleges Need to Know Now: An Update on College Drinking Research*. NIH Publication No. 07-5010 Printed November 2007.