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Article 82

Driving Under the Influence (DUI) Programs: One State's Reality and All States' Responsibility

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Given the extraordinary number of lives lost to alcohol-related traffic crashes, effective responses to reduce driving under the influence (DUI) are imperative. As many as 40% of traffic fatalities in the United States occur due to impaired driving (Wagenaar, Maldonado-Molina, Tobler, & Komro, 2007). People age 21 to 34 continue to have the highest numbers of impaired driving crashes and fatalities (National Highway Traffic Safety Administration [NHTSA], 2008a).

Some states report higher alcohol related fatalities than other states. In 2006 the national average rate was 0.45 fatalities per 100 million *vehicle miles of travel* (VMT) with Montana reporting the highest rate (0.91 fatalities per 100 million VMT), Utah the lowest (0.21 per 100 million VMT); Wyoming ranked seventh (0.71 per million VMT; NHTSA, 2008b). Combined data from 2004 and 2006 indicated 15.1 % of the nation's

drivers age 18 and older reported driving while under the influence of alcohol at least once in the previous year; some states reported nearly one in four drivers. The highest rates of *driving under the influence of alcohol* were in Wisconsin (26.4%), North Dakota (24.9%), Minnesota (23.5%), Nebraska (22.9%), and South Dakota (21.6%). The highest rates of *driving under the influence of illicit drugs* (marijuana/hashish, cocaine, crack-cocaine, inhalants, hallucinogens, heroin, or prescription-type drugs used non-medically) were in the District of Columbia (7.0%), Rhode Island (6.8%), Massachusetts (6.4%), Montana (6.3%), and Wyoming (6.2%; Substance Abuse and Mental Health Services Administration [SAMHSA], 2008a). Estimates indicate that there is only one DUI arrest for every 300 to 1,000 occurrences (Jewell, Hupp, & Segrist, 2008; Voas & Lacey, 1990). In 2007 an estimated 12,998 people died as a result of alcohol-impaired crashes where a vehicle operator had a blood alcohol concentration (BAC) of .08 grams per deciliter (g/dL) or higher (NHTSA, 2008c). DUI offenses are a preventable public health problem (Nochajski & Stasiewicz, 2006).

In this article, we show evidence of increases in DUI problems in Wyoming, provide a brief overview of DUI etiology, and review a number of DUI intervention and deterrence responses. Findings from an exploratory survey of Wyoming's DUI providers are presented to offer recommendations for Wyoming's program which could have relevance for application for DUI programs in other states.

DUI: A Problem in Wyoming

As evident by the national data, DUI is a considerable problem; in Wyoming DUI convictions continue to increase. From 1997-2007, there were 35,544 convictions reported on record with 1997-98 reporting 3562 and 2005-06 reporting 4974 (*DUI Convictions by Court, County, Age and Sex*, 2007). Given that the population of Wyoming is estimated to be at least 515,004 (U.S. Census Bureau, 2006), the number of convictions in Wyoming is high relative to a small population. Wolfson (2007) reported nearly one-half of DUI arrests in Wyoming during a 6-month period (April-September, 2006) had a BAC of at least twice the legal limit (Note: Wyoming's BAC alcohol content of 0.08 is legally presumed to be impaired (W.S. 31 -5-233(b) (i), 2009). More recent data indicated DUI arrests accounted for 32% of *all* custodial arrests and the average reported BAC level was 0.158 (*Evaluation of Alcohol Factors in Custodial Arrests in the State of Wyoming*, 2008). Two reasons which may account for the high incidence of DUI convictions in Wyoming include: (a) a measurable increase in intervention efforts from law enforcement, and (b) significant changes in population characteristics. Over the last 5 years Wyoming increased funding for highway law enforcement efforts (Sackett, 2008). Arrests are shown to increase when law enforcement agencies are given additional resources to curb problems (Nochajski & Stasiewicz, 2006). Over the last 8 years, Wyoming's population shifted due to a significant boom in the mineral extraction industry. A boom like this can create extraordinary stress and demands on community resources, housing, and families contributing to increased alcohol and legal problems (Cortese & Jones, 1977). "The high demand for raw energy sources kicked off a familiar demographic dynamic: Wyoming's population rises with the price of oil, gas, and coal." (Western, 2008, p.1). The reasons for increased numbers in DUI events in Wyoming

cannot be assumed to be the same for other states; however DUI realities are similar for all states and appear to have some common etiology.

DUI: Etiology

Prior DUI arrests have been found to be the most well-established predictor of driving while or after drinking (Marques, Tippetts, & Voss, 2003). DUI offenses are also found to correlate with neurocognitive impairments (Ouimet et al., 2007), negative attitudes (Greenberg, Morral, & Jain, 2005), and poor decision-making ability (Cavaioila, Strohmetz, & Abreo, 2007). Cavaioila et al. (2007) reported, “reckless driving behaviors, including driving while intoxicated, may be more a reflection of a poor decision-making lifestyle than of merely alcohol use per se” (p. 860). Of approximately 1.5 million drivers who are arrested each year for DUI in the United States, two-thirds are first time offenders and one-third, re-offenders (Rider et al., 2006). LaBrie, Kidman, Albanese, Peller, and Shaffer (2007) reported that individuals who committed more serious crimes were more likely to re-offend. Considering somewhere between 21% and 47% of first time DUI offenders will re-offend, reduction of recidivism can have a sizeable effect (Fell, 1995). It is important that intervention programs address the diverse etiologies of DUI offenders. While DUI offenders may have some common characteristics, they appear to be a mixed group; interventions need to be designed and tailored to address individual needs.

DUI: Intervention

Intervention is an opportunity to change future behavior (Voas & Fisher, 2001); however not one particular program has been established as the most efficacious intervention for DUI offenders. Not all interventions reducing recidivism have reported significant success. Wells-Parker, Bangert-Drowns, McMillen, and Williams (1995) found only a 7-9% reduction in DUI recidivism in a meta-analysis of 215 treatment programs. Barry, Misra, and Dennis (2006) found responses from a *variety* of professionals combined with license suspension, education, and follow-up contact created the most effective interventions. Recent interventions have focused less on sanctions and mandated treatments and more on behavior changes and decision-making processes *before* drinking and driving behavior (Hennessy, Lanni-Manley, & Maiorana, 2006; Marques et al., 2003; Rider, Voas, Kelley-Baker, Grosz, & Murphy, 2007). DUI interventions that raise awareness and impact attitudes can have an effect in reducing alcohol impaired behavior in DUI recidivists (Greenberg et al., 2005). Overall, findings suggest that effective treatment needs to be client-centered, integrating education, relationship engagement (motivational enhancement), skills training, brief interventions, sanctions, and celerity (close proximity to the arrest). Programs need to match the offender’s needs, characteristics, issues, and acceptance with the treatment (Nochajski & Stasiewicz, 2006; Wells-Parker, Dill, Williams, & Soduto, 2006). Additional efforts found influential in reducing DUI recidivism include comprehensive substance abuse assessments, treatment planning, social and family support, and counseling (Pratt, Holsinger, & Latessa, 2000). “The best strategy is to combine alcohol-related interventions and treatment with licensing actions” (Dill & Wells-Parker, 2006, p. 43).

Although treatment efforts are expected to reduce recidivism, deterrence efforts are important prevention interventions.

DUI: Deterrence

“Deterrence-- influencing people not to drink and drive through laws and enforcement-- is the foundation of efforts to reduce alcohol-impaired driving and associated crashes” (Williams, McCartt, & Ferguson, 2007, p. 6). Increasing the real and perceived risks of legal consequences, reducing the abuse of alcohol, and implementing cultural shifts-- separating drinking from driving (including utilizing vehicle technology making them inoperable by drivers with an illegal BAC level) together create effective deterrence (Williams et al., 2007). From a review of deterrence efforts across the United States, Wagenaar, Maldonado-Molina, Erickson, Tobler, and Komro (2007) found mandatory fine policies and jail sentences did not have consistent effects from state to state; however, administrative driver’s license suspensions and reductions in the BAC limits *were* consistently related to reductions in alcohol-related crashes. License suspensions and jail were more effective when imposed immediately after a DUI arrest (Dill & Wells-Parker, 2006; Nochajski & Stasiewicz, 2006; Wagenaar & Maldonado-Molina, 2007). Ignition interlocks have been found to reduce recidivism (Beirness, Mayhew, & Simpson, 1994; Marques et al., 2003; Roth, Voas, & Marques, 2007). In South Dakota the urinalysis program in which repeat DUI offenders check-in two times daily rather than be held in jail, is reportedly keeping individuals sober longer, reducing numbers being held in jail, and responding to the problem that “15 percent of people behind bars in the state are there on felony drunken driving charges...” (Chavers, 2008, p. 27). NHTSA (2008d) reported state impaired driving enforcement programs are more likely to be successful when they incorporate numerous checkpoints, highly visible patrols offered routinely throughout the year with at least three mobilized crackdowns per year; *and* intense publicity of the enforcement activities with paid advertising. Highway enforcement activities save lives (Welki & Zlatoper, 2007). Frequent statewide sobriety checkpoints have been found to reduce alcohol-related fatal, injury, and property damage crashes by approximately 20 percent (Elder et al., 2002; Shults et al., 2001). It appears a combination of diverse intervention and deterrence efforts are used to respond to DUI events across states; however, evidence-based programs are not often mentioned in the state’s DUI regulations (*State Administrative Codes*, 2006).

Evidence commonly refers to the use of controlled trials with research and evaluation data and suggests an identified result will occur as a result of a clearly defined practice or protocol. “Knowledge of evidence-based practices is needed to decrease the variability of practice that results in a lesser quality of care...Treatments and services should be standardized to [assure] quality and accountability in our...programs...across the system as a whole” (Hyde, Falls, Morris, & Schoenwald, 2003, pp. 18-19). Five examples of evidence-based DUI interventions include *PRIME for Life* (Hill, 2006; Prevention Research Institute [PRI], 2003); Preventing Alcohol-Related Convictions (PARC; Rider et al., 2007); ignition interlocks (Marques et al., 2003; Mejeur, 2007; Nochajski & Stasiewicz, 2006; Pollard, Nadler, & Stearns, 2007; Roth et al., 2007); *Who’s Driving* (Hazelden, 1993); and Fatal Vision Goggles (FVG; Hennessy et al., 2006).

Although reviewing DUI programs in all 50 states is not the goal of this article, state policies are inconsistent on factors such as lengths of programs, pre-post treatment tests, instructor training, curriculum, BAC levels and treatment levels, enrollment numbers, counseling requirements, and the utilization of information for license re-application (Hill, 2006; *State Administrative Codes*, 2006). The many differences across states challenge the determination of how and if programs work to reduce DUI events. Program variation within states may also create challenges in assessing impacts of DUI programs. Wyoming's DUI standards are minimal, requiring programs to offer certain topics, a pre- and post-test, and a personal recovery plan; however, the differing programs are not required to define expected time of class participation, which pre- and post-test formats or structures are used, or evidence-based curriculum (*Rules and Regulations of the Mental Health and Substance Division*, 2008). Consequently DUI programs in Wyoming offer varied hours, diverse curriculum, and do not use the same pre and post tests.

The primary purpose of this exploratory study, which was approved by the sponsoring university's institutional review board, was to determine if Wyoming DUI program providers were interested in state standardization of DUI programs. Standardization would mean that across programs there would be many similarities in the use of evidence-based programs, attendance and participation requirements, pre- and post-tests, and training of providers. An example of a state standardized DUI program is evident in nine states (Georgia, Hawaii, Indiana, Iowa, Kentucky, Maine, North Dakota, South Carolina, and Utah) that all use the *PRIME for Life* program. *Prime for Life* is a lifestyle risk reduction program and can last from 12-20 hours (Hill, 2006). Standardization of interventions could enhance validity and reliability in outcome evaluations and provide support for statewide evidenced-based practices which ultimately may improve treatment outcomes and allow ongoing systematic analysis (Hyde et al., 2003; Marotta & Watts, 2007). Given the increase in DUI problems in Wyoming, the justification for DUI program standardization could be supported.

Method

Participants

Questionnaires were mailed to all of the 113 Wyoming certified substance abuse providers listed on the state's website (Wyoming Department of Health: Mental Health and Substance Abuse Division [WMHSASD], 2008). In Wyoming, all court-ordered substance abuse evaluators and DUI programs must be certified by the state. Any DUI educational program that is not involved with a court oversight would not be included in this study; however, most DUI events are involved with the court in some way.

Instrument

The questionnaire was created by two of the authors, included nine questions, and was designed to determine DUI providers' services, needs, and preferences: (a) does your organization provide DUI intervention programs in Wyoming and, if yes, approximately how many individuals did you serve this last year?; (b) do you believe you have sufficient resources necessary to offer the best services you can?; (c) if additional resources were available to enhance your program, what would they be?; (d) do you use

standardized pre-and post-tests?; (e) would you want the state to create standardized pre-and post-tests?; (f) do you already have and use a standardized DUI program?; (g) would you want the state to create a standardized statewide DUI program? ; and (h) would you be willing to have participants in your DUI program complete post-treatment questionnaires to assess their evaluation of your program? There was no field-testing completed on the questionnaire as this was considered more of an exploratory survey.

Procedure

During the single mailing, an informational letter with the questionnaire was mailed to all state certified substance abuse providers listed on the Wyoming's Division of Mental Health and Substance Abuse provider website (WMHSASD, 2008). Respondents were asked to complete the questionnaire, and were provided a self-addressed postage-paid return envelope. Respondent's identifying information was minimal and optional. Results were compiled and reviewed after all personal or program identifying information was removed.

Results

Thirteen questionnaires were returned as undeliverable and of 44 surveys returned, 26 reported they were providers of DUI programs. The provider website listed 57 DUI state certified providers in Wyoming; therefore, the survey feasibly represented nearly 46% of the listed providers. Although an absolute number of current DUI providers was not obtainable given the website was not updated frequently, the number of surveys (26) analyzed was considered to be a representative sample of Wyoming providers. Based on the data from the questionnaires, nearly 2,500 offenders had been served in the last year by the providers who responded. A little more than one-half of the providers (16/26) reported they had sufficient resources necessary to offer the basic services. Those who could use additional resources indicated wanting updated materials and funding to assist participants who could not pay. Approximately two-thirds of the responses indicated they would like additional program resources: (a) updated evidence-based materials (DVDs and educational handouts), (b) increased funding to hire additional staff, and (c) evidence-based training. Although a majority of the providers reported utilizing pre- and post-tests (20/23), the assessments were not standardized across the programs. Nearly two-thirds of the respondents (16/26) reported they would support a standardized pre- and post-assessment.

Nearly one-half (12/26) of the providers indicated that a state-standardized DUI program could be beneficial indicating that standardization could provide program consistency, would facilitate the training of new providers, and would allow for more effective measurement of outcomes. However, it was stipulated that any standardization must be designed to address Wyoming's needs. A number of the providers indicated an interest to offer input for program design. Providers urged that the programs should be research-based, offer additional funding to start new programs, and that there would need to be flexibility in how programs are implemented. Providers not interested in standardization mentioned concerns regarding the ability to adequately address the diversity of client needs, co-morbidity issues, and possible unforeseen impacts on the private sector. A little more than one-half (16/26) of the providers indicated that they

would consider having program participants be given post treatment questionnaires; confidentiality was a concern.

Discussion

The findings of the current study provided moderate support for DUI program standardization in Wyoming. Providers clearly desire input, program flexibility, and financial assistance to support additional expenses for standardization of programs, and financial support for low-income consumers. Although the providers were concerned that standardization might not adequately address individual needs of the program participants, a significant number of the providers believed outcome research could be enhanced with implementation of standardization. Given one-half of the providers did not indicate support for standardization, the state would need to address their concerns and work toward consensus building. These findings validate honoring the balance between the autonomy and experience of providers with the expectations and structure from the state when implementing change.

Based on the findings from this study, when evaluating DUI programs, states might consider the following: (a) actively involve providers with any changes, (b) evaluate pros and cons of program standardization, (c) provide evidence-based DUI intervention models and provider training, (d) provide adequate funding to providers to enable them to implement DUI program changes, access evidenced-based materials, and assist income-challenged consumers, and (e) require outcome measures of impaired driving programs.

Limitations

There are limitations in this study: (a) all providers might not have been represented; (b) the survey was self-report, therefore subject to differential interpretation; (c) minimal provider demographic information was obtained; (d) the term “standardization” may not have been as clearly defined in the questionnaires as it could have been; (e) the findings may not be representative of providers in other states; and (f) the focus on drug-impaired driving other than alcohol is not differentiated in the discussion and findings.

Implications for Counselors

Chiriquí, Terry-McElrath, McBride, and Eidson (2008) indicated that state policy requirements governing outpatient substance abuse treatment programs could have significant public health implications and a potential role effectuating evidence-based outpatient substance abuse treatment program practices. The Council for the Accreditation of Counseling and Related Educational Programs (CACREP) in July 2009 included addiction counseling as a specialized area requiring training in core knowledge, counseling, prevention, intervention, clinical skills, assessment, research, evaluation, diagnosis, diversity, and advocacy (CACREP, 2009); therefore, it is a professional responsibility for counselors to be involved with the enhancement and best-practice support for programs addressing addictions. Findings from this article can have implications for counselors to advocate for changes in DUI state policies to support program standardization, implementation of evidence-based programs, provider training,

outcome-based research, and funding for program enhancement and research. The wisdom of providers is critical for state policy makers: when a system of change is inclusive, the outcomes are more representative and meaningful. Parallel to the national “systems of care” approach supporting children’s mental health care, a national DUI systems-of-care program approach could recognize the importance of communities, law enforcement, consumers, and providers to have a voice, work in partnership to address the challenges and severe consequences of impaired driving, identify effective intervention responses, and expect outcome accountability (NHTSA, 2006; SAMSHA, 2008b).

Summary

Impaired driving is a significant public health problem; nationally there is considerable diversity in DUI intervention responses. A brief review of interventions finds that multilevel responses including brief interventions, decision-making skills training, enhanced and immediate sanctions, levels-based interventions, traditional and non-traditional alcohol educational classes, ignition interlocks, and client-centered treatment in combination may reduce drinking and driving. States need to work together to reduce DUI events and increase outcome research.

In 2006 the National Highway Safety Program made national recommendations for impaired driving programs, suggesting that each state develop and implement a comprehensive highway safety program reflecting state demographics and focusing on a significant reduction in traffic crashes, fatalities, and injuries on public roads. The guidelines indicated programs should be research-based, include training for legal personnel, promote enhanced awareness campaigns, be data-driven, focus on populations and geographic areas that are most at risk, and be monitored through independent evaluations. Programs should be adequately funded and involve diverse stakeholders representing treatment, business, health care, law enforcement, media, and higher education. States should include marketing campaigns with year-round screening and brief intervention training for medical, health, and business partners. Employers, educators, and all health care professionals should follow a systematic program to screen and/or assess at-risk drivers utilizing brief intervention techniques. Prevention should be aimed to change social norms and risky behaviors addressing all ages and publicity should be culturally relevant and based on market research (NHTSA, 2006).

References

- Barry, A. E., Misra, R., & Dennis, M. (2006). Assessing driving while intoxicated (DWI) offender characteristics and drinking problems utilizing the numerical drinking profile (NDP). *Journal of Alcohol & Drug Education*, 50, 66-79.
- Beirness, D. J., Mayhew, D. R., & Simpson, H. M. (1994). *Dealing with DWI offenders in Canada: An inventory of procedures and programs, Final report*. Minister of National Health and Welfare, Ottawa, Ontario.
- Council for the Accreditation of Counseling and Related Educational Programs. (2009). Retrieved from <http://www.cacrep.org/template/index.cfm>

- Cavaiola, A. A., Strohmetz, D. B., & Abreo, S. D. (2007). Characteristics of DUI recidivists: A 12-year follow-up study of first time DUI offenders. *Addictive Behaviors*, 32, 855-861. doi: 10.1016/j.addbeh.2006.06.029
- Chavers, M. (2008). South Dakota DUI offenders get sober. *State News-The Council of State Governments*, 51, 26.
- Chiriqui, J. F., Terry-McElrath, Y., McBride, D. C., & Eidson, S. S. (2008). State policies matter: The case of outpatient drug treatment program practices. *Journal of Substance Abuse Treatment*, 35, 13-21.
- Cortese, C., & Jones, B. (1977). The sociological analysis of boom towns. *Western Sociological Review*, 8, 76-90.
- Dill, P. L., & Wells-Parker, E. (2006). Court-mandated treatment for convicted drinking drivers. *Alcohol Research and Health*, 29, 41-48.
- DUI convictions by court, county, age and sex (September 11, 1997 through September 11, 2007)*. (2007). Cheyenne, WY: Wyoming Department of Transportation.
- Elder, R. W., Shults, R. A., Sleet, D. A., Nichols, J. L., Zaza, S., & Thompson, R. S. (2002). Effectiveness of sobriety checkpoints for reducing alcohol-involved crashes. *Traffic Injury Prevention*, 3, 266-274. doi: 10.1080/15389580290091929
- Evaluation of Alcohol Factors in Custodial Arrests in the State of Wyoming*. (2008). Wyoming Association of Sheriffs and Chiefs of Police.
- Fell, J. C. (1995). *Repeat DUI offenders in the United States*. Washington DC: U.S. Department of Transportation, National Highway Traffic Safety Administration.
- Greenberg, M. D., Morral, A. R., & Jain, A. K. (2005). Drunk-driving and DUI recidivists' attitudes and beliefs: A longitudinal analysis. *Journal of Studies on Alcohol*, 66, 640-647.
- Hazelden. (1993). *Who's driving DUI DWI program*. Retrieved from http://www.hazelden.org/OA_HTML/ibeCCtpItmDspRte.jsp?item=2501.
- Hennessy, D. A., Lanni-Manley, E., & Maiorana, N. (2006). The effects of fatal vision goggles on drinking and driving intentions in college students. *Journal of Drug Education*, 36, 59-72.
- Hill, J. N. (2006). Driving under the influence (DUI) education program models. *Research Memo. Wyoming Legislative Service Office (LSO): Cheyenne, Wyoming*, 1-4.
- Hyde, P. S., Falls, K., Morris, J. A., & Schoenwald, S. K. (2003). *Turning knowledge into practice: A manual for behavioral Health administrators and practitioners about understanding and implementing evidence-based practices*. Retrieved from <http://www.tacinc.org/Pubs/hspubs.htm>
- Jewell, J. D., Hupp, S. D. A., & Segrist, D.J. (2008). Assessing DUI risk: Examination of the behaviors and attitudes of drinking and driving scale (BADDS). *Addictive Behaviors*, 33, 853-865. doi:10.1016/j.addbeh.2008.02.002
- LaBrie, R. A., Kidman, R. C., Albanese, M., Peller, A. J., & Shaffer, H. J. (2007). Criminality and continued DUI offense: Criminal typologies and recidivism among repeat offenders. *Behavioral Sciences & the Law*, 25, 603-614.
- Marotta, S. A., & Watts, R. E. (2007). An introduction to the best practices section in the *Journal of Counseling & Development*. *Journal of Counseling and Development*, 85, 491-503.

- Marques, P. R., Tippetts, A. S., & Voas, R. B. (2003). Comparative and joint prediction of DUI recidivism from alcohol ignition interlock and driver records. *Journal of Studies on Alcohol*, 64, 83-92.
- Mejeur, J. (2007). Ignition interlocks: Turn the key and blow. *State Legislatures*, 33, 16-21.
- National Highway Traffic Safety Administration [NHTSA]. (2006). *Uniform guidelines for state highway safety programs: Highway safety program guideline No. 8: Impaired driving*. Washington, DC: U.S. Department of Transportation. Retrieved from <http://www.nhtsa.dot.gov/nhtsa/whatsup/tea21/tea21programs/pages/ImpairedDriving.htm>
- National Highway Traffic Safety Administration [NHTSA]. (2008a) *A Summary Report of Six Demonstration Projects To Reduce Alcohol-Impaired Driving Among 21 to 34-Year-Old Drivers*, April 2008: DOT: HS 810912. Washington, DC: U.S. Department of Transportation. Retrieved from <http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.18e416bf1b09b6bbbf30811060008a0c/>
- National Highway Traffic Safety Administration [NHTSA]. (2008b). *Fatalities and fatality rates in alcohol-impaired crashes by state, 2005-2006*. Washington, DC: U.S. Department of Transportation. Retrieved from <http://www-nrd.nhtsa.dot.gov/Pubs/810920.PDF>
- National Highway Traffic Safety Administration [NHTSA]. (2008c). *2007 Traffic safety annual assessment-Alcohol-impaired driving fatalities*. Washington, DC: U.S. Department of Transportation. Retrieved from <http://www-nrd.nhtsa.dot.gov/Pubs/811016.PDF>
- National Highway Traffic Safety Administration [NHTSA]. (2008d). *Evaluation of seven publicized enforcement demonstration programs to reduce February 2008 impaired driving: Georgia, Louisiana, Pennsylvania, Tennessee, Texas, Indiana, and Michigan*. Washington DC: U.S. Department of Transportation. Retrieved from <http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.18e416bf1b09b6bbbf30811060008a0c/>
- Nochajski, T. H., & Stasiewicz, P.C. (2006). Relapse to driving under the influence (DUI): A review. *Clinical Psychology Review* 26, 179-195. doi:10.1016/j.cpr.2005.11.006
- Ouimet, M. C., Brown, T. G., Nadeau, L., Lepage, M., Pelletier, M., Courture, S., ...Ng Ying Kin, N. M. (2007). Neurocognitive characteristics of DUI recidivists. *Accident Analysis & Prevention*, 39 (4), 743-750. doi: 10.1016/j.aap.2006.11.005
- Pollard, J. K., Nadler, E. D., & Stearns, M.D. (2007). *Review of technology to prevent alcohol-impaired crashes (TOPIC)*. U.S. Department of Transportation, National Highway Traffic Safety Administration.
- Pratt, T. C., Holsinger, A. M., & Latessa, E. J. (2000). Treating the chronic DUI offender "Turning point" ten years later. *Journal of Criminal Justice*, 28, 271-281.
- Prevention Research Institute [PRI]. (2003). *PRIME for Life*. 841 Corporate Drive, #300, Lexington, Kentucky.
- Rider, R., Kelley-Baker, T., Voas, R. B., Murphy, B., McKnight, A. J., & Levings, C. (2006). The impact of a novel educational curriculum for first-time DUI offenders on intermediate outcomes relevant to DUI recidivism. *Accident Analysis and Prevention*, 38, 482-489. doi: 10.1080/15398580601111586

- Rider, R., Voas, R.B., Kelley-Baker, T., Grosz, M., & Murphy, B. (2007). Preventing alcohol-related convictions: The effect of a novel curriculum for first-time offenders on DUI recidivism. *Traffic Injury Prevention*, 8, 147-152. doi: 10.1016/j.aap.2005.11.004
- Roth, R., Voas, R., & Marques, P. (2007). Interlocks for first offenders: Effective? *Traffic Injury Prevention*, 8, 346-352. doi: 10.1080/15389580701598559
- Rules and Regulations of the Mental Health and Substance Division* (2008). Cheyenne, WY: Wyoming Department of Health: Mental Health and Substance Abuse Division (MHSASD). Retrieved from <http://wdh.state.wy.us/mhsa/about/Standards.html>
- Sackett, M. (2008). Summary of appropriations, revenues, and spending. *Wyoming Legislative Service Office Research Document 08FSO23*. Cheyenne, Wyoming. Retrieved from <https://legisweb.state.wy.us/LsoResearch/2008/08FSO23.pdf>
- Shults, R. A., Elder, R. W., Sleet, D. A., Nichols, J. L., Alao, A. O., & Carande-Kulis, V. G. (2001). Reviews of evidence regarding interventions to reduce alcohol-impaired driving. *American Journal of Preventive Medicine*, 21, 66-88.
- State Administrative Codes*. (2006). (Arizona Ad. C R9-20-903; Utah Ad. C R523-22; Colorado C. of Reg. 1008-5; Reg. of Connecticut State Agencies 54-56g-7; Illinois Ad. C. 77, 2060.505; Texas Ad. C. 19, 176.1206; & Vermont Code R. 14 050 030).
- Substance Abuse and Mental Health Services Administration (2008a). Press Release: *New nationwide report estimates that roughly a quarter of all drivers in some states drove under the influence of alcohol in the past year*. Rockville, MD . Retrieved from <http://www.oas.samhsa.gov/2k8/stateDUI/press.htm>
- Substance Abuse and Mental Health Services Administration (2008b). *Transforming children's mental health care in America: Systems of care*. Rockville, MD. Retrieved from <http://systemsofcare.samhsa.gov/>
- U.S. Census Bureau. (2006). *United States population 2006 estimates*. Retrieved from <http://factfinder.census.gov/servlet/ACSSAFFacts>
- Voas, R. B., & Lacey, D.A. (1990). Drunk driving enforcement, adjudication, and sanctions in the United States. In R. J. Wilson & R.E. Mann (Eds.), *Drinking and driving: Advances in research and prevention* (pp. 116-158). New York: Guilford.
- Voas, R. B., & Fisher, D. A. (2001). Court procedures for handling intoxicated drivers. *Alcohol Research Health World*, 25, 32-42.
- Wagenaar, A. C., & Maldonado-Molina, M. M. (2007). Effects of drivers' license suspension policies on alcohol-related crash involvement: Long-term follow-up in forty-six states. *Alcoholism: Clinical & Experimental Research*, 31, 1399-1406. doi: 10.1111/j.1530-0277.2007.00441.x
- 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, 493-499. doi:10.1016/j.jsr.2007.06.001
- Wagenaar, A. C., Maldonado-Molina, M. M., Erickson, D. J., Ma, L., Tobler, A. L., & Komro, K. A. (2007). General deterrence effects of U.S. statutory DUI fine and

- jail penalties: Long term follow-up in 32 states. *Accident Analysis & Prevention*, 39, 982-994. doi:10.1016/j.aap.2007.01.003
- Welki, A. M., & Zlatoper, T. J. (2007). The impact of highway safety regulation enforcement activities on motor vehicle fatalities. *Transportation Research Part E: Logistics and Transportation Review*, 43, 208-217. doi:10.1016/j.tre.2005.07.007
- Wells-Parker, E., Bangert-Drowns, R., McMillen, R., & Williams, M. (1995). Final results from a meta-analysis of remedial interventions with drink/drive offenders. *Addiction*, 90, 907-926.
- Wells-Parker, E., Dill, P. Williams, M., & Soduto, G. (2006) Are depressed drinking/driving offenders more receptive to brief intervention? *Addictive Behaviors*, 31, 339-350. doi: 1016/j.addbeh.2005.05.011
- Western, S. (2008). *The Wyoming baby boom*. Retrieved from http://www.wyofile.com/wyoming_baby_boom.htm
- Williams, A. F., McCartt, A. T., & Ferguson, S. A. (2007). Hardcore drinking drivers and other contributors to the alcohol-impaired driving problem: Need for a comprehensive approach. *Traffic Injury Prevention*, 8, 1-10. doi: 10.1080/15389580600992895
- Wolfson, J. (2007, July 15), Report details alcohol impact. *Casper Star Tribune*. p. A 3.
- Wyoming Department of Health: Mental Health and Substance Abuse Division [WMHSASD] (2008) *Substance Abuse Providers' website*. Cheyenne, Wyoming. Retrieved from <http://wdh.state.wy.us/mhsa/treatment/MHprovidermap.html>
- W.S. 31 -5-233(b)[i] (2009). Wyoming Legislative Service Office. Retrieved November 1, 2009, from <http://legisweb.state.wy.us/statutes/statutes.aspx>

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