

Attachment B: ODMHSAS Evidence-Based Practices Matrices

The purpose of this document is to assist prevention planners in identifying and selecting strategies that: (1) address local needs, and (2) have strong evidence of effectiveness. Please note – the matrices do not contain a comprehensive list of programs and practices, rather the matrices contain those environmental approaches consistent with ODMHSAS definition of evidence based practices and causal factor research.

Substance use and associated problems are influenced by a complex set of issues. Researchers have tried to identify these issues to assist prevention practitioners and policymakers in targeting strategies that can effectively intervene to change patterns of alcohol, tobacco, and other drug (ATOD) use and related problems. To assist Oklahoma prevention practitioners with selecting appropriate strategies, the ODMHSAS is providing the following guidance document, which aligns substance abuse prevention research from the Pacific Institute for Research and Evaluation (PIRE)—causal factors—and research from the Social Development Research Group (SDRG)—risk and protective factors.

Following is a set of tables, one table for each substance use issue. The Underage Alcohol, Adult Binge Drinking, Marijuana, Inhalant and Methamphetamine tables identify the intermediate variables, strategies, and the *evidence* that supports each strategy. In addition, web site addresses where the evidence support information is located, is also provided. Levels of evidence are based on the following criteria:

Tier 1: Appears on a National registry of evidence-based practices.

Tier 2: Appears in a peer-reviewed journal article that illustrates positive effects based on the evaluation of the targeted causal or contributing factor.

Tier 3: Documentation that illustrates the strategy has been effectively implemented in the past, multiple times, with results that show a consistent pattern of positive effects.

Although multiple agencies are funding research to validate the effectiveness of strategies for Fetal Alcohol Spectrum Disorder and Nonmedical Prescription Drug Use, currently prevention practitioners rely on identified best practices. Therefore, the tables for these two issues identify the intermediate variables, strategies, and sources from Federal agencies and other organizations that provide support information for the substance use issue. These Web sites include data describing the extent of the problem, recommendations for best practices to address the problem, and tools for implementing prevention activities.

This document, along with “Advancing Environmental Strategies for Alcohol, Tobacco, and Other Drug Prevention” and the “Standards of Effectiveness” series will assist communities to

1. select appropriate evidence-based strategies,
2. include of all key elements of effective environmental strategies (data collection, community organizing, policy development, enforcement, and media advocacy), and
3. implement each strategy with fidelity guided by the standards of effectiveness.

**Evidence-based Strategies
Underage Alcohol Use**

Intermediate Variable			
Causal Factor (Risk/Protective Factor)	Contributing Factor	Strategy <i>Level of Evidence</i>	Research*
Retail Access (community domain: availability)	Low level of monitoring outlet sales	Age identification checks <i>Tier 1</i>	NHTSA—1 UM AEP—2
		Responsible beverage service training <i>Tier 1</i>	NIAAA/APIS—3 UM AEP—4 CDC—5 OJJDP—8
		Merchant education <i>Tier 1</i>	OJJDP—6
		Home delivery restrictions <i>Tier 1</i>	OJJDP—8 UM AEP—9
	Low retailer compliance to ordinances	Compliance checks <i>Tier 1</i>	NHTSA—1 OJJDP—8 UM AEP—10
		Media advocacy <i>Tier 1</i>	OJJDP—11
		Minimum age of seller requirements <i>Tier 1</i>	OJJDP—8, 12 UM AEP— 13
		Increase beverage servers’ legal liability <i>Tier 2</i>	Wagenaar, et al.—i
	Outlet Density	Regulating outlet density <i>Tier 1</i>	OJJDP—8 CDC—14

* Sources providing evidence of effectiveness; numbers correspond to source listing provided at end of table. URLs provided for each source.

		Conditional land use permits/ordinances for alcohol outlets <i>Tier 1</i>	OJJDP—15
Enforcement (community domain: laws and norms favorable toward drug use)	Low level of enforcement of drinking and driving	Sobriety checkpoints <i>Tier 1</i>	CDC—16 NHTSA—17
		Compliance checks <i>Tier 1</i>	NHTSA—1 OJJDP—8 UM AEP—10
		Media advocacy <i>Tier 1</i>	OJJDP—11
		Community mobilization <i>Tier 1</i>	SAMHSA/NREPP—18 UM AEP—19
		Enforce impaired driving laws <i>Tier 1</i>	NHTSA—7 OJJDP—20
		Immobilize or impound vehicles <i>Tier 1</i>	NHTSA—21
		Random BAC testing for drivers <i>Tier 2</i>	McCaul, et al.—ii
		Open container laws <i>Tier 1</i>	NHTSA—22
	Low level of enforcement of sales to minors	Age identification checks <i>Tier 1</i>	NHTSA—1 UM AEP—2
		Compliance checks <i>Tier 1</i>	NHTSA—1 OJJDP—8 UM AEP—10
		Media advocacy <i>Tier 1</i>	OJJDP—11
		Administrative penalties <i>Tier 1</i>	OJJDP—8 UM AEP—24
		Party patrols <i>Tier 1</i>	NHTSA—1 OJJDP—8, 5

		Shoulder tap <i>Tier 1</i>	NHTSA—1 OJJDP—8
Social Access (community domain: perceived availability) (family domain: parental attitudes favorable toward drug use)	Adults providing alcohol at fairs and festivals	Alcohol restrictions at community events <i>Tier 1</i>	OJJDP—8 UM AEP—26
	Adults providing alcohol at parties	Keg registration laws <i>Tier 1</i>	OJJDP—8 NIAAA/APIS—27 UM AEP—28
		Social host liability laws <i>Tier 1</i>	UM AEP—29
		Party patrols <i>Tier 1</i>	NHTSA—1 OJJDP—8, 25
	Easy access to alcohol from home with parental knowledge	Media advocacy <i>Tier 1</i>	OJJDP—11
Norms concerning alcohol issues (community domain: laws and norms favorable toward drug use)	Belief that underage drinking is a rite of passage	Social norms campaign <i>Tier 1</i>	SAMHSA/NREPP—30
		Alcohol use restrictions in public places <i>Tier 1</i>	OJJDP—8 UM AEP—31
Pricing (community domain: laws and norms favorable toward drug use)	Discount pricing	Bans on alcohol price promotions/happy hours <i>Tier 2</i>	Kuo, et al.—iii
		Increase tax on alcohol <i>Tier 1</i>	CDC—32

Perception of Risk (individual domain: perceived risk) (individual domain: attitudes favorable toward drug use) (peer domain: attitudes favorable toward drug use) (community domain: laws and norms favorable toward drug use)	Low perceived risk of getting caught for underage drinking	Sobriety checkpoints Tier 1	CDC—16 NHTSA—17
		ATOD warning posters Tier 1	UM AEP—33
	Low perceived risk of law enforcement if caught for underage drinking	Apply appropriate penalties to minors Tier 1	OJJDP—8
		Zero tolerance policies Tier 1	OJJDP—8, 20, 23 NHTSA—34
	Low perceived risk of getting caught for selling to minors	Compliance checks Tier 1	NHTSA—1 OJJDP—8 UM AEP—10
		ATOD warning posters Tier 1	UM AEP—33
	Low perceived risk of enforcement for selling to minors	Apply appropriate penalties to clerks and store owners Tier 1	CDC—35
		Zero tolerance policies Tier 1	OJJDP—8, 20, 23 NHTSA—34
	Low perceived risk of getting caught drinking and driving	Sobriety checkpoints Tier 1	CDC—16 NHTSA—17
		Lower (less than .08) BAC limits Tier 1	NHTSA—36
		Use of media to describe penalties Tier 1	NHTSA—37
		Use of mass media campaigns Tier 1	CDC—38
	Low perceived risk of enforcement if caught drinking and driving	Apply appropriate penalties to drunk drivers Tier 1	NHTSA—39

		Zero tolerance policies <i>Tier 1</i>	OJJDP—8, 20, 23 NHTSA—34
		Graduated licensing policies <i>Tier 1</i>	NHTSA—40
		Revoke license for impaired drivers <i>Tier 1</i>	OJJDP—8 NHTSA—41
	Low perceived risk of getting caught providing alcohol to underage youth	Keg registration laws <i>Tier 1</i>	OJJDP—8 NIAAA/APIS—27 UM AEP—28
		Social host liability laws <i>Tier 1</i>	UM AEP—29
		ATOD warning posters <i>Tier 1</i>	UM AEP—33
	Low perceived risk of law enforcement if caught providing alcohol to underage youth	Apply appropriate penalties to adult suppliers and enablers <i>Tier 1</i>	OJJDP—8
		Zero tolerance policies <i>Tier 1</i>	OJJDP—8, 20, 23 NHTSA—34
	Promotion (community domain: laws and norms favorable toward drug use)	Low level of monitoring the amount of alcohol advertising	Restrictions on alcohol advertising <i>Tier 1</i>
Counteradvertising campaigns <i>Tier 2</i>			Agostinelli, et al.—iv
Media advocacy <i>Tier 1</i>			OJJDP—11
Media literacy <i>Tier 1</i>			CDC—43
Low level of monitoring the target population for alcohol advertising <i>Tier 1</i>		Prohibition of alcohol sponsorship at family and youth events <i>Tier 1</i>	UM AEP—44
Low level of monitoring the location of alcohol advertising <i>Tier 1</i>		Community mobilization <i>Tier 1</i>	SAMHSA/NREPP—18 UM AEP—19

Sources—Underage Alcohol Use

Tier 1

1. National Highway Traffic Safety Administration, U.S. Department of Transportation (2001). Community How To Guide on Enforcement. URL: http://www.nhtsa.gov/people/injury/alcohol/community%20guides%20html/Book5_Enforcement.html
2. University of Minnesota Alcohol Epidemiology Program** (2009). Checking Age Identification. URL: <http://www.epi.umn.edu/alcohol/policy/checkid.shtm>
3. Alcohol Policy Information System, National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health (2004). URL: http://alcoholpolicy.niaaa.nih.gov/Beverage_Service_Training_and_Related_Practices.html
4. University of Minnesota, Alcohol Epidemiology Program (2009). Responsible Beverage Service Training. URL: <http://www.epi.umn.edu/alcohol/policy/rbst.shtm>
5. Community Guide Branch, Epidemiology Analysis Program Office, Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (2010). Guide to Community Preventive Services. Preventing excessive alcohol consumption: responsible beverage service training. www.thecommunityguide.org/alcohol/beverage_service.html
6. Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice (2006). Preventing Sales of Alcohol to Minors: What You Should Know About Merchant Education Programs. URL: <http://www.udetc.org/documents/merchanted.pdf>
7. National Highway Traffic Safety Administration, U.S. Department of Transportation (2001). Youth Impaired Driving Manual for Sheriffs. URL: <http://www.nhtsa.gov/people/injury/alcohol/Sherrifs%20Web/toc.html>
8. Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice (2006). Regulatory Strategies for Preventing Youth Access to Alcohol: Best Practices. URL: <http://www.udetc.org/documents/accesslaws.pdf>
9. University of Minnesota Alcohol Epidemiology Program (2011). Alcohol Home Delivery Restrictions. URL: <http://www.epi.umn.edu/alcohol/policy/homdeliv.shtm>
10. University of Minnesota Alcohol Epidemiology Program (2011). Compliance Checks. URL: <http://www.epi.umn.edu/alcohol/policy/compchks.shtm>

** The Alcohol Epidemiology Program, a research program in the Division of Epidemiology and Community Health within the School of Public Health at the University of Minnesota, is funded by the National Institute on Alcohol Abuse and Alcoholism, the Centers for Disease Control and Prevention, and the Robert Wood Johnson Foundation.

11. Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice (1999). Strategic Media Advocacy for Enforcement of Underage Drinking Laws. URL: <http://www.udetc.org/documents/mediaadvocacy.pdf>
12. Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice (2009). Strategies to Reduce Underage Alcohol Use: Typology and Brief Overview. URL: <http://www.udetc.org/documents/strattoreduce.pdf>
13. University of Minnesota Alcohol Epidemiology Program (2009). Minimum Age of Seller Requirements. URL: <http://www.epi.umn.edu/alcohol/policy/sellrage.shtm>
14. Community Guide Branch, Epidemiology Analysis Program Office, Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (2011). Guide to Community Preventive Services. Preventing excessive alcohol consumption: Regulation of alcohol outlet density. URL: <http://www.thecommunityguide.org/alcohol/outletdensity.html>
15. Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice (1999). How to Use Local Regulatory and Land Use Powers to Prevent Underage Drinking. URL: <http://www.udetc.org/documents/regulatory.pdf>
16. Community Guide Branch, Epidemiology Analysis Program Office, Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (2001). Guide to Community Preventive Services. Reducing alcohol-impaired driving: Sobriety checkpoints. URL: www.thecommunityguide.org/mvoi/AID/sobrietyckpts.html
17. National Highway Traffic Safety Administration, U.S. Department of Transportation (2006). Uniform Guidelines for State Highway Safety Programs. URL: <http://www.nhtsa.gov/nhtsa/whatsup/tea21/tea21programs/pages/ImpairedDriving.htm>
18. Substance Abuse and Mental Health Services Administration (2011). SAMHSA's National Registry of Evidence-Based Programs and Practices: Communities Mobilizing for Change on Alcohol. URL: <http://nrepp.samhsa.gov/ViewIntervention.aspx?id=117>
19. University of Minnesota Alcohol Epidemiology Program (2011). Communities Mobilizing for Change on Alcohol. URL: <http://www.epi.umn.edu/alcohol/cmca/index.shtm>
20. Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice (2010). A Guide for Enforcing Impaired Driving Laws for Youth. URL: <http://www.udetc.org/documents/EnforceImp.pdf>
21. National Highway Traffic Safety Administration, U.S. Department of Transportation (2004). Vehicle and license plate sanctions. Traffic Safety Facts: Laws. URL: <http://www.nhtsa.gov/people/injury/New-fact-sheet03/VehicleLicensePlate.pdf>
22. National Highway Traffic Safety Administration, U.S. Department of Transportation (2002). Open Container Laws and Alcohol-Involved Crashes: Some Preliminary Data. URL: <http://www.nhtsa.gov/people/injury/research/opencontainer/>
23. Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice (2000). A Guide to Zero Tolerance and Graduated Licensing: Two Strategies That Work. URL: <http://www.udetc.org/documents/Guide2zero.pdf>

24. University of Minnesota Alcohol Epidemiology Program (2011). Administrative Penalties. URL: <http://www.epi.umn.edu/alcohol/policy/admnpenl.shtm>
25. Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice (2005). A Practical Guide to Preventing and Dispersing Underage Drinking Parties. URL: <http://www.udetc.org/documents/UnderageDrinking.pdf>
26. University of Minnesota Alcohol Epidemiology Program (2009). Alcohol Restrictions at Community Events. URL: <http://www.epi.umn.edu/alcohol/policy/atevents.shtm>
27. Alcohol Policy Information System, National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health (2011). Retail Sales: Keg Registration. URL: http://alcoholpolicy.niaaa.nih.gov/Keg_Registration.html
28. University of Minnesota Alcohol Epidemiology Program (2009). Beer Keg Registration. URL: <http://www.epi.umn.edu/alcohol/policy/beerkeg.shtm>
29. University of Minnesota Alcohol Epidemiology Program (2009). Social Host Liability. URL: <http://www.epi.umn.edu/alcohol/policy/hostliab.shtm>
30. Substance Abuse and Mental Health Services Administration (2007). SAMHSA's National Registry of Evidence-Based Programs and Practices: Challenging College Alcohol Abuse. URL: <http://nrepp.samhsa.gov/ViewIntervention.aspx?id=60>
31. University of Minnesota Alcohol Epidemiology Program (2011). Alcohol Restrictions on Public Property. URL: <http://www.epi.umn.edu/alcohol/policy/userestr.shtm>
32. Community Guide Branch, Epidemiology Analysis Program Office, Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (2011). Guide to Community Preventive Services. Preventing excessive alcohol consumption: Increasing alcohol taxes. URL: <http://www.thecommunityguide.org/alcohol/increasingtaxes.html>
33. University of Minnesota Alcohol Epidemiology Program (2011). Alcohol Warning Posters. URL: <http://www.epi.umn.edu/alcohol/policy/posters.shtm>
34. National Highway Traffic Safety Administration, U.S. Department of Transportation (2001). Determine Why There Are Fewer Young Alcohol-Impaired Drivers. URL: <http://stnw.nhtsa.gov/people/injury/research/feweryoungdrivers/>
35. Centers for Disease Control and Prevention (2004). Enhanced Enforcement of Laws to Prevent Alcohol Sales to Underage Persons—New Hampshire, 1999–2004. URL: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5321a2.htm>
36. National Highway Traffic Safety Administration, U.S. Department of Transportation (2000). Effectiveness of the Illinois .08 Law. URL: <http://www.nhtsa.gov/people/injury/research/pub/composite.pdf>

37. National Highway Traffic Safety Administration, U.S. Department of Transportation (2004). Public perceptions of the July 2003 *You Drink & Drive. You Lose*. Crackdown: Telephone surveys show the media campaign reaches target audience. Traffic Safety Facts: Research Note. URL: http://www.nhtsa.gov/people/injury/research/RN-public04/RN%20PublicPercep/images/Public_Perceptions.pdf
38. Community Guide Branch, Epidemiology Analysis Program Office, Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (2010). Guide to Community Preventive Services. Reducing alcohol-impaired driving: Mass media campaigns. URL: <http://www.thecommunityguide.org/mvoi/AID/massmedia.html>
39. National Highway Traffic Safety Administration, U.S. Department of Transportation (2001). Evaluation of Use and Lose Laws. URL: <http://www.nhtsa.gov/people/injury/research/pub/alcohol-laws/eval-of-law/index.html>
40. National Highway Traffic Safety Administration, U.S. Department of Transportation (2004). Graduated driver licensing system. Traffic Safety Facts: Laws. URL: <http://www.nhtsa.gov/people/injury/new-fact-sheet03/GraduatedDriver.pdf>
41. National Highway Traffic Safety Administration, U.S. Department of Transportation (2003). Administrative license revocation (suspension). Traffic Safety Facts: Laws. URL: <http://www.nhtsa.gov/people/injury/New-fact-sheet03/AdminLicenseRevocn.pdf>
42. University of Minnesota Alcohol Epidemiology Program (2009). Alcohol Advertising Restrictions. URL: <http://www.epi.umn.edu/alcohol/policy/adrstrct.shtm>
43. Centers for Disease Control and Prevention (1996). Media Sharp. URL: http://www.cdc.gov/tobacco/publications/dvds_videos/mediasharp/guide_modules/pdfs/mdiashrp.pdf
44. University of Minnesota Alcohol Epidemiology Program (2009). Alcohol Sponsorship Restrictions. URL: <http://www.epi.umn.edu/alcohol/policy/sponsrad.shtm>

Tier 2

- i. Wagenaar, A. C., and Holder, H. D. (1991). Effects of alcoholic beverage server liability on traffic crash injuries. *Alcoholism: Clinical and Experimental Research*, 15: 942–947.
- ii. McCaul, K. A., and McLean, A. J. (1990). Publicity, police resources, and the effectiveness of random breath testing. *Medical Journal of Australia*, 152: 284–286.
- iii. Kuo, M., Wechsler, H., Greenberg, P., and Lee, H. (2003). The marketing of alcohol to college students: The role of low prices and special promotions. *American Journal of Preventive Medicine*, 25(3): 204–211.
- iv. Agostinelli, G., and Grube, J. W. (2002). Alcohol counter-advertising and the media. *Alcohol Research & Health*, 26: 15.

**Evidence-based Strategies
Nonmedical Prescription Drug Use**

Intermediate Variable			
Causal Factor	Contributing Factor	Strategy	Support Sources
Medical Availability	Lack of prescriber knowledge	Prescribing guidelines	AMDG—2 CLAAD—3 ONDCP—6 LifeSource—7
		Provider continuing education	CLAAD—1, 3 LifeSource—7 PPDM—8
	Lack of monitoring pain clinics	Prescription monitoring	AMDG—2 FDA—4 NIDA—5
		Limit dispensing authority	CLAAD—3
	Doctor shopping	Prescription monitoring	CLAAD—1, 3 FDA—4 NIDA—5 ONDCP—6
	Prescription forgery	Prescription monitoring	CLAAD—1, 3 FDA—4 NIDA—5 ONDCP—6
	Lack of pharmacy knowledge	Dispensing guidelines	CLAAD—1, 3
	Lack of quality data	Medical examiner collect/code	CLAAD—3
	Internet sales	Laws restricting internet sales	CLAAD—1, 3 FDA—4

Social Availability	Unsafe storage	Media advocacy	CLAAD—1 PPDM—8
	Inappropriate disposal	Media advocacy	CLAAD—1, 3 ONDCP—6
		Drop-off sites	CLAAD—1, 3 ONDCP—6
	Prescription sharing	Media advocacy	CLAAD—1, 3
Norms	Low perceived risk of use	Social norms campaign	CLAAD—1, 3 PPDM—8
Enforcement	Lack of enforcement focus on the issue	Engage law enforcement	CLAAD—1, 3 PPDM—8
		Track criminal diversion	CLAAD—1, 3 FDA—4 ONDCP—6
Individual Factors	Low perceived risk of use	Media advocacy	CLAAD—3 FDA—4 ONDCP—6 PPDM—8
	Low perceived risk of law enforcement if caught using	Laws restricting use without prescription	ONDCP—6
		Apply appropriate penalties	ONDCP—6

Sources—Nonmedical Prescription Drug Use

1. Center for Lawful Access and Abuse Deterrence (2009). National Prescription Drug Abuse Prevention Strategy. URL: http://www.claad.org/downloads/Nat_Prescript_Drug_Abuse_Prev_Strat_2009.pdf
2. Washington State Agency Medical Directors Group (2010). Interagency Guideline on Opioid Dosing for Chronic Non-Cancer Pain. URL: <http://www.agencymeddirectors.wa.gov/Files/OpioidGdline.pdf>
3. Center for Lawful Access and Abuse Deterrence (2010). National Prescription Drug Abuse Prevention Strategy. URL: http://img.medscape.com/pi/features/pain/2010_National_Strategy.pdf
4. U.S. Food and Drug Administration (2005). Testimony on FDA's Role in Preventing Prescription Drug Abuse before the U.S. House of Representatives Subcommittee on Regulatory Affairs Committee on Government Reform. URL: <http://www.hhs.gov/asl/testify/t050913.html>
5. National Institute on Drug Abuse (2011). Prescription drugs: Abuse and addiction. Research Report Series. URL: <http://www.drugabuse.gov/sites/default/files/rrprescription.pdf>
6. White House Office of National Drug Control Policy (2011). Epidemic: Responding to America's Prescription Drug Abuse Crisis. URL: http://www.whitehouse.gov/sites/default/files/ondcp/issues-content/prescription-drugs/rx_abuse_plan.pdf
7. LifeSource (previously Zero Unintentional Deaths). URL: <http://www.yourlifesource.org/>
8. Preventing Prescription Drug Misuse Project. URL: <http://www.prescriptiondrugmisuse.org/>

**Evidence-based Strategies
Adult Binge Drinking**

Intermediate Variable			
Causal Factor	Contributing Factor	Strategy <i>Level of Evidence</i>	Research*
Retail Access (community domain: availability)	Low level of monitoring outlet sales	Responsible beverage service training Tier 1	NIH/NIAAA- 1 CDC- 2 SAMHSA/NREPP- 3 UM/AEP - 12
	Low retailer compliance to ordinances	Increase beverage servers' liability Tier 2	Wagenaar, et al. - i
	Outlet Density	Regulating Outlet Density Tier 1	SAMHSA/NREPP- 3 CDC- 13
Enforcement	Low level of enforcement of drinking and driving	Community mobilization Tier 1	SAMHSA/NREPP- 14 UM/AEP- 15
		Immobilize or impound vehicles Tier 1	NHTSA- 16
		Random BAC testing for drivers Tier 2	McCaul, et al. - ii
		Open container laws Tier 1	NHTSA- 17
Social Access (community domain: perceived availability)	Ease of availability at community events	Alcohol restrictions at community events Tier 1	UM/AEP- 18
Norms Concerning Alcohol Issues (community domain: laws and norms favorable toward drug use)	Low perceived risk of excess use	Social norms campaign Tier 1	SAMHSA/NREPP- 4
		Alcohol use restriction in public places Tier 1	UM/AEP- 11

* Sources providing evidence of effectiveness; numbers correspond to source listing provided at end of table. URLs provided for each source.

Pricing (community domain: laws and norms favorable toward use)	Discount Pricing	Bans on alcohol price promotions/happy hours <i>Tier 2</i>	AJPM- 20 Kuo, et al.-iii
		Increase tax on alcohol <i>Tier 1</i>	CDC- 10
Perception of Risk (individual domain: perceived risk)	Low perceived risk of getting caught drinking and driving	Sobriety checkpoints <i>Tier 1</i>	SAMHSA/NREPP- 3 CDC- 5 NHTSA- 6
		Media campaign <i>Tier 1</i>	SAMHSA/NREPP- 3 NHTSA- 7 CDC- 8
	Low perceived risk of enforcement if caught drinking and driving	Apply appropriate penalties <i>Tier 1</i>	SAMHSA/NREPP- 3
		Revoke license for impaired drivers <i>Tier 1</i>	NHTSA- 9
Promotion (community domain: laws and norms favorable toward use)	Low level of monitoring the amount of alcohol advertising	Restrictions on alcohol advertising <i>Tier 1</i>	UM/AEP- 19
	Low level of monitoring the target population for alcohol advertising	Prohibition of alcohol sponsorship at events <i>Tier 2</i>	UM/AEP- 20
	Low level of monitoring the location of alcohol advertising	Community mobilization <i>Tier 1</i>	SAMHSA/NREPP- 14 UM/AEP- 15

Sources—Adult Binge Drinking

Tier 1

1. National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism, Alcohol Policy Information System (2004). URL: <http://alcoholpolicy.niaaa.nih.gov/>
2. Community Guide Branch, Epidemiology Analysis Program Office, Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (2001). Guide to Community Preventive Services. Preventing Excessive Alcohol Consumption: Responsible Beverage Service Training. URL: www.thecommunityguide.org/alcohol/berverage_service.html
3. Substance Abuse and Mental Health Services Administration (2007). SAMHSA's National Registry of Evidence-Based Programs and Practices: Community Trials Intervention to Reduce High-Risk Drinking. URL: <http://nrepp.samhsa.gov/ViewIntervention.aspx?id=9>
4. Substance Abuse and Mental Health Services Administration (2007). SAMHSA's National Registry of Evidence-Based Programs and Practices: Challenging College Alcohol Abuse. URL: <http://nrepp.samhsa.gov/ViewIntervention.aspx?id=60>
5. Community Guide Branch, Epidemiology Analysis Program Office, Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (2001). Guide to Community Preventive Services. Reducing alcohol-impaired driving: Sobriety checkpoints. URL: www.thecommunityguide.org/mvoi/AID/sobrietyckpts.html
6. National Highway Traffic Safety Administration, U.S. Department of Transportation (2006). Uniform Guidelines for State Highway Safety Programs. URL: <http://www.nhtsa.gov/nhtsa/whatsup/tea21/tea21programs/pages/ImpairedDriving.htm>
7. National Highway Traffic Safety Administration, U.S. Department of Transportation (2004). Public perceptions of the July 2003 *You Drink & Drive. You Lose*. Crackdown: Telephone surveys show the media campaign reaches target audience. Traffic Safety Facts: Research Note. URL: http://www.nhtsa.gov/people/injury/research/RN-public04/RN%20PublicPercep/images/Public_Perceptions.pdf
8. Community Guide Branch, Epidemiology Analysis Program Office, Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (2010). Guide to Community Preventive Services. Reducing alcohol-impaired driving: Mass media campaigns. URL: <http://www.thecommunityguide.org/mvoi/AID/massmedia.html>
9. National Highway Traffic Safety Administration, U.S. Department of Transportation (2003). Administrative license revocation (suspension). Traffic Safety Facts: Laws. URL: <http://www.nhtsa.gov/people/injury/New-fact-sheet03/AdminLicenseRevocn.pdf>
10. Community Guide Branch, Epidemiology Analysis Program Office, Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (2011). Guide to Community Preventive Services. Preventing excessive alcohol consumption: Increasing alcohol taxes. URL: <http://www.thecommunityguide.org/alcohol/increasingtaxes.html>

11. University of Minnesota Alcohol Epidemiology Program (2011). Alcohol Restrictions on Public Property. URL: <http://www.epi.umn.edu/alcohol/policy/userestr.shtm>
12. University of Minnesota, Alcohol Epidemiology Program (2009). Responsible Beverage Service Training. URL: <http://www.epi.umn.edu/alcohol/policy/rbst.shtm>
13. Community Guide Branch, Epidemiology Analysis Program Office, Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (2011). Guide to Community Preventive Services. Preventing excessive alcohol consumption: Regulation of alcohol outlet density. URL: <http://www.thecommunityguide.org/alcohol/outletdensity.html>
14. Substance Abuse and Mental Health Services Administration (2011). SAMHSA's National Registry of Evidence-Based Programs and Practices: Communities Mobilizing for Change on Alcohol. URL: <http://nrepp.samhsa.gov/ViewIntervention.aspx?id=117>
15. University of Minnesota Alcohol Epidemiology Program (2011). Communities Mobilizing for Change on Alcohol. URL: <http://www.epi.umn.edu/alcohol/cmca/index.shtm>
16. National Highway Traffic Safety Administration, U.S. Department of Transportation (2004). Vehicle and license plate sanctions. Traffic Safety Facts: Laws. URL: <http://www.nhtsa.gov/people/injury/New-fact-sheet03/VehicleLicensePlate.pdf>
17. National Highway Traffic Safety Administration, U.S. Department of Transportation (2002). Open Container Laws and Alcohol-Involved Crashes: Some Preliminary Data. URL: <http://www.nhtsa.gov/people/injury/research/opencontainer/>
18. University of Minnesota Alcohol Epidemiology Program (2009). Alcohol Restrictions at Community Events. URL: <http://www.epi.umn.edu/alcohol/policy/atevents.shtm>
19. University of Minnesota Alcohol Epidemiology Program (2009). Alcohol Advertising Restrictions. URL: <http://www.epi.umn.edu/alcohol/policy/adrstrct.shtm>
20. American Journal of Prevention Medicine, 25 (3): 204-211, 2003. The Marketing of Alcohol to College Students: The role of Low prices and Special Promotions. <http://www.ncbi.nlm.nih.gov/pubmed/14507526>

Tier 2

- i. Wagenaar, A. C., and Holder, H. D. (1991). Effects of alcoholic beverage server liability on traffic crash injuries. *Alcoholism: Clinical and Experimental Research*, 15: 942–947.
- ii. McCaul, K. A., and McLean, A. J. (1990). Publicity, police resources, and the effectiveness of random breath testing. *Medical Journal of Australia*, 152: 284–286.
- iii. Kuo, M., Wechsler, H., Greenberg, P., and Lee, H. (2003). The marketing of alcohol to college students: The role of low prices and special promotions. *American Journal of Preventive Medicine*, 25(3): 204–211.

**Evidence-based Strategies
Fetal Alcohol Spectrum Disorder**

Intermediate Variable			
Causal Factor	Contributing Factor	Strategy	Support Sources
Access	Consumption	Media campaign	NIAAA – 1 SAMHSA/FASD- 2 JCA- 3
		Warning labels	NIAAA – 1
		Abstinence	SAMHSA/FASD- 2 JCA- 3
Perception of Risk	Low perceived risk of drinking during pregnancy	Media campaign	NIAAA – 1 SAMHSA/FASD- 2 JCA- 3

Sources – Fetal Alcohol Spectrum Disorder

1. National Institutes of Health, National Institute on Alcohol Abuse and Alcoholism, Fetal Alcohol Syndrome Prevention Research. URL: <http://pubs.niaaa.nih.gov/publications/arh26-1/58-65.htm>
2. Fetal Alcohol Spectrum Disorder Center, Substance Abuse and Mental Health Services Administration. Prevention. URL: <http://www.fasdcenter.samhsa.gov/assessmentprevention/fasdprevention.cfm>
3. Journal of Canadian Academy of Child and Adolescent Psychiatry - Prevention of Fetal Alcohol Syndrome, 2002 www.ncbi.nlm.nih.gov/pmc/articles/PMC2582740/

Evidence-based Strategies
Marijuana Use **DRAFT**

Intermediate Variable			
Causal Factor	Contributing Factor	Strategy <i>Level of Evidence</i>	Research*
Access	Easy access	Community mobilization <i>Tier 2</i>	DEA - 1
Enforcement	Lack of enforcement focus on the issue	Community mobilization <i>Tier 2</i>	DEA - 1

* Sources providing evidence of effectiveness; numbers correspond to source listing provided at end of table. URLs provided for each source.

Sources – Marijuana Use

1. Drug Enforcement Administration. Drug Prevention Guide for Teens. <http://www.learningforlife.org/lfl/resources/99-349.pdf>

Evidence-based Strategies

Inhalant Use

Intermediate Variable			
Causal Factor	Contributing Factor	Strategy <i>Level of Evidence</i>	Research*
Retail Access	Easy access	Regulate minimum age for purchase <i>Tier 3</i>	Burk - 1
Enforcement	Low level of enforcement	Penalize abuse, possession, or distribution of abuseable products <i>Tier 3</i>	Burk - 1
Perception of Risk	Low perceived risk	Warning labels <i>Tier 3</i>	Burk - 1
		Media campaign <i>Tier 2</i>	Burk - 1 Creighton - 2

* Sources providing evidence of effectiveness; numbers correspond to source listing provided at end of table. URLs provided for each source.

Sources – Inhalant Use

1. Burk, I. (2001). Inhalant Prevention Resource Guide. Virginia Department of Education. <http://www.inhalants.org/Inhalantbook.pdf>
2. Creighton, C. (2010). Using social media to increase awareness of inhalant abuse. *Journal of Communication In Healthcare*, 3(3-4):197-213.

**Evidence-based Strategies
Methamphetamine Use**

Intermediate Variable			
Causal Factor	Contributing Factor	Strategy <i>Level of Evidence</i>	Research*
Retail Access	Easy access to methamphetamine precursors	Pseudoephedrine restrictions Tier 2	Cunningham & Liu – 4 Cunningham & Liu – 5
		Meth Watch Tier 3	Kansas – 7 Kansas - 8
		Rural initiatives Tier 3	Kansas – 7
Enforcement	Lack of enforcement focus on the issue	Community Oriented Policing Tier 2	ODMHSAS -1 USDOJ – 3
Perception of Risk	Low perceived risk	Meth360 Tier 3	USDOJ – 2 TPAD – 6

* Sources providing evidence of effectiveness; numbers correspond to source listing provided at end of table. URLs provided for each source.

Sources – Methamphetamine Use

2. Oklahoma Department of Mental Health and Substance Abuse Services (2008). Oklahoma Methamphetamine Prevention Toolkit. <http://www.ok.gov/odmhsas/documents/Meth%20Prevention.pdf>
3. United States Department of Justice (2010). Strategies to Fight Meth and Other Drugs. <http://blogs.usdoj.gov/blog/archives/787>
4. United States Department of Justice. An Evaluation of the COPS Office Methamphetamine Initiative. http://www.cops.usdoj.gov/files/RIC/Publications/meth_initiative.pdf
5. Cunningham, J., and Liu, L. (2003). Impacts of federal ephedrine and pseudoephedrine regulations on methamphetamine-related hospital admissions. *Addiction*, 98(9):1229-1237.
6. Cunningham, J., and Liu, L. (2005). Impacts of federal precursor chemical regulations on methamphetamine arrests. *Addiction*, 100(4):479-488.
7. The Partnership at Drugfree.org. Pact 360. Meth 360 Information Kit. <http://store.samhsa.gov/shin/content/METHPKT-11/METHPKT-11.pdf>
8. Kansas Methamphetamine Prevention Project (2011). <http://www.ksmethpreventionproject.org/kmppactivities.htm#dec>
9. Kansas Methamphetamine Prevention Project. Kansas Meth Watch Program. <http://www.kansasmethwatch.com/>

Tables prepared for ODMHSAS by

Bach Harrison, L.L.C.

SPF SIG Evaluators

- Underage Alcohol Use
- Nonmedical Prescription

Dr. Leslie Ballenger

ODMHSAS Epidemiologist

- Adult Binge Drinking
- Fetal Alcohol Spectrum Disorder
- Marijuana Use
- Inhalant Use
- Methamphetamine Use