

Vermont Prevention of Underage Drinking Logic Model August 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 underage drinking. Intervening variables are attributes of target populations and their environments that, when changed through intervention efforts, are expected to prevent or reduce targeted problem behaviors. The reviews, along with the federally-sponsored registries, were also used to identify specific evidence-based intervention strategies for preventing underage 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.

The strength of relationship between a given intervening variable and underage drinking is indicated beside the name of the variable using a rating scheme that is defined in PIRE's Scientific Evidence for Developing a Logic Model on Underage Drinking: A Reference Guide for Community Environmental Prevention. The rating scheme is as follows:

- ✓✓✓ = **Strong relationship:** Strong evidence of relationship based on three or more studies of population level prevention effects; and/or strong effect on other intermediate variables that have population level prevention effects.
- ✓✓ = **Moderate relationship:** Strong evidence of the relationship based on one or two studies of population level prevention effects; and/or evidence of moderate effect on other intermediate variables that have population level prevention effects.
- ✓ = **Minor relationship:** Evidence of the relationship with only limited or no evidence of population level prevention effects but some evidence of target group effects.

Ratings for most of the variables listed in the table were provided in the PIRE 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 underage drinking, binge drinking among underage individuals, and underage 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). From the larger registries of programs (OJJDP Model Program Guide and NREPP), however, only those interventions that were identified in at least one of the other sources were included. Excluding the many other programs identified in these two registries, but which failed to receive explicit endorsement in the literature reviews, helps keep the number of strategies identified here to a manageable level. The source list can be found at the end of this document.

For some intervening variables, specific interventions were not identified by Vermont's Underage Drinking Task Force (UADTF). Instead, the Task Force recommended more general approaches (e.g., types of strategies) **These recommended strategy types are noted in red.**

All approaches can be facilitated through media advocacy (in addition to the explicit mention of media advocacy as a means of supporting approaches designed to increase perceptions of legal risks of underage drinking or providing alcohol to minors). Media advocacy efforts are more effective if community members receive some training in advocating for coverage of prevention issues and events.

Underage Drinking Logic Model

Intervening Variables	Intervention Approaches <i>VT Prevention Model Level</i>	Important Partners ^	Evidence Based Practices/Programs
☆ Retail Availability ^{3,4,17} ✓✓✓	Policy advocacy and adoption <i>Policies and Systems</i>	Legislators Municipal government Retailers Supportive community orgs	Maintaining MLDA ^{9,13,14,17a,18b} Keeping state control over sales ^{17a,16} Outlet density restrictions ^{9,14,17a,16} Restricted days and hours of sale ^{6,14a} Dram shop liability ^{6,11,12,14b,16} Community Trials Intervention (community mobilization to work on policy and enforcement strategies) ^{9,10b,13,14a,15b} Lower levels of alcohol in beverages ^{14b} Types of retail outlets ^{14a}
	Surveillance and enforcement <i>Community</i>	VDLC Local police agency Underage buyers Retailers	Compliance checks ^{6,11,14a} Shoulder tap operations ^{11,12,14c} (UADTF recommended warning for first offense)
	Retailer education <i>Community</i>	VDLC Underage buyers Retailers	Responsible beverage service training (RBS) ^{11,12,14a} (UADTF recommended inclusion of delivery personnel) Reward and Reminder program ^{1,7,8,12} ID checking ^{11,14b}
☆ Social Availability ^{2,3,14} ✓✓✓	Policy advocacy and adoption <i>Policies and Systems</i>	Municipal government Supportive community orgs	Curfews for youth ^{12,14c} (UADTF recommended mechanism for identifying autos driven by teen) Social host liability ^{11,14c} Restricting access at social events ^{11,14c} Restricted drinking locations ^{14b} Keg registration ^{11,14b} Lower levels of alcohol in beverages ^{14b} Auto ignition interlock devices ^{14a}
	Surveillance and enforcement <i>Community</i>	VDLC Local police agency	Party patrols ^{11,12,14c} Underage drinking tip phone line ¹² Shoulder tap operations ^{11,12,14c} (UADTF recommended warning for first offense)

	Server and public education <i>Community</i>	Public and private event organizers Caterers	Social host liability ^{11,14c} Responsible beverage service training (RBS) ^{11,12,14a} ID checking ^{14b}
Price ^{2,3,14} ✓✓✓	Policy advocacy and adoption <i>Policies and Systems</i>	Legislators Municipal government Supportive community orgs	Restrictions on discount pricing and promotion ^{14c} Increasing taxes on alcohol ^{6,11,12,14a,16}
★ Family Norms & Influences (that protect against underage drinking) ^{3,12} ✓✓	Parent/family education programs (individual-focused) <i>Relationships</i>	Schools Parent-child centers Churches	*Strengthening Families ^{4b,9,10a,13,15a,19b} *Strong African American Families ^{4b,10b} *Raising Healthy Children ^{4b} *Guiding Good Choices ^{4b,10a,13,15b,19b} STARS for Families ^{10b,13,19b} Creating Lasting Family Connections/Creating Lasting Connections ^{10b,13,19b} Lifeskills Training Parent Component ^{19b} Informal parent education programs such as dialogue nights (not evidence-based) ^{19b}
	Parent/family education programs (population-focused) <i>Policies and Systems</i> <i>Community</i> <i>Relationships</i>	Schools Parent-child centers Media outlets	*Triple P ^{4b,9,10b,13,15b} *Seattle Social Development Project ^{4b,9,15a} Orebro Prevention Program ^{4b} Midwestern Prevention Project ^{4a,9,10b,15a} Family Matters ^{10a,13,15b}
	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Schools Social marketing experts Media outlets	Social marketing ^{9,11,12}
Peer Norms & Influences (that protect against underage drinking) ^{3,14} ✓✓	Programs that develop resistance/refusal skills and other life skills <i>Individual</i>	Schools School board PTA Youth-serving organizations	Life Skills Training ^{4a,9,10a,13,14b,15b, 19b} ATLAS ^{4b,10a,15b} Midwestern Prevention Project ^{4a,9,10b,15a} Project Toward No Drug Abuse ^{4a,10a,15a} *Michigan Model ^{10c,13,19b} *Protecting You, Protecting Me ^{10b,13,19b} SODAS City ^{15b}
	School-based prevention education programs <i>Individual</i>	Schools Parents	*All Stars ^{10c,13,19b}

	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Schools Social marketing experts Media outlets	Social marketing ^{9,11,12}
★Community Norms (that protect against underage drinking) ^{2,3,14} ✓	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Supportive community orgs Social marketing experts Media outlets	Social marketing ^{9,11,12} Community Trials Intervention (community mobilization to work on policy and enforcement strategies) ^{9,10b,13,14a,15b}
	Policy advocacy and adoption <i>Policies and Systems</i> <i>Community</i>	Municipal government Retailers Supportive community orgs	(See policy-based strategies for retail and social access). Community Trials Intervention (community mobilization to work on policy and enforcement strategies) ^{9,10b,13,14a,15b} CMCA ^{9,10b,13,14a,15b} Midwestern Prevention Project ^{4a,9,10b,15a}
	Community engagement <i>Community</i>	Supportive community orgs Local businesses/employers	Substance-free recreational activities (not evidence-based) ¹² Age appropriate youth job placement (not evidence-based) ¹² Communities that Care ^{4b,16}
Attitudes Toward Alcohol Use (how wrong is it for someone their age to drink alcohol) ^{3,14} ✓✓	School-based prevention education programs <i>Individual</i>	Schools Parents	Project Northland ^{4b,9,10a,16,13, 14b,15a ,19b} Project Toward No Drug Abuse ^{4a,10a,15a} Lions Quest Skills for Adolescence ^{10b,13,19b} School Health and Alcohol Harm Reduction Project ^{15b}
	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Schools Social marketing experts Media outlets	Social norms marketing ^{12,14c,16} Mass media counter-advertising ^{14b}
Perceived negative and positive social consequences of drinking ^{3,14} ✓✓	School-based prevention education programs <i>Individual</i>	Schools Parents	Project Northland ^{4b,9,10a,16,13, 14b,15a ,19b} Project Toward No Drug Abuse ^{4a,10a,15a}
	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Schools Social marketing experts Media outlets	Social norms marketing ^{12,14c,16} Mass media counter-advertising ^{14b}
Perceived negative and positive health consequences of drinking ^{3,14} ✓✓	School-based prevention education programs <i>Individual</i>	Schools Parents	ATLAS ^{4b,10a,15b} Project Toward No Drug Abuse ^{4a,10a,15a} *Michigan Model ^{10c,13,19b} *Protecting You, Protecting Me ^{10b,13,19b} Healthy School and Drugs ^{15b} School Health and Alcohol Harm Reduction Project ^{15b}

			*Coordinated school health initiatives ^{19a} Informal parent education programs such as dialogue nights (not evidence-based) ^{19b}
	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Schools Social marketing experts Media outlets	Social marketing ^{9,11,12} Mass media counter-advertising ^{14b}
	Screening and referral <i>Individual</i>	Schools Parents Health care providers Local substance abuse and mental health treatment programs	*Screening and referral to substance abuse and mental health services using CRAFFT or GAIN screeners ^{11,19a} Brief Interventions in primary and other health care settings ^{11,16,15b}
Perceived negative legal consequences of drinking ^{2,3,14✓✓✓}	Communications campaigns <i>Policies and Systems</i> <i>Community</i>	Schools Social marketing experts Media outlets	Education for incoming college students on Vermont's underage drinking laws ¹²
	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 ^{11,14a} Administrative license revocation ^{11,14a} Graduated driver licensing ^{11,12,14b} Auto ignition interlock devices ^{14a} Zero tolerance laws ^{11,12,14c} Comprehensive sanctions/TASP ^{11,12,14b}
	Visible enforcement <i>Community</i>	VDLC Local police agency	Enhanced enforcement of underage drinking laws ^{6,11} (e.g., party patrols, minor in possession laws, DUI surveillance, etc.). Sobriety checkpoints ^{11,12} Saturation patrols ^{11,12}
	Media advocacy <i>Organizations</i>	Supportive community orgs Media outlets	Media advocacy ^{11,12,14c}
★ Perceived negative legal consequences of providing alcohol to minors ^{2,3,14✓✓}	(See approaches for reducing retail and social access)	(See partners for reducing retail and social access)	(See example strategies for reducing retail and social access)
	Media advocacy <i>Organizations</i>	Supportive community orgs Media outlets	Media advocacy ^{11,12,14c}
Normative Beliefs (perceived level of alcohol use by others, perceived level of approval/disapproval of	School-based prevention education programs <i>Individual</i>	Schools Parents	Project Northland ^{4b,9,10a,16,13,14b,15a,19b} *Project SUCCESS ^{13,19b} Keepin It REAL ^{10a,13,15a}
	Communications campaigns	Schools	Social norms marketing ^{11,12,14c,16}

alcohol use by others) ^{3,14} ✓✓	<i>Policies and Systems Community</i>	Social marketing experts Media outlets	Mass media counter-advertising ^{14b}
Refusal/Resistance Efficacy Beliefs ^{3,14} ✓✓	School-based prevention education programs <i>Individual</i>	Schools Parents	Project Northland ^{4b,9,10a,16,13, 14b,15a ,19b} Project Alert ^{9,13,19b,15b} (was removed from Blueprints as a result of recent research findings)
	Communications campaigns <i>Policies and Systems Community</i>	Schools Social marketing experts Media outlets	Social norms marketing ^{11,12,14c,16} Mass media counter-advertising ^{14b}
	Parent/family education programs (individual-focused) <i>Relationships</i>	Schools Churches Parent-child centers Supportive community orgs	Creating Lasting Family Connections/Creating Lasting Connections ^{10b,13,19b} Lifeskills Training Parent Component ^{19b}
	Community-based prevention education programs <i>Individual</i>	Cultural leaders Parents	Bicultural Competence Skills Program (for Native American Youth) ^{10b,15b}
Alcohol Promotion ^{2,3,14} ✓	Policy advocacy and adoption <i>Policies and Systems</i>	Legislators Municipal government (?) Supportive community orgs	Advertising restrictions ^{14c} Warning labels ^{14c} Billboard bans ^{14c}
	Communications campaigns <i>Policies and Systems Community</i>	Social marketing experts Media outlets	Mass media counter-advertising ^{14b}
Emotional/Behavior problems in early and middle childhood ^{2,9} ✓✓	Parent/family education programs (individual-focused) <i>Relationships</i>	Schools Parent-child centers	*Strengthening Families ^{4b,9,10a,13,15a,19b} *Fast Track ^{9,15b} Creating Lasting Family Connections/Creating Lasting Connections ^{10b,13,19b} Lifeskills Training Parent Component ^{19b} *Nurturing Parenting Program ^{13,18} *I Can Problem Solve ^{4b,10b,13,15b}
	Parent/family education programs (population-focused) <i>Policies and Systems Community Relationships</i>	Schools Parent-child centers Media outlets	*Triple P ^{4b,9,10b,13,15b}
	School-based programs <i>Individual</i>	Schools School board	*Good Behavior Game ^{4b,9,10a,13,15b ,19b} *Preventive Treatment Program ^{4b,10a,15a} *Classroom-centered intervention ^{15b} *Olweus Bullying Prevention ^{4a,15b} *Promoting Alternative Thinking

			<p>Strategies^{4a,10a,13,15b} *Second Step^{10b,13,15b} Educational support groups (not evidence-based)^{19b}</p>
	<p>Family-school interventions <i>Relationships</i></p>	<p>Schools PTA</p>	<p>*Linking Interests of Families and Teachers^{4b,9,10a,15a} *Families and Schools Together^{10a,13,15b} *Raising Healthy Children^{4b,15a} *Seattle Social Development Project^{4b,9,15a} *Adolescent Transitions Program^{9,10b,13} *First Steps to Success^{10b,15b} *Schools and Families Educating Children^{13,15b} *The Incredible Years^{4a,13,15b}</p>
<p>Parental monitoring/clear standards/consistent enforcement of discipline 2,9✓✓</p>	<p>Family-school interventions <i>Relationships</i></p>	<p>Schools PTA</p>	<p>*Adolescent Transitions Program^{9,10b,13} *Orebro Prevention Program^{4b} *First Steps to Success^{10b,4b}</p>
	<p>Parent/family education programs (individual-focused) <i>Relationships</i></p>	<p>Schools Parent-child centers</p>	<p>*Guiding Good Choices^{4b,10a,13,15b,19b} *Nurturing Parenting Program^{13,18} *I Can Problem Solve^{4b,10b,13,15b} *New Beginnings Program^{13,15b}</p>
<p>Child abuse/maltreatment, low family attachment^{2,9✓✓}</p>	<p>Programs that provide family support <i>Policies and Systems</i> <i>Community</i> <i>Relationships</i></p>	<p>Public Health Nurses VNA</p>	<p>*Nurse Family Partnership^{4a,9,10a,13,15a} *Triple P^{4b,9,10b,13,15b} *Healthy Families New York⁹ *Nurturing Parenting Program^{13,18}</p>
<p>School failure/low commitment to school^{2,9✓✓}</p>	<p>Programs that focus on school success <i>Organizations</i> <i>Individual</i></p>	<p>Schools Parents Supportive community orgs</p>	<p>*Big Brothers, Big Sisters Mentoring^{4a,9,10a,13} *Perry Preschool Project^{4b,9,10a,15b} *Raising Healthy Children^{4b} *Coordinated school health initiatives^{19a} *Project SUCCESS^{13,19b} *Families and Schools Together^{10a,13,15b} *First Steps to Success^{10b,15b} *I Can Problem Solve^{4b,10b,13,15b} *Schools and Families Educating Children^{13,15b} Youth empowerment groups/peer leadership programs (not evidence-based)^{19b}</p>

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

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

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