

centre lines

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issuing **forth**

Is the embracing of 'random' roadside saliva testing to prevent drug-affected driving premature?



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edspace

Welcome to the August issue of *CentreLines*, the main theme of which is drug testing. In *Headspace*, Steve Allsop raises the need for sound evidence upon which to base drug testing, while in *Issuing Forth*, Simon Lenton challenges the rapid adoption in Australia of random roadside saliva testing for illicit drugs.

Since being established twenty years ago, more than 200 research projects have been completed at NDRI, many of which have resulted in positive outcomes for drug policy, practice and the community. One key area in which NDRI has endeavoured to make a difference is addressing alcohol and other drug problem in Indigenous communities. NDRI was therefore recently delighted when Dennis Gray and other members of the Indigenous research team received recognition for their work by winning the National Drug and Alcohol Award for Excellence in Research (see article on page 4).

Rachael Lobo
Editor

NDRI
national drug research institute

headspace

Drug testing: The need for an evidence base

The speed, complexity and mechanisation associated with modern living has changed our tolerance for levels of alcohol and other drug use and associated intoxication. Any historical review of alcohol use in western cultures will provide evidence that, in the not too distant past, not only was alcohol use at work tolerated, it was sometimes encouraged. As Roman and colleagues^(p122) have noted, faster paced work, which makes unprecedented demands on judgement and decision-making, coupled with inflexible and unforgiving technology, has implications for alcohol and other drug use:

"Machines can keep up a pace of activity that does not parallel human capability ... most machine activity does not detect or react to boredom or inattention among human operators ... when work becomes organised around machine activity, the tolerance for impairment of human operators by psychoactive substance use disappears".

These changes have resulted in an increasing demand for strategies to deter and detect people

who may put themselves and others at risk by operating machinery (whether a vehicle or a work machine) whilst under the influence of drugs. Effective detection and deterrence of impaired work performance is not contentious, but many of the methods that are promoted and used to achieve these ends have stimulated a great deal of debate.

As indicated by Simon Lenton in *Issuing Forth*, many responses to drug impaired driving are influenced by political and moral appeal, as opposed to being supported by a strong evidence-base. On the other hand, there is a (limited) body of evidence that can guide effective practice – but the evidence sometimes directs us to strategies that may be (initially) more expensive and/or require a greater investment in ensuring community support. Similar issues arise in relation to the workplace, although the evidence-base to guide effective practice is weaker.

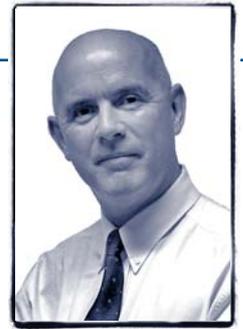
Other writers have more eloquently warned us to "beware of masterstrokes". We should perhaps add to that warning the observation that new,

improved and attractive technology is not the same as quality evidence about how to implement effective strategies to prevent and reduce impairment in human operators. Simon Lenton's article asks whether the rapid embracing of roadside saliva testing to prevent drug-affected driving may prove to be another example where the initial appeal of a technological solution has led to a premature uptake.

Steve Allsop

References

1. Roman, R.M., Johnson, J.A. and Blum, T.C. (2000) *The Workplace, Employer and Employee*. In D.B. Cooper (ed) *Alcohol Use*. Radcliffe, Medical Press Ltd. Abingdon, Oxon, pp121-133.



issuing forth

Is the embracing of 'random' roadside saliva testing to prevent drug-affected driving premature?

Note: The author was a member of the now disbanded WA Drug Impaired Driving Working Group, which presented its unpublished report and recommendations to the Road Safety Council of WA in July 2003. Legislation, which includes provision for random roadside drug testing of drivers using oral fluid samples is currently being finalised and is expected to be introduced into the West Australian Parliament in the near future. The views expressed in this Issuing Forth are the author's and should not be inferred as necessarily representing the views of any other members of the Working Group. Thanks to the two experts who commented on earlier drafts of this piece.

In 2000, the International Council on Alcohol, Drugs and Traffic Safety (ICADTS) Working Group on Illicit Drugs and Driving noted at its meeting in Maryland that the increasing prevalence of illicit drug use globally led to increased concerns about the impact of this on road safety. They concluded that:

From our review of the available literature it appears that the scope of the problem is rapidly and significantly surpassing our scientific, technical and legal knowledge base. Governments around the world are seeking advice on how to create policy initiatives to deal with this problem based on our best scientific judgement of the evidence we have in hand. This is a difficult role for scientists, who generally would rather wait for better data before voicing an opinion, but politicians must make these decisions every

day and it is critical for the scientific community to become part of the process.'(p8)

Understandable concern

There is good reason for the emerging concern about drug-affected driving. An analysis of 3398 driver fatalities in Victoria, NSW and WA in the period 1990-99 found that the prevalence of alcohol in fatally injured drivers declined from 33% to 28% over the decade, while for drugs the prevalence increased from 22% to 30% over the same period². Drummer and colleagues² found the prevalence of alcohol at >0.05% among fatally injured drivers was 29.1% and drugs other than alcohol was 26.7%. Psychoactive drugs were identified in 23.5% of drivers, comprising cannabis (13.5%), opioids (4.9%), benzodiazepines (4.1%) and stimulants (4.1%). Stimulants were present in 23% of fatally injured truck drivers³. In the years where THC, the main psychoactive substance found in cannabis, could be measured directly (rather than simply cannabis metabolites which can be detected for days after smoking and do not indicate intoxication) the incidence was estimated at 8.5%³. In a comprehensive review of the literature on cannabis use and crash risk, Ramaekers and colleagues⁴ concluded that recent use of cannabis may increase crash risk, but past use does not – suggesting that the measurement of THC, rather than its metabolites, is essential.

In their analysis of culpability, or responsibility, for

these fatal crashes, Drummer and colleagues³ determined that deceased drivers with a blood alcohol content (BAC) of >0.05% were six times more likely to be responsible for the crash than those who had no psychoactive substances detected. Those positive to any psychoactive drug were 1.8 times more likely, those positive to any level of THC alone were 2.7 times more likely and those at >5ng/ml (indicative of likely intoxication with the drug) were 6.6 times more likely to be culpable than drug-free drivers. Drivers positive to THC and having a BAC of >0.05% were 2.9 times more likely than those simply with the alcohol reading, to be responsible for a crash. Drivers positive to stimulants were 2.3 times more likely to be culpable, while truck drivers positive for stimulants were 8.8 times more likely to be responsible. Deceased drivers positive to opiates were 1.4 times more likely than those drug-free to be culpable. Those positive to benzodiazepines were only 1.3 times more likely to be responsible, but this was considered an underestimate, as those positive for benzodiazepines often had other drugs in their system. Additionally, as Drummer and colleagues³ note, while some studies have found that benzodiazepines do not increase crash risk, these drugs have been shown to impair skills necessary for safe driving, and other studies have found an association.



Victoria leads the nation

In Australia, Victoria has led the nation in responding to drug driving. Initially, the government responded with the development of their standardised roadside assessment⁶.

Subsequently, in December 2004, after an initial trial period, Victoria implemented roadside saliva testing under *The Road Safety (Drug Driving) Act 2003*, which made it an offence to drive with any concentration of cannabis or methylamphetamine in the blood or oral fluid. While most other states initially observed how the Victorian experience of random roadside drug testing using saliva unfolded, governments in New South Wales, South Australia, Western Australia and Tasmania, announced their intention to introduce roadside saliva testing in their jurisdictions in late 2004⁷. South Australia has recently introduced a random roadside drug-testing regime with provision to test drivers for the presence of THC, methamphetamine and MDMA. The proposed regime for WA will include similar provisions.

Early in the debate, government MPs in many of these states expressed caution and the need to monitor the Victorian experience of saliva testing closely before adopting similar regimes in other Australian jurisdictions. Their concerns were reinforced following early problems with the Victorian scheme, when initial testing procedures resulted in a small number of false positives, which received extensive media coverage (eg Sydney Morning Herald, *Another cleared in drug-testing fiasco*)⁸. In what was a less than ideal start to the Victorian scheme, of the 283 drivers subjected to saliva tests in the first 9 days, only three returned positive samples and two of these were subsequently shown to be false on confirmatory testing. Despite this, the Victorian Government vowed to continue the scheme amidst reports of the growing rates of detection of drug testing.

Yet, as reports of the number of positive tests in Victoria continued to emerge, public and media pressure on other governments to also introduce saliva testing appeared to increase. This was likely aided by the way the roadside drug test statistics were described by Victorian officials and reported in the media. Although the roadside operations were targeted at people leaving 'rave parties' and late night entertainment areas and trucking routes, which is an appropriate policing strategy, the results were reported as if they applied to a totally random sample of drivers. The figures were used to support an astounding claim that drug driving was five times more prevalent than drink driving. For example an article in the Herald Sun noted:

Police have described as frightening the results of the first six months of roadside drug testing. One in 50 drivers tested for drugs have returned a positive result, which is six times as many as expected. Insp. Ian Cairns said the results indicated drug driving was more common than drink driving. Random alcohol tests detected one in 250 drivers above the legal limit. Details of the Victorian drug testing trial were released at the Victorian Police traffic enforcement forum yesterday. From the start of testing on December 13 last year until June 30, police tested 5054 car drivers and 2153 truck drivers. Of those 103 returned positive tests for methamphetamines and six for cannabis. Both drugs were found in 36 drivers. Police detected 111 drug-drivers in cars and 34 in trucks. One truck driver tested positive twice. More than two-thirds of car drivers tested positive for

drugs were in their 20s. About 80 per cent of all drug-drivers were men. Insp. Cairns said illicit drug use in the community had increased in the past five years "It's a frightening problem," he said. He had expected the drug detection rate to be one in 300, not one in 50.

Saliva, what it can and can't do

The advantages of saliva testing over other methods such as blood, urine and sweat are that it is relatively simple to administer in a roadside context; is less invasive and expensive than collecting blood or urine, and may provide a good correlation with blood concentration for some drugs⁵. Where the initial saliva sample is positive, a confirmatory sample is taken. Where that is also positive, the second saliva sample is sent to the laboratory where it is subjected to Gas Chromatography-Mass Spectrometry (GCMS) analysis. It is only when the third laboratory sample is positive that the driver is charged by summons for driving with a proscribed drug in the system. Yet there are a number of problems with use of saliva for roadside drug screening that are rarely discussed in the public realm.

Saliva testing is very efficient in picking up amphetamines but cannabinoids appear to be especially difficult to detect in oral fluids as very little THC is transferred from the bloodstream into the saliva. The good thing about this is that when this route detects THC, one can be confident that cannabis has recently been consumed and the person is likely to be intoxicated. This is not the case with urine analysis that also detects cannabis metabolites, and thus use, up to a month or more later, depending on established detection levels⁵. It is thought that much of the THC detectable in saliva may be due to THC contamination in the mouth, as a result of smoking or eating the drug, rather than THC released from the blood stream back into the saliva. This also raises the possibility that drinking, eating or rinsing the mouth out after consuming cannabis might reduce rates of detection. The difficulty of detecting THC in saliva appears to be reflected in the drug detection rates in the Victorian trial presented above. Given that THC doesn't effectively transfer from the blood stream into saliva, it is hard to envisage that saliva will ever be a good method for roadside testing for cannabis and, as a consequence, other technologies will need to be found.

Another problem is the scope of the tests. Data such as that provided by Drummer and colleagues above would suggest from a road safety perspective the drugs that we should be focusing on after alcohol are cannabis, amphetamine-type stimulants, benzodiazepines and possibly opioids. However, most jurisdictions that have established or are planning roadside saliva screening are excluding benzodiazepines and opioids. This is because many people who are taking these drugs for medical conditions will be detected by saliva sampling. And many over-the-counter and prescription medications containing codeine will also come up positive on an oral fluid opioid screen.

A third problem relates to impairment. The relationship between measurement of blood alcohol level (BAL) via a breathalyser and likely impairment in driving ability and crash risk has been well established, even though there are certainly large individual differences and tolerance effects which mean that the association between BAL and impairment is not perfect. Yet work to

measure the association between blood concentrations of various drugs and accident risk is at an earlier stage than that for alcohol. Further, much more work is needed before the relationships between levels of drug detected in oral fluid and driver impairment are established.

The saliva horse has bolted

There is no doubt that roadside saliva testing has promise as one tool to reduce drug-related harm on our roads. However, it would seem that more work needs to be done to improve the technology before this can be fully realised. The pace at which a number of Australian states have moved toward legislation to embrace the use of oral fluid testing seems out of kilter with the evidence pertaining to the use of this technology. The rapidity at which governments outside of Victoria have moved to implement random roadside saliva testing appears to have been driven by the claims of 'success' coming out of the Victorian experience and the perceived community expectation that has followed.

Perhaps the potential benefits of a general deterrent effect provided by having random roadside drug testing are enough to justify this strategy. After all, the experience with random breath testing (RBT) for alcohol was that Australia's early adoption of that technology undoubtedly had a net road safety benefit. Alternatively, perhaps we should hold off the implementation of roadside saliva screening until some of the problems are sorted out. One problem with drug testing is that we know from work in prisons that drug users are likely to swap to less detectable alternatives when drug screening is put in place⁹. These alternative drugs may be more deleterious to driving performance. Furthermore, if roadside saliva testing is going to come anywhere near the general deterrent effects of RBT, then the 'smoke and mirrors' will need to be pretty convincing.

If impaired driving, rather than the presence of drugs in the bodies of drivers is the main concern, then other less 'whiz-bang' approaches could be implemented. Providing appropriate legislation, training and other support to facilitate police to better detect and deal with drug-impaired drivers is something that can be employed. Some jurisdictions such as Victoria and NSW already have standardised police observation checklists of driving performance and observations regarding the driver's behaviour, physical presentation and demeanour. This information is combined with the results of blood tests and provided for expert review leading to a determination of whether the person's impaired driving was deemed to be a result of drug use or some other medical condition that can then be addressed. Such strategies are probably only going to identify grossly impaired drivers and clearly, there is an opportunity for legislation and procedures supporting such measures to include saliva testing once the technology is further developed. Granted, impairment based strategies probably will not have the general deterrent effects imagined by advocates of random roadside saliva testing. However, they can aid police in apprehending and successfully bringing charges against drivers who are grossly drug-impaired, whether the impairment is due to legal or illegal drugs.

But realistically, it seems the hyperbole and promises of the Victorian 'random' roadside oral fluid drug testing experience, combined with a justifiable concern about drug-affected driving

issuing forth **continued..**

and an understandable need for politicians to 'do something' probably means the saliva horse has bolted. One can only wonder whether the dollars which will be spent across the country on implementing random roadside drug testing using oral fluids would have produced a better road safety benefit if they were applied to measures to further reduce the massive toll from drink driving. At the very least, if the benefits of random roadside drug testing using oral fluids are to be maximised and the limitations identified, then all such initiatives should be subject to rigorous and independent evaluation. It will be interesting to see how this all unfolds in Australia over the next few years. Many other countries, which have decided not to rapidly proceed down the saliva-testing path, will also be watching us with interest.

Simon Lenton

References

1. **ICADTS** (International Council on Alcohol, Drugs and Traffic Safety) (2000) Working Group Report – "Illegal Drugs and Driving", ICADTS (Available at: <http://www.icadts.org/reports/Drugs-FinalReport.pdf>)
2. **Drummer, O. H., Gerostamoulos, J., Batziris, H., Chu, M., Caplehorn, J., Robertson, M. D., et al.** (2003) The incidence of drugs in drivers killed in Australian road traffic crashes. *Forensic Science International*, 8, 154-162.
3. **Drummer, O. H., Gerostamoulos, J., Batziris, H., Chu, M., Caplehorn, J., Robertson, M. D., et al.** (2004) The involvement of drugs in drivers of motor vehicles killed in Australian road traffic crashes. *Accident Analysis & Prevention*, 36, (2), 239-248.
4. **Ramaekers, J. G., Berghaus, G., Laar, M. V., & Drummer, O. H.** (2004) Dose related risk of motor vehicle crashes after cannabis use. *Drug and Alcohol Dependence*, 73, 109-119.
5. **Johns, R.** (2004) Drink Driving and Drug Driving NSW Parliamentary Library Briefing Paper No 15/2004 (Available at: <http://www.parliament.nsw.gov.au/prod/parlment/publications.nsf/0/501E339C7D576080CA256F81001FE9B4>)
6. Another Cleared In Drug-Testing Fiasco, *The Sydney Morning Herald*, 22 December 2004.
7. **Gardiner, A.** Tests catch out one in 50, *Herald Sun*, 15 July 2005.
8. **Gore, S. M. and Bird, G. A.** (1995) Mandatory drug tests in prisons. *British Medical Journal*, 310, 595.

NDRI news

NDRI Indigenous Research Team wins National Drug and Alcohol Award for Excellence in Research

At the 2006 National Drug and Alcohol Awards recently held in Sydney, the National Drug Research Institute's Indigenous Research Team won the Award for Excellence in Research. NDRI's Indigenous Research Program was established in 1992 and the team currently consists of team leader Dennis Gray, Indigenous research associates Anna Stearne and Donna Campbell, research fellow Heidi Nietz, and Indigenous support officer Ed Garrison. It also includes long-time collaborator Professor Sherry Saggars from the Centre for Social Research at Edith Cowan University. A previous staff member Brooke Sputoré has also made a significant contribution to the program (as readers of *CentreLines* will know).

The team has undertaken over 30 projects in conjunction with 27 Indigenous community controlled organizations in Western Australia, South Australia, the Northern Territory and Queensland. Among these projects are:

- An evaluation of the Tennant Creek liquor licensing restrictions;
- A study of the harm reduction needs of Indigenous people who inject drugs;
- The policing implications of volatile substance misuse;
- Mapping the distribution of substance misuse intervention projects for Indigenous Australians; and,
- Identification of elements of best practice in Indigenous substance misuse interventions.

Indigenous capacity building has been an important focus of the team's activities. Identified positions have been established for Indigenous people and various provisions for training, mentoring and support for them have been put in place – including employment of a staff member whose sole role is that of Indigenous staff support. The team has also established a joint research internship with Aboriginal Alcohol and Drug

Services in Perth and, perhaps most importantly, has helped Tangentyere Council in Alice Springs to establish its own research unit.

A third focus of the team's activities has been the dissemination of information about Indigenous alcohol and drug misuse and measures for its prevention. Activities in this area include the establishment of a web-based bibliographic database on Indigenous substance misuse, the publication of several review articles, circulation of publications to agencies working in the area, and presentations on substance misuse to Indigenous community-controlled organizations, government agencies, policy making bodies such as the National Indigenous Drug and Alcohol Committee and the Inter-Governmental Committee on Drugs, and to various committees of inquiry.

The team's research has had demonstrable positive impacts at regional, state and national levels. However the team is particularly proud of its work with local Indigenous organisations. In accepting the award Dennis Gray said:

"Our success in winning this prestigious award is largely due to the strong collaborative relationships we have developed with Indigenous community organisations. ... Such collaboration demonstrates that Indigenous people are taking positive action to address the problems confronting their communities, and our success is more of a tribute to their efforts than it is to ours".



Dennis Gray and Anna Stearne accepting the National Drug and Alcohol Award for Excellence in Research

NDRI achieves Tier 1 status

The National Drug Research Institute has achieved Tier 1 status as part of a review of research within Curtin University of Technology.

Curtin's *Review of the Structure, Funding and Management of Research* was aimed at improving the University's research profile within a highly dynamic and competitive higher education system, and at ensuring the University delivers internationally recognised research leadership, maintains diversity, and builds research capacity.

The Review recommended that the University make a strategic investment in a small number of Tier 1 and 2 areas of research excellence to build the scale and focus required for internationally competitive research.

NDRI was one of six centres at the University to achieve Tier 1, which required "an ability to demonstrate excellence in relation to the quality of research output, outcomes and impact along with effective research and project management."

Several colleagues from within Curtin's Division of Health Sciences formally joined NDRI's application for Tier 1 status, bringing skills in such areas as medicine, public health and biostatistics, to strengthen the bid. Current NDRI staff look forward to working with our 'new' colleagues - Professors Colin Binns, Andy Lee, Rob Donovan and Peter Howat; Associate Professor Bruce Maycock; Doctors Andrew Joyce and Owen Carter; and Mr Geoffrey Jalleh – on alcohol and other drug projects in the future.

project notes

A multi-site investigation of the social meanings of alcohol misuse amongst young adults in recreational settings

David Moore, Jeremy Northcote and Jocelyn Grace

This research project, which is funded by the Alcohol Education and Rehabilitation Foundation, aims to:

1. Describe the social contexts and cultural meanings of alcohol use among young adults in recreational settings in Perth.
2. Compare and contrast alcohol use in nightclubs, hotels and private parties.
3. Understand binge drinking and related risk behaviours.
4. Investigate the impact of social networks and life transitions on young adults' use of alcohol.

The methodology links structured direct observation of the drinking practices of young people in recreational settings with in-depth interviews focusing on the meanings that they attach to these practices. In-depth interviews will also be conducted with key informants, including venue management, licensing authorities, youth agencies and other relevant stakeholders, in order to explore their understandings of the relevant issues and the ways in which they deal with alcohol-related harm amongst young people.

The early stages of the research involved refining the conceptual and methodological framework for the study and recruiting project staff. In mid-2005, a team of peer research assistants was recruited and several training workshops were held. Data collection on the project began in October 2005 following securing of ethics approval for all research instruments. The pool of research assistants was increased in December 2005 and May 2006 in order to ensure coverage of salient groups of young people. Over 80 fieldwork reports have so far been produced for the project, with approximately three months of fieldwork remaining. Jeremy is coordinating the field team and Jocelyn has been conducting interviews with young people about their drinking and beginning preliminary analysis of the observational data. The data collection with young people will continue until late 2006 and interviews with key informants will also begin this year. The research project will provide important data that will inform the design of effective interventions for reducing alcohol-related harm amongst young people.

Policing, volatile substance misuse, and Indigenous Australians

Dennis Gray, Gill Shaw, Peter d'Abbs, David Brooks, Anna Stearne, Anne Mosey and Catherine Spooner

Dennis Gray and Anna Stearne from NDRI's Indigenous Research Team – in conjunction with NDRI Adjunct Associate Professor Peter d'Abbs and colleagues Gill Shaw, David Brooks, Anne Mosey, and Catherine Spooner from NDARC – have recently completed this project for the National Drug Law Enforcement Research Fund'. Work for the project was conducted over a range of community settings from remote settlements to a capital city. It built upon work which each of the researchers had previously undertaken and involved interviews with a total of 190 police officers, Aboriginal police liaison officers, Indigenous community members and representatives of both Indigenous and non-Indigenous service organisations.

After presenting seven regional case studies, the project report puts policing into the broader context of activities being undertaken by Indigenous communities to address volatile substance misuse. Although volatile substance misuse is not illegal – except in some Indigenous communities where it is prohibited under local by-laws – police responsibility for the problem is three-fold: to protect the safety of the broader community and its individual members (including users themselves); to deal with offences that are indirectly, or directly, associated with volatile substance misuse; and to prevent crime that might be associated with, or arise from, volatile substance misuse.

Within the framework of this responsibility, the authors describe: the policing context of volatile substance misuse; reactive policing (the response to intoxication); and proactive policing strategies. With regard to the policing context, they make the point that good policing of volatile substance misuse is essentially good policing practice and they identify elements of policing practice, which both facilitate and undermine good practice.

The section of the report on reactive policing outlines the range of strategies potentially available to officers who encounter persons intoxicated on volatile substances. These range from taking no action at all (for various reasons) through enlisting the support of other agencies such as night patrols, placing users in non-police protective custody, placing users in police custody (as a last resort where no offence has been committed), charging and detaining users where an offence has been committed, through to referring users to other agencies such as welfare or treatment services. Importantly, however, the authors note that in most settings this range of options – particularly the

provision of safe places for juveniles – is not available. This section of the report also includes a list of practical 'dos-and-don'ts' for officers encountering volatile substance users.

Proactive policing activities aimed at preventing or minimising volatile substance misuse and its consequences include those for which the police have prime responsibility and those in which they have a supportive role. The former include supply reduction, routine patrolling, targeted operations and, to a lesser extent, the use of other legislation to control misuse activities. Proactive activities in which police have a supportive, though no less important role, include: recreational activities; school and community-based education; coordination, cooperation and support of other agencies; and working with communities.

Although it is not 'the solution' to the problem, policing can make an important contribution to the protection of individual volatile substance users, the communities in which users live, and the wider society. There is not a single, simple solution to the problems associated with volatile substance misuse. A range of strategies is required and there is an urgent need to improve the effectiveness of what is currently being done. This includes strengthening relationships and partnerships between key stakeholders, particularly between Indigenous community members and police, and the provision of mutual support. It also involves improved training for police officers to enable them to more confidently deal with acute incidents, but also to work more effectively with community members. Finally, a greater commitment from the Australian and state/territory governments is required to provide a wider range of appropriate and accessible support services – without which police responses to volatile substance misuse are severely constrained.

The report complements another commissioned by NDLERF on the policing of illicit drugs in Indigenous communities². Both reports were launched at an Australian Institute of Criminology Conference on *Family Violence, Drug and Alcohol Use in Remote Communities* held in Darwin on 18 August 2006.

References

1. Gray, D., Shaw, G., d'Abbs, P., Brooks, D., Stearne, A., Mosey, A. and Spooner, C. (2006) *Policing, Volatile Substance Misuse and Indigenous Australians*. Monograph Series No. 16, National Drug Law Enforcement Research Fund, Mardon, SA.
2. Delahunty, B. and Putt, J. (2006) *The Policing Implications of Cannabis, Amphetamine and Other Illicit Drug Use in Aboriginal & Torres Strait Islander Communities*. Monograph Series No. 15, National Drug Law Enforcement Research Fund, Mardon, SA.

abstracts

Fact or fiction? A critique of the National Aboriginal and Torres Strait Islander Social Survey 2002

Tanya Chikritzhs and Maggie Brady

Drug and Alcohol Review, 2006, 25, pp 277-287

The ability of policy makers, practitioners and the broader public to respond appropriately in reducing the harms caused by alcohol misuse depends in large part on our understanding of the nature of the problem. In the case of consumption patterns and associated harms among indigenous minority peoples - in Australia and elsewhere - such an understanding is often difficult to achieve. There are a host of reasons for this including cultural differences between indigenous peoples and the broader populations within which they are located, cultural heterogeneity among indigenous peoples themselves, political and economic disadvantages which exacerbate misuse and its effects, methodological difficulties in the appropriate design of data collection instruments, sampling issues and the issues in the interpretation of data. All these difficulties mean that we need to subject any studies of substance misuse among indigenous peoples to a high level of scrutiny. This is particularly the case when such studies are conducted by organisations that are generally regarded as 'authoritative' sources of information. Chikritzhs & Brady have done this in the case of the National Aboriginal and Torres Strait Islander Social Survey 2002, conducted by the Australian Bureau of Statistics. In their review of this and other surveys, they demonstrate that to produce valid information about indigenous alcohol misuse, as well as having the skills to conduct broad population surveys, it is necessary to have an understanding of both methods of collecting data on alcohol consumption and indigenous cultures themselves.

The impact of later trading hours for hotels on levels of impaired driver road crashes and driver breath alcohol levels

Tanya Chikritzhs and Tim Stockwell

Addiction, 2006, 101

Aim: To examine the impact of later trading hours for licensed hotels in Perth, Western Australia on levels of associated impaired driver road crashes and driver breath alcohol levels (BALs).

Design: Police data on the 'last place of drinking' for impaired drivers involved in road crashes and their corresponding BALs were examined to

identify those associated with Perth hotels between 1 July 1990 and 30 June 1997. During this period, 43 (23%) of the 186 hotels meeting study criteria were granted an Extended Trading Permit for 1am closing (ETP hotels), while the rest continued to close at midnight (non-ETP hotels). Time-series analyses employing multiple linear regressions were applied to determine whether an association existed between the introduction of extended trading and (i) monthly levels of impaired driver road crashes associated with ETP hotels and (ii) driver BALs associated with ETP hotels. Trends associated with non-ETP hotels were included as controls and possible confounders were considered.

Findings: After controlling for the trend in crash rates associated with non-ETP hotels and the introduction of mobile police breath testing stations to Perth freeways, a significant increase in monthly crash rates for ETP hotels was found. This relationship was largely accounted for by higher volumes of high-alcohol content beer, wine and spirits purchased by ETP hotels. No relation was found between driver BALs and the introduction of ETPs.

Conclusions: Late trading was associated with increased levels of impaired driver road crashes and alcohol consumption, particularly high-risk alcoholic beverages. Greater numbers of patrons and characteristics specific to clientele of hotels which applied for late trading hours (ie younger age, greater propensity to drunk-drive, preference for high-risk beverages) were suggested as having contributed to this increase.

Moderate alcohol use and reduced mortality risk: Systematic error in prospective studies

Kaye Fillmore, William Kerr, Tim Stockwell, Tanya Chikritzhs and Alan Bostrom

Addiction Research and Theory, 2006, 14 (2), pp 101-132

The majority of prospective studies on alcohol use and mortality risk indicates that abstainers are at increased risk of mortality from both all causes and coronary heart disease (CHD). This meta-analysis of 54 published studies tested the extent to which a systematic misclassification error was committed by including as 'abstainers' many people who had reduced or stopped drinking, a phenomenon associated with ageing and ill health. The studies judged to be error free found no significant all-cause or cardiac protection, suggesting that the cardiac protection afforded by alcohol may have been over-estimated. Estimates of mortality from heavier drinking may also be higher than previously estimated.

Threat or opportunity? Secondary exchange in a setting with widespread availability of needles

Simon Lenton, Jude Bevan and Tania Lamond

Substance Use and Misuse, 2006, 41, pp 845-864

Where authorised access to needles and syringes (N&S) from exchanges and pharmacies is limited, secondary exchange (SE) can provide an important source of sterile injecting equipment. Interventions can be developed to use SE to facilitate NSEPs to reach a wider population of drug injectors. Yet in a context such as Western Australia, where N&S are available to drug injectors from many authorised sources, the added benefit of SE is unknown. There are potential benefits, but also concerns about undermining vulnerable public and political support for authorised needle provision schemes that has been nurtured and supported over a number of years.

Putting at risk what we know: Reflecting on the drug-using subject in harm reduction and its political implications

David Moore and Suzanne Fraser

Social Science and Medicine, 2006, 62, (12), pp 3035-3047

This paper provides a poststructuralist analysis of the cultural inscription of drug-using subjects in the neo-liberal discourses of contemporary harm reduction. We argue that although neo-liberal discourses downplay material constraints on individual human agency, divert policy and practice away from structural issues, limit the conception of effective strategies for harm reduction and ignore alternative formulations of the subject, they are also potentially empowering for drug users. Approximating the neo-liberal subject offers political benefits in terms of recognition, trust and legitimation, even as those values assume and reproduce understandings of behaviour, thought and sociality that fit only poorly the realities faced by many drug users. We explore this dilemma and consider three available directions in formulating the subject of harm reduction: (1) embracing the neo-liberal subject; (2) employing a more contextualised version of the neo-liberal subject; and (3) adopting alternative notions of subjectivity, extending the critique of the neo-liberal subject to all citizens, not solely drug users. To clarify some of these issues surrounding this strategic process, the paper considers another field in which struggles over the nature of the subject have been conducted—feminism. The intention is not to resolve the question of the most appropriate subject for harm reduction, but to sketch the political consequences of adopting particular models of the subject as a stimulus to further discussion and debate.

recent publications

MONOGRAPHS AND TECHNICAL REPORTS

Fetherston, J. and Lenton, S. (2006) *WA drug trends 2005: Findings from the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre, Sydney.

Gray, D., Shaw, G., d'Abbs, P., Brooks, D., Stearne, A., Mosey, A. and Spooner, C. (2006) *Policing, Volatile Substance Misuse and Indigenous Australians*. Monograph Series No. 16, National Drug Law Enforcement Research Fund, Mardon, SA.

Stafford, J., Degenhardt, L., Black, E. and Fetherston, J. (2006) *Australian drug trends 2005: Findings from the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre, Sydney.

PUBLISHED ARTICLES, CHAPTERS AND BOOKS

Chikritzhs, T. and Brady, M. (2006) Fact or fiction? A critique of the National Aboriginal and Torres Strait Islander Social Survey 2002. *Drug and Alcohol Review*, 25, pp 277-287.

Chikritzhs, T. and Stockwell, T.R. (2006) The impact of later trading hours for hotels on levels of impaired driver road crashes and driver breath alcohol levels. *Addiction*, 101.

Fillmore, K.M., Kerr, W.C., Stockwell, T.R., Chikritzhs, T. and Bostrom, A. (2006) Moderate alcohol use and reduced mortality risk: Systematic error in prospective studies. *Addiction Research and Theory*, 14, (2), pp 101-132.

Gray, D., Pulver-Jackson, L., Saggars, S. and Waldon, J. (2006) Addressing indigenous substance misuse and related harms. *Drug and Alcohol Review*, 25, pp 183-188.

Lenton, S., Bevan, J. and Lamond, T. (2006) Threat or opportunity? Secondary exchange in a setting with widespread availability of needles. *Substance Use and Misuse*, 41, pp 845-864.

Lenton, S. and Midford, R. (2006) Response: Research regulation by omission and by publication. *International Journal of Drug Policy*, 17, pp 244-245.

Midford, R. (2006) Why is drug education popular? *Issues* (March edition), 74, pp 41-42.

Midford, R. and Munro, G. (eds) (2006) *Drug education in schools: Searching for the silver bullet*. IP Communications, Melbourne.

Midford, R. (2006) Looking to the future: Providing a basis for effective school drug education. In Midford, R. and Munro, G. (eds) *Drug education in schools: Searching for the silver bullet*. IP Communications, Melbourne.

Midford, R. and Munro, G. (2006) Preface. In Midford, R. and Munro, G. (eds) *Drug education in schools: Searching for the silver bullet*. IP Communications, Melbourne.

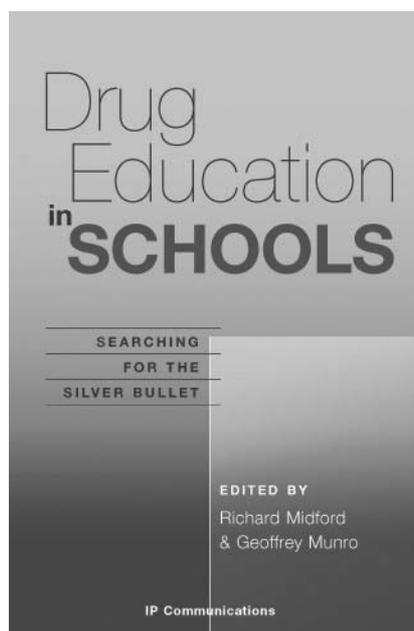
Midford, R., Pettingell, J. and Stothard, B. (2006) The history of drug education: An Australian perspective. In Midford, R. and Munro, G. (eds) *Drug education in schools: Searching for the silver bullet*. IP Communications, Melbourne.

Moore, D. and Fraser, S. (2006) Putting at risk what we know: Reflecting on the drug-using subject in harm reduction and its political implications. *Social Science and Medicine*, 62, (12), pp 3035-3047.

Saggars, S., Gray, D. and Stempel, P. (2006) Sex, drugs and indigenous young people. In Aggleton, P., Ball, A. and Mane, P. (eds) *Sex, drugs and young people: International perspectives*. Routledge, London.

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Edited by

**Richard Midford, National Drug Research Institute
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