Emory University Evaluation of the Georgia DUI Alcohol/Drug Risk Reduction Program: Fiscal Years 1992-1996

Summary Final Report

October 27, 1997

Frederick A. Marsteller, Ph.D.
Deborah Rolka, M.S.
Arthur Falek, Ph.D.

Department of Psychiatry
Emory University School of Medicine

Executive Summary

In 1990, the DUI Alcohol and Drug Risk Reduction Program (RRP) was introduced after authority for mandatory educational intervention for DUI offenders was transferred to the Georgia Department of Human Resources. The RRP represented a significant departure from past practice. The program includes a standardized assessment of alcohol and drug problems and a standardized curriculum that is designed as an early intervention to reduce major alcohol and drug problems.

Since 1991, investigators from the Department of Psychiatry of the Emory University School of Medicine have been conducting a series of studies designed to evaluate the effectiveness of the RRP. This report summarizes the major findings from those studies.

- During the period during which subjects were being added to the study (Fiscal Years 1992-1995) 230,691 offenders were convicted of a total of 276,712 DUI offenses.

- Relative to the 4,489,709 active licenses on July 1, 1996, offenders comprise 5.1% and multiple offenders comprise 2.4% of the estimated driving population.

- Although all DUI offenders are required to attend the RRP for license reinstatement, only 58.3% of offenders do so without an intervening recidivism. 64.7% of lifetime first offenders, 58.9% of offenders with a prior more than five years before their reference, and 45.4% of offenders with multiple offences within five years filed certificates of RRP completion.

- The offenders who do not attend the program recidivate at twice the rate of those who attend (27.1% vs. 13.5%). It is not possible for us to determine how much of this very large difference is due to the effects of the RRP and how much is due to factors that differentiate people in the compliant and non-compliant populations.

- Of 134,607 people with certificates, 17,833 (13.2%) were legally repeat offenders (i.e. had a DUI within five years prior to the reference DUI.)

- The DUI offenders are predominantly male (79.9%) and are younger than the general driving-age population of Georgia.

- The prevalence of serious alcohol related problems is extremely high in this population: 53% of offenders who complete the SALCE assessment have summary scores in a range indicating a need for clinical referral.

    - 42% of first offenders would be referred for clinical treatment.
    - 75% of offenders with most recent offenses more than five years ago would be referred.
    - 84% of offenders with prior offences within five years of arrest (legally repeat-offenders) would be referred.

- The most important predictors of recidivism among those completing the RRP were number of lifetime moving violations, BAC at arrest, prior DUIs and SALCE assessment scores.

- Evaluation of responses to questionnaires administered to students before class, after class and at various follow-up periods indicate that the TAAD curriculum is generally effective in meeting its objectives -- the students learn what they are intended to and many reported significant reductions in alcohol use for extended periods after class.

- These same surveys support the validity of the SALCE assessment -- agreement between SALCE scores and our clinically oriented questions is good. Furthermore, the SALCE has demonstrated predictive validity -- SALCE summary scores are associated with a person's risk of recidivism.

- Although severity of alcohol problems is an important determinant of continued impaired driving by DUI offenders, recidivism is even more strongly associated with driving record, specifically moving violations and arrest BAC. We believe that these measures reflect important additional components to the risk for recidivism, namely history of driving while extremely impaired and a propensity for being apprehended for traffic violations -- both of which may measure a person's likelihood of being **caught** again, rather than for continued impaired driving.

- Despite the positive effects of the TAAD curriculum, a large proportion of offenders who attend the RRP continue to drive while impaired, as evidenced by their 13.5% recidivism rate.

- It is our opinion that the effectiveness of the RRP, although generally good, could be improved by more directly addressing the issue of very high rates of alcohol dependence among DUI offenders. During the recently completed legislative session, modifications to the DUI statutes have added a requirement of treatment for some multiple offenders. If this requirement succeeds in reducing recidivism among multiple offenders, it might beneficially be extended to all offenders.

- Among DUI offenders with multiple lifetime DUI convictions in Georgia, the two-year recidivism rate of those with a prior DUI within a five years of their reference was significantly **lower** than the two-year recidivism rate of repeat offenders with a most recent prior DUI more than five years before the reference arrest. Under current law, a person who receives three DUIs within a 5-year period can be declared a Habitual Violator. The severe licensing penalties placed on Habitual Violators may serve as a deterrent to recidivism among offenders with two offences within five years resulting in the difference described above. If this is the case, increasing or eliminating the period of time over which DUIs "age-off" may further reduce recidivism among repeat offenders.

- Finally, the RRP can only have a positive impact in reducing impaired driving by DUI offenders if those who are required to attend it actually do. The extremely high non-compliance rates among those required to attend the RRP indicate a major need for legislative and/or enforcement attention.

Introduction

Despite the recent decrease in alcohol-related traffic accidents, people whose ability to drive safely is impaired by the use of alcohol and other drugs is a serious public health, economic and social problem. According to the National Highway Traffic Safety Administration (NHTSA), nearly half of the national traffic fatalities are alcohol-related. Moreover, the economic costs of impaired driving in the US is estimated at over $20 billion annually. Major efforts to find effective ways to curb this ongoing national tragedy began in earnest in 1966 with the passage of the National Highway Safety Act. Prior to this time the emphasis of the courts were upon traditional punitive sanctions to deter drinking and driving. Such sanctions included fines, community service, jail sentences, and occasional driver's license suspensions. By the mid-sixties there was a growing awareness that these countermeasures were failing to reduce the incidences of drunk driving and produce the desire changes in behavior.

As an alternative strategy, motivated by the federal initiative embodied in the National Highway Safety Act, states in the early 1970s began to enact legislation requiring persons convicted of driving under the influence (DUI) to attend an alcohol education or treatment program. The idea behind these programs was that deterrence alone was insufficient to significantly change drinking and driving behavior. Education and treatment for alcohol and/or drug problems were viewed as necessary.

In this spirit the Georgia Driver Improvement courses under supervision of the Department of Public Safety (DPS) were created during the late 1970s. This program consisted of two 12-hour classes, the first (Level I) for first offenders and the second (Level II) for repeat DUI offenders. The Alcohol Level I course was primarily an information oriented course, centering on the effects of alcohol and the symptoms of alcoholism. The Alcohol Level II course was designed for repeat offenders and focused on three stated goals: 1) to convince the alcoholic that he/she is "sick;" 2) to help the person understand "the nature of the disease," and 3) to convince the abuser of the need for treatment. Over the years the Level II program supplanted the Level I program for first offenders and the content of the Level II program was taught to both first and multiple offenders. Despite this stated emphasis on treatment, this program remained primarily didactic in its orientation. There exists no evidence of its effectiveness in terms of reducing DUI recidivism, or of persuading offenders to change their drinking or to enter an alcoholic treatment program.

In July of 1990 the responsibility for oversight of the DUI program, including the Driver Improvement Clinics (DUI schools), was transferred from the Department of Public Safety to the Georgia Department of Human Resources, Division of Mental Health, Mental Retardation and Substance Abuse. In September of 1990 the Georgia DUI Alcohol and Drug Risk Reduction Program (RRP) was instituted. At that time, the RRP broke new ground in the intervention component of the management of DUI offenders by introducing a standardized assessment and intervention curriculum based upon sound, current theoretical principles. The RRP is comprised of three components: 1) a psychometrically proven self-administered, computer scored assessment of the severity of alcohol and drug problems, 2) a 16-hour education/intervention curriculum, and 3) an 8-hour intensive intervention curriculum. Under the current statutes, offenders convicted of driving under the influence of alcohol or other drugs or for possession of illegal drugs can apply to the Department of Public Safety for reinstatement of their driving privileges only after completing the RRP.

Assessment: All DUI offenders entering the RRP are required to complete the assessment component of the RRP, which is based upon the Substance Abuse Life Circumstances Evaluation (SALCE) developed by ADE Inc. The SALCE is a self-administered and computer-scored questionnaire that determines the level of intervention for that person. Based on SALCE score, offenders are either released or referred either to the 16-hour Educational Intervention course or the full 24-hour Intensive Intervention course. Typically, 5-6% of offenders with a score of 0-2 on the SALCE are released each year from the program. Offenders with a score of 3-14 are referred on to the 16-hour program and those with a score above 14 are referred to the 16-hour program **plus** the 8-hour Intensive Intervention curriculum. ADE recommends clinical intervention for people whose SALCE scores are above 14.

Risk Reduction curriculum: The Department adopted the "Talking about Alcohol and Drugs Series" (TAAD) curriculum developed by the Prevention Research Institute (PRI) as its standardized DUI curriculum for both the base 16-hour and the 8-hour intensive intervention elements. This highly structured curriculum is designed to prevent alcohol and drug addiction by changing perceptions and behaviors surrounding students' of their risk of addiction. The authors of the curriculum also believe that it may serve as an effective pre-treatment for those who are already dependent, and may serve to increase the likelihood that they will seek treatment.

The basic 16-hour TAAD curriculum is designed to lead the student through the following cognitive steps:

- Anyone can become an alcoholic, therefore,
- I can become an alcoholic.
- My personal choices of how much and how often I drink will determine whether I become an alcoholic.
- I will commit to only low-risk use of alcohol by following specific low-risk guidelines.

The curriculum is planned for presentation in a very specific sequence using completely designed educational methods. Audio-visual support in the form of slides and videotapes is provided to assist in presentation. Classroom exercises, supported by student workbooks, assist students to assessing their level of risk of alcoholism and the curriculum provides clear guidelines for low-risk drinking based upon that level of risk.

The theoretical foundation of both the educational and behavioral risk models used in the TAAD curriculum is clear and current. PRI conducts an ongoing process of updating the research basis and curricular support material, which is supported by mandatory continuing education of instructors. The structure and standardization of the curriculum provides stability and consistency of the educational experience across the State and simplifies compliance monitoring. Standardization has received criticism for limiting the approach to the diversity of the DUI offender population and for limiting the ability of instructors to address that diversity. In general, however, the curriculum has, from its introduction, received remarkable support from instructors and DUI school administrators.

This curriculum was initially developed as a prevention/early intervention curriculum for alcohol only. Discussion of drugs was added because people attend the RRP to remove license suspension for alcohol **or** drug DUI, **or** for possession of controlled substances. The model developed for alcohol – low-risk use for those not dependent or at high risk – cannot be applied to drugs. Because drugs are illegal, there is no low-risk use. Accordingly, the discussion of drugs other than alcohol in the curriculum is limited and occasionally awkward. Furthermore, we have received continuing reports of students who use drugs but not alcohol that are disruptive because they perceive little relevance of the curriculum to their circumstances.

All curriculum instructors are trained and certified both by PRI and by The Georgia Department of Human Resources. Opportunities for feedback from instructors and continuing instructor training in the curriculum is provided by PRI at scheduled training events throughout Georgia.

Curriculum monitoring efforts during the first years of the RRP showed that there was substantial variation among instructors in the quality of their teaching and adherence to the curriculum. In an effort to improve the quality of instruction the Department of Human Resources Risk Reduction Unit and the Prevention Research Institute inaugurated the Master Level Instructor Program in the Fall of 1994. This training program has strengthened the quality of instruction. The program credentials and employs the most qualified and effective teachers from the program to teach other instructors identified by the Georgia Risk Reduction Program to be less qualified or effective teachers. Moreover, any instructor in the program can request to work with a Master instructor in order to improve the quality of his or her teaching. In time as more Master level instructors are trained and become available to assist their peers, the quality of teaching in the Risk Reduction Program should show progressive improvement.

DUI schools are privately operated under the certification and regulation of DHR. Competition for DUI students among DUI schools within this system has had some impact on the delivery of the DUI curriculum in some areas of the State. There is no choice of products or cost savings among schools: all schools are required to offer the same assessment and teach the same standardized curriculum for a fixed fee. Selection of schools by offenders appears to be based on two factors: convenience of class schedule and school location. Most offenders want to complete the 16 or 24-hour curriculum in the shortest period of time. This creates pressure on schools to create cramped schedules that allow students to complete the full 16-hour curriculum in one weekend and the 24-hour curriculum in one weekend plus two additional 4-hour evening classes - often in the same week. Such scheduling, given its potential adverse effects on attention span and the learning process, creates serious concerns regarding the quality of the learning experience. While many instructors and Risk Reduction schools recognize the seriousness of this problem, most have found it necessary to continue this type of scheduling due to stiff competition from other schools.

Emory University Risk Reduction Evaluation (1991 - 1997)

In March of 1991 the Georgia Department of Human Resources contracted with Emory University to assess the effectiveness of the Georgia Risk Reduction Program in reducing drunk driving and DUI recidivism among Georgia drivers. The Georgia Risk Reduction Program was defined as including the TAAD curriculum ("Talking About Alcohol and Drugs"), the assessment instrument (the Substance Abuse Life Circumstances Evaluation or SALCE), the DUI Risk Reduction schools, the school directors and instructors, the DUI offenders, and the Georgia DHR Risk Reduction Unit. The stated mission of the program is to change drinking behavior of DUI offenders in order to prevent DUI recidivism. Correspondingly, the aim of the Emory outcome evaluation was to determine the effectiveness of the program in accomplishing that mission. Moreover, the evaluators realized early on that DUI offenders comprised a heterogeneous population and that the program might be more effective for some than for others. A careful analysis of the diverse DUI population was necessary in order to determine for whom the program was effective and for whom it was ineffective.

To accomplish this task the evaluators focused upon five major goals that directed the five-year study. First, beginning broadly, the Emory University Evaluation Group sought to assess the effectiveness of the implementation of the program in the schools. This consisted of the attitudes of the schools - the administrators and instructors - to the curriculum as well as the rules and regulations governing the program. In addition, we sought to specify their attitude and relationship with the DHR Risk Reduction Unit. The evaluators felt it was important to know to what extent the curriculum was being effectively implemented and whether there were identifiable roadblocks to this implementation.

The second goal of the study was to clarify the background and behavioral characteristics of the Georgia DUI population. The evaluators believed it was important to identify not only the typical DUI offender, but to determine whether differential background and/or behavioral characteristics affected response to the program and future drinking and driving behavior. An important issue here was to see to what extent the program was effective with the various populations required to participate. For instance, was the program effective for drug offenders as well as alcoholics; for women as well as men; for blacks and Hispanics, and for young drivers as well an older population?

The third goal of the evaluation was to measure the effectiveness of Risk Reduction curriculum in changing attitudinal and behavioral changes among offenders completing the program. With no control group to compare to those who completed the program, we measured changes in knowledge, attitudes, behavioral intentions and actual behavior completion of the course using questionnaires to measure demographic variables, course knowledge, attitudes, behavioral intentions, drinking patterns and DSM-III-R alcohol and drug dependence symptoms. Versions of this questionnaire were given at the beginning and the end of class at measure immediate changes due to exposure to course material. Prior to the administration of the first

questionnaire an Informed Consent was given to all participating students to read and sign. This form described the purpose of the follow-up study and guaranteed the confidentiality of individual responses to the questions. Participants were also informed that they would be receiving a follow-up phone call at three, six and twelve months to see how they were doing and to gather further information on the response to the curriculum. In addition, this follow-up questionnaire asked detailed questions regarding their actual drinking and driving behavior and the importance of the TAAD curriculum guidelines or other factors in any actual behavioral changes. At this stage we were particularly interested in what actual behavioral changes were made and sustained by the student over time and the continuing influence of the curriculum to affect these changes. Specific questions were included to detect for dishonesty of response. In addition to the questionnaire responses we had available to us the continuing driving records of all participating students, including any additional DUIs since completion of the Risk Reduction curriculum.

Our fourth goal was to identify subgroups of offenders least likely to respond to the program, and who remained at high risk for drunk driving and DUI recidivism. Based on information from the post-curriculum questionnaire and the three-year follow-up study, a model of high and low-risk offenders was developed. The high-risk offender group was defined as those who continued to drink at high levels, who exhibited symptoms of alcoholism and who were predicted to be most likely to continue to drink and drive.

Based on previous finding from the questionnaires and a Case Control Study of recidivists and non-recidivists, our fifth goal consisted of an attempt to develop and refine our method for predicting the continuing risk for impaired driving and DUI recidivism. In this study we looked at the difference between high and low risk recidivists and high and low risk non-recidivists. This study helped us to better distinguish between offenders and to better predict offenders more likely to continue to drink and drive.

In summary, we focussed our efforts on attitudinal and behavioral changes of offenders following completion of the RRP, and attempted to identify specific subgroups of offenders least likely to respond positively to the curriculum. Those least likely to respond to the curriculum were defined as those continuing to engage in high-risk drinking and those continuing to drive after drinking.

Limitations of the study:

The best method for determining the effectiveness of an intervention program would involve an experimental study. The experimental study provides for the random selection of subjects to either a control or an experimental group. All things being equal, the only difference between the two groups is that the experimental group receives the intervention - in this case the Risk Reduction Program. The control group receives no designated intervention. Under these controlled conditions changes that occur in the experimental group is attributed to the effect of the intervention. Unfortunately, these conditions did not exist among Georgia DUI offenders. All convicted offenders with SALCE scores of 2 or higher are required to complete the program in order to have their license reinstated.

Analyses of Driving Records of DUI Offenders

Basic Numbers:

- There were a total of 276,712 DUI convictions between July 1, 1991 and June 30,1995 (Fiscal Years 1992-1995).

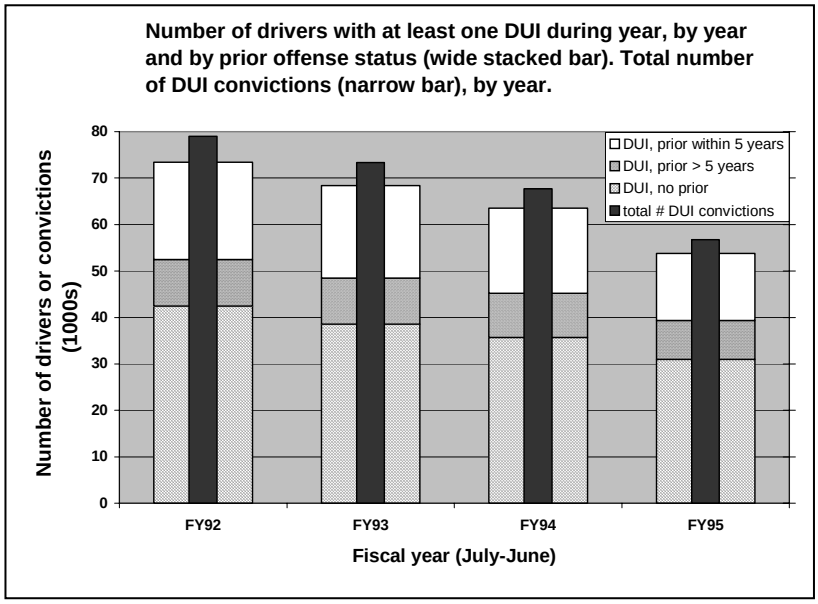
- The total number of *people* with DUI convictions in FY92-FY95 was 230,691.

- For purposes of this study, the first offense for which a person was convicted during the study period was taken as the reference offense. The person was classified as a recidivist if he had another DUI conviction with an arrest date after the arrest date of the reference offense. Because people with reference offenses late in the study period had less time in which to recidivate than those with reference offenses early in the study, most analyses use a two-year recidivism rate.

- A person was classified has having competed the Risk Reduction Program if the Department of Public Safety had a certificate on record after the reference arrest date and prior to any subsequent DUI arrest. 134,556 (58.3%) of the offenders completed the RRP by this definition.

- 7601 offenders had RRP completion certificates filed **before** their first conviction during the FY92-FY95 study period due to offenses which occurred prior to the start of the study period. These records were excluded from all analyses of the full study period, but are included in the year-by-year analyses.

Figure 1 shows the conviction rates, numbers of offenders and distribution of offenses for each fiscal year of the study.



Demographics of the DUI offender population based on SALCE (89,354)

In addition to providing important information regarding the severity of alcohol problems, the SALCE was also our primary source of demographic information on DUI offenders. Accordingly, the following demographic description of DUI offender population reflects applies only those who completed the RRP. Those who failed to complete may differ.

Figure 2 shows that the DUI offender population is younger than the general population of Georgia.

Table 1 shows the distribution of major demographic variables among DUI offenders and the two-year recidivism rate for each demographic group. To summarize, relative to the general population, DUI offenders are predominantly male, young, unmarried, have limited education and low incomes and this is even more the case among recidivists.

Relative to the 1994 census estimate of Georgia population, DUI offenders comprise 4.5% of all driving-aged people, and multiple offenders comprise 2.1%.

Relative to the 4,489,709 active licenses on July 1, 1996, offenders comprise 5.1% and multiple offenders comprise 2.4% of the estimated driving population.

Figure 2. Age of Georgia DUI offenders, FY92-FY95 (N=89,291), compared to age of Georgia driving-age population (1994 census estimates)

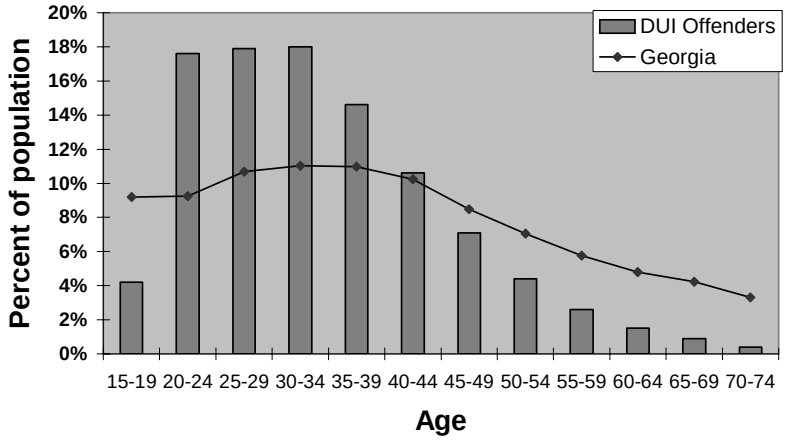


Table 1. Demographics and two-year recidvism of DUI offenders with an offense Between 7/1/91 and 6/30/94, who completed the Risk Reduction Program and whose SALCE assessment record was successfully matched to their driving record.

Variable	Category	N	% of DUI population	% 2-year recidivism
Sex	Male	62,350	79.9%	11.1%
	Female	15,654	20.1%	7.7%
Race	White	59,009	75.8%	10.0%
	African American	15,429	19.8%	11.3%
	Other	3,465	4.5%	13.3%
Education	<12 years	19,486	25.0%	12.7%
	12 years	34,604	44.4%	11.1%
	>12 years	23,914	30.7%	7.6%
Marital status	Never married	29,308	37.6%	9.1%
	Married	26,183	33.6%	10.5%
	Divorced/separated	22,406	28.8%	11.9%
Income	<$15,000	26,794	34.6%	12.7%
	$15,000+	50,682	65.4%	9.2%
SALCE score	<14	36,591	46.9%	8.5%
	14+	41,413	53.1%	12.1%
Age	16-20	5,225	6.7%	12.4%
	21-30	28,695	36.9%	10.0%
	31-40	24,444	31.4%	10.6%
	41+	19,478	25.0%	10.3%
Employment	Full time	58,471	75.1%	10.3%
	Unemployed	5,323	6.8%	12.5%
	Other	14,037	18.0%	9.9%
Total population		**86,524**	**100.0%**	**11.4%**

Analyses based on whether offenders completed the RRP (demonstrated by a RRP completion certificate filed with the Department of Public Safety) for their first offense during the study period (N=223,092)

23,949 (27.1%) of those who did not complete the RRP and 18,165 (13.5%) of those who did recidivated by the end of the study (6/30/96). The proportion was 18.9% for these two groups combined. For those who had offenses on or before June 30, 1995, 18,684 (27.0%) of those without certificates and 11,433 (10.1%) of those with certificates recidivated within two years of their reference DUI.

Among offenders who completed the RRP:

- 6970 (6.2%) were excused from attending the Risk Reduction classes because of low SALCE scores. 514 (7.4%) of these offenders recidivated within two years.
- 44,866 (39.7%) attended the 16-hour curriculum. 3912 (8.7%) of these recidivated within two years.
- 59,813 (53.0%) completed the 24-hour curriculum. 6997 (11.7%) of these offenders recidivated within two years.

SALCE assessment results provided by DHR were matched to RRP completion certificates for 89,354 offenders. 78,067 of these people had two years of follow-up: 8119 (10.4%) of them recidivated within two years of their reference DUI. This recidivism rate is comparable to that of the entire population that completed the RRP based on having presented a certificate to DPS.

The total number of people with DUI convictions in FY92-FY95 was 230,691. Those who did not complete the RRP averaged 1.31 DUIs during the interval, while those who did averaged 1.13.

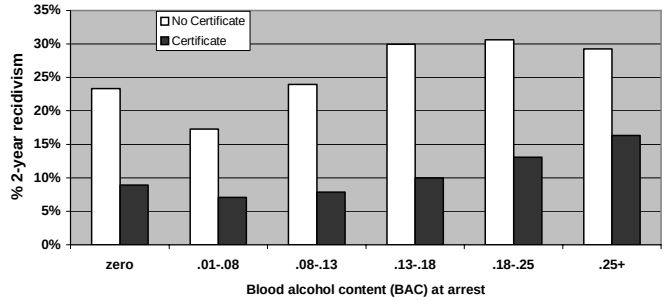
Individuals with DUIs during the study period had as many as 22 lifetime DUIs and 44.8% had more than one. Those who completed the RRP were more likely (55.1% vs. 39.1%) than those with those who did not to have two or more lifetime DUIs.

Individuals had as many as 8 between July 1,1992 and June 30, 1996.

Relationships between 2-year recidivism rates, presentation of an RRP certificate, and selected variables (moving violations, prior DUIs, BAC, and SALCE) are presented in the following charts.

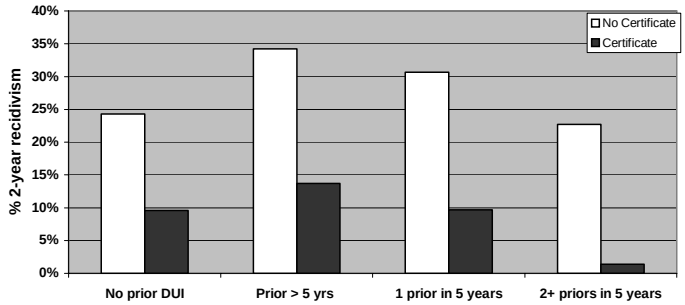
The strong association of recidivism with Blood Alcohol Content (BAC, Figure 3) supports the hypothesis that high tolerance to the effects of alcohol, an important symptom of alcohol dependence, is an predictor of continuing problems with impaired driving. Note that BACs of zero denote either refusal to submit to testing or a charge of DUI for substances other than alcohol.

Figure 3. Two-year recidivism among Georgia DUI offenders (FY92-FY94) by arrest BAC and certificate status (N=181,979)



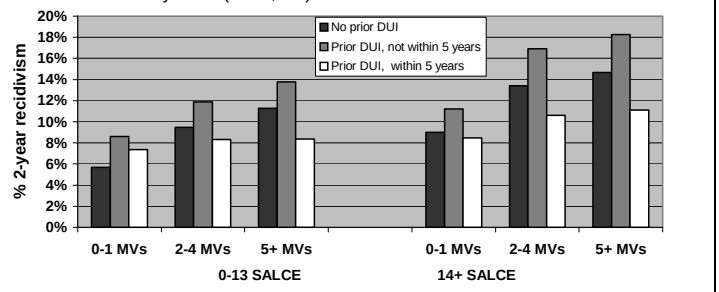
Recidivism is strongly associated with both RRP completion and with prior History of DUI offenses (Figure 4). The fact that the highest rate of recidivism is among offenders with prior offenses more than five years prior to the reference offense demonstrates the chronic pattern of behavior involved in DUI recidivism.

Figure 4. Two-year recidivism among Georgia DUI offenders (FY92-FY94) by prior DUI and certificate status (N=182,105)



Finally, recidivism is strongly associated with both severity of alcohol problems, as indicated by a SALCE score of 14 or higher and with the number of moving violations for which a person has been convicted (Figure 5). It is possible that the association of recidivism with moving violations reflects the likelihood that among drivers who repeatedly drive while impaired, those with more moving violations are the ones who are more likely to be apprehended.

Figure 5. Two-year recidivism among Georgia DUI offenders (FY92-FY94) by number of non-DUI moving violations (MVs) and SALCE summary score (N=78,004)



Demographic and SALCE variables were examined through stratified analysis of raw recidivism rates. They were also evaluated in the presence of the important violation variables (moving violations, BAC, priors) through modeling of time to recidivism using proportional hazards and modeling of probability of recidivating within two years using logistic regression. The conclusions of this study are as follows:

- More moving violations and higher arrest BAC are the strongest predictors of recidivism.
- A prior DUI is a strong predictor of recidivism, but those with recent priors may be less likely to recidivate in a 2-year interval. A complicated picture.
- SALCE summary score, education level, gender, and income level are strong predictors. Women, those with 13+ years of education, those with income over $15,000, and those with lower SALCE scores are *less* likely to recidivate.
- Race differences are very small, with Blacks somewhat more likely to recidivate than Whites (people of "Other" race are most likely.)
- There are age differences, with the youngest offenders (16-20) appearing to be somewhat more likely to recidivate than those in other age groups.
- Those who are married are somewhat less likely than those who are divorced, separated, etc. to recidivate, with the never-married rate being between the other two.
- Differences by employment status are small.

Analyses for each year (all 230,691)

- The annual number of DUI convictions declined over FY92-FY95, from 78,989 in FY92 to 56,709 in FY95 (a 28.2% decrease).
- The number of people with convictions each year similarly declined from 73,429 to 53,831 (a 26.7% decrease).
- *For those who had two years of follow-up after their first offense in each year,* the proportions who recidivated within two years were 18.5%, 16.9%, and 14.3% for FY92, FY93, and FY94 respectively.
- The proportion that had an RRP completion certificate *prior* to their first offense in each year increased from 1.9% to 15.4%.
- The proportion that had a DUI conviction *prior* to their first offense in each year remained constant over the four years at about 57%.
- The proportion that completed the RRP *within one year* of their first offense in each year remained constant over the first three years at about 50%, but declined in the fourth year to 43%.
- In each year, those with one prior RRP certificate were less likely to receive a certificate within one year than were those with no prior certificate. Those with two or more prior certificates were much less likely to receive certificate within year, probably due to the licensing penalties applied to *habitual violators*.
- In each year, those with a prior DUI were less likely to receive a certificate within one year than those with no prior DUI, and those with a prior DUI in the previous five years were least likely to receive a certificate within one year.
- For each of FY92-FY95, the proportion that recidivated within two years was smaller for the group that completed the RRP within one year than for the group that did not.

Conclusions from Studies of the Full DUI Offender Population

Although all offenders are required to attend the Risk Reduction Program, within one year, only 58.3% completed the program. Any beneficial impact of the RRP on repeated impaired driving by those convicted of a DUI since the implementation of the program is severely limited by noncompliance. The extremely high recidivism rates among those choosing not to complete the RRP is clear evidence of a need for strong steps to improve compliance.

The SALCE assessment is strongly associated with recidivism risk: 7.4% of offenders scoring 0-1 on the SALCE Summary Score recidivate vs. 8.7% of those scoring 2-13, vs. 11.7% of those scoring 14 or higher. Two points warrant comment:

- Those scoring 0-1 on the SALCE are currently exempted from having to attend the Risk Reduction classes. The recidivism rate among these offenders indicates that many people who might benefit from the TAAD curriculum are not receiving it.
- SALCE Summary Scores of 14 and higher, by the criteria set by ADE, the producer of the SALCE, indicate a need for clinical referral. The much higher recidivism rate among the 53% of offenders whose scores fall within this range is a point of concern. The TAAD curriculum is not clinical treatment for people with significant alcohol problems and is not designed around the specific and difficult problems of communicating with them. Neither we nor Prevention Research Institute, which provides the curriculum, believe that the TAAD curriculum is a sufficient intervention for those with significant alcohol problems. In order to substantially reduce the continued impaired driving of the large segment of the DUI offender

population that is chemically dependent, additional measures, such as the mandatory clinical treatment required in the majority of other States, are needed.

Analysis of the demographics of the offender population indicate that recidivism is highest among young men who are single or divorced, have less than a high school education and earn less that $15,000 per year. The success of the TAAD curriculum depends upon the participant being able to make a commitment to changing behaviors which may place him or her at risk of alcohol dependence. Future development of the curriculum should consider that in the population at highest risk of recidivism, the motivation and ability to make and adhere to such a commitment might be limited. Additional exercises designed to address these areas may be effective in reducing recidivism among those who are not yet chemically dependent.

Survey results: Does the curriculum do what it sets out to do?

We evaluated several questions pertaining to the effectiveness of the TAAD curriculum through a series of surveys using questionnaires administered before class, at the end of class and up to two years after class completion. These major questions were:

- Do changes in knowledge and attitudes from before to after class and behavioral intentions at the end of class:
    - Reflect the curricular objectives -- does the curriculum do what it sets out to do?
        - Do participants believe that they are at risk of alcoholism?
        - Do participants believe that their choices with respect to quantity and frequency of drinking will determine whether they become dependent of alcohol?
        - Do participant's assessment of their risk of alcoholism, based on class exercises correspond to the level of risk indicated by the SALCE assessment and by their responses to clinical questions in our surveys?
        - Do they express intent to adopt behaviors that will minimize the risk of alcohol dependence?
        - Do they express a belief that they have developed adequate skill and strategies to meet their behavioral intentions?
    - Do participants who later recidivate respond differently to the curriculum than those who do not?
    - Do responses to questions pertaining to clinical (DSM-III-R) symptoms of alcohol abuse and dependence lead to the same conclusions as those obtained from the SALCE assessment?
- After participants leave the class:
    - Do they retain the knowledge and behavioral intentions gained during the class?
    - Does the quantity and frequency of their alcohol use change?

The results used to answer these questions are drawn from a cohort study into which 2655 subjects entered. All subjects completed informed consent permitting us to check driving records and to contact them subsequent to class. They then completed survey questionnaires before and after class. Using drivers license numbers, names and dates of birth provided on the informed consent form, their questionnaire responses were matched to their SALCE assessment results and driving records.

- Matching SALCE results were found for 2121 (79.9%)
- Matching driving records were found for 1985 (74.5%)
- Both were found for 1714 (64.6%)

At three, six and twelve months after the end of each participant's class, questionnaires were mailed to them. If no response was received within two weeks, a second questionnaire was mailed. A sample of non-respondents was contacted by telephone to complete the questionnaire.

- At least one mail or telephone follow-up questionnaire (3, six and 12 months after class) was returned by 983 (37%).
- Those who responded to the follow-up were less likely to become recidivists than those who did not (9.4% vs. 13.6%).

A second follow-up study was conducted to check for response bias due to the low response rate in the mail follow-up. In this case-control study, all participants who were convicted of a DUI with an arrest date after the last class date and for whom SALCE assessments were also matched were selected as the "cases". There were 131 male and 18 female recidivists with complete matching records. 393 male and 64 female non-recidivists with complete records were randomly selected as "controls". At an average of approximately 30 months after the completion of the class, we attempted to contact each selected person by telephone using information provided on the informed consent completed at the start of class. For those who could not be located through those telephone numbers, we conducted an computerized search of the Equifax database to obtain the most recent address and telephone information available and continued attempting to contact subjects using the new information. In total, 295 (49.3%) of subjects could not be located or were not contacted due to incarceration, hospitalization or death. Among the 303 contacted, 107 (35.2%) refused to participate or were otherwise ineligible, and 196 consented. A computer failure resulted in the loss of 16 interviews, so the final sample size is 180. Contact and completion rates for recidivists and non-recidivists were not significantly different.

Short term response

- One of the largest changes in response from before class to after class was in response to the statement "I could become an alcoholic", which was endorsed by less only 42% of students before class, but was endorsed by 77% after class.
- Likewise the proportion of students who endorsed the statement "Alcoholism is closely related to how much a person drinks." increased from 55% before class to 78% after class.
- 81% of participants endorsed the statement "This course changed my thinking about how much and how often I should drink" at the end of class.
- At the end of class, 73% endorsed the statement "I am committed to following my low risk guidelines."

These response patterns reflect the changes and commitments that the curriculum attempts to impart and are reflected in similar response patterns to questionnaire items addressing related issues. In summary, for the majority of students, the curriculum "improves" responses related to its objectives. It is noteworthy, however, that a substantial minority of participants complete the curriculum without agreeing with its principle tenets.

Agreement of SALCE Assessment and DSM-III-R Diagnoses from Questionnaires

In general, the SALCE assessment and the frequency with which survey respondents endorsed questions related to DSM-III-R symptoms of alcohol dependence and abuse were in good agreement:

- 66.1% of respondents whose SALCE scores were matched to questionnaire responses had SALCE summary scores above 14, the suggested cutoff for identifying significant problems.

- 55.6% of respondents endorsed enough DSM-III-R symptoms to qualify for a diagnosis of alcohol dependence if clinically supported, and an additional 16.7% endorsed symptoms indicating a diagnosis of alcohol abuse.
- Of those respondents with SALCE summary scores above 14, 67.8% were "dependent", and 15.5% had questionnaire "diagnoses" of abuse.
- Only 23.7% of those with questionnaire "diagnoses" had SALCE summary scores of 14 or less, mostly in the range of 8-14, which indicates problems of some concern.

Identifying recidivists from their responses to in-class questionnaires

In general, subjects who participated in the study and recidivated responded similarly to those who did not. The only statistically significant finding is that the recidivists more frequently endorsed the following items:

- "I drink to loosen up with people"
- "I often drink more than I planned"
- "Many of my problems are caused by my drinking"
- "I usually have trouble stopping at 1 or 2 drinks"
- "I enjoy getting drunk"
- "I drink to get drunk"
- "I wish I could control my drinking better"
- "I need help to change my drinking"
- "Any drinking is high risk for me"

These responses indicate that many of those who become recidivists are aware that they have significant alcohol-related problems and are prone to acknowledge that they are unable to control their drinking. In other words, they are people in need of clinical assistance for their alcohol problems and who, given their awareness of the problems, may respond positively to treatment.

Recidivists also responded somewhat differently with respect to the change of their responses from before class to after class. Specifically, recidivists were more likely than non-recidivists to endorse more common DSM-III-R symptom items before class **and** not endorse them after class. They were also more likely to report drinking less after class than before class. This finding may indicate that for some participants – some of those with significant alcohol problems and a high risk of recidivism -- the curriculum may challenge their self-image by showing them that their symptoms **are** problems, and that they respond by denying the problems, rather than committing to resolve them.

Persistence of response to the TAAD curriculum

The major points of concern in the two follow-up studies were whether participants recall the major points of the curriculum, maintain a commitment to drink at lower levels of risk, and actually drink less per occasion and/or less frequently. The very low overall response rates for the study warrant caution -- the majority of subjects in both studies did not respond, and non-respondents may differ substantially from respondents.

At follow-up (average 7 months after class):

- 57.4% endorse "I drink less than before class"
- 12.7% "regularly attend 12-step meetings", and 8.3% report having received alcohol treatment.

- 72.6% report promising themselves to follow the low-risk drinking guidelines from class.
- 49.5% report trying to abstain from drinking.
- 74.7% report at least sometimes trying to follow their low-risk guidelines.
- 27.7% report at least sometimes ignoring their guidelines.
- 33.2% report at least sometimes drinking without thinking about their guidelines.
- 65.6% endorse "Remembering my guidelines helps me drink less."
- There was no significant change in the number in the number of drinking days per week reported at the end of class compared to follow-up, but 45.8% of respondents reported having fewer drinks per drinking day.

In the case-control study (about 30 months after class):

- 74.2% responded "Yes" to "It is possible for you to become an alcoholic?"
- 59.6% responded "Yes" to "Do you have (or have you had) a drinking problem?"
- 27.6% responded "Yes" to "Are you an alcoholic?". Recidivists responded "Yes" to this item significantly more often than non-recidivists (41.5% vs. 23.2%).
- 19.9% reported receiving alcohol treatment, and recidivists reported a significantly higher rate (35.7% vs. 13.7%).
- 34.4% report drinking much less during the last six months.
- 26.1% of respondents report having entirely stopped drinking and 24.7% report not having a drink in the past six months.
- Among those who report drinking during the past six months,
  - 67.2 report drinking five or more drinks in a day at least once during the past month.
  - 59.1% report a personal definition of "high-risk" drinking as at least four drinks per day, 9.1% report definitions at or above 8 drinks.
- 38.1% report driving a car after having at least one drink.
- 54.0% of those who reported drinking less than before class said that the TAAD curriculum influence that change either "a lot" (45.4%) or was "most important" (8.6%).
- 87.6% remember the discussion of the low-risk drinking guidelines, but only 55.2% of those who remember the discussion remember the specific guidelines which apply to them.
- Quality of reporting may be an issue in this study:
  - 91.5% of respondents rated the honesty with which they had responded at "9" or "10" on a scale of 1-10.
  - However, 73.8% of recidivists stated that they had not received another DUI since taking the class.

The Cost-Impact of Mandatory Treatment for Multiple DUI Offenders

In order to assess the impact of proposed changes in the DUI legislation for FY1998, we conducted a limited study of the cost impact of mandating treatment for DUI multiple offenders. The model used incorporated very conservative estimates of the costs attributable to DUI recidivists -- limiting them to the direct and

indirect costs of DUI crashes. Furthermore, conservative estimates of the cost and efficacy of treatment were also used. The following discussion summarizes the results of this study.

While important steps to reduce drinking and driving in Georgia have taken place over the last decade, impaired driving remains a sizeable, expensive problem. Approximately, 51,595 Georgians are convicted for DUI each year with half of this group being repeat-offenders. In 1995 1488 fatal car crashes occurred in Georgia; approximately 35% of these were alcohol-related. Conservative estimates place the cost, including medical care, lost productivity, and property damage, of alcohol-related driving fatalities and injuries at $541 million or an estimated $44,000 per alcohol-related crash. Notably, these estimates exclude the cost of the pain and suffering inflicted on victims and their families by impaired drivers.

In response to this situation, mandatory treatment for multiple offenders has been advocated by a number of groups. Treatment is likely to be the only efficacious way to address the alcohol abuse problems of DUI multiple offenders. Currently, DUI offenders are required to participate in a risk reduction education program that is self-funded through charges to clients. A similar model could be adopted in relation to mandating treatment. Under this model the state would be required to pay for treatment only for those who could not afford it according to strict income requirement. Based on assumptions about treatment needs, the structure of treatment plans, treatment costs, success rates, and insurance coverage, the costs to the state of mandating treatment would be $2.7 million. For this investment an estimated 850 abstainers would be produced at a cost of $3168 per non-drinker and an estimated 204 car crashes costing $9 million would be avoided.