

centre lines

NDRI (32)

December 2010

A bi-monthly newsletter published alternately by the National Drug Research Institute (NDRI), Perth and the National Drug and Alcohol Research Centre (NDARC), Sydney

issuing **forth**

Alcohol consumption in Australia:
revealing an accurate picture



Funded by the
National Drug Strategy

Registered by Australia Post –
Print Post Publication No
PP236697/00013
ISSN 1034-7259

contents

ed space	1
head space	2
issuing forth	2
Michaela Evans discusses new research on per capita alcohol consumption in Australia	
project notes	6
Brief reports on new, ongoing or recently completed research projects	
ndri news	8
abstracts	9
Summaries of recently published articles	
recent publications	11
staff list	12

ed**space**

Welcome to the December issue of CentreLines. NDRI's Associate Professor Tanya Chikritzhs and colleagues recently published a study in the Medical Journal of Australia on per capita alcohol consumption in Australia. The study found that previous figures had underestimated how much people drank because they did not take into account that more drinkers chose wine and its alcohol content had increased steadily. In *Issuing Forth*, Tanya's colleague Michaela Evans discusses this study and the need for a suite of independent measures of consumption, drinking patterns and associated harms, to enable a more precise assessment of the amount of alcohol consumed annually in Australia.

Project Notes includes reports on Developing the capacity to model the impact of interventions that target high-risk drinking among young Australians; The Safe and Sober Support Service; Evaluating young people's progress in residential rehabilitation; A longitudinal study of the influences on alcohol consumption and related harm in Central Australia; and Developing resources for health professionals dealing with alcohol and pregnancy and fetal alcohol spectrum disorders.

As previously advised, NDRI is endeavouring to move towards predominantly electronic circulation of *CentreLines*. If you have not yet provided NDRI with your email address we encourage you to do so as soon as possible. For further information, please see the back page of this issue.

We hope that you enjoy this issue, and offer you our best wishes for the festive season. For more information about NDRI's research and other activities, please visit ndri.curtin.edu.au.

Rachael Lobo
Editor

headspace

Flaws in alcohol consumption rates exposed

Until recently alcohol researchers were musing over an apparent inconsistency. Most evidence indicates that if we increase the availability of alcohol, there is an associated increase in consumption and adverse outcomes. Over the past decade or so in Australia we have seen large increases in the numbers of licensed outlets in several jurisdictions, significant increases in permitted hours of sale of alcohol, and increased affordability of alcoholic beverages. Not surprisingly, this has been accompanied by growing concern about alcohol related harm. Senior police have expressed disquiet about the apparent increase in alcohol related disruption, which demands a large proportion of their resources, and there has been an increase in media reports of problems associated with intoxication. The more objective data similarly indicate an increase in harm. Thus, recent publications indicate that higher

density of particular types of alcohol retail outlets is associated with increases in violence, and there has been consistent evidence of increases in alcohol attributable hospital admissions across all jurisdictions and, specifically, a national increase in the general population prevalence of liver cirrhosis. Per capita alcohol consumption did not appear to be changing, hence the apparent discrepancy. Some commentators noted that the stable levels of Australian alcohol consumption were an argument against any alcohol policy change.

A recent revision, by the Australian Bureau of Statistics, of the estimated alcohol content of wine removes the apparent aberration. As Michaela Evans notes in *Issuing Forth*, consistent with the international literature, Australian data indicate that alcohol has become more available we have consumed more and,

associated with this, there have been increases in a range of adverse outcomes. There are two important policy messages. First, if we increase the availability of alcohol we should anticipate a related increase in associated harms that have relevance for the whole community, not just those who drink. Second, if we are to have informed debate about the impact of alcohol policy, we need to ensure that we have accurate and current data about consumption and harm. **cl**

Steve Allsop
Director

**issuing forth**

Alcohol consumption in Australia – revealing an accurate picture

In the context of de-regulation and the reduction of 'anti-competitive' practices by Australian governments, alcoholic beverages have become increasingly available and affordable and are widely promoted.¹⁻² The growing number of and longer trading hours for licensed premises have been accompanied by rising concern about increased rates of harm³, such as alcohol-caused liver cirrhosis⁴ and alcohol-attributable hospitalisations⁵. Surprisingly, however, until this year, the increasing physical and economic availability of alcoholic beverages had not been accompanied by increased consumption, at least as reported by the Australian Bureau of Statistics (ABS). In fact, until the publication of its most recent report,⁶⁻⁷ ABS per capita consumption (PCC) trends, which are a measure of pure alcohol consumption by the resident Australian population aged 15 years and over, had apparently remained relatively unchanged since the early 1990s.

The discrepant pattern of relatively stable consumption trends alongside growing availability and mounting alcohol-related problems was puzzling because

international research consistently shows that increased availability is associated with rising consumption and consequent increased harm⁸⁻⁹. As noted by Chikritzhs and colleagues,¹⁰ there is now an explanation for this apparent inconsistency. Specifically, a recent revision by the ABS⁶⁻⁷ indicates that annually released per capita alcohol consumption figures have consistently overlooked the gradually increasing alcohol content of table wine.

Estimating alcohol content

Apparent PCC estimates are generated for beer, wine, spirits, and, more recently, pre-mixed alcoholic beverages (ready-to-drink alcohol) on the basis of a range of data sources, including: surveys of winegrowers, domestic alcohol sales data, import clearance and excise tax figures.⁶⁻⁷ The present system of calculating PCC is open to inaccuracies primarily because of the manner in which alcohol is taxed in Australia, which allows for a relatively accurate identification of the alcohol content of beer, spirits and ready-to-drink beverages, but not wine.

In Australia, alcoholic beverages are not taxed equally. Specifically, they are either subjected to a volumetric excise (where tax is calculated based on pure alcohol content per litre), a sales tax (a fixed rate tax based on the item's value, also deemed an ad valorem tax), or both. Additionally, all alcoholic beverages attract a goods and services tax, being 10% of the product price. Unlike beer and spirits, which attract both volumetric and sales tax, wine is presently subject solely to an ad valorem tax, currently at 29%.¹¹ Because spirits and beer (above 1.15% alcohol content) are expressly taxed on the basis of alcohol content by volume, information on the alcohol strength as well as the volumes sold of these two beverages is readily available for estimates of PCC. By contrast, as wine is taxed via the Wine Equalisation Tax (WET), which does not require information about pure alcohol volumes, the ABS must conduct annual surveys of wine producers to estimate volumes of wine sold. Although



these surveys are purported to capture the vast majority of wines consumed in Australia (92%),¹² the national wine growers survey does not currently enquire about the alcohol contents of wines produced. As far as NDRI has been able to ascertain, the wine grower survey has never included questions regarding alcohol content (ABS, pers. comm. 2008) and no other government agency collects such information. In any case, a wine producer survey would not necessarily be the most reliable means of identifying the alcoholic strength of wine beverages since wines of varying alcohol contents may be combined from a range of production sites. A review of past and current ABS reports on apparent per capita alcohol consumption reveals that assumptions regarding pure alcohol contents for wine-based beverages had remained unchanged since at least 1985 to 2009. We have been unable to find any detailed information from ABS publications as to how these estimates were derived.

It is not uncommon for the alcohol content of wine to change; historical studies have shown that alcohol strength differs by geographical location and fluctuates over time, reflecting trends in consumer taste, harvesting practices, climate conditions, and marketing techniques.¹³ In Australia and the United States, for more than a decade, the trend has been towards the increasing alcohol content of both red, and to a lesser extent, white wine.¹⁴⁻¹⁵ At the same time as the alcohol content of wine has grown in strength, its Australian popularity has risen while the market share of beer has fallen.^{6,16-17} Despite these changes, from the early 1990s up until this year, the ABS consistently approximated the alcohol content of table wine to be 10.8% and wine overall (i.e. including fortified, sparkling, etc) to be 11.2%.

The acknowledgment of the increasing pure alcohol content of wine, combined with the growing market share of this beverage, has had a visible effect on Australia's consumption estimates. In the new consumption estimates, the concentration of alcohol in white and red wine has been revised up, to 12.2% and 13.4% respectively, generating a new mean alcohol content of 12.7% for all wine⁷ (see Table 1 for an indication of the old and new estimates). Based on this revision, the ABS has reissued its last four annual PCC estimates which, when combined with estimates from earlier years, now indicate that PCC has not in fact been stable over the past few decades, but that it actually increased by over 8% from its lowest point in 1995/96 to 2007/08 (the year before the so-called 'alco pops' tax was introduced). Indeed, Chikritzhs and colleagues¹⁰ suggest that the 2008/09 estimate would

have been higher had it not been for the decline in pre-mixed spirit consumption, the sales of which decreased subsequent to the introduction of this tax (a decrease that was only partially offset by increased consumption of straight spirits). They also suggest that, based on comparable research in the United States,¹⁴ the increase in the alcohol content of table wine is likely to have changed more gradually and begun earlier (1998/99 rather than the arbitrarily set date of 2004/05) than the revised ABS PCC estimates suggest.

Informed debate and policy demand accurate, current and comprehensive measures of consumption and related harm. Unsurprisingly, the Australian alcohol industry has consistently returned to the apparent stability of PCC in submissions to government inquiries¹⁸⁻¹⁹ and in various other media²⁰ to justify questionable promotion practices, argue against aspects of industry regulation, and discount the claims of public health- advocates and researchers regarding the magnitude of alcohol-related problems in the nation. While the ABS' estimates of annual PCC play an important role in measuring consumption trends and are normally an appropriate gauge of problematic drinking levels, such estimates should be produced and examined in conjunction with other key alcohol 'indicators'. Complementary yet independent data sources, including comprehensive collection of alcohol sales data by all Australian jurisdictions, along with national alcohol consumption survey data, are needed to refine and enhance our knowledge of changing patterns of alcohol use. The decade-long miscalculation of national PCC also highlights debate regarding Australia's alcohol tax system.

Sales data

The World Health Organisation⁸ identifies per capita alcohol consumption estimates, usually derived from sales data, as an essential indicator of alcohol consumption that should be central to the evaluation of alcohol policy and regulation. A comprehensive collection of state- and territory-based sales data could provide a comparable measure against which the accuracy of national consumption estimates can be assessed.²¹ More importantly however, jurisdiction-based sales data collection allows sensitive analysis of the relation between local alcohol consumption and harm which is not afforded by national supply data. This is because alcohol availability, levels of consumption and associated harms are not equally distributed among each Australian state and territory and the variation within jurisdictions can also be large.

Recent National Drug Research Institute findings⁵ highlight the substantial yet geographically disparate contribution of alcohol to the incidence of illness, disease, and death in Australia. While the trend towards annually increasing national PCC levels is reflected in increasing rates of alcohol-attributable hospitalisations evident in all jurisdictions between 1995/96 to 2004/05, national consumption estimates provide little insight into why Victoria had the largest increase over this period, or why rates of alcohol-attributable mortality in the Northern Territory surpassed the national average. The volumes of alcohol sold by wholesalers and retailers at a local level would provide some clarification of the trends evident in Victoria and the Northern Territory. However, unlike the Northern Territory, Victoria, together with South

Table 1: ABS estimates of alcohol strength (%) by wine type

Wine Type	Previous alcohol strength estimates (%) [*]	New alcohol strength estimates (%) [^]
Fortified	17.9	17.9
Sparkling and carbonated	10.6	11.2
Table wine (White)	-	12.2
Table wine (Red)	-	13.4
Table wine	10.8	-
Vermouth	17.3	16.4
Other wine not elsewhere included	14.4	14.4
Alcohol strength all wine (%)	11.2	12.7

^{*} Source: ABS (2009) Apparent consumption of alcohol, Australia, 2007-08. Explanatory notes. ABS Cat. no. 4307.0.55.001. Available at: <http://abs.gov.au/AUSSTATS/abs@.nsf/lookup/4307.0.55.001Explanatory%20Notes12007-08?OpenDocument>

[^] Source: ABS (2010) Apparent consumption of alcohol, Australia, 2008-09. Explanatory notes. ABS Cat. no. 4307.0.55.001. Available at: <http://abs.gov.au/AUSSTATS/abs@.nsf/lookup/4307.0.55.001Explanatory%20Notes12008-09?OpenDocument>

issuing forth

continued...

Australia, New South Wales, Tasmania and the Australian Capital Territory, ceased collecting sales data in the mid 1990s. Some jurisdictions (e.g. ACT) are now considering reintroducing the measures.

Jurisdiction-based sales data collections enable a range of applications which can inform evidence-based decision making by liquor licensing authorities and local councils. They can be used to explore consumption patterns and related adverse consequences associated with on- and off-premise sales and examine whether the promotion and price of particular alcoholic beverages are associated with different rates of alcohol-related harm, such as night-time assaults, drink driving offences, and a range of intentional and unintentional injuries. Additionally, jurisdiction-based sales data should be considered a fundamental and indispensable tool for evaluating the impact of changes to licensing regulations, local alcohol policies and interventions, such as: alcohol bans in troubled communities; 'lockouts' in entertainment precincts; changes to trading hours; and the addition of new licences. Given the recognised use of sales data as a primary indicator of levels and trends in consumption and alcohol-related problems, jurisdictions not presently collecting sales data should be strongly encouraged to do so, and those that are should receive ongoing support to continue improving and applying their collections.

Consumer surveys

The data sources used in the calculation of PCC account for the supply of alcoholic beverages, and, as such, cannot measure whether alcohol that is supplied is consumed at risky or high risk levels, what age and sex the consumers are, or whether the beverage is purchased but not consumed and instead discarded, cellared, or used in food preparation.⁶⁻⁷ In this sense, alcohol supply data account for the quantity of alcohol that is available for consumption, but not the exact amount consumed, by whom, or in what manner. For these reasons, national survey results, such as those provided in Australia by the National Drug Strategy Household Survey and the National Health Survey,²² provide valuable additional information on the proportions of Australians who drink in a fashion that puts them at risk of long- or short-term harm and which subpopulations are most at risk. Survey data can also provide information on alcohol consumption not readily available in other data sets, such

as alcoholic beverages that are produced at home.²³ In this sense, survey data provide refined information on prevalence, patterns and drinking behaviours, which, when coupled with national consumption estimates, are essential to the development of effective health policy. It is important to note, however, that while surveys are invaluable for describing drinking patterns these data are not typically a good source of information on actual levels of consumption. Most drinking surveys, even those with sophisticated methods, typically underestimate alcohol known to be consumed from sales data by between 40% and 60%.²⁴ Stockwell et al.²⁵ estimated that on average, when asked to recall their usual quantity and frequency of drinking, Australians under-estimate their consumption by 28%. For this reason, total consumption estimates based on objective, non-self report consumption data, such as that made by the ABS, are especially important in gauging actual levels of alcohol consumed in a community.

Alcohol taxation

The manner in which tax is applied to alcoholic beverages has been the subject of much debate in Australia. A greatly contested issue in this debate is the extent to which taxation policy should be guided by public health concerns rather than generating revenue or protecting the interests of local industry.²⁶

While the issue of how to tax alcoholic beverages is contentious, research shows that the price of alcohol matters. Cheap, readily available beverages with relatively high alcohol concentrations, such as cask wine, generate considerable harms associated with high-risk consumption practices, especially amongst underage, young and Indigenous drinkers.²⁷⁻³⁰ Presently, the Australian taxation system ensures that there is no standardised cost per 'standard' drink and there is significant resistance to such change. Regardless of opposition, strong evidence exists which highlights that increasing the price of alcoholic beverages reduces aggregate consumption,³¹ which in turn impacts on a range of associated chronic and acute harms.³² Adjusting price, particularly through the implementation of a volumetric tax system across all alcoholic beverages and setting a minimum price per standard drink, is not only an effective harm-reduction tool, but it is also particularly cost-efficient.³³⁻³⁵

Opportune improvements

Alcohol is a commonly consumed psychoactive drug in Australia. Based on the present calculation of national consumption (10.08 litres of pure alcohol) and taking into account the estimated 17% of the population who do not drink alcohol,³⁶ on average, Australian drinkers (aged 15+ years) are now estimated to consume about two and a half standard drinks daily. This is likely to be an under-estimate, as ABS PCC does not currently include alcohol sold in the form of cider. Although cider consumption is currently thought to be relatively small, given the potential for growth in this sector, it would be prudent for the ABS to consider its collection in the future. Nevertheless, the consumption of two and a half standard drinks everyday exceeds the National Health and Medical Research Council's³⁷ recommended daily limit of no more than two standard drinks per day to reduce lifetime risk of a range of alcohol-related conditions, including breast cancer, colorectal cancer, stroke and liver cirrhosis. While regularly consumed for pleasure, alcohol is an intoxicating drug, internationally recognised as carcinogenic,³⁸ with the potential for dependence. Alcohol-related harm is not just a private matter – it has relevance for the well-being, amenity and safety of the whole community.

National PCC estimates are integral to effectively monitoring the magnitude of and trends in alcohol use. While it is unfortunate that Australian estimates have been underestimated for some time, this miscalculation highlights opportunities for the improvement of this important public health monitoring tool. A suite of independent measures of consumption, drinking patterns, and associated harms, gathered from national and local surveys of alcohol consumption, jurisdiction-based wholesale data collections, hospital, death, emergency department and police records as well as a movement towards a volumetric tax system that provides accurate estimates of alcohol content, would enable a more precise assessment of the amount of alcohol consumed annually in Australia. Collecting the best possible evidence of patterns and levels of drinking in the Australian community and on the adverse consequences associated with such consumption is not simply an academic enterprise; instead, it is integral to informed debate, appropriate policing – and health – policy and ensuring that public health services are available and adequately funded. **cl**

Michaela Evans
Research Associate

References

- Chikritzhs T. (2009). Australia. In: Hadfield P, editor. *Nightlife and crime: Social order and governance in international perspective*. Oxford: Oxford University Press. p. 307-324.
- Alcohol Working Group. (2009). Australia: the healthiest country by 2020. Technical paper 3: Preventing alcohol related harm in Australia: a window of opportunity. Canberra: Preventative Health Taskforce, Commonwealth Government of Australia. Available at: [http://www.health.gov.au/internet/preventativehealth/publishing.nsf/Content/09C94C0F1B9799F5CA2574DD0081E770/\\$File/alcohol-jul09.pdf](http://www.health.gov.au/internet/preventativehealth/publishing.nsf/Content/09C94C0F1B9799F5CA2574DD0081E770/$File/alcohol-jul09.pdf) (accessed Nov 2010).
- Australian Institute of Health and Welfare. (2008). 2007 National drug strategy household survey: Detailed findings. Cat. no. PHE 107. Canberra: Australian Institute of Health and Welfare.
- Liang, W., Chikritzhs, T., Pascal, R. & Binns, C.W. (2010). Mortality rate of alcoholic liver disease and risk of hospitalisation for alcoholic liver cirrhosis, alcoholic hepatitis, and alcoholic liver failure in Australia between 1993 and 2005. *Internal Medicine Journal*. Epub ahead of print: 10.1111/j.1445-5994.2010.02279.x.
- Pascal, R., Chikritzhs, T. & Jones, P. (2009). Trends in estimated alcohol-attributable deaths and hospitalisations in Australia, 1996-2005. Perth: National Drug Research Institute, Curtin University of Technology.
- Australian Bureau of Statistics. (2010). Apparent consumption of alcohol, Australia, 2008-09. ABS Cat. No. 4307.0.55.001. Canberra: Australian Bureau of Statistics. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/48BD96605A358A0ACA256F16007D736D?opendocument> (accessed Jul 2010).
- Australian Bureau of Statistics. (2010). Apparent consumption of alcohol, Australia, 2008-09. Explanatory notes. ABS Cat. No. 4307.0.55.001. Canberra: Australian Bureau of Statistics. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4307.0.55.001Explanatory%20Notes12008-09?OpenDocument> (accessed Jul 2010).
- World Health Organization. (2000). *International guide for monitoring alcohol consumption and related harm*. WHO/MSD/MSB/00.4. Geneva: WHO Department of Mental Health and Substance Dependence, Noncommunicable Diseases and Mental Health Cluster, World Health Organization.
- National Drug Research Institute. (2007). *Restrictions on the sale and supply of alcohol: Evidence and outcomes*. Perth: National Drug Research Institute, Curtin University of Technology.
- Chikritzhs, T., Allsop, S.J., Moodie, A.R. & Hall, W.D. (2010). Per capita alcohol consumption in Australia: will the real trend please step forward? *MJA* 193(10):594-597.
- Australian Taxation Office. (ATO). (2006). *The alcohol industry - excise technical guidelines (current to 30 June 2006)*. NAT 14790-04. Canberra: Australian Taxation Office. Available at: <http://law.ato.gov.au/atolaw/view.htm?docid=SAV/73966/00001> (accessed Nov 2010).
- Australian Bureau of Statistics. (2009). Sales of Australian wine and brandy by winemakers, Jun 2009. Explanatory notes. ABS Cat. No. 8504.0. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/8504.0Explanatory%20Notes1Jun%202009?OpenDocument> (accessed Nov 2010).
- Conibear H. (2006). Rising alcohol levels in wine - is this a cause for concern? *Aim Digest Online* 18(4):1-3.
- Kerr, W.C., Greenfield, T.K., Tujague, J. & Brown, S.E. (2006). The alcohol content of wine consumed in the US and per capita consumption: New estimates reveal different trends. *Alcoholism Clinical and Experimental Research* 30(3):516-522.
- Bonné, J. (2004). Wine's potent appeal may be at its limit: vintners are rethinking their skyrocketing alcohol levels. *Today*. August 13, 2004. Available at: <http://today.msnbc.msn.com/id/5675721/> (accessed Jul 2010).
- World Advertising Research Centre. (2004). *World drink trends 2004*. London: Henley-on-Thames.
- Australian Bureau of Statistics. (2000). Apparent consumption of foodstuffs, Australia, 1997-98 and 1998-99. ABS Cat. No. 4306.0. Canberra: Australian Bureau of Statistics. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/0/123FCDBF086C4DAACA2568A90013939A?OpenDocument> (accessed Nov 2010).
- Distilled Spirits Industry Council of Australia Inc. (2008). Submission to the Senate Standing Committee on Community Affairs Inquiry into Ready to Drink alcohol beverages (RTDs). Melbourne: Distilled Spirits Industry Council of Australia Inc. Available at: http://www.aph.gov.au/senate/committee/clac_ctte/alcohol_beverages/submissions/sub27.pdf (accessed Nov 2010).
- Distilled Spirits Industry Council of Australia Inc. (2008). Submission to the Senate Standing Committee on Community Affairs Alcohol Toll Reduction Bill 2007. Melbourne: Distilled Spirits Industry Council of Australia Inc. Available at: http://www.aph.gov.au/senate/committee/clac_ctte/alcohol_reduction/submissions/sub93.pdf (accessed 5 Nov 2010).
- Riden, S. (2010). Comment on: "Liquor industry paints itself as defender of the people". [Internet]. Sydney: Sydney Morning Herald; 2010 Jan 19 [two paragraphs]. Available at: <http://www.theage.com.au/opinion/society-and-culture/liquor-industry-paints-itself-as-defender-of-the-people-20100118-mgnc.html> (accessed Nov 2010).
- Hall, W.D., Chikritzhs, T.N., d'Abbs, P.H.N. & Room, R.G.W. (2008). Alcohol sales data are essential for good public policies towards alcohol. *Medical Journal of Australia* 189(4):188-189.
- Australian Bureau of Statistics. (2009). *National Health Survey: Summary of results, 2007-2008 (Reissue)*. Cat No. 4364.0. Canberra: Australian Bureau of Statistics.
- Stockwell, T., Donath, S., Cooper-Stanbury, M., Chikritzhs, T., Catalano, P. & Mateo, C. (2004). Under-reporting of alcohol consumption in household surveys: a comparison of quantity-frequency, graduated-frequency and recent recall. *Addiction* 99(8):1024-1033.
- Knibbe, R.A. and Bloomfield, K. (2001). Alcohol consumption estimates in surveys in Europe: Comparability and sensitivity for gender differences. *Substance Abuse* 22(1):23-38.
- Stockwell, T., Zhao, J., Chikritzhs, T. & Greenfield T. (2008). What did you drink yesterday? Public health relevance of a recent recall method used in the 2004 Australian National Drug Strategy Household Survey. *Addiction* 103(6):919-928.
- Skov, S.J., for the Royal Australasian College of Physicians Alcohol Advisory Group (2009). Alcohol taxation policy in Australia: public health imperatives for action. A statement by the Royal Australasian College of Physicians. *Medical Journal of Australia* 190(8):437-439.
- Bellis, M., Phillips-Howard, P. Hughes, K., et al. (2009). Teenage drinking, alcohol availability and pricing: a cross-sectional study of risk and protective factors for alcohol-related harms in school children. *BMC Public Health* 9(1): 380.
- Chikritzhs, T., Pascal, R., & Jones, P. (2004). Under-aged drinking among 14-17 year olds and related harms in Australia. *National Alcohol Indicators Bulletin No. 7*. Perth: National Drug Research Institute, Curtin University of Technology.
- Chikritzhs, T. & Pascal, R. (2004). Trends in youth alcohol consumption and related harms in Australian jurisdictions, 1990-2002. *National Alcohol Indicators Bulletin No. 6*. Perth: National Drug Research Institute, Curtin University of Technology.
- Chikritzhs, T., Pascal, R., Gray, D., Stearne, A., Siggers, S. & Jones, P. (2007). Trends in alcohol-attributable deaths among Indigenous Australians, 1998-2004. *National Alcohol Indicators Bulletin No. 11*. Perth: National Drug Research Institute, Curtin University of Technology.
- Hall, W. & Chikritzhs, T. (2010). The Australian alcopops tax revisited. *The Lancet Epub ahead of print*: 10.1016/S0140-6736(10)61420-1.
- Chikritzhs, T., Stockwell, T. & Pascal R. (2005). The impact of the Northern Territory's Living With Alcohol Program, 1992-2002: revisiting the evaluation. *Addiction* 100(11):1625-1636.
- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., et al. (2010). *Alcohol: No ordinary commodity. Research and public policy*. 2nd ed. Oxford: Oxford University Press.
- Byrnes, J.M., Cobiac, L.J., Doran, C.M., Vos, T. & Shakeshaft, A.P. (2010). Cost-effectiveness of volumetric alcohol taxation in Australia. *Medical Journal of Australia* 192(8):439-443.
- Wagenaar, A.C., Salois, M.J. & Komro, K.A. (2009). Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies. *Addiction* 104(2):179-190.
- Australian Institute of Health and Welfare. (2008). 2007 National drug strategy household survey: First results. Cat. no. PHE 98. Canberra: Australian Institute of Health and Welfare.
- National Health and Medical Research Council. (2009). *Australian guidelines to reduce health risks from drinking alcohol*. Canberra: National Health and Medical Research Council.
- Bann, R., Straif, K., Grosse, Y., et al. (2007). Carcinogenicity of alcoholic beverages. *The Lancet Oncology* 8(4): 292-293.

project notes

Developing the capacity to model the impact of interventions that target high-risk drinking among young Australians

David Moore, Paul Dietze¹, Pascal Perez² and Robin Room³

(¹Burnet Institute & Monash University, ²University of Wollongong, ³AER Centre for Alcohol Policy Research & University of Melbourne)

Aims: The proposed research, which is funded by an Australian Research Council Discovery Project Grant, aims to improve understanding of the individual, social and cultural factors that shape high-risk drinking and related problems among young Australians. Agent-based modelling will draw on qualitative and quantitative data on drinking to explore the likely impact of interventions on alcohol-related problems. The outcomes of the modelling will inform the development of new evidence-based policy to reduce alcohol-related problems.

Background: Alcohol use in Australia is associated with serious and substantial social and health problems. While surveillance data has provided evidence of the extent of these problems, little is known about the social contexts and cultural meanings of alcohol use in Australian settings. Most qualitative studies have been small-scale, localised investigations of how alcohol consumption expresses or enacts particular class or gender identities, while analysis of quantitative data has generally been descriptive. Few studies have combined qualitative and quantitative research on the drinking cultures of young Australians and none have used agent-based modelling to integrate multidisciplinary research data. Agent-based modelling can improve understanding of the complexity of alcohol use and related problems and inform the development of effective policy responses. While reducing the overall availability of alcohol and regulating licensed venues are important measures in reducing alcohol-related problems among young adults, they may not be sufficient in the absence of interventions that also target drinking cultures.

Research design: The research design employs ethnography, epidemiology and agent-based modelling. Data collection will focus on alcohol use and related problems amongst young adults in two Melbourne locations: inner-urban Yarra and peri-urban Hume. Young adults have been chosen for

study because they experience high rates of alcohol-related problems. The two sites will allow comparison of different geographical, demographic and cultural ecologies and their relationship to alcohol-related problems.

Ethnographers will conduct targeted direct observation of, and in-depth interviews with, young adults in the two sites to collect qualitative data on alcohol use and related problems. The epidemiological component will consist of baseline and follow-up surveys conducted concurrently with the ethnographic fieldwork in the two sites. This allows for iterative feedback between the two forms of data collection, minimises their limitations and maximises their interactive potential.

Qualitative analysis will focus on the social contexts and cultural meanings of alcohol use and related problems. Quantitative analysis will focus on the relationships between drinking patterns and contexts (including dynamic shifts in these over time) and their effects on key outcomes in the social and health domain. Agent-based modelling will be used to integrate diverse types of data and to model the impact of interventions on alcohol use and related problems.

Outcomes and significance: In its methodological approach, empirical focus and policy relevance, the project will make a significant and innovative contribution to alcohol research and policy. It will also establish a framework for collaboration amongst disciplines involved in alcohol research that will emphasise the synthesis of diverse data types to generate new policy-relevant knowledge.

A longitudinal study of the influences on alcohol consumption and related harm in Central Australia, with a particular emphasis on the role of price

Dennis Gray, John Boffa¹, Steven Skov², Tanya Chikritzhs, Sherry Siggers, Mandy Wilson and Anna Stearne

(¹Central Australian Aboriginal Congress, ²Northern Territory Department of Health and Families)

The Central Australian longitudinal alcohol project involves collaboration across the Indigenous, Alcohol, and Prevention, Early Intervention and Inequality teams at NDRI,

in association with the Central Australian Aboriginal Congress and the Department of Health and Families. The aims of the project are to examine and report on trends in levels of alcohol consumption and related harm in Central Australia over a ten year period (1999-2009) and assess the impact of a variety of interventions introduced to address the high levels of consumption and alcohol-related harm in Alice Springs and Central Australia.

Evaluations of two intervention measures demonstrated reductions in alcohol-related harms. However, these evaluations covered limited time periods and no longitudinal study of the impact of the various interventions has been undertaken. This study seeks to address this dearth by presenting a longer-term picture of trends in alcohol consumption in Central Australia (as compared with elsewhere in the Northern Territory) and the impact of a range of restrictions, with a particular focus on price-related measures. The time period of this study encapsulates the three years before the introduction of trial alcohol restrictions and complementary measures in 2002, and the establishment of a photographic ID system for the purchase of alcohol enacted in 2008.

To achieve the study aims, there are three distinct stages. Stage one involves a time-series analysis of alcohol wholesales data and a number of key indicators of alcohol-related harms including, but not limited to, Emergency Department presentations and alcohol-specific offences and incidents. This will allow the team to identify trends over time in consumption and harm. In order to test the preliminary results and our interpretations of them, Stage two will involve interviews with key informants from the liquor licensing, health and justice sectors. Participants will be provided with a copy of the initial results and asked questions based on these findings. This will provide the opportunity to identify confounding factors which may have influenced findings from Stage one. The third and last stage will involve reassessing, and possibly reanalysing, results from Stage one in light of findings from Stage two, and the preparation of the final report.

The project has received ethics clearance from Curtin University's and Central Australia's Human Research Ethics Committees, and the Minister for Alcohol Policy, Delia Lawrie, has approved access to the data. The project team is currently waiting for their data requests to be processed.

Safe and sober support service: evaluation and data systems research project

Dennis Gray, Ted Wilkes, Anna Stearne and David Hay¹

(¹School of Psychology, Curtin University)

Central Australian Aboriginal Congress' Safe and Sober Support Service (SSSS) is a secondary treatment service in Alice Springs attempting to work in a holistic and culturally appropriate way to facilitate improved wellbeing for Aboriginal people experiencing the effects of harmful alcohol use. SSSS provides ambulatory case management and care coordination for all clients through three streams of care: advocacy, social and cultural support; structured therapy; and pharmacotherapy.

The National Drug Research Institute has been contracted by the Central Australian Aboriginal Congress to evaluate the Service over the life of the program, which is currently funded until June 2012. The Safe and Sober Support Service Evaluation and Data Systems Research Project is to be conducted in three parts.

Part A of the Evaluation and Data Systems Research Project is to conduct a 3-month Data Collection Systems Research Project from September 2010 until December 2011. Participants in Part A are partner organisations in Alice Springs. The aims of this phase are to:

- establish baseline data on the existing client data from services in Alice Springs;
- examine the nature of data collections systems used across these service providers;
- consider potential for sharing client information across service providers; and,
- create a system to collate and interpret population statistics regarding alcohol impacts in Alice Springs, measuring the impacts of SSSS.

Part B-1 of the Evaluation and Data Systems Research Project is the development of an Evaluation Framework for reporting to the SSSS' Coordination Reference Group (CRG). Part B-2 of the Evaluation and Data Systems Research Project is the ongoing evaluation of the SSSS, using the Evaluation Framework developed in Part B-1.

Parts A and B-1 have received low-risk ethics approval from Curtin University Human Research Ethics Committee. The initial fieldwork was conducted between September and November 2010, resulting in the completion of the Evaluation

Framework for review. The first report from the evaluation is to be presented to Central Australian Aboriginal Congress in early 2011. With the finalisation of the Evaluation Framework, further ethics approvals are to be sought from both Curtin University Human Research Ethics Committee and the Central Australian Human Research Ethics Committee.

Alcohol and pregnancy and fetal alcohol spectrum disorders: resources for health professionals working in Aboriginal and Torres Strait Islander health care settings

Sherry Sagggers, Steve Allsop, Colleen O'Leary, Dennis Gray, Ted Wilkes, Nyanda McBride, Kate Frances and Lynn Roarty

The term Fetal Alcohol Spectrum Disorders (FASD) is an umbrella term encompassing the range of effects that can result from prenatal alcohol exposure such as Fetal Alcohol Syndrome (FAS), partial FAS, and Alcohol-Related Birth Defects (ARBD). Prenatal alcohol exposure can have serious consequences for the developing fetus and may result in physical, mental, behavioural, and/or learning disabilities, each of which can have lifelong implications. A recent survey of health professionals found that very few (2%) feel prepared to deal with FASD, and over 70% of Aboriginal health workers surveyed indicated that they wanted information on alcohol and pregnancy/FASD for themselves and their clients.

This two year project will work closely with a National Aboriginal and Torres Strait Islander FASD Prevention Reference Group, the Western Australian Drug and Alcohol Office, and key stakeholders throughout Australia. It aims to develop templates that can be used in the production of culturally secure and appropriate resources to assist health professionals in Aboriginal and Torres Strait health care settings across Australia to address the issues of alcohol and pregnancy and Fetal Alcohol Spectrum Disorders (FASD).

Culturally secure and appropriate resources about alcohol and pregnancy developed from the templates will assist health professionals in increasing their own and their clients' understanding of the risks of drinking alcohol, drinking alcohol whilst pregnant, and breastfeeding. In turn, it is hoped this will encourage Aboriginal and Torres Strait Islander women to stop drinking alcohol during pregnancy, or where this is not possible, to reduce their alcohol consumption.

What difference does treatment make? Psychometric properties of a measure of young people's progress in residential rehabilitation

Sherry Sagggers, Mandy Wilson, Lynn Roarty, Helen Wildy¹, Thiagarajan Sitharthan², Kate Conigrave³, Tim Marchant⁴, Anne Hampshire⁴, Jagdish Dua⁵, Carmen Acosta⁴ and Allan Colthart⁶

(¹University of Western Australia, ²University of Western Sydney, ³Sydney South West Area Health Service, ⁴Mission Australia, ⁵Ted Noffs Foundation, ⁶Drug & Alcohol Office, WA)

This ARC Linkage project is designed to produce a psychometrically robust outcome measure of young people's progress in treatment that is accessible to the alcohol and other drug (AOD) workforce, and produces outcome data that is meaningful and useful to practitioners and to the young people. The specific aims of the project are to:

Phase 1 – establish the validity of a qualitative framework to assess the progress of young people in treatment;

Phase 2 – develop an assessment instrument based on the framework;

Phase 3 – undertake data collection and investigation of the applicability of the framework and the instrument in a range of residential rehabilitation settings;

Phase 4 – determine the relevance of the qualitative framework and instruments to programs and interventions, and disseminate research results.

The validity of a qualitative framework to assess the progress of young people in treatment has been established in phase 1 of the project through regular meetings, iterative refinement, and the conduct of focus groups of staff and young people at Mission Australia's Triple Care Farm and at the Ted Noffs Foundation in Sydney.

An assessment instrument based on the framework, using narrative accounts to generate quantitative data, has been developed and was trialled in late November 2010. In phase 3 of the project, expected to occur throughout 2011, practitioners across five sites in NSW and Perth will be trained in the use of the instrument, and data collection will take place over a nine month period. **cl**

Recognition for outstanding NDRI researchers

NDRI's Associate Professor Tanya Chikritzhs was recently awarded the Public Health Association of Australia (PHAA) WA President's Award for 2010 in recognition of her outstanding achievements and contributions to public health. Professor Chikritzhs leads the Alcohol Policy Research Team at NDRI and is Chief Investigator for the National Alcohol Indicators Project (NAIP).

PHAA WA President, Professor Mike Daube, said that Tanya was recognised nationally and internationally as a leading authority on alcohol. Her research has not only made important contributions to the literature, but has informed the development of public



PHAA WA President's Award for 2010 recipient Tanya Chikritzhs

policy at both State and national levels. "Tanya works in areas of great health and social importance, identifies areas where research can be of genuine value, and is willing to ensure that the outcomes are appropriately communicated to media and decision-makers," he said. "Her work is of great importance in addressing one of Australia's most pressing public health problems, and the PHAA is delighted to be able to recognise her achievements."

Tanya also recently won the Curtin University Research and Development Prize for Early Career Researcher - Highest Research Performance Index (Publications) 2009 in the Faculty of Health Sciences.

Professor Tony Butler, who is an offender health researcher at the NDRI, was recently named 2010 Curtin Health Sciences Researcher of the Year.

The award, which is based on 2009 output, recognises outstanding researchers in Curtin's Faculty of Health Sciences.

"Tony had a spectacular year with National Health and Medical Research Council (NHMRC) and Australian Research Council (ARC) funding, in addition to public sector and industry funding," the judges said.

In recognition of his high quality research contributions, Tony Butler was one of only 200 researchers in Australia to be awarded



Emeritus Professor Mark Liveris, presents 2010 Researcher of the Year Award to Tony Butler

a prestigious Australian Research Council Future Fellowship in 2009. The four-year fellowship will help Tony to continue groundbreaking work exploring the health and drug-related problems experienced by prisoners and the causes of violent criminal behaviour.

NDRI Tier 1 colleague Professor Colin Binns has also been recognised. He received the 2010 Research Australia Lifetime Achievement Award in recognition and honour of the support he has given to health policy, practice and medical research, and the John Curtin Distinguished Professor Award, from Curtin University.

NDRI researchers strengthen links with New Zealand/Aotearoa

In September 2010, Associate Professor Ted Wilkes and Professor Dennis Gray travelled to New Zealand/Aotearoa as guests of the Alcohol Advisory Council of New Zealand (Kaunihera Whakatpatu Waipiro Aotearoa).

While there, they presented a keynote address to the *Cutting Edge 2010: Development Diversity Direction for a New Decade* conference. Their presentation focused on approaches to addressing the harmful use of alcohol and other drugs among Indigenous Australians – especially the National Drug Strategy Aboriginal and Torres Strait Islander Peoples Complementary Action Plan, the role of the National Indigenous Drug and Alcohol Committee (of which Ted is the Chair and Dennis a member), and the place of research.

They also made informal presentations to Māori politicians and AOD workers and to a pre-conference Māori *hui* (meeting) at Te Noho Kotahitanga Marae in Auckland, as well as appearing for an hour-long segment on New Zealand's largest audience radio program, the 'Willie and JT Show'.

It is hoped that the visit will foster stronger links between



Dennis Gray, Ted Wilkes, Tame Iti and Tuari Potiki, Cutting Edge 2010 Conference

Indigenous peoples in Australia and New Zealand and facilitate improved strategies to address harmful use of alcohol and other drugs.

abstracts

Beyond neoclassical economics: Social process, agency and the maintenance of order in an Australian illicit drug marketplace

Robyn Dwyer and David Moore

International Journal of Drug Policy, 2010, 21, (5), pp 390-398

Background: The dominant Australian approaches to understanding illicit drug marketplaces are surveillance and criminological research. These approaches rely on the elementary neoclassical economic model of the market which focuses primarily on supply and demand. In this paper, we draw on anthropological and sociological research to develop an alternative framework for understanding Australian illicit drug marketplaces that emphasises their constituent processes.

Methods: The paper draws on two years of ethnographic research among heroin user/sellers of Vietnamese ethnicity in an Australian heroin marketplace.

Results: Trade and barter were key modes of exchange in this marketplace. We identified active negotiation and bargaining over price on the basis of social relationships, with dealers and customers actively working to develop and maintain such ties. Dealers set price collectively and this was shaped by moral and cultural elements such as notions of a 'fair' price. Social processes and relations as well as shared cultural expectations helped to generate trust and maintain order in the marketplace.

Conclusion: Our ethnographic research suggests that the dominant Australian approaches to the study of illicit drug markets, with their reliance on the elementary neoclassical economic market model, ignore the social processes and social relations through which such sites are made and remade. Nor do they adequately capture the complex character of the subjects who act within these sites. If we are to expand our understanding of illicit drug markets and marketplaces in Australia, we must look beyond the conceptions offered by surveillance and criminological approaches.

Managing alcohol-related problems among Indigenous Australians: what the literature tells us

Dennis Gray, Sherry Siggers, Edward Wilkes, Steve Allsop and Coralie Ober

Australian and New Zealand Journal of Public Health, 2010, 34, Issue Supplement S1, pp S34-S35.

Objective: To contextualise and provide an overview of two review papers – prepared as part of a larger research program – dealing with different aspects of the treatment of Indigenous Australians with alcohol-related problems.

Method: The papers were reviewed thematically and compared to identify key issues raised in them.

Findings: Together, the papers highlight the paucity of the evidence base for the provision of treatment for Indigenous Australians with alcohol-related problems. Among the key issues identified are: the need to engage with clients in culturally safe ways; practitioner, organisational and client barriers to engagement; the contexts in which Indigenous drinking and treatment take place; the need to develop rigorous methods of evaluation more appropriate to Indigenous cultural and service provision settings; and the importance of effective partnerships in the provision of services.

Conclusion: For those working in the field, the reviews direct attention to the need to review and interrogate our current practice. They also provide clear directions for future research.

Australia, the healthiest nation: death, hospital and cost savings of the Preventative Health Taskforce target reductions for alcohol, 2007 to 2020

Tanya Chikritzhs, Steve Whetton, Mike Daube, Richard Pascal and Michaela Evans

Australasian Medical Journal, 2010, 3, (8), pp 499-503.

Background: The National Preventative Health Taskforce has set a 30% target reduction in the proportion of risky and high-risk drinkers by 2020. This study

estimated the potential saving in deaths, hospitalisations and associated economic cost savings to premature mortality and health of achieving the target.

Method: Past national estimates of alcohol-attributable hospitalisations and deaths were used to forecast trends from 2007 to 2020. Estimated potential savings in deaths and hospitalisations were based on incremental decline in the prevalence of risky/high-risk drinking reaching a total of 30% by 2020 (about 2.3% per year). Associated economic costs of premature death were estimated using the Value of Statistical Life method (willingness to pay). Hospital costs were estimated from known trends in annual national costs for recent past years and taking inflation into account.

Results: A 30% reduction in risky/high-risk drinkers would avoid an estimated 7,200 deaths and some 94,000 person-years-of-life lost due to premature death by 2020. The estimated benefit to the health sector would include 330,000 fewer hospitalisations and 1.5 million associated bed days. The net present value of these benefits is AUD 22.7 billion from deaths avoided and AUD 1.7 billion from fewer hospital separations totalling AUD 24.4 billion.

Conclusion: The potential savings in premature deaths, health and associated financial costs of a 30% reduction in risky and high-risk drinking by 2020 across the Australian population are considerable.

Alcohol pouring practices among 65- to 74-year-olds in Western Australia

Celia Wilkinson, Steve Allsop and Tanya Chikritzhs

Drug and Alcohol Review, Article first published online: 16 AUG 2010, DOI: 10.1111/j.1465-3362.2010.00218.x

Introduction and Aims: Alcohol pouring practices have relevance to the validity of self-reported alcohol consumption. However, little research has focused on older populations nor investigated relationships between volumes poured and participants' estimations of beverages in terms of Australian standard drinks. The aim of this study was to address these issues.

Design and Methods: Interviews were conducted (in participants' homes) with 844 current drinkers, aged 65–74 years, from Perth, Western Australia. Participants

poured their 'usual' serving of alcohol into their 'usual' drinking vessel and were asked questions regarding the volumes poured.

Results: Older men poured drinks that were 32% larger than a standard drink (10g of ethanol). The comparable figure for older women was 16%. However, over 25% of all men and 20% of all women indicated they would not record (in a self-report assessment of consumption) the amount poured as one standard drink. Despite participants making corrections, men and women still underestimated amounts poured (men by 23% and women by 16%).

Discussion and Conclusions: As with younger populations, older people pour drinks that are, on average, larger than standard drinks. To increase the accuracy of self-reported consumption, it is recommended that researchers consider pouring practices and people's perceptions of alcohol volumes poured in relation to a standard drink. Further research on this issue may reduce the discrepancy between self-reported levels of consumption and national per capita alcohol sales.

Exploring the micro-politics of normalisation: narratives of pleasure, self-control and desire in a sample of young Australian 'party drug' users

Amy Pennay and David Moore

Addiction Research & Theory, 2010, 18, (5), pp 557-571

This paper explores the micro-politics of recreational use of illicit 'party drugs' in a social network of young Australians. These young people often engage in extended sessions of concurrent alcohol and other drug use, and regularly emphasise the pleasures associated with this use. However, as well-integrated young people, they are also exposed to the discourses of non-using friends, family and the wider society, which represent illicit drug use as a potential moral threat. Some group members invoked the need for self-control in relation to illicit drug use and had developed a number of strategies to cease or regulate their use. However, they struggled to regulate pleasure and drew on popular understandings of 'excessive' drug use as indicative of flawed neo-liberal subjectivity. Other group members rejected the need for self-control, choosing instead to emphasise the value of unrestrained bodily pleasure facilitated by the heavy use

of illicit drugs. These co-existing discourses point to the complex ways in which illicit drug users try to challenge the stigma associated with their drug use. Our analysis suggests that future accounts of illicit drug use, and harm reduction initiatives, need to be more attentive to the micro-politics of normalisation. How should harm reduction respond to those who articulate its ethos but pursue pleasure in practice? What should harm reduction say to those who reject regulation on the grounds that it stifles pleasure? Discussing ways to incorporate pleasure into harm reduction should be central to the future development of policy and practice.

Enhancing clinical research with alcohol, tobacco and cannabis problems and dependence

Steve Allsop, Owen Carter and Simon Lenton

Drug and Alcohol Review (2010), 29, (5), pp 483-490

Issues: A strong body of evidence guides clinical responses to alcohol and tobacco dependence and there is an emerging evidence base informing responses to cannabis dependence. Nevertheless, there are still important gaps in the evidence base.

Approach: Three researchers, with backgrounds in alcohol, tobacco and cannabis research examine current clinical research and practice to identify potential future priorities for clinical research.

Key Findings: Clinical outcomes will be improved by research that enhances engagement and retention of a broader range of consumers, especially under-represented and disadvantaged populations who may not respond as well to mainstream interventions. Research might focus on innovative client recruitment approaches, varying treatment intensity, use of new technology and assertive outreach. Assessment of treatment outcome will be enhanced by strategies that facilitate longer-term follow up of participants, adoption of shared measures of non-abstinent outcomes and extending the focus and outcome measures beyond drug use. Translation of research into clinical strategies will be enhanced by improving links between theory and interventions, increased attention on factors that influence treatment fidelity, designing treatment studies that are relevant to a variety of clinical settings, focussing on

clinician characteristics as treatment variables and developing methodologies that address the capacity of participants to discriminate between placebo and pharmacotherapy.

Implications: A range of future research priorities have been identified that have the potential to better engage and retain clients in a range of treatment settings and enhance translation of research findings into improved treatment outcomes.

Per capita alcohol consumption in Australia: will the real trend please step forward?

Tanya Chikritzhs, Steve Allsop, Rob Moodie and Wayne Hall

Medical Journal of Australia, 2010, 193, pp1-4.

Objective: To estimate the national trend in per capita alcohol consumption (PCC) for Australians aged 15 years and older from 1990/91 to 2008/09.

Data Sources: Annual volumes of alcohol consumed and mean alcohol contents by beverage type were obtained from the Australian Bureau of Statistics' apparent consumption of alcohol catalogues and World Advertising Research Centre reports.

Design: Three alternative trends in PCC were estimated based on different assumptions about the alcohol content of wine: i) Old series, assumed that the alcohol content of wine remained stable over time; ii) New series, assumed that the alcohol content of wine increased once in 2004/05 and remained stable to 2008/09; iii) Adjusted series, assumed that beginning in 1998/99, the alcohol content of wine increased gradually over time. Linear trend analysis was applied to identify significant trends.

Results: The New and Adjusted PCC series demonstrated increasing trends while the Old PCC series was stable.

Conclusions: Until recently, official estimates of PCC have been under-estimated and led to the mistaken impression that levels of alcohol consumption have been stable since the early 1990s. Total PCC has in fact been increasing significantly over time due to a gradual increase in the alcohol content and market share of wine and is at one of its highest points since 1991/92, consistent with evidence of increasing alcohol related harm. This new information highlights the need for timely and accurate data on alcohol sales and harms across Australia. **cl**

recent publications

Monographs and Technical Reports

Butler, T.G., Richters, J., Yap, L., Papanastasiou, C., Richards, A., Schneider, K., Grant, L., Smith, A. and Donovan, B. (2010) Sexual health and behaviour of Queensland prisoners – with Queensland and New South Wales comparisons. National Drug Research Institute, Curtin University, Perth and School of Public Health and Community Medicine, University of New South Wales, Sydney.

Gray, D. and Wilkes, E. (2010) Addressing and preventing harmful alcohol and other drug use. Closing the Gap Clearinghouse, Australian Institute of Health and Welfare and Australian Institute of Family Studies.

Rainsford, C.A. and Lenton, S. (2010) WA drug trends 2009: Findings from the Illicit Drug Reporting System (IDRS). National Drug and Alcohol Research Centre, University of New South Wales, Sydney.

Rainsford, C.A., Fetherston, J. and Lenton, S. (2010) WA trends in ecstasy and related drug markets 2009: Findings from the Ecstasy and Related Drugs Reporting System (EDRS). National Drug and Alcohol Research Centre, University of New South Wales, Sydney.

Articles and Books

Adams, M., Fredericks, B., Faulkner, S., Meiklejohn, B., Wilkes, E., Roe, Y., Paki, D., Stearne, A. and Roe-Banks, J. (2010) The 4th International Network of Indigenous Health Knowledge and Development Conference. Aboriginal and Islander Health Worker Journal, 34, (5), pp 31-32.

Allsop, S. (2010) Commentary on Teesson et al. (2010): Getting help to those who need it – improving the delivery of services to people affected by risky drinking. *Addiction*, 105, (12), pp 2095–2096.

Allsop, S., Carter, O. and Lenton, S. (2010) Enhancing clinical research with alcohol, tobacco and cannabis problems and dependence. *Drug and Alcohol Review*, 29, (5) pp 483-490.

Burns, S., Cross, D. and Maycock, B. (2010) “That could be me squishing chips on someone’s car”: how friends can positively influence bullying behaviours. *Journal of Primary Prevention*, 31, pp 209-222.

Chikritzhs, T.N., Allsop, S., Moodie, R. and Hall, W. (2010) Per capita alcohol

consumption in Australia: will the real trend please step forward? *Medical Journal of Australia*, 193, (10), pp 594-597.

Chikritzhs, T.N., Whetton, S., Daube, M., Pascal, R. and Evans, M. (2010) Australia, the healthiest nation: death, hospital and cost savings of the Preventative Health Taskforce target reductions for alcohol, 2007 to 2020. *Australasian Medical Journal*, 3, (8), pp 499-503.

Dietze, P., Room, R., Jolley, D., Mathews, S. and Chikritzhs, T. (2010) The adverse consequences of drinking in a sample of Australian adults. *Journal of Substance Use*. Early online view, 16 September 2010, DOI: 10.3109/14659891.2010.495816.

Dwyer, R. and Moore, D. (2010) Beyond neoclassical economics: social process, agency and the maintenance of order in an Australian illicit drug marketplace. *International Journal of Drug Policy*, 21, (5), pp 390-398.

Gray, D., Siggers, S., Wilkes, E., Allsop, S. and Ober, C. (2010) Managing alcohol-related problems among Indigenous Australians: what the literature tells us. *Australian and New Zealand Journal of Public Health*, 34, pp 34-35.

Hall, W. and Chikritzhs, T.N. (2010) The Australian alcopops tax revisited. *The Lancet*, Early Online Publication, 15 September 2010, doi:10.1016/S0140-6736(10)61420-1.

Howat, P., Hallett, J., Kypri, K., Maycock, B., Dhaliwal S. and McManus, A. (2010) Tobacco smoking in an Australian university sample and implications for health promotion. *Preventive Medicine*, 51, (5), pp 425-426.

Lee, A.H., Liang, W., Hirayama, F., Binns, C.W. (2010) Association between green tea consumption and lung cancer risk. *Journal of Preventive Medicine & Public Health*, 3, (4), 366-367.

Liang, W. (2010) Cyberbullying, Let the Computer Help, *Journal of Adolescent Health*, 47, (2), pp 209.

Liang, W. and Binns, C.W. (2010) Estrogen and colorectal cancer. NOVA. ISBN: 978-1-61728-696-4.

Liang, W. and Chikritzhs T. (2010) Reduction in alcohol consumption and health status. *Addiction*, Early online view, 4 November 2010, Doi: 10.1111/j.1360-0443.2010.03164.x

Liang, W., Lee, A.H. and Binns, C.W. (2010) White rice-based food consumption and

ischemic stroke risk: a case-control study in southern China, *Journal of Stroke and Cerebrovascular Diseases* 19, (6), pp. 480-484.

Lobo, R., McManus, A., Brown, G., Hildebrand, J. and Maycock, B. (2010) Barriers and enablers for evaluating peer-based youth programs. *Evaluation Journal of Australia*, 10, (1), pp 36-44.

McBride, N. (2010) School alcohol education. *Directions in Education*, 19/11, (9), pp 3.

McBride, N. (2010) School alcohol education: What way forward? *Directions in Education*, 19/9, (11), pp 4.

Northcote, J. and Moore, D. (2010) Understanding contexts: methods and analysis in ethnographic research on drugs. In P.G. Miller, J. Strang & P.M. Miller (eds), *Addiction Research Methods*. Wiley-Blackwell, Oxford. pp 287-298.

Pennay, A. and Moore, D. (2010) Exploring the micro-politics of normalisation: narratives of pleasure, self-control and desire in a sample of young Australian ‘party drug’ users. *Addiction Research & Theory*, 18, (5), pp 557-571.

Skov, S.J., Chikritzhs, T.N., Li, S., Pircher, S. and Whetton, S. (2010) How much is too much? Alcohol consumption and related harms in the Northern Territory. *Medical Journal of Australia*, 193, (5), pp 269-272.

Tinworth, J. Lenton, S. Rodas, A. (2010) Cannabis: the gap between law and enforcement: snapshot of cannabis laws. *Of Substance*, 8, (3), pp 24-5.

Wilkes, E., Gray, D., Siggers, S., Casey, W. and Stearne, A. (2010) Substance misuse and mental health among Aboriginal Australians. In Purdie, N., Dudgeon, P. and Walker, R. (eds.) *Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice*. Australian Council for Educational Research, Canberra. pp. 117-134. ISBN: 978-1-74241-090-6-6

Wilkinson, C., Allsop, S., and Chikritzhs, T.N. (2010) Alcohol pouring practices among 65 to 74-year-olds in Western Australia. *Drug and Alcohol Review*. Article first published online: 16 AUG 2010, DOI: 10.1111/j.1465-3362.2010.00218.x

Wilson, M., Stearne, A., Gray, D. and Siggers, S. (2010) The harmful use of alcohol amongst Indigenous Australians. *Australian Indigenous HealthInfoNet*. **cl**

staff list

NDRI staff as at December 2010

Steve Allsop	Professor, Director
Dennis Gray	Professor, Deputy Director
Simon Lenton	Professor, Deputy Director
Tony Butler	Professor
Rob Donovan	Professor
Peter Howat	Professor
Andy Lee	Professor
Bruce Maycock	Professor
Sherry Saggars	Professor
Tanya Chikritzhs	Associate Professor
David Moore	Associate Professor
Ted Wilkes	Associate Professor
Julia Butt	Senior Research Fellow
Susanne Fraser	Senior Research Fellow
Nyanda McBride	Senior Research Fellow
Susan Carruthers	Research Fellow
Owen Carter	Research Fellow
Robyn Dwyer	Research Fellow
Kate Frances	Research Fellow
Ed Garrison	Research Fellow
Jonathon Hallett	Research Fellow
Geoffrey Jalleh	Research Fellow
Wenbin Liang	Research Fellow
Eva Malacova	Research Fellow
Lynn Roarty	Research Fellow
Jeane Roberts	Research Fellow
Amanda Wilson	Research Fellow
Michael Doyle	Research Associate
Michaela Evans	Research Associate
Jessica Miller	Research Associate
Colleen O'Leary	Research Associate
Richard Pascal	Research Associate
Aurora Popescu	Research Associate
Candice Rainsford	Research Associate
Anna Stearne	Research Associate
Clare Stevens	Research Associate
Paul Catalano	Senior Research Officer
David Lim	Research Officer
Fran Davis	Business Manager
Rachael Lobo	Communications Officer
Vic Rechichi	Communications Officer
Paul Jones	Computer Systems Officer
Jo Hawkins	A/Administration Officer
Patricia Niklasson	A/Administrative Officer
Jodie Koch	A/Secretary/Admin Assistant
Clare Dalais	Clerical Officer
Jillian Evans	Clerical Officer
Monica Barratt	PhD Scholar
Beatriz Cuesta Briand	PhD Scholar
James Fetherston	PhD Scholar
Rachael Green	PhD Scholar
Tina Lam	PhD Scholar
Amy Pennay	PhD Scholar
Christine Siokou	PhD Scholar
Nicola Thomson	PhD Scholar

Adjunct Appointments

David Hawks	Professorial Fellow
Kaye Fillmore	Professor
Kate Graham	Professor
Tim Stockwell	Professor
Nicole Lee	Associate Professor
Wendy Loxley	Associate Professor
Richard Midford	Associate Professor
Neil Donnelly	Senior Research Fellow
Celia Wilkinson	Senior Research Fellow
Vi Bacon	Research Fellow
Allyson Brown	Research Fellow
Jocelyn Jones	Research Fellow

subscriptions

IMPORTANT INFORMATION FOR READERS

Changes to *CentreLines* distribution

NDRI would like to advise subscribers and readers of *CentreLines* that the distribution arrangements for *CentreLines* are in the process of changing, moving away from printed hard copy towards predominantly electronic circulation.

In future readers will be sent an email which advises that the latest *CentreLines* issue is available, gives a brief outline of content, and provides a direct link to a PDF of the issue on the NDRI website, which can then be read online or downloaded and printed.

We hope that you find *CentreLines* of value and wish to continue receiving it. In order to do so, please ensure that you provide us with your email address using one of the following methods:

1. Send an email giving your name, organisation and telephone number, with the words "CentreLines Subscription" in the "Subject" box to:
ndri@curtin.edu.au

2. Complete the form below, copy and return it by mail or fax to:
CentreLines Subscription, National Drug Research Institute
Curtin University of Technology, GPO Box U1987, Perth WA 6845
Fax (08) 9266 1611

CentreLines Electronic Subscription Details

Please add me to the electronic mailing list for my free copy of *CentreLines*
from the National Drug Research Institute

Name:

Organisation:

Email Address:

Phone Number:

We welcome your feedback on all issues discussed in *CentreLines*. If you would like to write to us, please send all correspondence to Rachael Lobo, Editor at the address below or email r.lobo@curtin.edu.au.



Curtin University

National Drug Research Institute
Curtin University
GPO Box U1987 Perth WA 6845
ndri.curtin.edu.au



UNSW
THE UNIVERSITY OF NEW SOUTH WALES

National Drug & Alcohol Research Centre
University of New South Wales
Sydney NSW 2052
ndarc.med.unsw.edu.au