A Whole of Government approach to reducing drink drive re-offending.

The success of the NSW Sober Driver Program.

Patricia Bryant, Rosemary Rouse, Andrew Hawkins*, Wendy Hodge, Klas Johansson#, Margaret Bowery, Peter Harvey+, Gillian Browne**, Bruce Flaherty## and David Saffron.

*NSW Centre for Road Safety, Roads and Traffic Authority,
#ARDT Management and Research Consultants
*Department of Corrective Services,
**Motor Accidents Authority
##Attorney General’s Department

The Sober Driver Program
The NSW Sober Driver Program (SDP) is a state-wide education and relapse prevention program for repeat drink drive offenders who are convicted of two or more offences within five years. Unlike other education programs for drink drivers, participants are required to complete the program as part of their sentence. The SDP is the outcome of a comprehensive review of existing road safety interventions and international best practice in traffic offender programs and was developed by a NSW whole of Government committee made up of Roads and Traffic Authority, Motor Accidents Authority, Department of Corrective Services and Attorney General’s Department.

The Department of Corrective Services, Community Offender Service (DCS COS) delivers the program through 51 district offices from 63 locations across NSW and at different times throughout the year. Around 100 courses are offered every year and district offices may run simultaneous or multiple courses in a year. The NSW Sober Driver Program commenced as a pilot in 2002 and was rolled out statewide from June 2003. Up to the end of June 2007, 5,032 individual offenders have enrolled in a SDP and 4,223 have completed the program.

Goals of the Sober Driver Program
The overall goal of the NSW Sober Driver Program is to reduce drink driving re-offending. The program targets adult drink drive offenders who are convicted of more than one drink drive offence within five years, and combines educational and remedial approaches and activities. The program is available across the state for all eligible offenders and is delivered consistently using a standard format.

The program is not expected to influence behaviour on its own, rather to complement the effects of existing sanctions, such as driver’s licence disqualification. The literature indicates that remedial programs targeting drink driving are most effective when used in conjunction with sanctions.
The program teaching and learning goals are to:

- provide accurate information about alcohol to participants.
- explain short and long-term effects of alcohol on the body.
- explain the ways in which alcohol affects one’s ability to drive safely.
- develop participants’ understanding of the effects and costs of drink driving for self and the community.
- assist the participants to develop essential skills and positive attitudes for safe driving.
- assist drink drivers to develop and implement strategies and to access additional support to avoid relapse.

**Program Course Structure**

The program course content is prescriptive, and presenters are expected to follow session notes faithfully. The program is delivered in two formats and both formats cover the same topics.

- **Standard format** – nine week duration, two hours a week.
- **Condensed format** – three weeks, one day a week (six hours). This format is used in remote rural locations where numbers are low and where potential participants come from a large geographical catchment area.

The **standard programs** nine sessions cover:

1. Introduction, program overview, rights and responsibilities and the drinking diary.
2. Consequences of drink driving for self. The session explores reasons for drink driving, excuses and the immediate and long term consequences for self.
3. Consequences of drink driving for others. The session explores the chain of events and introduces the concept of ‘Mapping’ to show the impact of drink driving on friends, family and the community as a whole.
4. About driving. The session explores the complexities of driving, looking at skills required to drive a vehicle, simulated driving, effects of impairment, identification of hazards, and includes research about road crashes and making legal and safe decisions about driving.
5. About alcohol. The session explores why people drink, effects of alcohol on the body, how much alcohol impairs function, pouring a standard drink, blood alcohol concentration (BAC) and returning to zero BAC.
6. Effects of alcohol on behaviour. The session explores the effect of blood alcohol concentration on behaviour, personal and social problems, reviewing the chain of events and the drinking diary.
7. Managing drinking and driving situations. The session explores Breath Alcohol Interlock devices, steps to changing drink/ driving behaviour, making choices and identifying high risk situations.
8. Avoiding relapse. The session explores styles of communication, how to communicate assertively to avoid relapse.
9. Making choices about drinking and driving. The session explores managing stress, identifying support, making a commitment.
The condensed version program covers:

- Day 1: Introduction overview; Consequences of drink driving for self and others.
- Day 2: About driving; About alcohol; Effects of alcohol on behaviour.
- Day 3: Managing drinking and driving situations; Avoiding relapse and stress management; Making Choices about drinking and driving.

**Sober Driver Participants**

When examining SDP participants to July 2005, the majority of program participants were male (91%), 68% were single and aged between 18 and 39 years. 6% were of Aboriginal or Torres Strait Islander (ATSI) descent. The majority were under Good Behaviour Bonds (80%). Other court orders included community service (23%), bail supervision (3%), parole orders (2%), home detention (1%), and other penalty orders (1%).

The large majority were convicted of only drink drive offences (77%), predominantly middle (34%) and high range prescribed concentration of alcohol (PCA) (43%). Other drink driving offences included lower range PCA (4%), drive under the influence of alcohol or drug (2%), refuse or fail breath test (1%) refuse or fail subsequent breath analysis (1%), special range PCA (1%), and other drink driving offences (<1%).

Results from the application of an *Alcohol Use Disorders Identification* evaluation amongst SDP participants involved in the evaluation indicate that repeat drink drivers referred to the SDP consume alcohol in a risky manner with 40% engaging in high risk or harmful use of alcohol. A substantial proportion appears to be also dependent on alcohol, for example, 58% reported being unable to stop drinking once they started.

**The evaluation**

In 2004, the NSW Safe Driver Program Interagency Working Party commissioned ARTD to conduct an independent evaluation of the effectiveness and impact of the SDP on SDP participants’ knowledge, attitudes and behaviour relating to drink driving. The Department of Corrective Services Ethics Committee granted ethical approval or the research design. The evaluation design combined quasi-experimental and mixed methods:

**Quasi-experimental – impact on drink driving behaviour.**

The study compared rates of drink driving recidivism among all SDP participants to a comparison group of offenders with similar characteristics, who received legal sanctions only. All persons in NSW who had a drink driving offence between 2000 and 2005 and who had a previous offence within the last five years (the criteria for entry to SDP) were identified from court records from the Bureau of Crime Statistics and Research (n=22,546) After adjustments for penalty characteristics, this group was limited to 11,407 persons. SDP participants were identified from this group wherever adequate data was
available. In total 73% (n=1,740) of SDP participants could be identified, leaving 9,667 subjects in the community comparison group.

Quasi-experimental – impact on knowledge, skills and self-reported behaviour

The study compared participant’s knowledge, skills and intentions to change before doing the SDP, immediately after finishing the program and four-months later. All offenders commencing SDP between 1 September 2004 and 31 July 2005 (n=943) were invited by facilitators to participate in quantitative surveys. In total, 397 chose to participate (42%). Respondents were followed up at the end of the program (86%) and 4 months following program completion (51%). Responses across time were compared for the 149 participants (38% of initial respondents) who were followed-up at all three time points, and whose surveys could be matched for each of the three time points using their unique study identifier.

The survey questionnaires included questions on sex, age, geographic location, and licence status. Drinking behaviour was assessed using the Alcohol Use Disorders Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). The questionnaire also contained items on knowledge, attitude and intention to change questions. Thirteen true/false questions asked about the short and long term effects of alcohol on the body, the ways in which alcohol affects the ability to drive safely, and the effects of drink driving on the driver and the community. One knowledge question (regarding individuals’ right to refuse a breath test) was not addressed by the program, but was asked to give an indication of the degree to which any change in knowledge could be attributed to the program. Eleven statements were used to explore respondents’ attitudes about a range of drink drive practices. Each statement had a range of four possible responses from ‘Agree’ to ‘Disagree’, or ‘Don’t Know’. All statements were constructed so that the socially acceptable response was to disagree. The end-of-program questionnaire repeated the same knowledge, attitude, and intention to change questions and included additional questions about the perceived impact of the program on behaviour and skill level, and current self-reported behaviour regarding drinking and driving. The four month follow-up survey was conducted over the phone and contained the same knowledge, attitude and intention to change questions included in the two previous questionnaires, the current self-reported drinking and driving questions used in the end-of-program questionnaire, and additional questions on whether the program has helped the participant avoid drink driving, usefulness of behavioural avoidance strategies developed in the program and frequency of drink driving since finishing the program.

Mixed methods were used to assess the effectiveness and appropriateness of the implementation of the SDP. Fifty Six SDP participants were interviewed in-depth before, immediately after and four months after the SDP ended. A total of 90 key stakeholder interviews were completed with 20 magistrates, 30 SDP facilitators and co-facilitators and 40 DCS COS district managers. 100 active facilitators and co-facilitators completed a post-implementation survey. Six discussion groups with court users were held in rural/ regional and metropolitan NSW, with 68 participants.

The rigour of the quasi-experimental design and the scope of supporting evidence generated through the mixed methods means that decision makers can have a high level of confidence in using the evaluation findings. Statistically significant data was generated on the difference between recidivism rates of SDP participants and other repeat drink driver offenders with similar characteristics. Extensive
quantitative and qualitative data from SDP participants was generated that confirmed the recidivism findings and helped explain the effects, and evidence was gathered from all relevant stakeholders to confirm that the program model was being implemented as intended.

**Effect**
The *NSW Sober Driver Program* is an effective intervention that complements other sanctions for drink drivers. The study shows that repeat drink drive offenders who have completed the SDP are half as likely (Odds Ratio = 0.47) to re-offend again, than offenders who have not completed the SDP. Where an intention-to-treat analysis is used the effect on recidivism is somewhat lower, persons in the SDP are almost half as likely to re-offend (Odds Ratio = 0.57).

Among drink driver offenders who are convicted of two or more offences within five years, existing sanctions achieve recidivism rates of 10% after two years. Our findings show that the *NSW Sober Driver Program* provides an additional effect and reduces recidivism rates to around 5% (for participants who complete the program) and 6.1% for participants who enrol in the program (intention-to-treat). The reduction equates to one less case of recidivism after two years for every 19 people in the target population who complete the *NSW Sober Driver Program*. On the June 2003-June 2005 enrolments of 2,341 SDP participants (when the program was formally rolled out) and an average recurrent program expenditure of $724,760 the program prevents 46 fewer people from being charged with a repeat drink driving offence within two years. Because detection rates are low, many more instances of drink driving than indicated by the recidivism rate may actually be prevented.

This is a stronger effect than seen in other studies of drink drive education prevention programs, where a meta-analysis of remedial interventions with drink drive offenders concluded that these programs can achieve a 7-9% reduction in subsequent drink driving offences.¹

**Causal mechanisms**
The research with SDP participants showed that the program provides respondents with personally relevant knowledge of the effects of alcohol and the consequences for themselves and others of drinking and driving; changes anti-social attitudes to drinking and driving; and assists many individuals to identify their own unsafe behaviour patterns and develop skills and devise realistic strategies to avoid drinking and driving. At the time of the study, few respondents had the opportunity to apply the strategies because their licence had not been returned.

At the end of the program, most respondents were confident that they would not re-offend again and that having completed the SDP would help them change their behaviour in the future.

Knowledge of specific facts improved after the program, as well as self-reported skills in planning ahead and resistance to peer pressure for some participants. Knowledge of facts about the effect of alcohol on the body improved, which would assist people in judging the level of risk involved in driving. This finding is particularly relevant to this group, as 86% of SDP participants were identified as drinking in a harmful or hazardous manner. One unplanned impact of the program was the increase in awareness of alcohol consumption and the self-reported reduction in drinking amongst some participants.

After completing the program, significantly fewer study respondents indicated that they would take a risk of driving after drinking, or try to work out how many drinks they can have and stay under the limit. SDP participant interviews confirmed changed attitudes about the seriousness of drink driving, the acceptability of taking risks and their ability to judge these risks, and these changes were sustained over time.

The SDP also intended to provide individuals with the opportunity to develop personal skills and realistic strategies to change their behaviour and prevent relapse. Respondents reported rehearsing ways to avoid drink driving, and commonly indicated that in future they would plan ahead to avoid drinking and driving. However, not all individuals we talked to were able to come up with specific strategies for change or the strategies chosen appear to have less likelihood of succeeding because they rely on exercising judgement when out drinking rather than planning ahead, as emphasised in the program.

It was apparent that offenders’ drink driving behaviour is also being influenced by the impact of other sanctions, particularly the loss of a licence and the threat of gaol, and the consequences of these on the person’s own life and their relationships with their family and work. Offenders commonly came to the program highly motivated to learn and determined not to drink and drive again and the program reinforced these intentions and provided information and tools to do so for many.

The changes observed are consistent with the theory of behaviour change and teaching and learning approaches upon which the program design is based.

**Implementation**

The findings of the evaluation show that the SDP is being implemented as intended, administered effectively and is well received by participants. However, issues to consider with regard to future implementation of the SDP include the following findings:

- At the time of the evaluation, the uptake of the program by magistrates was uneven, with a small group of magistrates being responsible for a high proportion of court referrals to the SDP. Magistrates who use the SDP as a sentencing option regard it as a valuable tool for addressing recidivism. Magistrates expressed a need to receive more feedback about the impact of the SDP on individuals and its overall effectiveness.
• although the program has largely been responsive to local demand for referrals, there are still areas of high demand where the SDP is getting fewer referrals than would be expected, given the rate of drink drive offending.
• there appears to be a minority of participants being referred to the program who do not meet the strict eligibility criteria, although the referrals may be appropriate from the perspective of addressing offenders at high risk of repeat drink drive offending.
• the study has confirmed that alcohol abuse and dependency is a characteristic of repeat drink driver offenders and that a significant proportion of offenders are not undertaking treatment for this problem.
• the study identified areas for refinements that could be addressed as part of the continuous improvement of the SDP, in particular the suitability of teaching and learning materials for offenders who have difficulty understanding, reading and writing English.

Many of these issues are currently being addressed in the ongoing delivery of the program by DCS with continued program input and funding from RTA from July 2007.

Benefit Cost ratio of the SDP
Following the completion of the evaluation of the SDP, the RTA commissioned Dr David Saffron to conduct an estimation of the economic value or benefit cost ratio (BCR) of the SDP in 2006. Dr Saffron estimated two BCRs for the SDP. One is a BCR that would have been calculated at the beginning of the program if we had known how effective it would be and the second is a BCR for continuation of the SDP from 2007 onwards.

The BCR for the SDP, hypothetically calculated from when it started, is 1.6. The BCR for the SDP from 2007 is 1.9, recognising that some of the benefits of the SDP would be enjoyed if the SDP were discontinued. From 2009, the yearly benefits are 2.3 times the costs².

Conclusion
The SDP is an effective education and relapse prevention program, which is accessible and appropriate to the target group of drink drive recidivists across NSW. SDP graduates are half as likely to re-offend as other recidivist drink drivers who do not attend the program, demonstrating the value of the program in reducing re-offending over and above the effect of sanctions such as fines and licence loss. That the reduction was much larger than would be expected from the international literature on rehabilitation programs, indicates the high quality of the SDP and the valuable contribution it makes to reducing drink drive offending.