

NATIONAL DRUG AND
ALCOHOL RESEARCH CENTRE
2005 ANNUAL REPORT



NDARC

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**National Drug and Alcohol
Research Centre**

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ABOUT THE CENTRE

The National Drug and Alcohol Research Centre (NDARC) was established at the University of New South Wales in May, 1986 and officially opened in November, 1987. It is funded by the Australian Government as part of the National Drug Strategy (formerly, the National Campaign Against Drug Abuse). NDARC is situated on the University of New South Wales Randwick campus in the eastern suburbs of Sydney.

The Centre is multidisciplinary and collaborates with medical, psychology, social science and other schools of the University, and with other institutions and individuals in Australia and overseas. Facilities at the Centre include a computer network, a Document Archive with an extensive bibliographic database, seminar and conference facilities.

In addition to research projects currently being carried out within the Centre, NDARC engages in collaborative projects with other researchers throughout Australia to provide a national focus for research in this field. NDARC also has links with researchers overseas.

Other activities include an Annual Symposium, special conferences, workshops and monthly research seminars, which are open to workers in the field. As well as contributing to scientific journals and other publications, NDARC produces its own Research Monographs and Technical Report Series. In conjunction with the National Drug Research Institute in Perth, it also produces a free quarterly newsletter, *CentreLines*, to increase communication between the national research centres, other researchers and workers in the alcohol and other drug field in Australia.

MISSION STATEMENT

The overall mission of NDARC is:

“to conduct high quality research and related activities that increases the effectiveness of the Australian and International treatment and other intervention responses to alcohol and other drug related harm”.

In order to increase the effectiveness of the Australian treatment response to drug problems four goals need to be met:

- (1) the harms to which treatment should be directed need to be known
- (2) effective treatments should be available for responding to these harms
- (3) those providing treatment should be aware of which treatments are effective
- (4) those who suffer the harms for which the treatments are intended should be made aware of ways in which to minimise harm, and of the availability of effective forms of treatment

Key Goals

- (1) to improve our understanding of the nature and extent of alcohol and other drug-related harms to which treatment and other interventions should be directed
- (2) to increase knowledge on the range and effectiveness of treatment and other interventions that is aimed at reducing forms of alcohol and other drug related harm
- (3) to increase knowledge among treatment and intervention providers about which programs are effective and which individuals are most suited to them
- (4) to increase the community's knowledge of appropriate and effective treatment and other intervention programs for alcohol and drug-related problems

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FOREWORD

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It is once again my pleasure to submit a brief foreword to this excellent report. I am extremely proud of the achievements of the Centre over the past seventeen years which have matched steady growth with very cost-effective research and outstanding results. We are now recognised internationally as a centre of excellence and increasingly consulted and referenced by other research centres and agencies working in the field. Great credit is due to the whole team so ably led by our Director, Richard Mattick, Deputy Director Maree Teesson and the senior leadership team. The impressive work of our researchers is set out in the report.

The continuing challenge of substance addiction in today's frenetic world underlines the continuing relevance and importance of the Centre. It is most unfortunate that much of the catalyst for substance abuse is driven by commercial market forces that shape demand much in the same way as for acceptable mainstream lifestyle products, albeit in a less direct and more sinister fashion. It is thus vital that the work of the Centre is strongly supported, for only from high quality, independent and soundly based research can meaningful strategies emerge that will provide the tools necessary for successful medical, social and law enforcement policies.

For this reason I am particularly pleased to see an emerging focus on increasing the capacity of the NDARC Education Trust to disseminate research outcomes to the widest possible audience. It would be foolish to think that the full responsibility for tackling the problem of substance abuse lies with government driven initiatives. Endeavours must be pursued that will provide useful intervention at all levels, be it alcohol and other drugs workers, the medical profession, law enforcement workers, the public service, teachers, local government, the trade unions, industry and the general community.

As always I am indebted to the continuing commitment of my fellow Board members. Their invaluable contribution is important to the on-going direction and stability of the Centre. All Board members are extremely busy within their own disciplines, but none the less, give their time generously, as and when the need arises. As Chairman I am personally appreciative of their individual and collective contribution.

I once again commend the Annual Report to the attention of all who have an interest in the cutting edge of research in the drug and alcohol field.



The Hon Kevin Rozzoli
Chairman, NDARC Board of Management

YEAR IN REVIEW: 2005 – DIRECTORS REPORT

The year of 2005 has continued to see the growth of the National Drug and Alcohol Research Centre both in terms of staff and activities. The current report provides an overview of completed, new and on-going projects. The range of activities is substantial and strengthens the already well-developed staffing (both academic and general staff) of the Centre.

Important work has been completed in 2005 on a range of projects including Dr Rebecca McKetin's work on estimating the number of dependent methamphetamine users in Australia and understanding methamphetamine markets. Other projects have included overseas research in East Asia and the Pacific on amphetamine-type drugs, understanding mental health outcomes amongst sex workers, and working on school-based prevention for ecstasy and related drugs (ERDs), just to mention a few. Understanding aspects of methamphetamine and GHB use, the issues related to performance and image enhancing drugs (PIEDs), as well as work on cocaine supply and demand are just some of the important products from the Centre's staff.

There has been a strong focus on alcohol-related problems with Dr Anthony Shakeshaft and colleagues from the University of Newcastle undertaking a randomised controlled trial to reduce alcohol-related harm in rural communities, and A/Prof Jan Copeland's work on better understanding young peoples' perceptions of alcohol, particularly ready-to-drink (RTD) preparations. A/Prof Maree Teesson's research on preventing alcohol-related problems in schools through the computer-based Climate School package with Ms Laura Vogl, as well as her work with colleagues from Royal Prince Alfred Hospital on pharmacotherapies, remain important projects. Dr Delyse Hutchinson has conducted a review of alcohol and impacts on family functioning. Dr Lucy Burns has been able to capitalise on her data linkage work through the Health Evaluation Research Outcomes Network (HERON) on alcohol, as well as illicit drugs. Work with our collaborators in Western Sydney has focused on a randomised trial aimed at evaluating the effectiveness of a correspondence program for alcohol, anxiety and depression for reducing alcohol-related problems.

Turning to illicit drug problems, the team of Maree Teesson, A/Prof Shane Darke and Dr Joanne Ross have continued their work with the research officers on the Australian Treatment Outcome Study (ATOS), and recently focused not only on the broader outcomes, but also post-traumatic stress disorder and its relationship to the use of heroin and cocaine. Dr Louisa Degenhardt's work on the National Illicit Drug Indicator Project (NIDIP), the Illicit Drug Reporting System (IDRS) and Party Drug Imitative (PDI) with her research team has been an important feature of the Centre's ongoing activities in understanding drug trends and complements work done in Australia by other groups.

Rebecca McKetin's focus on methamphetamine work, and the commencement of a methamphetamine treatment cohort study funded by the Australian Government Department of Health and Ageing (AGDHA) and the National Health and Medical Research Council (NHMRC) adds to the important investment in this area to date. Dr McKetin is also working with others on psychosis

prone among amphetamine users. Mr James Shearer's work on randomised clinical trials of pharmacotherapies for dealing with problematic psychostimulant use adds to the important work by others in understanding treatment outcomes for methamphetamine users.

Of course, we continue our work on illicit opioid use, and NDARC's staff have been able to contribute to the work of the World Health Organisation (WHO) in having both methadone and buprenorphine listed on the WHO model list of medicines. We have also contributed to international guidelines through work with the WHO directly in Geneva, as a part of our role as a WHO Collaborating Centre. There has been on-going work as mentioned in ATOS by Joanne Ross, work by Shane Darke on morbidity and mortality associated with illicit drug use in conjunction with Dr Sharlene Kaye, and work by Ms Marian Shannahan in conjunction with A/Prof James Bell on the cost and effects of pharmacotherapies for opioid dependence.

Jan Copeland has continued her significant work in the area of cannabis with the Adolescent Cannabis Check-Up (ACCU), an examination of the role of lithium carbonate in cannabis withdrawal, and providing evidence-based answers to questions about cannabis for the Australian National Council on Drugs (ANCD), as well as continuing to provide training and brief interventions for cannabis problems to a range of organisations.

The National Cannabis Strategy development has begun and has offered a significant opportunity for the Centre's staff to contribute to policy development in an area which is of increasing concern nationally. Dr Wendy Swift's complementary work and contribution to evidence-based answers to cannabis questions, as well as her focus on the medical uses of cannabis, and contributions to inquiries about young people and cannabis use broaden the range of areas addressed by NDARC.

Mr Paul Dillon has continued with his work on PIEDs, and is currently developing a pamphlet on 'ice' for the AGDHA. He also continues to provide advice to government departments and others in 2005. An important alteration to Paul Dillon's work is an increasing focus on gaining media attention for a range of projects that the Centre staff are involved in and the products which arise from their activities.

In 2005 we were successful in having two staff appointed to Associate Professor. A/Prof Kate Dolan and Jan Copeland are to be congratulated for the recognition given to them by the University of New South Wales (UNSW) for their contribution to research. A/Prof Dolan's work on hepatitis C, needle stick injury in prisons, the work that she has conducted advising the ANCD on policy options and approaches for prison settings in terms of drug-related problems are all important. She has also continued her work on the Program of International Research and Training (PIRT) and has had significant success in that regard.

We have continued a focus on co-morbidity with one particular study examining co-morbidity and trauma. This is an important study looking at early life events and outcomes for heroin users, using a case controlled methodology.

There are other important projects which are not mentioned here which are covered in the body of this report. Suffice to say the Centre continues to be active and vibrant in terms of its research activity and output. We continue to attract significant research funding from a range of competitive sources. It is anticipated that 2006 will see NDARC continue to grow, bringing in more projects and more opportunities and strengthening even further an already well developed research base.

The research base is one which needs to be maintained and developed. To that end we have a very strong, young staff of research officers. Many of these individuals are enrolled in further studies and some are our important PhD candidates. These individuals contribute very significantly to the work in the Centre.

The role of the administrative staff is also of utmost importance in the efficient running of the Centre, with Mr Ross Beck providing excellent computing support, Ms Eva Congreve maintaining the Centre Data Archive/Library, Ms Josie Kim, Ms Julie Hodge and Ms Carla Santos providing personal assistance, administrative and reception efforts, and Ms Heli Wolk looking after the financial aspects of the Centre's projects.

Overall, 2005 was a very good year for the Centre and we looking forward to 2006 and beyond to continue to solidly ground knowledge and intervention efforts in alcohol and other drug issues in a firm basis of evidence.

RESEARCH DISSEMINATION

NDARC has continued to be an effective centre for the media to obtain comment on a wide range of alcohol and other drug issues. Methamphetamine, alcohol use and abuse as well as ecstasy and related drugs (ERDs) are just some of the issues that have continued to make headlines.

The strategy of making the Centre staff available to the media for comment has continued to ensure excellent access to the media when we have wanted to disseminate results of specific research projects to the general public. As in other years, 2005 saw a number of NDARC projects generate far more media interest than others. The launch of the Methamphetamine Market Project received great exposure at the end of the year, with a press conference being held to announce the findings. A range of other research projects received coverage including one which examined the cocaine markets in Sydney and Melbourne, a rapid assessment of performance and image enhancing drugs (PIEDs) in NSW and the results of the Illicit Drug Reporting System (IDRS).

NDARC's Media Liaison Manager, Paul Dillon, has continued to develop positive relationships with journalists representing a variety of media. He, along with many other members of staff, have conducted many interviews responding to media interest in news stories of the day.

Apart from general media dissemination it remains vital that research findings can be accessed by alcohol and other drug workers and policy makers. *CentreLines* has continued to expand its readership across Australia and internationally and is currently being received by almost 1200 subscribers. Some of the topics examined throughout 2005 included outcome monitoring in alcohol treatment and post traumatic stress disorder among people with heroin dependence.

Our web page has continued to prove to be a valuable tool for a wide audience, including policymakers, alcohol and other drug workers and the general public. It has proven most effective in delivering information on our publications and research projects. Users of the web can find abstracts of nearly all of our technical reports and monographs on-line, as well as full pdf versions of many of these. Once again we used the web to launch important Australian statistical data such as the *Opioid Overdose Death in Australia: 2004 Edition*. Including these publications on the website has ensured that this important data is made available to a potentially large audience quickly and effectively. NDARC's web page is located at ndarc.med.unsw.edu.au

The NDARC Annual Symposium continues to prove extremely popular with workers from around the country travelling to Sydney to attend. There was no one specific theme again this year, following the success of the 2004 program, and the day was broken up into four sections highlighting a range of projects examining such diverse topics as rural injecting, alcohol and pregnancy, 'ready to drinks' (RTDs), and PIEDs. Once again the Annual Symposium acted as an extremely effective tool to disseminate the findings of the Centre to the alcohol and other drugs field.

NDARC is increasingly being asked to provide information and training to a wide variety of workers in the field, as well as members of the public. To assist in coping with this demand the NDARC Education Trust (NET) has been created. NET is a separate arm of NDARC that provides education, resources and training to a variety of audiences. Some of the groups that have benefited from the Trust's services include alcohol and other drug workers, teachers, law enforcement personnel and local government workers.

NDARC resources continue to be popular with both workers in the field, as well as drug users. During 2005, in response to great demand, NDARC produced two easy-to-read pamphlets for young men and women on the topic of alcohol – *Young Men and Alcohol* and *Young Women and Alcohol*. These booklets cover such topics as alcohol and its specific effects on either young men or young women, some of the problems young people may experience when drinking, safety tips and recommended drinking levels. They also address the issue of alcohol poisoning and gives the reader some simple strategies to identify a potentially life threatening situation. Differing in style to previous NDARC publications these are small, leaflet-style booklets that have proven extremely popular with the target audience.

NDARC's expertise in producing quality resources has resulted in another resource production project being funded by the Australian Government Department of Health and Ageing

(AGDHA). Following on from the success of the NEPOD and PIEDs booklets in 2004, NDARC has now been commissioned by the Department to develop a resource aimed at 'ice' users. There will be an evaluation component comprising of a number of simple telephone interviews with a range of stakeholders from across Australia, including NSPs and drug user organisations such as AVIL and NUAA, to investigate whether the resource had successfully reached the target group.

STAFFING

As of 31 December 2005, NDARC staff numbered 59, including support staff, part-time staff, conjoint and honorary appointments. A full list of staff is given in Appendix B.

MANAGEMENT STRUCTURE

NDARC's Board of Management met 4 times during the year with Mr Kevin Rozzoli continuing as Chairman.

The Research Committee, the main administrative body of the Centre, comprises: Professor Richard Mattick (Chair); Associate Professor Maree Teesson; Associate Professor Shane Darke; Associate Professor Jan Copeland; Dr Louisa Degenhardt; Associate Professor Kate Dolan; Dr Rebecca McKetin; Dr Anthony Shakeshaft; Dr Wendy Swift; Dr Joanne Ross; Dr Claudia Sannibale; Dr Lucy Burns; Dr Delyse Hutchinson; Ms Marian Shanahan; Mr Paul Dillon; Ms Heli Wolk; Ms Alys Harvard (representing NDARC staff) and Mr Greg Martin (representing PhD students). The Research Committee meets monthly, immediately before the NDARC Staff Meeting, to maintain regular checks on the progress of projects listed in the Strategic Plan, to regularly review the progress of PhD students, and to assess the Centre's success in enacting its Strategic Plan.

The Staff Meeting continues to be held on the first Thursday in every month and members of staff take turns to chair these meetings. The remaining management structure of the Centre (i.e. Computing Committee, Library Committee, Accommodation Committee, and regularly-meeting steering committees for all major projects) remain as in past years.

FUNDING

Allocation for base-line core funding from the Australian Government Department of Health and Ageing for the financial year 2004/05 was \$1,447,815. This was expended as follows

	2003-2004 \$	2004-2005 \$
SALARIES	1,031,046	1,083,198
OPERATIONAL	322,184	330,769
EQUIPMENT AND FURNITURE	31,092	33,848
TOTAL	1,384,322	1,447,815

Expenditure during 2005 of funds from external grants awarded to NDARC was \$4,212,017. Details of these grants may be found in Appendix C.

NDARC POSTGRADUATE STUDENTS

NDARC offers both PhD and Masters Degrees by research in a wide variety of topic areas, depending on student background and interest. Congratulations to Dr Carolyn Day, Dr Peter Lawrinson and Dr Clare Thetford who were awarded their doctorates in 2005. A further congratulations to Neil Donnelly, Jo Kimber, Katherine Mills and Anna Williamson who have recently submitted their PhDs for assessment. Examples of current PhD projects include:

- Development of a cannabis screening questionnaire
- Mortality associated with pharmacotherapies for opioid dependence
- Alcohol-related emergency department presentations
- Reducing alcohol-related harm in rural communities in NSW
- Treatment seeking for alcohol use disorders
- Agonist pharmacotherapy for psychostimulant dependence
- Prevalence & consequences of child maltreatment among heroin dependent cases and matched controls
- Patterns of suicidal behaviour, comorbidity and drug use among opioid dependent subjects and matched control subjects
- Brief intervention for adolescent cannabis users
- CLIMATE schools alcohol module: Evaluating the efficacy of a computer based preventative alcohol module for schools

The students have a representative on the Research Committee and meet quarterly with the Executive Director to discuss progress and any issues of concern. The students meet monthly to discuss relevant issues and to offer support and encouragement to each other. Some of these groups constitute more formal seminars, where issues are presented by a staff member or other relevant person.

RESEARCH SUPERVISION

The following undergraduate and postgraduate research supervision was undertaken by Centre staff during 2005.

Bashford, J. (2002-present). Development of cannabis screening questionnaire. Full-time PhD in School of Psychology, Massey University, New Zealand. Joint supervision by Dr Copeland and Dr Swift. Expected date of submission December 2006.

Breen, C. (2004-present). Reducing alcohol-related harm in rural communities in NSW. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Shakeshaft and Prof Mattick. Expected date of submission August 2007.

Conroy, E. (2005-present). Prevalence & consequences of child maltreatment among heroin dependent cases and matched controls. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Degenhardt and Dr Ward. Expected date of submission January 2008.

Donnelly, N. Applied statistical methods in pharmacoepidemiology in primary care. Part-time PhD in School of Community Medicine, UNSW. Supervised by Prof Wayne Hall and A/Prof Andrea Mant. Submitted.

Gibson, A. (2005-present). Mortality associated with pharmacotherapies for opioid dependence. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Degenhardt and Dr Burns. Expected date of submission February 2008.

Indig, D. (2005-present). Alcohol-related emergency department presentations. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Copeland and Dr Kate Conigrave. Expected date of submission February 2008.

Kimber, J. Health services evaluation. Part-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Dolan and Prof Mattick. Submitted.

Maloney, E. (2005-present). Patterns of suicidal behaviour, comorbidity and drug use among opioid dependent subjects and matched control subjects. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Degenhardt and A/Prof Darke. Expected date of submission April 2008.

Martin, G. (2002-present). Brief motivational interventions for adolescent cannabis users. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Copeland and Dr Swift. Expected date of submission December 2006.

Mills, K. Post traumatic stress disorder among people with heroin dependence. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by A/Prof Teesson and Dr Ross. Submitted.

Proudfoot, H. (2000-present). Treatment seeking for alcohol use disorders. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by A/Prof Teesson and Dr Ross. Expected date of submission June 2006.

Shearer, J. (2005-present). Agonist pharmacotherapy for psychostimulant dependence. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by A/Prof Darke and Prof Alex Wodak. Expected date of submission March 2008.

Vogl, L. (2003-present). CLIMATE schools alcohol module: Evaluating the efficacy of a computer based preventative alcohol module for schools. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by A/Prof Teesson and Dr Kevin Bird. Expected date of submission December 2006.

Williamson, A. Comorbid cocaine and heroin dependence. Part-time PhD in School of Community Medicine, UNSW. Joint supervision by A/Prof Darke and Dr Ross. Submitted.

Wood, E. (2005-present). Alcohol Action in Rural Communities. Part time Masters of Applied Anthropology, Macquarie University. Joint supervision Dr Shakeshaft and Dr Biddle (Macquarie University). Expected date of submission August 2006.

EPIDEMIOLOGY

TITLE: ALCOHOL AND OTHER DRUG USE IN SIX NON-ENGLISH SPEAKING (NESB) COMMUNITIES

NDARC Staff: Jan Copeland

Other Investigators: Michelle Toms, Kelvin Chambers and Richard Taylor (DAMEC)

Aims: This study will partially replicate the previous series of studies of NESB communities' patterns of alcohol and other drug use conducted by the Drug and Alcohol Multicultural Education Centre (DAMEC) over the last decade. This series of surveys over three years will determine the prevalence and patterns of alcohol and other drug use in Chinese, Vietnamese, Arabic-speaking, Spanish-speaking, Italian and Pacific Islander communities in NSW.

Start Date: March 2004

Expected Completion Date: January 2007

Funding: Alcohol Education and Rehabilitation Fund

TITLE: NATIONAL ILLICIT DRUG INDICATORS PROJECT

NDARC Staff: Louisa Degenhardt and Amanda Roxburgh

Aim: The aims of the surveillance project are to improve the understanding of, and systematically track changes in, heroin and psychostimulant use and related harms.

Design and Method: The project involves identifying and compiling a large number of state and national data sources and their indicators. Examples of relevant data indicators include: information on population patterns of drug use from national surveys, data on deaths due to drug overdoses, morbidity data, treatment data, indicators of drug purity and seizures, crime data and attitudes. It is envisioned that the data indicators will be updated, analysed and published regularly on the NDARC website. This will provide an accessible and more complete picture of trends in use and harms over time.

Benefits: This project will provide a number of benefits, including enhanced dissemination of information on heroin and psychostimulant use and harms, and a greater ability of agencies and policymakers to assess the need for, and outcomes of, policy and other interventions.

Outputs: The outputs of this project include the following publication:

Degenhardt, L., Roxburgh, A. & Barker, B. (2005). Underlying causes of cocaine, amphetamine and opioid related deaths in Australia. *Journal of Clinical Forensic Medicine* 12, 187-195.

Start Date: June 2002

Expected Completion Date: Ongoing

TITLE: HEALTH EVALUATION AND RESEARCH OUTCOMES NETWORK (HERON): SUBSTANCE USE IN PREGNANCY STREAM

NDARC Staff: Lucy Burns and Richard Mattick

Other Investigators: Bruce Armstrong, Richard Taylor and Judy Simpson (School of Public Health, University of Sydney); Louisa Jorm (NSW Health); Anne Krickler (School of Public Health, University of Sydney); Dianne O'Connell (Cancer Council of NSW); Christine Roberts (Centre for Perinatal Health Services Research, University of Sydney); and Elizabeth Sullivan and Anthony Zwi (Public Health and Community Medicine, UNSW)

Aims: To assess the magnitude and outcomes of substance use in pregnancy.

Design and Method: The overall aim of HERON is to use population health datasets to explore issues of clinical or policy significance to guide health policy and service provision. In the perinatal stream of this project HERON will provide information for service planning for pregnant drug users. Using retrospective and prospective methods the maternal and neonatal outcomes of babies born to substance-dependent women will be explored. Included in this will be the relative outcomes for pregnant women receiving methadone and other pharmacotherapies for opioid dependence. The project will link the Methadone Database with the Midwives Data Collection and other relevant databases.

Start Date: January 2004

Expected Completion Date: January 2009

Funding: National Health and Medical Research Council

IDENTIFICATION OF POTENTIAL HARMS

TITLE: AN EMPIRICAL INVESTIGATION OF PSYCHOSIS PRONENESS AMONG AMPHETAMINE USERS: CURRENT AND PREDICTIVE VALIDITY

NDARC Staff: Rebecca McKetin and Maree Teesson

Other Investigators: Sharon Dawe (Griffith University); Ross Young (Queensland University of Technology); and David Kavanagh and John Saunders (University of Queensland)

Aim: This project is being conducted through Griffith University in collaboration with the National Drug and Alcohol Research Centre. The project aims to investigate:

- the relationship between dose, pattern and duration of amphetamine use and emergent psychotic symptoms
- the relative contribution of amphetamine dose, schizotypal features and family history of schizophrenia on the increase of positive psychotic symptoms

- the progression of psychotic symptoms over time, and specifically what is the evidence for the development of sensitisation to amphetamine such that smaller doses precede an increase in psychotic symptoms?

Design and Method: A cohort of 300 methamphetamine users will be recruited from needle and syringe programs (NSPs) in inner Brisbane and Sydney. The cohort will undergo a detailed assessment of psychosis and drug use history at baseline, and will then be followed up at one-month intervals over one year. Follow-up interviews will include assessment of current positive psychotic symptoms and drug use. Psychotic symptoms and diagnostic status will be measured using the Diagnostic Interview for Genetic Studies and the Brief Psychiatric Rating Scale. Premorbid schizotypal features will be assessed using the Premorbid Schizophrenia-spectrum Traits measure and the Oxford-Liverpool Inventory of Feelings and Experiences. Drug use will be assessed for the preceding 30 days using Timeline FollowBack method.

Start Date: June 2005

Expected Completion Date: June 2008

Funding: National Health and Medical Research Council

TITLE: SEXUAL BEHAVIOUR AND DRUG USE AMONG UK BACKPACKERS

NDARC Staff: Jan Copeland, Paul Dillon and Peter Gates

Other Investigators: Mark Bellis and Karen Hughes (John Moores University)

Rationale: The project will provide data that will substantially improve our understanding of the drug use and sexual behaviour of young tourists visiting Australia. Very little is known about the risk-taking behaviour of this group of young people. This data will inform both UK and Australian policy makers in developing targeted interventions aimed at reducing the negative consequences of drug use and sexual behaviour.

Aims: The aims of this project are:

- to determine the extent of drug use and sexual risk taking behaviour by young people holidaying in Australia
- to compare types, frequencies and quantities of substances used by young people while holidaying in Australia with their patterns of use in the UK
- to compare sexual behaviour of young people while holidaying in Australia with their behaviour in the UK
- to compare the risk-taking behaviour of UK holidaymakers visiting dance resorts, such as Ibiza, to those who travel to Australia

Design and Method: Participants will consist of 1000 volunteers recruited from backpacker hostels and venues frequented by international visitors. The criteria for entry to the study will be that participants must be 16-35 years old, a UK resident, travelling in Australia and not on a set package deal with a single hotel who have been in the country for at least two weeks. A self-completion questionnaire will examine demographics, drug use and sexual behaviour both in their country of residence and in Australia. Similar questions have been used successfully in studies examining young UK holidaymakers in Ibiza.

Start Date: May 2005

Expected Completion Date: January 2006

Funding: John Moores University, Liverpool, UK

TITLE: THE IMPACT OF ALCOHOL USE DISORDERS ON FAMILY FUNCTIONING

NDARC Staff: Delyse Hutchinson and Richard Mattick

Aims: The aim of this project is to write a comprehensive literature review detailing the effects of alcohol on family life, for example, on the family budget and spending decisions, effects on children growing up with an alcohol dependent parent, and the involvement of families in treatment. The project also aims to review literature on the role of problematic family functioning in the development of alcohol use in young people.

Design and Method: The process will include:

- literature searches to identify the type and extent of impact
- interviews and liaison with major family and cohort research groups in Australia
- identification of biological and environmental risk factors

Start Date: March 2005

Expected Completion Date: February 2006

Funding: Australian Government Department of Health and Ageing

TITLE: A QUALITATIVE FIELD STUDY OF USERS OF PERFORMANCE AND IMAGE ENHANCING DRUGS (PIEDS)

NDARC Staff: Paul Dillon, Jan Copeland, Briony Larance and Cath Finney-Lamb

Other Investigators: Sophie Pointer, Robert Ali and Victoria Dennington (DASSA) and Jo Taylor and Jackie Ruddock (Streetwise)

Aim: To explore the motivations, behaviours, risks and physical and psychological harms associated with the use of performance and image enhancing drugs (PIEDs).

Design and Method: There are three components to this study:

- a comprehensive review of the national and international literature in respect of the use of PIEDs for reasons other than improved elite sporting performance
- a national qualitative survey of current and past users of PIEDs from three target groups – adolescent males aged 16 years and above; members of the gay community; and employees in the security industry
- a qualitative survey of key informants who have knowledge of PIEDs users in the three target groups

Output: The literature review has been completed and is available as an NDARC Technical Report:

Larance, B., Degenhardt, L., Dillon, P., & Copeland, J. (2005). *Use of performance and image enhancing drugs among men: a review.* Technical Report No. 232. Sydney: National Drug and Alcohol Research Centre.

Start Date: July 2005

Expected Completion Date: January 2007

Funding: Australian Government Department of Health and Ageing

TITLE: CATS (COMORBIDITY AND TRAUMA STUDY). OPIOID DEPENDENCE: CANDIDATE GENES AND GENETIC X ENVIRONMENT INTERACTIONS

NDARC Staff: Richard Mattick, Maree Teesson, Louisa Degenhardt, Elizabeth Conroy, Amy Gibson, Cherie Kam, Elizabeth Maloney and Caitlin McCue

Other Investigators: Elliot Nelson and Michael Lynskey (Washington University); Grant Montgomery, Dixie Stratham and Megan Campbell (Queensland Institute of Medical Research); and Yong Pan and Bill Rawlinson (Prince of Wales Hospital)

Aims: This is a case-control genetic association study of opioid dependence with the inclusion of childhood trauma history as potential confounding variables. The study is being conducted in collaboration with researchers from Washington University, St Louis; the Queensland Institute of Medical Research (QIMR), Brisbane; and the Prince of Wales Hospital, Randwick. NDARC will be involved in the interviewing and collection of blood samples from the subjects, and the genetic analysis of the blood samples will occur at QIMR and Washington University.

The study aims to:

- interview and collect blood samples from 1500 cases and 1500 matched controls
- identify polymorphisms and/or mutations in candidate genes to be typed in cases and controls
- assess retrospective history of childhood trauma to enable its inclusion as a risk modifying variable

- analyse genotype and interview data to test for candidate gene effects on opioid dependence, and the moderation by history of childhood trauma.

Design and Method: A case-control study recruiting 1500 opioid dependent subjects and 1500 controls, matched by age, sex and employment status. Childhood trauma history and psychiatric comorbidities will be measured by a computerised, structured interview. This interview is based on the CIDI, an instrument with established reliability and validity that permits DSM IV and DSM III diagnoses to be made.

The subjects will be recruited over a period of 3 years, with control subjects (non-opioid dependent) being interviewed at NDARC and cases (opioid dependent) primarily being interviewed at participating public and private opioid dependence clinics in the Sydney area.

Start Date: November 2004

Expected Completion Date: December 2008

Funding: National Institute on Drug Abuse

TITLE: AN EXPLORATION OF DRUG INJECTORS' UNDERSTANDING OF HEPATITIS C INFECTION AND THE IMPLICATIONS FOR TRANSMISSION (UNDERSTANDING HEPATITIS C PROJECT)

NDARC Staff: Carolyn Day, Kate Dolan, Emma Black, Clare Thetford and Jo Kimber

Other Investigators: Erica Southgate (Centre for Clinical Epidemiology and Biostatistics, University of Newcastle) and Susan McGuckin (New South Wales Users and AIDS Association)

Aims: The aims of the present study are to measure injecting drug users' (IDU) knowledge of hepatitis C, in particular their knowledge and understanding of issues such as:

- virus transmission
- symptoms and clinical markers, e.g. what it means to have antibodies to hepatitis C and confusion with other forms of hepatitis and other blood-borne viruses
- hygiene issues and blood awareness messages, including the conflation of the various health promotion messages

Design and Method: This cross-sectional study will interview 120 injecting drug users across three sites: inner-city, suburban and regional. Groups will draw on those at-risk, including a sub group of recently released prisoners. A questionnaire will be purposefully designed to examine IDUs' knowledge of hepatitis C and their understanding of having the virus, including that of clinical terms and symptoms. The questionnaire will also examine IDUs' knowledge of hygiene practices. In depth qualitative interviews will also be conducted with 30 IDU to gain a greater insight into their understanding of hepatitis C.

Start Date: June 2003

Expected Completion Date: January 2006

Funding: Australian National Council on Drugs

TITLE: AN EXAMINATION OF CONTENTS OF CONFISCATED INJECTING EQUIPMENT AND NEEDLESTICK INJURIES IN PRISONS

NDARC Staff: Kate Dolan and Sarah Larney

Aims: The aims of this project are:

- to provide evidence, other than self-report data, on the level of syringe sharing that occurs in prison
- to provide evidence, other than self-report data, on the level of syringe cleaning that occurs in prison
- to provide evidence, other than self-report data, of HIV positive and/or hepatitis C positive inmates engaging in syringe sharing in prison

Start Date: April 2005

Expected Completion Date: December 2006

Funding: Unilife Medical Solutions through Unitract Syringe Pty Ltd

HEALTH ECONOMICS

TITLE: A RANDOMISED TRIAL OF EFFECTIVENESS AND COST EFFECTIVENESS OF SUPERVISED VERSUS UNSUPERVISED ADMINISTRATION OF BUPRENORPHINE-NALOXONE FOR HEROIN DEPENDENCE

NDARC Staff: Marian Shanahan and Richard Mattick

Other Investigators: James Bell and Adam Winstock

Aims: To compare the effectiveness and cost effectiveness of combination buprenorphine-naloxone (Suboxone®) in the treatment of heroin dependence under two conditions – supervised and unsupervised.

Design and Method: The study is a randomised control trial, conducted at two sites in Sydney, which recruits subjects on days 3-5, post-inception to buprenorphine. Participants will be randomised to either daily dosing of Suboxone at the clinic or will receive one week's prescription to take home. Subjects in both groups will receive weekly clinical review and monthly medical review. This study will measure retention of treatment at three and six months, heroin use at three months and the costs of treatment to government as well as explore the personal costs of travelling to the clinic for treatment.

Benefits: This study will provide evidence as to the relative effectiveness and cost-effectiveness of supervised versus unsupervised treatment, and will assist in the development of policy around use of Suboxone.

Start Date: November 2003

Expected Completion Date: October 2006

Funding: Reckittbenckiser and NSW Health

DRUG MARKET ANALYSIS AND SUPPLY REDUCTION

TITLE: THE ILLICIT DRUG REPORTING SYSTEM (IDRS)

NDARC Staff: Louisa Degenhardt, Jennifer Stafford, Emma Black and Richard Mattick

Other Investigators: Jeff Ward, Kirsten Buckingham, Phoebe Proudfoot and Randolph Sparks (School of Psychology, Australian National University); Christopher Moon and Jaclyn Newman (Department of Health and Community Services); Jane Fischer, Stuart Kinner and Jake Najman (Queensland Alcohol and Drug Research and Education Centre); Josephine Weekley, Sophie Pointer and Robert Ali (Drug and Alcohol Services Council); Raimondo Bruno and Stuart McLean (University of Tasmania); Craig Fry and Rebecca Jenkinson (Turning Point Alcohol and Drug Centre Inc.); and James Fetherston and Simon Lenton (National Drug Research Institute)

Aims: This project aims:

- to monitor the price, purity, availability and patterns of use of heroin, methamphetamine, cocaine and cannabis
- to identify emerging trends in illicit drug markets in Australia that require further investigation

Design and Method: The IDRS analyses three main sources of information to document drug trends:

- a quantitative survey of injecting drug users (IDU)
- a semi-structured interview with key informants (KIS), who are professionals working in the illicit drug field, and have regular contact with and/or specialised knowledge of illicit drug users, dealers or manufacture
- a collation of existing indicator data on drug-related issues

Data from these three sources are triangulated against each other to determine the convergent validity of trends detected. The data sources complement each other in the nature of the information they provide. Data from each year's IDRS studies are compared to earlier findings to determine changes in drug trends over time. The strengths of the IDRS are the ability to compare data across jurisdictions as well as over time.

Progress: The IDRS is an ongoing project that is conducted annually in all Australian jurisdictions. In 2005, 943 regular IDU were interviewed across Australia, providing information on their use patterns and drug markets. Two hundred and sixty three KIS provided information on the drug users they had contact with.

Output: The annual National Drug Trends Conference was held in Melbourne in November, in conjunction with the 2005 APSAD Conference, where a summary of jurisdictional drug trends findings, as well as a national overview, was presented to relevant health professionals, law enforcement, and policy makers. Throughout the year, quarterly bulletins, outlining current drug trends or issues of interest were also disseminated. These bulletins are available on the NDARC website to ensure broader dissemination. More detailed findings from each jurisdiction, and a national overview, are documented in comprehensive reports.

Black, E. & Degenhardt, L. (2005). Self-reported substance-related aggressive behaviour in the IDU sample, 2004. *Drug Trends Bulletin June*. Sydney: National Drug and Alcohol Research Centre.

Black, E., Degenhardt, L. & Stafford, J. (2005). *NSW Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 211. Sydney: National Drug and Alcohol Research Centre.

Breen, C., Roxburgh, A. & Degenhardt, L. (2005). Gender differences among regular injecting drug users in Sydney, Australia, 1996-2003. *Drug and Alcohol Review* 24, 353-358.

Bruno, R. (2005). *Tasmania Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 215. Sydney: National Drug and Alcohol Research Centre.

Buckingham, K., Ward, J., Sparks, R., & Proudfoot, P. (2005). *ACT Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 217. Sydney: National Drug and Alcohol Research Centre.

Fetherston, J. & Lenton, S. (2005). *WA Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 216. Sydney: National Drug and Alcohol Research Centre.

Jenkinson, R. & O'Keefe, B. (2005). *Vic Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 212. Sydney: National Drug and Alcohol Research Centre.

Kinner, S. & Fischer, J. (2005). *Queensland Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 214. Sydney: National Drug and Alcohol Research Centre.

Kinner, S., Fowler, G., Fischer, J., Stafford, J., & Degenhardt, L. (2005). Monitoring the ecstasy market in Australia – challenges and successes. *Party Drug Trends Bulletin April*. Sydney: National Drug and Alcohol Research Centre.

Moon, C. (2005). *NT Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 218. Sydney: National Drug and Alcohol Research Centre.

Roxburgh, A., Degenhardt, L. & Breen, C. (2005). Drug use and risk behaviours among injecting drug users: A comparison between sex workers and non-sex workers in Sydney, Australia. *Harm Reduction Journal* 2:7.

Stafford, J., Degenhardt, L. & Agaliotis, M. (2005). Examining injecting, sexual and driving risk behaviours among regular ecstasy users in Australia by gender and age. *Party Drug Trends Bulletin June*. Sydney: National Drug and Alcohol Research Centre.

Stafford, J., Degenhardt, L., Black, E., Bruno, R., Buckingham, K., Fetherston, J., Jenkinson, R., Kinner, S., Moon, C., & Weekley, J. (2005). *Australian Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Monograph No. 55. Sydney: National Drug and Alcohol Research Centre.

Weekley, J., Pointer, S. & Ali, R. (2005). *SA Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 213. Sydney: National Drug and Alcohol Research Centre.

Start Date: January 1997

Expected Completion Date: Ongoing

Funding: National Drug Law Enforcement Research Fund and the Australian Government Department of Health and Ageing

TITLE: THE PARTY DRUGS INITIATIVE (PDI)

NDARC Staff: Louisa Degenhardt, Jennifer Stafford, Maria Agaliotis and Richard Mattick

Other Investigators: Jeff Ward, Phoebe Proudfoot, Kirsten Buckingham and Randolph Sparks (Australian National University); Craig Fry and Jennifer Johnston (Turning Point Alcohol & Drug Centre); Raimondo Bruno, Allison Matthews and Stuart McLean (University of Tasmania); Josephine Weekley, Sophie Pointer and Robert Ali, (Drug & Alcohol Services Council); Francoise Chanteloup and Simon Lenton (National Drug Research Institute); Christopher Moon and Jaclyn Newman (Northern Territory Department of Health and Community Services); and Jane Fischer, Stuart Kinner and Jake Najman (Queensland Alcohol Drug Research Education Centre)

Aims: This project aims:

- to describe the characteristics of a sample of current regular ecstasy users interviewed in each capital city of Australia
- to examine the patterns of ecstasy and other drug use of these samples
- to document the current price, purity and availability of ecstasy and related drugs (ERDs) across Australia

- to examine participant's perceptions of the incidence and nature of ecstasy-related harm, including physical, psychological, financial, occupational, social and legal harms
- to identify emerging trends in the ERDs market that may require further investigation

Design and Method: The Party Drugs Initiative (PDI) is coordinated by NDARC, and is conducted by different research institutions in each Australian state and territory.

The PDI uses a similar methodology to the Illicit Drug Reporting System (IDRS). Regular ecstasy users are interviewed as they were identified as a group of ERDs users that are able to provide the required information on patterns of ERDs use, the current availability, price and purity of ERDs and perceived drug-related health issues associated with ERDs use. A semi-structured survey of experts in the field of ERDs (e.g. party promoters, treatment providers, law enforcement personnel) is also conducted and indicator data (e.g. purity of drug seizures and overdose rates) is analysed. These data sources are examined together to identify convergent trends in ERDs use and markets

Progress: The PDI was conducted successfully in every state and territory in 2005. Over eight hundred regular ecstasy users were interviewed on their drug use patterns and provided information on drug markets. One hundred and fifty three key informants provided information on ERDs users they had contact with. Indicator data including custom seizures, purity analysis and treatment data was examined.

Output: The results of the 2005 PDI were presented as part of the National Drug Trends Conference which was held in Melbourne in November in conjunction with the 2005 APSAD Conference. The December 2005 PDI Bulletin presents a brief overview of the 2005 results.

Stafford, J., Degenhardt, L., Agaliotis, M., Chanteloup, F., Fischer, J., Matthews, A., Newman, J., Proudfoot, P., Stooze, M., & Weekley, J. (2005) *Australian Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Monograph No. 57. Sydney: National Drug and Alcohol Research Centre.

Chanteloup, F. & Lenton, S. (2005). *WA Trends in Ecstasy and Drug Related Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Technical Report No. 220. Sydney: National Drug and Alcohol Research Centre.

Degenhardt, L., Agaliotis, M., White, B., & Stafford, J. (2005). *NSW Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Technical Report No. 221. Sydney: National Drug and Alcohol Research Centre.

Newman, J. & Moon, C. (2005). *NT Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drug Initiative (PDI)*. Technical Report No. 222. Sydney: National Drug and Alcohol Research Centre.

Fischer, J. & Kinner, S. (2005). *Queensland Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Technical Report No. 223. Sydney: National Drug and Alcohol Research Centre.

Weekley, J., Pointer, S. & Ali, R. (2005). *SA Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Technical Report No. 224. Sydney: National Drug and Alcohol Research Centre.

Matthews, A. & Bruno, R. (2005). *Tasmanian Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Technical Report No. 225. Sydney: National Drug and Alcohol Research Centre.

Stoové, M., Laslett, M-A. & Barratt, M. (2005). *Victorian Trends in Ecstasy and Related Drug Markets: Findings from the Party Drugs Initiative (PDI)*. Technical Report No. 226. Sydney: National Drug and Alcohol Research Centre.

Proudfoot, P., Ward, J., Buckingham, K., & Sparks, R. (2005). *ACT Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Technical Report No. 227. Sydney: National Drug and Alcohol Research Centre.

Degenhardt, L., Stafford, J., Kinner, S., Johnston, J., Fry, C., Bruno, R., & Agaliotis, M. (2005). *Reflections on a two-year national pilot study of the Party Drugs Initiative (PDI)*. Technical Report No. 236. Sydney: National Drug and Alcohol Research Centre.

Start Date: January 2003

Expected Completion Date: Ongoing

Funding: National Drug Law Enforcement Research Fund

TITLE: THE POLICING IMPLICATIONS OF PETROL SNIFFING AND OTHER INHALANT MISUSE IN ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES' COMMUNITIES

NDARC Staff: Catherine Spooner

Other Investigators: Dennis Gray (National Drug Research Institute) (Chief Investigator); Peter d'Abbs (James Cook University); and Anne Mosey and Gill Shaw (independent consultants)

Aims: To conduct a project that will enhance the understanding of the law enforcement sector concerning the extent and nature of petrol sniffing and other inhalant misuse by Aboriginal and Torres Strait Islander Peoples predominantly in rural and remote, but also urban communities. The project will also seek to define best practice in addressing those issues.

Stage 1 Literature review and site visit planning

Stage 2 Development of data collection instruments

Stage 3 Site visits

Stage 4 Collation and analysis of regional reports and preparation of a draft report and recommendations

Stage 5 Negotiation of draft recommendations with key stakeholders and preparation of a final report.

Benefits: This project will enhance the understanding of the law enforcement sector of the extent and nature of petrol sniffing and other inhalant misuse by Aboriginal and Torres Strait Islander Peoples.

Start Date: January 2003

Expected Completion Date: January 2006

Funding: National Drug Law Enforcement Research Fund

PREVENTION AND EARLY INTERVENTIONS

TITLE: YOUNG PEOPLE AND ALCOHOL STUDY: TASTE PERCEPTION, ATTITUDES AND EXPERIENCES

NDARC Staff: Jan Copeland, Paul Dillon and Peter Gates

Other Investigators: Richard Stevenson (Macquarie University)

Rationale: This study was designed in response to the increasing proportion of under-age drinkers using pre-mixed spirits reported by the National Alcohol Campaign, among others. Despite the level of media and policy attention devoted to the question of the effects of newer alcohol products there is no scientific evidence of their comparative palatability across age groups and gender and the potential impact on age of initiation, and patterns of alcohol use.

Aim: The study hopes to determine:

- the palatability of a range of alcoholic and non-alcoholic beverages among teenagers and young adults
- whether this pattern changes with age
- the extent to which packaging affects these palatability ratings

Design and Method: This study involves a questionnaire relating to the participant's experience with alcohol, and to a lesser extent tobacco. Following this, each participant will taste (not swallow) several alcoholic and non-alcoholic beverages and rate their liking. This will be done in a random fashion, once with the participant blind to the packaging, and once aware of the packaging. Seventy participants from each of four age ranges (12-14, 15-17, 18-23, 24-30 years) will be recruited; half male, half female.

Start Date: April 2004

Expected Completion Date: January 2006

Funding: Australian Government Department of Health and Ageing

TITLE: REDUCING ALCOHOL-RELATED HARM IN RURAL COMMUNITIES: A RANDOMISED CONTROLLED TRIAL

NDARC Staff: Anthony Shakeshaft, Richard Mattick, Courtney Breen, Elissa Wood and Paul Dillon

Other Investigators: Rob Sanson-Fisher and Catherine D'Este (University of Newcastle); Ann Roche (NCETA); and Chris Doran (Centre for Burden of Disease and Cost-Effectiveness)

Aim: The aim of this five-year project is to conduct a cost-benefit analysis of a community action intervention strategy to reduce alcohol-related harm in rural communities in NSW. It represents a comprehensive community action approach, building on an existing minimalist community action project in at least three ways: utilisation of a greater number of intervention strategies; adoption of a randomised controlled study design as the most rigorous methodology available; and the conduct of a cost-benefit economic analysis.

Start Date: January 2002

Expected Completion Date: August 2006

Funding: Australian Government Department of Health and Ageing

TITLE: THE DEVELOPMENT AND EVALUATION OF THE EFFECTIVENESS OF A UNIVERSAL, COMPUTERISED SCHOOL-BASED PREVENTION PROGRAM FOR ALCOHOL AND RELATED HARMS: CLIMATE SCHOOLS ALCOHOL

NDARC Staff: Laura Vogl, Maree Teesson and Paul Dillon

Other Investigators: Helen van Vliet, Gavin Andrews, Mark Dadds and John McCormick (UNSW)

Aims: To develop and evaluate a computer delivered preventative alcohol education program (CLIMATE Schools: Alcohol) for adolescents in Year 8 of high school.

Design and Method: CLIMATE Schools: Alcohol module has been developed in liaison with teachers, health professionals, students and police to ensure it provides evidence-based prevention and meets the objectives set out in the NSW Personal Development, Health and Physical Development (PDHPE) curriculum. The effectiveness and feasibility of this module is currently being assessed in a cluster randomised controlled trial involving 16 schools and over 1500 students. To date, the effectiveness of this intervention has been measured both immediately, 6 and 12 month post intervention. The final 2 year follow-up results will be collected mid 2006.

Start Date: March 2003

Expected Completion Date: December 2006

Funding: National Drug and Alcohol Research Centre

TREATMENT AND OTHER INTERVENTIONS**TITLE:** INCORPORATING HARM REDUCTION MEASURES INTO ABSTINENCE-BASED THERAPEUTIC COMMUNITIES

NDARC Staff: Kate Dolan, Kate Corcoran, Sarah Larney and Alex Wodak

Background: We Help Ourselves (WHOS) is a drug treatment agency established in 1972 in New South Wales, Australia. The objective of WHOS is to foster personal growth within a drug free therapeutic program, while at the same time providing harm reduction services for those who are unable or unwilling to begin a drug free lifestyle. The aim of the program was to encourage abstinence in drug users. This model of rural-based, abstinence-focused programs remained in place until the late 1980s when an increase in HIV among injecting drug users prompted a move to urban-based programs in which abstinence was an aim, but harm reduction education was also offered. Harm reduction services offered by WHOS therapeutic communities (TCs) include HIV and infectious diseases education for all TC clients, a needle and syringe program and an HIV/AIDS outreach worker for former clients who may or may not be drug-free.

Aims: The aim of the proposed project is to document the process by which WHOS moved from a philosophy of abstinence to one in which abstinence is one option available to drug users who wish to reduce the harms associated with their drug use. A report describing the experience of WHOS will be produced. Based on this report, a manual will be prepared for use in the training of drug treatment workers in Asia.

Design and Method: Key stakeholders from WHOS will be interviewed.

Start Date: October 2005

Expected Completion Date: January 2006

Funding: World Health Organisation

TITLE: METHAMPHETAMINE TREATMENT COHORT STUDY

NDARC Staff: Richard Mattick, Rebecca McKetin, Joanne Ross and Erin Kelly

Other Investigators: Robert Ali (DASSA and the University of Adelaide) and Dan Lubman (University of Melbourne)

Associates: Jake Najman (QADREC); Amanda Baker (University of Newcastle); Nicole Lee (Turning Point Alcohol and Drug Centre); Sharon Dawe (Griffith University); and Matthew Law (National Centre for HIV Epidemiology and Clinical Research, UNSW)

Aim: To conduct the first Australian treatment cohort study of dependent methamphetamine users, examining:

- rates of psychiatric disorders (Major Depression, Panic Disorder, Agoraphobia, Social Phobia, and Generalised and Anxiety Disorder) and psychotic symptoms among people seeking treatment for methamphetamine dependence
- the characteristics of those entering treatment for methamphetamine dependence, in terms of abstinence rates, criminal involvement, general health functioning, and contact with health services and the criminal justice system
- differences between the characteristics of those entering treatment and dependent methamphetamine users not seeking treatment in terms of their level of drug use, psychiatric morbidity, criminal involvement and general health functioning
- factors predictive of abstinence, psychiatric morbidity, criminal involvement and contact with the health and criminal justice system

Design and Method: The study will consist of a longitudinal follow-up of 400 methamphetamine users: 300 people receiving treatment for methamphetamine use and a comparison group of 100 out-of-treatment dependent methamphetamine users. Participants will be interviewed at baseline, 3 months and 12 months. Treatment modalities included will be counselling, residential rehabilitation and withdrawal management. The main predictor variable in the study will be treatment exposure (treatment retention, treatment completion and dose of treatment measured in days of treatment exposure/counselling sessions). The main outcome measure will be level of methamphetamine use at 3-month and 12-month follow-up (days of abstinence, diagnosis of methamphetamine dependence, severity of methamphetamine dependence). Other data collected will include rates of psychiatric diagnoses (DSM-IV diagnosis of Major Depression, Panic Disorder, Agoraphobia, Social Phobia, and Generalized and Anxiety Disorder); symptoms of psychosis; treatment experience; criminal involvement; HIV risk-taking; and contact with the health and criminal justice system.

Start Date: June 2005

Expected Completion Date: June 2009

Funding: National Health and Medical Research Council

TITLE: METHAMPHETAMINE TREATMENT COHORT STUDY: ESTABLISHMENT OF A MULTI-SITE STUDY

NDARC Staff: Rebecca McKetin, Joanne Ross and Richard Mattick

Other Investigators: Jake Najman and Shelley Cogger (QADREC)

Rationale: Australia has a substantial and growing population of dependent methamphetamine users: methamphetamine accounts for 96% of psychostimulant treatment episodes in Australia, around one-third of all injecting drug use, and is the leading cause of psychosis due to substance use. Currently there is a dearth of information on the effectiveness of treatment provided to this population within a community setting. NDARC has been funded by the National Health and Medical Research Council (NHMRC) to establish a Methamphetamine Treatment Cohort Study in Sydney to examine:

- treatment outcome at 3 months and 12 months post treatment
- comorbid mental health disorders among methamphetamine users in treatment
- the impact of comorbid mental health disorders on treatment outcome and vice versa

Design and Method: The current study will expand the Sydney Methamphetamine Treatment Cohort Study to include a second recruitment site in Brisbane. An additional 100 treatment participants will be recruited from this second site using the same methodology employed under the Methamphetamine Treatment Cohort Study. This arm of the study will be undertaken by the Queensland Alcohol and Drug Research and Education Centre.

Start Date: June 2005

Expected Completion Date: June 2008

Funding: Australian Government Department of Health and Ageing

TITLE: TWO CONCURRENT RANDOMISED PLACEBO CONTROLLED TRIALS OF MODAFINIL IN METHAMPHETAMINE AND COCAINE DEPENDENCE

NDARC Staff: Richard Mattick, James Shearer, Rebecca McKetin and Shane Darke

Other Investigators: Alex Wodak (St Vincent's Hospital Alcohol and Drug Services); Ingrid van Beek (Kirketon Road Centre); and John Lewis (Pacific Laboratory Medicine Services)

Aims: Modafinil is a novel wake promoting agent which may have potential in the treatment of psychostimulant dependence withdrawal symptoms including low mood, excessive sleepiness, poor concentration and drug craving, thereby protecting against relapse. Modafinil is well tolerated with few major side effects and appears to have a low abuse liability. The aim of the two studies is to evaluate the safety and efficacy of modafinil (200 mg/day over 10 weeks) plus a brief cognitive behavioural therapy (CBT) program for psychostimulant (cocaine and methamphetamine) dependence.

Design and Method: Two concurrent randomised placebo controlled trials will be conducted at the Kirketon Road Centre, a primary health care centre, and Rankin Court, an alcohol and drug treatment centre, both located in inner city Sydney. Recruitment targets are 60 for the amphetamine study and 30 in the cocaine study. Subjects in both studies will be randomised equally to two groups. The experimental groups will receive a modafinil dose of 200 mg/day under a weekly script for 10 weeks. The control group will receive placebo under equivalent conditions. Both groups are offered a four-session manualised brief CBT intervention designed for amphetamine users. Treatment efficacy will be primarily evaluated by a between group comparison of the proportion of urine samples negative for psychostimulant over 10 weeks. Safety will be

evaluated by between group comparison of side effects and adverse events. Self-reported stimulant use, other drug use and retention will be compared between groups. Improvements in health and psychosocial harms associated with regular stimulant use and patterns of use will also be compared.

Benefits: The project is an original and rigorous contribution to the development of effective treatments in an area where few treatments currently exist and treatment need is great and growing. Results will be of wide national and international interest to service providers, research, policy makers and stimulant users.

Start Date: July 2005

Expected Completion Date: July 2007

Funding: Australian Government Department of Health and Ageing

TITLE: DEVELOPMENT AND PILOT TESTING OF A HEALTHY LIFESTYLE INTERVENTION PACKAGE FOR DELIVERY BY URBAN ABORIGINAL COMMUNITY HEALTH CENTRES

NDARC Staff: Dr Anthony Shakeshaft

Other Investigators: Lisa Jackson-Pulver, Anton Clifford and Dennis McDermott (The Muru Marri Indigenous Health Unit, SPHCM), and Rowena Ivers and Robyn Richmond (UNSW)

Aims: The objective of this project is to evaluate existing resources aimed at modifying lifestyle factors associated with increased health risk, incorporate those with best evidence for their effectiveness into a new package, and to pilot test its use among aboriginal clinical health staff.

Start Date: January 2004

Expected Completion Date: June 2006

Funding: Alcohol Education and Rehabilitation Foundation

TITLE: THE AUSTRALIAN TREATMENT OUTCOME STUDY (ATOS): HEROIN

NDARC Staff: Maree Teesson, Shane Darke, Joanne Ross, Katherine Mills, Anna Williamson, Alys Havard and Marian Shanahan

Other Investigators: Michael Lynskey (University of Washington); Robert Ali, Richard Cooke and Danielle Bament (Drug & Alcohol Services Council); and Alison Ritter, Tracey Holt and Amy Swan (Turning Point Alcohol & Drug Centre)

Aims: This project aims:

- to describe the characteristics of people entering treatment for heroin dependence
- to describe the treatment received
- to examine treatment outcomes (drug use, criminal behaviour and mental health) and costs at 3 and 12 months after the commencement of treatment. In NSW, longer term outcomes (at 24 and 36 months) will also be examined

Design and Method: Heroin users have been recruited on entry to treatment through methadone/ buprenorphine maintenance, detoxification and residential rehabilitation services. The study is being conducted in Sydney (n=535), Adelaide (n=100) and Melbourne (n=110). In NSW an additional 80 heroin users not currently in treatment have been recruited. Using a structured questionnaire, participants were interviewed on entry into treatment for heroin dependence and followed up again at 3 and 12 months post treatment entry. In NSW follow-up has been extended to 24 and 36 months.

A major strength of ATOS is the richness of data being collected on participants at baseline and follow-up. The measures used examine drug use, criminality, treatment history, injection related risk taking behaviour, overdose, general health, health service utilisation, and psychopathology (Major Depression, Post Traumatic Stress Disorder, Anti Social Personality Disorder and Borderline Personality Disorder). Extended follow up of the NSW cohort will provide valuable data on the natural histories of heroin users.

Progress: The three, 12, 24 and 36 month follow-up interviews have been completed. Follow-up rates were 89%, 80%, 76% and 70% respectively.

Benefits: ATOS is the first large-scale longitudinal study of treatment outcome for heroin dependence to be conducted in Australia. The longitudinal nature of the study will enable participant characteristics to be determined at baseline, and their progress to be assessed across time. The study will also provide a description of the treatment being received and a measure of the health costs generated by the cohort, including prescribed medications and the use of medical and other health services. Extended follow up of the NSW cohort will provide the first Australian data on the longer term natural histories of heroin users.

Outputs:

Darke, S., Ross, J. & Teesson, M. (2005). Twelve-month outcomes for heroin dependence treatments: Does route of administration matter? *Drug and Alcohol Review* 24, 165-172.

Darke, S., Ross, J., Teesson, M., Ali, R., Cooke, R., Ritter, A., & Lynskey, M. (2005). Factors associated with 12 months continuous heroin abstinence: Findings from the Australian Treatment Outcome Study (ATOS). *Journal of Substance Abuse Treatment* 28, 255-263.

Darke, S., Williamson, A., Ross, J., & Teesson, M. (2005). Attempted suicide among heroin users: 12-month outcomes from the Australian Treatment Outcome Study (ATOS). *Drug and Alcohol Dependence* 78, 177-186.

Darke, S., Williamson, A., Ross, J., & Teesson, M. (2005). Non-fatal heroin overdose, treatment exposure and client characteristics: Findings from the Australian Treatment Outcome Study (ATOS). *Drug and Alcohol Review* 24, 425-432.

Mills, K.L., Lynskey, M., Teesson, M., Ross, J., & Darke, S. (2005). Post-traumatic stress disorder among people with heroin dependence in the Australian Treatment Outcome Study (ATOS): Prevalence and correlates. *Drug and Alcohol Dependence* 77, 243-249.

Ross, J., Teesson, M., Darke, S., Lynskey, M., Ali, R., Ritter, A., & Cooke, R. (2005). The characteristics of heroin users entering treatment: Findings from the Australian Treatment Outcome Study (ATOS). *Drug and Alcohol Review* 24, 411-418.

Teesson, M., Havard, A., Fairbairn, S., Ross, J., Lynskey, M., & Darke, S. (2005). Depression among entrants to treatment for heroin dependence in the Australian Treatment Outcome Study (ATOS): Prevalence, correlates and treatment seeking. *Drug and Alcohol Dependence* 78, 309-315.

Start Date: January 2004

Expected Completion Date: June 2006

Funding: National Health and Medical Research Council, Australian Government Department of Health and Ageing, and Department of Human Services Victoria

TITLE: NATIONAL CORRESPONDENCE PROGRAM TO REDUCE ALCOHOL CONSUMPTION AND CO-OCCURRING DISORDERS (DEPRESSION/ANXIETY): A RANDOMISED CONTROLLED TRIAL

NDARC Staff: Richard Mattick

Other investigators: Thiagarajan Sitharthan (Western Sydney Area Drug and Alcohol Services)

Aims: The aims of the project are to:

- conduct a randomised controlled trial to evaluate the impact of correspondence treatments (treatments by mail) to problem drinkers who have a co-occurring mental disorder, namely, anxiety and depression
- identify the predictors of favourable treatment outcomes

Start Date: March 2005

Expected Completion Date: August 2006

Funding: Alcohol Education and Rehabilitation Foundation

TITLE: THE ADOLESCENT CANNABIS CHECK-UP: A RANDOMISED CONTROLLED TRIAL

NDARC Staff: Jan Copeland and Greg Martin

Other Investigators: Steve Allsop (NDRI) and Robert Ali (DASSA)

Aims: This study was designed to provide a robust test of the effectiveness of a brief motivational and cognitive-behavioural intervention in reducing problematic cannabis use and cannabis-related problems among young people (14 – 19 years). It builds on a recently completed feasibility study which returned promising findings. The intervention has been designed to be appropriate for both treatment seeking and non-treatment seeking individuals.

Design and Method: A multi-site randomised controlled trial. Three sites (Sydney, Adelaide and Perth) will each recruit 60 young people who will be randomly allocated to receive the two session intervention immediately or to a delayed treatment control group. Follow-up interviews will be conducted 3 months and 6 months later.

Benefits: Although cannabis is the most widely used illicit drug among young people, there has been little research into treatment options specifically for this population. This study will provide evidence as to whether this brief intervention is effective and acceptable to young people.

Start Date: July 2003

Expected Completion Date: July 2006

Funding: National Health and Medical Research Council

TITLE: MAGISTRATES' EARLY REFERRAL INTO TREATMENT (MERIT) AFTERCARE PROJECT: PHASE 1

NDARC Staff: Evelyn Harvey, Anthony Shakeshaft, Kate Hetherington, Claudia Sannibale and Richard Mattick

Aims: In broadening the scope of previous studies that have focused on drug courts and updating the literature on aftercare strategies, this methodological review aims to investigate the current strength of evidence for the efficacy of diversion and aftercare practices for criminal offenders, and identify elements of best practice.

Design and Method: A critical methodological review of existing literature.

Start Date: June 2005

Expected Completion Date: March 2006

Funding: Crime Prevention Division of the NSW Attorney General's Department

TITLE: A PILOT TRIAL INVESTIGATING THE EFFICACY OF LITHIUM CARBONATE IN THE MANAGEMENT OF CANNABIS WITHDRAWAL

NDARC Staff: Jan Copeland

Other Investigators: Adam Winstock (South West Sydney Area Health Service) and Mark Montebello (The Langton Centre, South Eastern Sydney Area Health Service)

Aims: This study aims to assess the effect of lithium carbonate on the symptomatology and course of cannabis withdrawal in treatment-seeking adults. The putative mechanism of action of lithium carbonate will be assessed using serum monitoring of oxytocin levels in conjunction with participants self-reported experiences over the course of their cannabis withdrawal.

Design and Method: Participants will be recruited from inpatient withdrawal management services in Sydney into an open label study.

Benefits: There are no accepted pharmacotherapies for the management of cannabis withdrawal and the addition of a readily available drug such as lithium carbonate would be a useful clinical tool should it prove safe and effective in a series of clinical trials.

Start Date: October 2004

Expected Completion Date: December 2006

Funding: NSW Health

TITLE: THE ROLE OF COMMERCIAL DRUG INJECTING ROOMS (CDIRS) (SHOOTING GALLERIES) IN THE REGULATION OF PUBLIC INJECTING AND AMENITY IN KINGS CROSS AND THEIR IMPACT ON THE EVALUATION OF THE MEDICALLY SUPERVISED INJECTING CENTRE (MSIC)

NDARC Staff: Jo Kimber and Kate Dolan

Other Investigators: Erica Southgate, Linette Collins, Michael Lynskey and Margaret MacDonald

Aims: To investigate the use of CDIRs in Kings Cross and their role in the regulation of public injecting and amenity in Kings Cross before and after the opening of the MSIC. The study aims to collect current information on the use and characteristics of CDIRs.

Design and Method: Using a pre-post design, the study will use quantitative and qualitative methods including IDU questionnaires and in-depth interviews, key informant interviews, syringe counts and police operations data.

Start Date: February 2002

Expected Completion Date: January 2006

Funding: National Drug and Alcohol Research Centre

TITLE: POST TRAUMATIC STRESS DISORDER (PTSD) AMONG AUSTRALIAN HEROIN USERS

NDARC Staff: Katherine Mills, Maree Teesson, Joanne Ross, Shane Darke, Anna Williamson, Alys Havard and Marian Shanahan

Aims: This study aims:

- to describe the prevalence and correlates of post traumatic stress disorder (PTSD) among treatment seeking heroin users and a sample of heroin users not in treatment
- to examine the impact of PTSD on treatment outcomes for heroin dependence (i.e., substance use, physical and mental health, health service utilisation) 3, 12 and 24 months post treatment entrance
- to determine the health service use costs associated with PTSD

Design and Method: The present study utilizes data collected for the NSW component of the Australian Treatment Outcome Study (ATOS). Five hundred and thirty five heroin users were recruited on entry to treatment through methadone/buprenorphine maintenance, detoxification and residential rehabilitation services. An additional 80 heroin users not currently in treatment were also recruited. Using a structured questionnaire, participants were interviewed on entry into treatment for heroin dependence and followed up again at 3, 12 and 24 months post treatment entry.

Progress: The three, 12, 24 and 36 month follow-up interviews have been completed. Follow-up rates were 89%, 80%, 76% and 70% respectively.

Benefits: ATOS allows for a detailed examination of PTSD among heroin users. Although a number of studies have examined psychopathology among heroin users, few have focused on PTSD. Indeed, ATOS is the first study to examine PTSD among heroin users across a range of treatment modalities, using comprehensive measures of comorbidity. Also, little is known regarding the short and longer term impact of PTSD on treatment outcomes for heroin dependence, or the impact of treatment for heroin dependence on PTSD. This knowledge is of clinical importance as it will assist in the planning and implementation of treatment for heroin users with this dual diagnosis.

Start Date: January 2001

Expected Completion Date: January 2006

Funding: National Health and Medical Research Council, Australian Government Department of Health and Ageing, and Department of Human Services Victoria

TITLE: COCAINE USE AMONG HEROIN USERS IN NSW: PREVALENCE AND RELATED HARMS

NDARC Staff: Anna Williamson, Shane Darke, Joanne Ross, Maree Teesson, Katherine Mills, and Alys Havard

Aims: The project aims:

- to describe the prevalence and correlates of cocaine use among treatment seeking heroin users in NSW and a sample of heroin users not in treatment
- to examine the impact of cocaine use on treatment outcomes for heroin dependence (i.e. substance use, crime, physical and mental health) 3, 12 and 24 months post treatment entry
- to examine the impact of treatment for heroin dependence on cocaine use

Design and Method: The present study utilises data collected for the NSW component of the Australian Treatment Outcome Study (ATOS). Five hundred and thirty five heroin users were recruited on entry to treatment through methadone/buprenorphine maintenance, detoxification and residential rehabilitation services. An additional 80 heroin users not currently in treatment were also recruited. Using a structured questionnaire, participants were interviewed on entry to treatment for heroin dependence and again at 3, 12 and 24 months post treatment entry.

Progress: The three, 12, 24 and 36 month follow-up interviews have been completed. Follow-up rates were 89%, 80%, 76% and 70% respectively.

Benefits: ATOS allows for a detailed examination of cocaine use among heroin users and its effect on treatment outcome. No Australian studies have yet examined the relatively recent phenomena of large-scale cocaine use amongst heroin users. Further, ATOS is the first study to monitor the effects of concomitant heroin and cocaine use on outcomes across a range of treatment modalities. This knowledge is of clinical importance and will assist in the planning and implementation of treatment for heroin users who also use cocaine.

Start Date: January 2003

Expected Completion Date: January 2006

Funding: National Health and Medical Research Council, Australian Government Department of Health and Ageing, and Department of Human Services Victoria

TITLE: THE DEVELOPMENT OF A STANDARDISED TREATMENT MONITORING TOOL FOR USE BY RESEARCHERS AND CLINICIANS: THE AUSTRALIAN ALCOHOL TREATMENT OUTCOME MEASURE (AATOM)

NDARC Staff: Jan Copeland, Peter Gates and Melanie Simpson

Other Investigators: Alison Ritter (Turning Point Alcohol and Drug Centre) and Larry Pierce (NADA)

Aims: The project aims to develop a standardised instrument (questionnaire) designed to measure outcomes for individuals in treatment for alcohol use in Australia. A further aim of the project will be to assess the feasibility of implementing this instrument into routine clinical practice in Australia.

Design and Method: The Alcohol Treatment Outcome Measure (AATOM) will comprise of two versions: one intended for use amongst clinicians for the purpose of routine treatment outcome monitoring for service development or funding requirements (AATOM-C) and one for use amongst researchers (AATOM-R). This study will also examine the psychometric properties of the AATOM-R including biological validation. The feasibility of conducting routine, ongoing outcome monitoring with the AATOM-C will be assessed in a range of treatment settings and modalities. This phase of the project will utilise a software version of the AATOM to facilitate the collection, collation and reporting of data. It will also include a formal assessment of clinician attitudes towards routine outcome monitoring in general and the use of the AATOM in particular.

Start Date: July 2005

Expected Completion Date: July 2007

Funding: Alcohol Education and Rehabilitation Fund (AERF)

INFORMATION AND TRAINING

TITLE: THE DEVELOPMENT OF A BOOKLET ON 'ICE'

NDARC Staff: Paul Dillon and Rebecca McKetin

Aims: The aims of this project are as follows:

- to write, design and produce a brief and factual information resource for users of 'ice'
- to develop an effective dissemination plan, in conjunction with the Australian Government Department of Health and Ageing (AGDHA), for the ice resource
- to evaluate the effectiveness of the dissemination plan i.e. how easy is it for ice users to access the resource across different jurisdictions?

Design and Method: This booklet will cover what the substance is, how it is used and its effects, perceived positive benefits and harms associated with use, issues around psychosis and overdose, different routes of administration and associated harms and tips on how to reduce use or quit.

The content will be drawn from the literature on methamphetamine and recent research findings on the nature and harms associated with the use of crystalline methamphetamine, or ice. The draft content will be pilot-tested with methamphetamine users. The pilot testing process will include both non-injecting drug users who smoke ice and methamphetamine injectors.

A distribution plan will be developed with the assistance of the AGDHA and all state and territory health departments. This will involve the mailing out of the booklet to one location in each state and territory. It will then be up to the Health Department in each jurisdiction to distribute the resources as widely as possible.

The evaluation component will comprise of a number of simple telephone interviews with a range of stakeholders from across Australia (to be decided upon in conjunction with the AGDHA), including NSPs and drug user organisations such as AVIL and NUAA, to investigate whether the resource had reached the target group. These interviews will take place six months after distribution. A brief report will then be delivered to the AGDHA.

Start Date: September 2005

Expected Completion Date: September 2006

Funding: Australian Government Department of Health and Ageing

TITLE: CHOICE HEALTH READER

NDARC Staff: Wendy Swift

Aim: The aim of the NDARC contribution to CHOICE Health Reader is to increase the dissemination of recent alcohol and other drug research findings to the general public.

Design and Method: NDARC contributes a page to each of 10 annual issues, highlighting recent findings in the field.

Benefits: This is an easy to read, informative way of disseminating important research findings to the general public and interested health professionals.

Start Date: March 2003

Expected Completion Date: Ongoing

Funding: National Drug and Alcohol Research Centre

TITLE: DEVELOPMENT OF THE NATIONAL CANNABIS STRATEGY

NDARC Staff: Richard Mattick, Jennifer McLaren and Margaret Eagers

Background: NDARC has been appointed by the Australian Government Department of Health and Ageing to coordinate the development of what will be Australia's first National Cannabis Strategy, with Richard Mattick as Chair of the Project Management Group. The widespread use of cannabis in Australia means that the National Cannabis Strategy will be a particularly important component of the National Drug Strategy.

Aim: To coordinate the development of a national strategy addressing ways to minimise the harm associated with cannabis use in Australia.

Process: The development of the Strategy will be informed by existing knowledge and research and a comprehensive consultation process. A Background Paper giving an overview of available cannabis research and policy will be produced. National consultation forums will be undertaken, which will provide relevant stakeholders with the opportunity to communicate ideas about the Strategy. Organisations and individuals will also be given the opportunity to convey suggestions via written submissions. Throughout the process, the Project Management Group and four Reference Groups will provide input.

Start Date: April 2005

Expected Completion Date: May 2006

Funding: Australian Government Department of Health and Ageing

TITLE: BRIEF INTERVENTIONS FOR CANNABIS DEPENDENCE TRAINING WORKSHOPS

NDARC Staff: Jan Copeland and Etty Matalon

Aim: These workshops are provided on request to a variety of local, national and international organisations that are interested in training their staff in the delivery of a brief intervention for cannabis use disorders that is based on the findings of a randomised controlled trial.

Start Date: January 1999

Expected Completion Date: Ongoing

Funding: Contracting organisations

TITLE: EVIDENCE-BASED ANSWERS TO CANNABIS QUESTIONS

NDARC Staff: Jan Copeland, Wendy Swift and Saul Gerber

Aim: This project will review the literature on a range of issues associated with the health and psycho-social aspects of cannabis use. This review will be developed into "plain English" materials to inform policy makers, the media and the general community on answers to common questions about cannabis.

Start Date: July 2003

Expected Completion Date: January 2006

Funding: Australian National Council on Drugs

TITLE: PROGRAM OF INTERNATIONAL RESEARCH AND TRAINING (PIRT)

NDARC Staff: Kate Dolan and Richard Mattick

Aim: The aim of PIRT is to develop an international arm as part of NDARC's core business. In order to achieve this aim, NDARC will need to acquire the necessary skills in conducting drug and alcohol research in developing countries. NDARC will cover the costs of several small scale research projects in order to gain sufficient experience.

Start Date: March 2003

Expected Completion Date: Ongoing

Funding: Australian Government Department of Health and Ageing

TITLE: TECHNICAL CO-OPERATION WITH UNODC ON IMPROVING INFORMATION ON AMPHETAMINE TYPE STIMULANTS IN EAST ASIA AND THE PACIFIC

NDARC Staff: Rebecca McKetin

Other Investigators: This project was conducted through the United Nations Office on Drugs and Crime (UNODC) Regional Centre Regional Centre for East Asia and the Pacific. Project Staff: Jeremy Douglas and Eduardo Hidalgo

Aims: To provide technical support to the UNODC Regional Centre for East Asia and the Pacific for the project "Regional ATS Data and Information Systems Project (AD/RAS/02/F97)"

Design and Method: NDARC had a Letter of Agreement with the UNODC for East Asia and the Pacific to support their project 'Improving ATS Data and Information Systems' (AD/RAS/01/F97) through the provision of technical assistance and information sharing.

The project consisted of developing national systems through which data on amphetamine-type stimulants (ATS) can be collected, a regional network of focal points through which information can be shared and synthesized, and a regional clearinghouse for ATS trends in East Asia and the Pacific. NDARC has been contributing information on the Australian ATS situation to this project since 2004. Further information on the project can be found at www.apaic.org.

Benefits: The main benefit was enhancing the quality and quantity of data available on regional ATS trends through cooperation with the UNODC project 'Improving ATS Data and Information Systems' (AD/RAS/01/F97). Training was provided by NDARC staff to national counterparts on the collection and compilation of ATS data. The project outputs included data on ATS and other drug trends from Australia as a consequence of the technical assistance and information sharing agreement.

Outputs: Project outputs can also be found at www.apaic.org including:

UNODC (2004). *Patterns and Trends in Amphetamine-Type Stimulants in East Asia and the Pacific: Findings from the 2003 Regional ATS Questionnaire*. Bangkok: Regional Centre for East Asia and the Pacific.

UNODC (2005). *Patterns and Trends in Amphetamine-Type Stimulants in East Asia and the Pacific: Findings from the 2004 Regional ATS Questionnaire*. Bangkok: Regional Centre for East Asia and the Pacific.

Start Date: July 2003

Funding: National Drug and Alcohol Research Centre

TITLE: MENTAL HEALTH DRUG USE AND RISK AMONG FEMALE STREET-BASED SEX WORKERS IN GREATER SYDNEY

NDARC Staff: Amanda Roxburgh, Louisa Degenhardt, Briony Larance and Jan Copeland

Aims: While much of the previous research on street-based sex workers has focused on drug use patterns and the transmission of BBVI through dual vectors of sharing injecting equipment and unsafe sex practices, there has been little done in Australia on the psychological health of street-based sex workers. This study examined the demographic characteristics, childhood experiences, drug use patterns and working conditions among a group of female street-based sex workers. It also documented the prevalence of problems such as depression, drug dependence and post traumatic stress disorder and considered the comorbidity between these problems.

Design and Method: Women who were 18 years or over, currently involved in the sex industry and working from the street were recruited through introductions from outreach workers. Seventy two face to face interviews were conducted using a structured survey.

Benefits: The findings of this study highlight the complexity of the needs of female street-based sex workers, and provides important information on strategies to enhance engagement of these women in basic treatment services as well as providing strategies to reduce the work-related risks these women face.

Outputs: Many of the female street-based sex workers interviewed for this study reported complex histories of trauma, and the majority reported experiencing work-related violence. Many of their basic needs, such as housing, were not being met and safe work practices were difficult for many to employ. Mental health problems of depression and PTSD were prevalent, and there were reports of heavy heroin and cocaine use among some of the women. Drug dependence (cocaine in particular) was associated with increasingly risky injecting and sexual behaviours, and HCV was prevalent.

Start Date: April 2005

Funding: Australian Government Department of Health and Ageing

TITLE: NSP INFORMATION KIT UPDATE

NDARC Staff: Kate Dolan, Alex Wodak and Edmund Silins

Other Investigators: John Ryan (Anex)

Background: Needle and syringe programs (NSPs) have been implemented in Australia since 1986. The existing NSP Information Kit provides a summary of the scientific evidence for NSPs in a quick-reference question and answer format. In a survey to evaluate the Kit, most respondents found it easy to understand, comprehensive, accurate and increased their knowledge of NSPs. An attitude change towards support for NSPs was reported by one in twenty respondents.

Aims: To update the Needle and Syringe Program (NSP) Information Kit that was written and produced by NDARC in 2000.

Design and Method: A steering committee was formed to inform the project and included members from the Australian Government Department of Health and Ageing (AGDHA), NSW Health, Australian National Council on Drugs (ANCD), ANEX, Australian Intravenous League (AIVL) and the National Centre in HIV Epidemiology and Clinical Research (NCHECR). The design of the updated Kit remained the same as the 2000 version but incorporated a new colour scheme to distinguish it from the old version.

Outputs: The NSP Information Kit is available online at the following address: <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/phd-needle-syringe-kit-cnt.htm>.

Dolan, K. MacDonald, M. & Silins, E. (2005). *Needle and syringe programs: A review of the evidence*. Canberra: Australian Government Department of Health and Ageing.

Dolan, K. & Silins, E. (2005). *Needle and syringe programs: Your questions answered*. Canberra: Australian Government Department of Health and Ageing.

Start Date: June 2005

Funding: Australian Government Department of Health and Ageing

TITLE: INDONESIAN/AUSTRALIAN SPECIALISED TRAINING PROJECT PHASE III (IASTP): DRUG INTERVENTION TRAINING (MEDICAL AND PSYCHOSOCIAL ASPECTS) IN AUSTRALIA

NDARC Staff: Annie Bleeker, Louisa Degenhardt and Paul Dillon

Other Investigators: UNSW Global and Centre for Harm Reduction (CHR), Melbourne

Background: The Indonesia-Australia Specialised Training Project Phase III (IASTP III) is a bi-lateral project administered through AusAID under the Australian Government's Development Cooperation Program with Indonesia. The aim is to provide an identified range of short training courses in Australia for participants selected from ministries, state enterprises, and non-government organisations.

Aim: This course was delivered in Australia and was designed to assist participants to develop practical ways of addressing the many problems associated with drug use in Indonesia. It also aimed to assist participants to understand the impact of drug-related problems on Indonesian society and to address issues related to drug use in the community, especially amongst young people. The information gained by the participants in the course was to be used to develop their own education and awareness programs when they returned to Indonesia.

Design and Method: The course was conducted using a variety of approaches including: lectures and presentations, small group work, activities, program development and analysis, brief interactive assignments, tutorial groups, simulation exercises and role-plays. The course began in Melbourne, with the Centre for Harm Reduction being responsible for that component. Participants then moved to Sydney to complete the training.

Outputs: The sixteen Indonesian participants who participated in this course spent a total of 12 weeks in training, from 26 September to 16 December (8 weeks in Sydney and 4 weeks in Melbourne). In Melbourne, the participants learnt primarily about the principles of harm reduction and how this has been implemented internationally, particularly in developing and Islamic countries. On their return to Sydney they received specialised training about drug treatment, rehabilitation and also prevention efforts with young people. A range of leading professionals in the drug and alcohol field and their agencies were invited to present to the group. Site visits were conducted to a variety of drug and alcohol services and HIV/AIDS agencies. Issues such as good governance and gender equity were also addressed in all modules of the training.

Start Date: July 2005

Funding: AusAID

TITLE: SCHOOL-BASED PREVENTION FOR ECSTASY AND RELATED DRUGS (ERDS): BARRIERS AND CONTENT DEVELOPMENT

NDARC Staff: Jan Copeland, Paul Dillon, Cath Finney Lamb and Annie Bleeker

Aim: This research aims to identify and describe factors that prevent and facilitate teachers providing information and students obtaining information about ecstasy and related drugs (ERDS) in schools across Australia.

Design and Method: Two cross sectional surveys and two qualitative investigations were conducted. The quantitative component aimed to obtain one hundred surveys from a convenience sample of secondary school teachers across Australia; and 500 surveys from a convenience sample of Australian school students.

This second component of the study used qualitative methods to collect information about teacher and student opinions and attitudes towards information provision and education about psychostimulants. A total of 66 interviews were conducted: 30 were group interviews or focus groups that contained between 2 and 10 members; the remaining 36 were semi-structured in-depth interviews with individual participants. A stratified purposive sampling strategy was employed to enable information to be collected from students, teachers and other stakeholders of drug education in schools. Five key groups of stakeholders were interviewed: health education teachers, generalist teachers, welfare and support service teachers, principals and drug education consultants.

Outputs: A report has been written and submitted to the funding body.

Funding: Australian Government Department of Education, Science and Training (DEST)

TITLE: THE RURAL INJECTORS PROJECT

NDARC staff: Kate Dolan, Carolyn Day, Elizabeth Conroy, Julia Lowe and Jo Kimber

The specific objectives of the research were:

- to examine patterns of drug use and drug treatment utilisation among rural and outer metropolitan injecting drug users (IDU)
- to determine the prevalence of blood-borne virus risk behaviours among rural and outer metropolitan IDU
- to measure HIV and hepatitis C prevalence among rural and metropolitan IDU via self-report
- to examine quality of life and other psychosocial aspects of IDU living in rural and metropolitan areas
- to examine patterns of migration from areas with low prevalence of blood-borne viruses to high prevalence areas (rural-metropolitan)

Design and Method: This was a cross-sectional study of injecting drug users in rural and outer metropolitan areas of NSW. Two hundred and sixty IDU were interviewed: 164 rural and 96 metropolitan. Age, gender, education and employment were similar for rural and metropolitan participants. Both samples reported use of a range of drugs, but rural participants were less likely than metropolitan participants to report daily heroin use (2% vs. 10%), but more likely to report having injected morphine (50% vs. 21%) in the last six months. Similar proportions reported using a needle/syringe after another person. Rural participants were less likely to report use of NSPs (36% vs. 80%), and reported a significantly longer period of time between BBVI testing. Fewer than half the sample reported having experienced a barrier to treatment, but there was no difference between the two groups.

Benefits: Samples of rural IDU are similar to metropolitan samples, although they report some differences in patterns of drug use. Quality of life, however, was lower for rural IDU. Service provision, including access to new injecting equipment, BBVI testing and drug treatment was found to cause considerable problems for rural IDU. These issues warrant further consideration.

Outputs: The following report has been written:

Day, C., Conroy, E., Lowe, J., Kimber, J., Page, K., & Dolan, K. (2005). *Drug use and harms among rural and metropolitan injecting drug users: Findings from the Rural Injectors Project.* Technical Report No. 234. Sydney: National Drug and Alcohol Research Centre.

Start Date: December 2003

Funding: AIDS and Infectious Diseases NSW Health and Australian Government Department of Health and Ageing

TITLE: RAPID ASSESSMENT OF PERFORMANCE AND IMAGE ENHANCING DRUGS (PIEDS) IN NEW SOUTH WALES: FEASIBILITY STUDY

NDARC Staff: Louisa Degenhardt, Paul Dillon, Jan Copeland and Briony Laranche

Aims: The aims of this project were to:

- describe the characteristics of a sample of PIEDs users
- examine the patterns of PIEDs and other drugs use of this sample
- document the price, purity and availability of PIEDs in Sydney
- examine participant's perceptions of the incidence and nature of PIEDs-related harms, including physical, psychological, financial, occupational, social and legal harms
- identify emerging trends in the PIEDs market that may require further investigation

Design and Method: The methodology of the present study was based on an existing program of research, the Illicit Drug Reporting System (IDRS). There were three main sources of information used to document PIEDs trends in NSW:

- face-to-face interviews with 60 male PIEDs users recruited in Sydney
- telephone interviews with 24 key experts who, through the nature of their work, had regular contact with PIEDs users or knowledge of PIEDs markets in NSW
- indicator data sources such as domestic and border seizures of AAS, calls to drug information lines, and health data

These three data sources were triangulated to provide an indication of convergent trends in PIEDs use and markets. The 2005 findings were compared to a similar study conducted in 1997 to give a broad indication of whether trends in the PIEDs market have changed over time. The present study also examined the feasibility of using this methodology across all jurisdictions as an ongoing monitoring system for PIEDs (such as the IDRS model).

Outputs: The following report has been written:

Laranche, B., Degenhardt, L., Dillon, P., & Copeland, J. (2005) *Rapid assessment of performance and image enhancing drugs (PIEDs) in New South Wales: Feasibility study*. Technical Report No. 239. National Drug and Alcohol Research Centre, Sydney.

Start Date: November 2004

Funding: Australian Government Department of Health and Ageing

TITLE: THE EMERGENCE OF MORE POTENT FORMS OF METHAMPHETAMINE IN SYDNEY: DEVELOPING OUR UNDERSTANDING OF AUSTRALIA'S DYNAMIC METHAMPHETAMINE MARKET

NDARC Staff: Rebecca McKetin, Jennifer McLaren and Erin Kelly

Other Investigators: Robert Rushby (Australian Customs Service) and Nerys Evans (NSW Police)

Collaborators: Dan Lubman and Leanne Hides (ORYGEN Research Centre, Department of Psychiatry, University of Melbourne)

Aims: This project aimed to develop a better understanding of the supply, use, and the health and social consequences of more pure forms of methamphetamine such as crystal methamphetamine or 'ice', and 'base' methamphetamine. The project also considered the implications for the health and law enforcement sectors of the increases in Australia in recent years of the availability and use of these more pure forms of methamphetamine.

Design and Method: The research used a range of methods including: semi-structured interviews with 54 health and law enforcement professionals; face-to-face survey of 310 regular methamphetamine users, including interviews with 55 regular methamphetamine dealers; in-depth interviews with 13 methamphetamine dealers; in-depth interviews with 31 frontline workers (police, ambulance and emergency personnel); a manual review of 2905 emergency department records at an inner Sydney hospital; analysis of forensic data on the purity and physical appearance of methamphetamine seizures in Victoria; and analysis of other routine data sources.

Benefits: The project has improved current understanding of the dynamics of the Sydney methamphetamine market. It has also raised public awareness about the problems associated with the use of crystalline methamphetamine, or ice, including dependence and psychosis.

Outputs: Sydney is supplied by a confluence of domestically produced speed and base methamphetamine, and imported high purity crystalline methamphetamine or ice. Ice was found to be around 80% pure, in comparison with an average purity of 20% for the wet/damp form methamphetamine sold as 'base' and 10% for powder methamphetamine or speed.

The study found that the more pure forms of base and ice methamphetamine now make up over two-thirds of methamphetamine consumption in Sydney, and the use of ice was associated with higher levels of dependence on methamphetamine. Dependence on methamphetamine was a key predictor of poor psychological and physical functioning, and also a key risk factor for experiencing symptoms of psychosis (e.g., hallucinations and persecutory delusions).

The prevalence of psychosis was 11 times higher among the methamphetamine users interviewed in this study compared to the Australian general population. Almost one in four (23%) participants had experienced symptoms of psychosis in the past year, and psychosis was also common (18%) among people who had no known history of schizophrenia or other psychotic disorders. Symptoms of psychosis included auditory and visual hallucinations and persecutory ideation, and these experiences typically lasted up to three hours. The majority of symptom episodes did not lead to hospitalisation (89%); however, 27% of participants reported overt hostility at the time they were experiencing psychotic symptoms. The hostility associated with methamphetamine psychosis presented a serious occupational health and safety issue for ambulance, emergency and police personnel.

A dissemination phase for this project will occur in early 2006. Detailed findings from the study can be found in the following reports:

McKetin, R., McLaren, J. & Kelly, E. (2005). *The Sydney methamphetamine market: Patterns of supply, use, personal harms and social consequences*. National Drug Law Enforcement Monograph Series No. 13. Australasian Centre for Policing Research, Adelaide.

McKetin, R. & McLaren, J. (2004). *The methamphetamine situation in Australia: A review of routine data sources*. NDARC Technical Report No. 233. Sydney: National Drug and Alcohol Research Centre.

Start Date: April 2003

Funding: National Drug Law Enforcement Research Fund

TITLE: RAPID ASSESSMENT OF CRYSTAL METHAMPHETAMINE AND GHB USE IN THE GAY, LESBIAN, BISEXUAL AND TRANSGENDER (GLBT) COMMUNITY IN NEW SOUTH WALES, AUSTRALIA

NDARC Staff: Louisa Degenhardt

Other Investigators: David McGuigan and Stevie Clayton (AIDS Council of New South Wales (ACON))

Aims: The current report is the result of a rapid assessment conducted jointly by the AIDS Council of New South Wales (ACON) and NDARC that aimed to do the following:

- review the existing literature on the effects of GHB and crystal methamphetamine and harms related to their use, with a particular focus upon evidence from GLBT populations
- summarise existing data on the extent of use of these drugs in the GLBT community in NSW
- conduct interviews with key experts working within the GLBT community, who had knowledge about trends in use and harms related to the use of these drugs, as well as obtain information from the GLBT community itself

- summarise existing programmes designed to address the harms related to the use of these drugs
- consider the implications of this exercise for future research, public health interventions, and programme development

Design and Method: A literature review was conducted of the available evidence on GHB and crystal meth use and harms with focus on issues related to the GLBT community. Existing data on recent trends in use derived from surveillance studies with sentinel groups of homosexually active men (such as the Sydney Gay Community Periodic Survey and the Health in Men cohort), with women identifying as lesbian, bisexual or queer (the Sydney Women and Sexual Health study), and with regular ecstasy users (the PDI). These studies have provided some time trend data on drug use among gay/bisexual men and women, but there is a distinct lack of detailed data on these issues. Additional studies primarily conducted jointly at the National Centre for HIV Social Research (UNSW) and the National Centre in HIV Epidemiology and Clinical Research (UNSW) provide additional, more in depth information on different issues and sub-populations within the GLBT community (primarily homosexually active men). Data were also collected from community forums conducted in late 2004 and early 2005 in Sydney. The first two forums, in particular, provided useful data on community concerns and opinions about use and harms related to crystal meth use. Interviews with a dozen key experts (KE) from Sydney were also conducted during early 2005. Interviews were conducted with general practitioners (GPs) in inner city clinics, drug counsellors, GLBT outreach workers, party promoters, and managers of sex on premises venues. The notes from these interviews were used where appropriate to provide additional contextual information.

Output: Detailed findings of the project can be found in the following report:

Degenhardt, L., McGuigan, D. & Clayton, S. (2005). *Rapid assessment of crystal methamphetamine and GHB use in the gay, lesbian and transgender community in New South Wales*. Technical Report No. 235. Sydney: National Drug and Alcohol Research Centre.

Start Date: April 2005

Funding: NSW Health

TITLE: ESTIMATING THE NUMBER OF METHAMPHETAMINE USERS IN SYDNEY, AUSTRALIA

NDARC Staff: Rebecca McKetin, Jennifer McLaren and Stuart Gilmour

Other Investigators: Matthew Hickman (Imperial College London); Devon Indig (NSW Health); and Matthew Law (National Centre in HIV Epidemiology and Clinical Research)

Aims: This project was a collaboration between researchers at NDARC and Imperial College, London, which was supported by a University of New South Wales John Yu Fellowship to Europe. The aim of this project was to develop techniques to estimate the number of dependent stimulant users (particularly methamphetamine users).

Traditionally, methods used to estimate the number of dependent or injecting drug users have been applied to heroin users. However, Australia has a substantial and growing population of dependent methamphetamine users. Estimates of the size of this population are crucial to planning services and estimating the coverage of services, however, prior to this study no robust estimates existed. This project aimed to explore the feasibility of different prevalence estimation techniques in the context of dependent stimulant use and pilot these techniques in Australia.

Outputs: It was estimated that there were around 17,700 regular methamphetamine users and 14,700 dependent methamphetamine users in Sydney. The estimated number of regular methamphetamine users in Australia was 102,600, or 10.3 per 1000 persons aged 15 to 49 years.

The contribution of dependent methamphetamine use to the health and social consequences associated with illicit drug use in Australia cannot be ignored. This population will generate a substantial number of hospital presentations for methamphetamine-psychosis that will adversely affect emergency medical and mental health services. Dependent methamphetamine users also reflect a large pool of injecting drug users, who are at-risk of contracting and transmitting HIV and other blood borne viruses.

Outputs: The following report has been written:

McKetin, R., McLaren, J., Kelly, E., Hall, W., & Hickman, M. (2005). *Estimating the number of regular and dependent methamphetamine users in Australia*. Technical Report No. 230. Sydney: National Drug and Alcohol Research Centre.

Start Date: August 2004

Funding: NSW John Yu Fellowship and the Australian Government Department of Health and Ageing

TITLE: INDONESIA/AUSTRALIAN SPECIALISED TRAINING PROJECT PHASE III (IASTP): DRUG INTERVENTION TRAINING (MEDICAL AND PSYCHOSOCIAL ASPECTS) IN INDONESIA

NDARC Staff: Annie Bleeker, Paul Dillon and Louisa Degenhardt

Other Investigators: UNSW Global

Background: The Indonesia-Australia Specialised Training Project Phase III (IASTP III) is a bi-lateral project administered through AusAID under the Australian Government's Development Cooperation Program with Indonesia.

Aim: The aim was to provide an identified range of short training courses in Indonesia for participants selected from ministries, state enterprises, and non-government organisations.

Design and Method: This course was delivered in country (i.e. Indonesia) and was designed to assist local authorities and program facilitators to develop practical ways of addressing the many problems associated with drug use in Indonesia. The course was designed to assist participants to understand the impact of drug-related problems on Indonesian society and to address issues related to drug use in the community, especially amongst young people. The information gained by the participants in the course was then to be used to develop their own education and awareness programs.

Outputs: Presentations and workshops were conducted in four locations over a three-month period in Denpasar, Medan, Makassar and Manado. Topics included overviews of the drug situation in Indonesia; extensive descriptions of drugs, their effects, and the ways they are used; frameworks for considering ways to address drug use and details of specific interventions to generate prevention programs; and coordination of responses to the problem. Two specialist interpreters/tutors (Indonesian nationals) provided interpretation and tutorial support throughout the workshop program. Participants then produced action plans in Bahasa Indonesian. These action plans will be followed up by Indonesian authorities to ensure that they have been enacted upon.

Start Date: July 2005

Funding: AusAID

TITLE: MALAYSIAN STUDY TOUR: HIV PREVENTION SERVICES IN SYDNEY

NDARC Staff: Kate Dolan and Sarah Larney

Aims: For the study tour participants:

- to understand the justifications, principles and overall need for needle and syringe programs NSPs to prevent HIV/AIDS among injecting drug users
- to understand the benefits of conducting NSPs as part of a comprehensive harm reduction program – and the results of inaction
- to see NSPs implemented through various models in Australia and understand factors that make programs successful and factors that can contribute to their failures
- to understand the legal issues related to NSPs and their relationship to the broader issue of the legality of drug use, especially in relation to police policies and national narcotic laws
- to provide a basic understanding to the participants about evaluation and research and its use in scaling up of NSPs

Design and Method: A study tour will be developed, organised and implemented for a group of Malaysian visitors for five days. Participants will hear a number of presentations on a range of topics and make several site visits to give them a better understanding of Australia's response to illicit drugs, particularly injecting drug use and the prevention of HIV transmission.

Benefits: The study tour participants will gain an increased knowledge and understanding of the importance of a comprehensive harm reduction program, including needle and syringe programs, in preventing HIV among injecting drug users.

Outputs: A report will be written on the study tour.

Start Date: September 2005

Funding: USAID

TITLE: SURVEY OF MEDICAL CANNABIS USE

NDARC Staff: Wendy Swift, Peter Gates and Paul Dillon

Aim: In 2003 the NSW Government announced a proposed trial of the therapeutic benefits of cannabis. One of the recommendations of the 2001 NSW Working Party on the medical use of cannabis was for Australian surveys on this issue, as there is little relevant local information. This exploratory survey aimed to examine people's experiences, behaviours and attitudes surrounding medicinal cannabis use.

Design and Method: Australian adults who had used cannabis for medical purposes were recruited using media stories. A total of 147 respondents were screened by phone and anonymous questionnaires were mailed, to be returned by postage paid envelope. Data were available for 128 participants.

Benefits: This survey will contribute important local information complementary to data from clinical trials and inform the design, scope and feasibility of any Government trial.

Outputs: The study found Australian medical cannabis users are risking legal ramifications, but consistent with users surveyed elsewhere, claim moderate to substantial benefits from its use in the management of their medical condition. In addition to strong public support, medical cannabis users show strong interest in clinical cannabis research, including the investigation of alternative delivery methods. A paper has also been published:

Swift, W., Gates, P. & Dillon, P. (2005). Survey of Australians using cannabis for medical purposes. *Harm Reduction Journal* 2:18.

Start Date: November 2003

Funding: National Drug and Alcohol Research Centre

TITLE: EXAMINING POLICY OPTIONS FOR PREVENTING CANNABIS USERS FROM DRIVING UNDER THE INFLUENCE OF CANNABIS

NDARC Staff: Wendy Swift

Other Investigators: Craig Jones, Don Weatherburn and Neil Donnelly (NSW Bureau of Crime Statistics and Research (BOCSAR))

Aims: We currently have little information about the factors that are predictive of cannabis-intoxicated driving, and we know very little about the likely benefits of increasing the certainty or severity of sanctions or providing education campaigns warning about the potential dangers of this behaviour. This study, which is a collaboration between the NSW Bureau of Crime Statistics and Research and NDARC, addresses these issues. Its two primary research questions are:

- what factors are predictive of the prevalence and frequency of driving under the influence of cannabis (DUIC), driving under the influence of cannabis and alcohol together (DUICA) and driving under the influence of cannabis and other drugs together?
- are there any likely deterrent benefits associated with (a) increasing the perceived certainty of being caught DUIC? (b) increasing the severity of sanctions if caught DUIC? and (c) providing factual information about the potential risks associated with DUIC?

Design and Method: Approximately 300 cannabis users were recruited to participate in a confidential, anonymous interview on their behaviours and attitudes towards DUIC. To be eligible, participants were aged 18 years or older, had used cannabis within the previous 12 months and had driven a motor vehicle within the preceding 12 months. Non-English-speakers and people with cognitive or psychological impairments that prevent them responding in a meaningful way were excluded.

The study comprised a cross-sectional analytic survey design. It incorporated a between-subjects factorial design to address the degree to which the certainty and severity of sanctions might reduce DUIC. Participants were presented with one of four vignettes giving a hypothetical situation where they were presented with the opportunity to DUIC and asked to rate their likelihood of driving under those circumstances. We hypothesised that, if roadside testing and harsher penalties for DUIC would exhibit a deterrent effect, those subjects who were led to believe that the certainty and severity of punishment are high would indicate that they were less likely to DUIC than those in lower certainty/severity conditions.

Benefits: There is sufficient evidence to suggest that driving under the influence of cannabis may increase the risk of fatal road trauma. At present though, because most Australian research has involved either small samples of regular cannabis users or non-representative samples of injecting drug users, we know very little about cannabis users' attitudes toward the behaviour, and very little about the characteristics of those

cannabis users most at-risk of engaging in it. Similarly, we know nothing about the likely benefits of increasing the intensity of law enforcement and education campaigns. This study, which employs accepted methodology from the criminological deterrence literature, was the first of its kind in Australia to address these issues.

Outputs: The study found that random drug testing would produce greater reductions in drug-driving than either increasing the severity of sanctions or providing factual information about the risks associated with the behaviour. Males, dependent users, early onset cannabis users, frequent drivers, cannabis users who had used more classes of other drugs and cannabis users who believed that their risk of accident would not change following cannabis use were all more likely to report driving under the influence of cannabis.

Outputs: The following paper has been published:

Jones, C., Donnelly, N., Swift, W., & Weatherburn, D. (2005). Driving under the influence of cannabis: The problem and potential countermeasures. *Crime and Justice Bulletin 87*, Sydney: NSW Bureau of Crime Statistics and Research.

Start Date: March 2004

Funding: NSW Cabinet Office, through the NSW Bureau of Crime Statistics and Research, NSW Attorney General's Department

TITLE: A DRUGS IN PREGNANCY CONSUMER CONSULTATION

NDARC Staff: Jan Copeland

Other Investigators: Marijke Boers, Cath Finney Lamb and Tanya Sultana

Aim: This qualitative project is being conducted in NSW to do the following:

- to consult with consumers of drugs in pregnancy programs
- to conduct focus groups with consumers and health care providers on the needs of this client group and their consultation strategies
- to provide recommendations on models of care to improve the health outcomes of pregnant women and their children that incorporate the views of consumers, service providers and other relevant stakeholders

Design and Method: A stratified purposive sample of opiate-using women, health service managers and staff was employed to enable qualitative comparison between groups. Thirteen semi-structured interviews and two focus groups were conducted with opiate-using women who were pregnant or had children between 0-2 years. Ten semi-structured interviews were conducted with managers and specialised staff representing Maternal Health Services, the Child and Family Team and Pharmacotherapy Unit. Three focus groups were held with health staff. Participants completed a questionnaire that included items on attitudes to consumer participation.

Benefits: The findings indicated that this client group is primarily concerned with relational problems they encounter with health staff, such as discrimination, maintenance of confidentiality and consumer rights, being treated with respect and establishing trust. Clients and staff had very different perspectives on a number of health care issues, such as the provision of pain relief, consistency in scoring babies for withdrawals, communication between women and staff, delayed care, information and support for breastfeeding, tobacco and other drug use during the hospital stay and drug use within the special care nursery. Dialogue meetings were helpful in discussing these different perspectives.

Outputs: A number of presentations of the findings were made to participants in the study and a final report was submitted to the Area Health Service and the funding body. Papers for submission to peer-reviewed publications are currently in preparation.

Start Date: December 2003

Funding: NSW Health

TITLE: THE COSTS AND UTILITY OF PARENTAL DRUG TESTING IN CHILD PROTECTION: A REVIEW OF THE AVAILABLE LITERATURE AND COMMENTARY

NDARC Staff: Elissa Wood, Richard Mattick, Lucy Burns and Anthony Shakeshaft

Aim: To undertake a review of the research evidence related to the cost and efficacy of parental drug testing in child protection, relative to alternative approaches and tools.

Design and Method: A review of the literature on illicit drug testing was provided to the NSW Department of Community Services (DOCS), at their request, in order to inform policy regarding current child protection practices. Databases were searched to identify literature regarding drug-testing methods, the efficacy of parental drug-testing, alternative options to drug-testing, treatment options and aspects of parenting and drug use.

Benefits: This review identified a number of limitations of drug testing, principally its inability to accurately determine levels of illicit drug use, dependence and the extent of impairment of parenting ability. Despite these limitations, drug-testing may have benefit in providing a pathway to formal treatment and/or confirmation of self-reported illicit drug use, on a case-by-case basis. If drug testing is to be implemented on that basis, hair and urine testing appear to be the most feasible and cost-efficient methods in the context of parental illicit drug-testing in child protection.

Output: A report has been submitted to DOCS.

Start Date: May 2005

Funding: NSW Department of Community Services

TITLE: CHARACTERISTICS AND DYNAMICS OF COCAINE SUPPLY AND DEMAND IN SYDNEY AND MELBOURNE**NDARC Staff:** James Shearer, Paul Dillon and Sharlene Kaye**Other Investigators:** Jennifer Johnston, Craig Fry, Paul Dietze (Turning Point) and Linette Collins (NSW Police Service)**Aims:** This study set out to examine the characteristics and dynamics of cocaine supply and demand in the two largest Australian cities, Sydney and Melbourne. The main aim of the study was to describe the breadth (in terms of types of users and dealers) and the depth of the market (length of supply chains, overlap with other drug supply).**Design and Method:** The analysis was based on 165 personal interviews with cocaine users in Sydney (n=88) and Melbourne (n=77) conducted between October 2004 and January 2005. The data was supplemented with a further 133 questionnaires completed by cocaine users through an internet-based survey over the same period (Sydney n=39, Melbourne n=94). Twenty 'for-profit' cocaine dealers were identified within the sample and they provided detailed histories of drug dealing and recent cocaine transactions.**Outputs:** The following report was submitted to the funding body:**Shearer, J., Johnston, J., Kaye, S., Dillon, P., & Collins, L.** (2005). *Characteristics and dynamics of cocaine supply and demand in Sydney and Melbourne*. NDLERF Monograph Series No. 14. NDLERF: Adelaide.

A press release was issued at the 2005 APSAD Conference in Melbourne and the results of the study received widespread coverage.

Start Date: December 2003**Funding:** National Drug Law Enforcement Research Fund**TITLE:** THE DESIGN AND PRODUCTION OF A RESOURCE FOR USERS OF PERFORMANCE AND IMAGE-ENHANCING DRUGS (PIEDS)**NDARC Staff:** Paul Dillon, Jan Copeland and Briony Larence**Aim:** To write, design and produce a series of fact sheets and a new resource on PIEDs (i.e. human growth hormone (hGH), human chorionic gonadotropin (hCG), insulin growth factor (IGF), erythropoietin (EPO), creatine monohydrate, insulin and clenbuterol).**Design and Method:** NDARC produced a series of resources covering the pharmacology of these substances, how they are used, history of use, legitimate uses and perceived positive benefits and harms associated with use. The fact sheets were designed so that they can be downloadable from the internet and made available on a number of internet sites. These sites were to include, but not be limited to, the NDARC website, the Australian Drug Information Network, and the Australian Drug Foundation. A new booklet was also written and printed.

A distribution plan for the PIEDs fact sheets and resource booklet was developed, in conjunction with the Department and State and Territory Health Departments, together with another NDARC resource, *Steroid Facts*.

Benefits: These resources will provide easy to read and accurate information on a range of substances. PIEDs are used by anabolic-androgenic steroid (AAS) users for a variety of reasons including water loss, strength gain, endurance and muscle mass. They may also be used to counteract the adverse effects of AAS use. Currently very little reliable information is available on these substances and the potential harm associated with their use.**Outputs:** NDARC produced a series of fact sheets and a new booklet on PIEDs which features information on human growth hormone (hGH), human chorionic gonadotropin (hCG), insulin growth factor (IGF), erythropoietin (EPO), creatine monohydrate, insulin and clenbuterol:**Larance, B., Dillon, P. & Degenhardt, L.** (2005). *Performance and image enhancing drugs*. Sydney: National Drug and Alcohol Research Centre.

All states and territories received a bulk order of this booklet, together with an already existing NDARC resource, *Steroid Facts*, to disseminate across their jurisdiction.

Start Date: December 2004**Funding:** Australian Government Department of Health and Ageing**TITLE:** NALTREXONE-RELATED DEATHS IN AUSTRALIA**NDARC Staff:** Louisa Degenhardt, Richard Mattick, Amanda Roxburgh and Amy Gibson**Aims:** The aims of the project were:

- to examine the number of persons being prescribed naltrexone, methadone and buprenorphine across Australia
- to examine the number of cases where persons were noted as receiving naltrexone, methadone or buprenorphine prior to death
- to consider the circumstances of death
- to consider the potential limitations of NCIS data in providing valid and complete data on potential cases where these medications may be involved

Design and Method: This was an analysis of the National Coronal Information System (NCIS) to address the concern that the use of naltrexone in the treatment of heroin dependence may be related to increased risk of opioid overdose should recipients relapse to heroin use. The findings related to naltrexone were contrasted with those individuals prescribed methadone or buprenorphine.

Potential limitations of the NCIS data for monitoring deaths related to naltrexone, methadone and buprenorphine were also identified.

Benefits: This project will contribute to our understanding of the relative harms associated with three maintenance pharmacotherapies for the treatment of heroin dependence. This is also a first estimate of the mortality associated with naltrexone treatment and ongoing work by the investigators aims to investigate this in more detail.

Outputs: The findings of this study have been published in the following report:

Gibson, A. & Degenhardt, L. (2005) *Mortality related to naltrexone in the treatment of opioid dependence: A comparative analysis*. Technical Report No. 229. National Drug and Alcohol Research Centre, Sydney.

This report has been submitted to the Australian Government Department of Health and Ageing.

Start Date: January 2005

Funding: Australian Government Department of Health and Ageing

TITLE: ASSESSMENT OF THE BEST PUBLICATIONS ON HIV PREVENTION AND CARE AMONG IDU

NDARC Staff: Kate Dolan, Lisa Bernstein, Alex Wodak and Benjamin Phillips

Aim: The aims of this project were:

- to identify and collect approximately 50 documents that provide the best information on HIV prevention and care for injecting drug users (IDU)
- to identify and collect key United Nations (UN) position documents on HIV prevention and care for IDU
- to make these available to International Harm Reduction Association (IHRA) for uploading to our website

Design and Method: Some organisations have already put together partial collections, so this project's first step was to identify what was already available and to assess the potential for inclusion in this collection (e.g. from harm reduction networks, international organisations, the UN Reference Group on HIV/AIDS among IDU, WHO Evidence for Action series, WHO and UNAIDS).

This provisional list was sent for comment to experts in the IHRA's networks and elsewhere. From this provisional list the 'best' 50 documents were agreed to in consultation with the IHRA's Executive Director. Documents needed to be available in electronic format (e.g. Word, pdf) or, where not directly available, by provision of an electronic link to a site from which they would be available in the public domain. Uploading to the website was conducted by the IHRA. Permissions to publish was obtained where needed.

Benefits: Researchers and public health officers will have access to a comprehensive collection of papers on HIV prevention and care for IDU.

Outputs: The IHRA website now contains this collection of articles for anyone to access.

Start Date: December 2004

Funding: International Harm Reduction Association

TITLE: INFORMATION BROCHURE FOR PEOPLE WITH COEXISTING MENTAL HEALTH AND SUBSTANCE USE PROBLEMS

NDARC Staff: Maree Teesson, Paul Dillon and Heather Proudfoot

Other Investigators: Mental Health Services Conference Inc. Board

Aims: The aims of this project were:

- to develop the content for an information brochure that aims to increase the understanding of comorbidity among people with coexisting mental health and substance use disorders
- to organise and facilitate two stakeholder forums

Design and Method: The stakeholder group consisted of representatives of treatment providers including GPs, consumers and researchers from both mental health and substance misuse fields. The stakeholders were consulted through two meetings regarding the format, content and focus of the brochure. A literature review was done to provide evidence-based and research supported content. We also drew on our recently completed book: *Comorbid mental disorders and substance use disorders: Epidemiology, prevention and treatment*.

Following production of the brochure there was a trial distribution and follow-up evaluation carried out through a written survey. The brochure was very well received by consumer, carer and professionals alike. A report on the evaluation was provided to the funding body, from where the brochure has been distributed.

Benefits: This project will contribute to the understanding and identification of comorbid problems in the community and direct people towards appropriate sources of help with their problems.

Outputs: The following resource directed towards young people with comorbid substance use and mental health disorders has now been disseminated Australia-wide by the Australian Government Department of Health and Ageing:

Proudfoot, H., Teesson, M. & Dillon, P. (2005). *Feeling good? Answering your questions about alcohol, drugs and mental health*. Canberra: Australian Government Department of Health and Ageing.

Start Date: August 2004

Funding: Australian Government Department of Health and Ageing

TITLE: THE NATURE AND EXTENT OF SELF-REPORTED DEPENDENCE ON ECSTASY, GHB AND KETAMINE IN TWO US AND ONE AUSTRALIAN CITY (CD-SLAM)

NDARC Staff: Jan Copeland, Peter Gates, Ety Matalon and Greg Martin

Other Investigators: Linda Cottler

Aims: This international study on club drugs and emerging trends aims to assess the psychometric properties and sources of unreliability in identifying abuse and dependence on club drugs.

Design and Method: The study was a cross sectional survey with a test-retest component. The US arms of the study in Miami (n=186) and St Louis (n=297) together with the Sydney arm (n=156) interviewed 639 ecstasy and other club drug users over two years. The Sydney sample was aged 18-35 years and the US sample 15-35 years who had used ecstasy at least 5 times in their life and at least once in the past 12 months.

Benefits: This study will assist in the identification and classification of ecstasy use disorder using the DSM IV taxonomy. This will form the basis for a range of other studies on the reduction of ecstasy-related harm.

Outputs: A range of papers are currently under preparation discussing the classificatory and harms related issues raised in the study including a number of cross cultural comparisons between the US and Australia. There have been more than a dozen international conference presentations based on the study to date.

Start date: February 2002

Funding: National Institute on Drug Abuse (NIDA)

TITLE: MODELLING THE COSTS AND THE OUTCOMES OF CHANGING GENERAL PRACTITIONER BEHAVIOURS WITH RESPECT TO AT-RISK DRINKING

NDARC Staff: Marian Shanahan, Anthony Shakeshaft and Richard Mattick

Aims: The aim of this project was to assess the relative cost-effectiveness of four strategies (academic detailing, computerised reminder systems, target payments and interactive CME) to increase the provision of screening and brief interventions by Australian general practitioners with the ultimate goal of decreasing risky alcohol consumption among their patients.

Design and Method: This project used a modelling approach to combine data from Australian and international literature on the effectiveness and costs of four separate strategies to change GP behaviours to estimate their relative cost effectiveness.

Benefits: This project will provide information to policy makers, clinicians and medical educators in identifying economic costs and benefits of various methods of increasing screening and brief interventions for risky alcohol consumption.

Outputs: This study found that computerised reminder systems and academic detailing appear to be most effective in achieving a decrease in grams of alcohol consumed among risky drinkers. Regardless of the assumptions made, the targeted payment strategy appeared to be the least cost-effective method to achieve a decrease in risky alcohol consumption while the other three strategies appear reasonably comparable.

A paper is being prepared for submission to a peer reviewed journal.

Start Date: October 2002

Funding: Alcohol Education Research Fund

TITLE: THE ROLE OF PHARMACOTHERAPY IN PREVENTION OF RELAPSE IN ALCOHOL DEPENDENCE

NDARC Staff: Maree Teesson and Claudia Sannibale

Other Investigators: Kirsten Morley, Sophie Reid, Clare Thomson, James Bell, Kylie Richardson, and Paul Haber (Royal Prince Alfred Hospital) and Nghi Phung and Martin Weltman (Nepean Hospital)

Aim: The aims of this study were to:

- compare naltrexone, acamprosate and placebo in the management of alcohol dependence in a randomised double-blind controlled trial
- identify factors that influence the effectiveness of these treatments including: (a) presenting characteristics of subjects, (b) characteristics that manifest during therapy
- determine whether a multifaceted intervention designed to increase patient compliance with medications improve

Design and Method: This is a double-blind, placebo controlled trial in three treatment centres. One hundred and sixty nine alcohol dependent subjects were given naltrexone, acamprosate or placebo for 12 weeks. All subjects were offered manualised compliance therapy, a brief intervention that targets problems that may affect treatment compliance such as ambivalence and misperceptions about medication. Compliance therapy was adapted from Kemp et al. (1996), pilot tested, and a treatment manual was written. This therapy consisted of 4-6 sessions in which beliefs about medication, side effects, ambivalence, the benefits of treatment, treatment maintenance and relapse prevention were addressed and explored with motivational interviewing and CBT techniques.

Benefits: This was the largest alcohol pharmacotherapy trial in Australia to date. The resulting Sydney-wide recruitment infrastructure has laid important foundations for continuing research on alcohol dependence. Neither acamprosate nor naltrexone were found to be more effective than placebo on an intention to treat basis. Naltrexone however, did show positive effects in those with no comorbid depression and those with lower levels of alcohol dependency.

Start Date: January 2002

Funding: National Health and Medical Research Council

TITLE: HEALTH SERVICE UTILISATION AMONG METHAMPHETAMINE USERS

NDARC Staff: Rebecca McKetin, Erin Kelly and Jen McLaren

Other Investigators: Devon Indig (NSW Health)

Aim: The impact of stimulant use on health services is poorly documented, and currently there is insufficient information on service utilisation among this group to carry out robust economic evaluations. Health service utilisation information can also be used to identify points of access for methamphetamine users, and to identify barriers to accessing health services.

Design and Method: Self-report data on health service utilisation was obtained from regular methamphetamine users. Complementary data was also obtained from NSW Health on stimulant-related drug treatment admissions and hospital admissions to assess the extent and nature of stimulant-related presentations to these services.

Benefits: This survey will help identify points of contact that methamphetamine users have with the health system. It will also help identify factors that predict contact with health services, particularly drug treatment services, and define the types of methamphetamine users who do not access drug treatment. This type of information can help identify barriers to drug treatment for methamphetamine users.

Output: The study has found that methamphetamine users have high levels of contact with general practitioners and are prescribed high levels of medication. Most of the health service utilisation among methamphetamine users could be attributed to concurrent heroin injection. A large proportion of methamphetamine users had recently been in drug treatment, but they were unlikely to have received treatment for their methamphetamine use.

The following report has been published:

E. Kelly, R. McKetin, & J. McLaren (2005). *Health service utilisation among regular methamphetamine users.* NDARC Technical Report No. 233. National Drug and Alcohol Research Centre, Sydney.

Start Date: July 2003

Funding: Australian Government Department of Health and Ageing

GLOSSARY

ACON	AIDS Council of NSW
AGDHA	Australian Government Department of Health and Ageing
AERF	Alcohol Education and Rehabilitation Foundation Ltd
CUT	Curtin University of Technology
DEST	Department of Education, Science and Training
DOCS	Department of Community Services
GU	Griffith University
HT	Humanity Trust
IHRA	International Harm Reduction Association
JMU	John Moores University, Liverpool, UK
NDLERF	National Drug Law Enforcement Research Fund
NHMRC	National Health and Medical Research Council
NIH	National Institute of Health (USA)
NSW CHS	NSW Corrections Health Service
UN	University of Newcastle
UNAIDS	United Nations AIDS
UNSW	University of New South Wales
VR	VicRoads
WHO	World Health Organisation
WU	Washington University, USA

APPENDIX A SEMINARS

IN-HOUSE SEMINARS

- Mar 17 **Pregnancy and early motherhood: Consumer participation in drug-related health care**
Cath Finney-Lamb
- Apr 14 **Review of school-based studies involving alcohol and the community**
Louisa Degenhardt
- Apr 21 **Examining the links between cocaine use and street - based sex work**
Louisa Degenhardt
- Apr 28 **Health service utilisation among regular methamphetamine users in Sydney**
Erin Kelly
- May 19 **Performance and image enhancing drugs: An overview**
Briony Larence
- Jun 9 **Understanding illicit drug markets using independent component analysis**
Stuart Gilmour and Dr Inge Koch
(Department of Statistics, UNSW)
- Jun 16 **Estimating the number of dependent methamphetamine users in Australia**
Rebecca McKetin
- Jul 14 **State-based, treatment outcome monitoring systems: Reflections on the bottom (BTOM)**
Peter Lawrinson
- Sep 8 **Deaths related to naltrexone treatment**
Amy Gibson
Prison Naltrexone Trial
James Shearer
- Sep 15 **Comparative cardiac pathology among deaths due to cocaine toxicity, opioid toxicity and non-drug related causes**
Shane Darke
- Oc 27 **Maternal attitudes in pregnancy predict drinking initiation in adolescence**
Delyse Hutchinson

INVITED SEMINARS

- Mar 3 **Scottish health technology assessment – cost effectiveness of treatments to prevent relapse in alcohol dependence**
Dr Jonathon Chick
Senior Lecturer
Psychiatry at Edinburgh University

- Apr 24 **Community drug strategies: Working with community groups**
Tahn O'Brien
Assistant Project Coordinator
Community Drug Information Strategy
NSW Premiers Department
- May 26 **Drowning your sorrows (and your treatment)**
Dr Adam Winstock
Director, Drug and Alcohol Services
South Western Sydney Area Health Services
- Jun 23 **Ted Noffs Foundation**
Anthony Arcuri
Research Officer
Ted Noffs Foundation
- Aug 11 **Participation in OMT in 3 cohorts (1990, 1995, 2000) entering first episode of methadone treatment**
Dr James Bell
Langton Centre
- Aug 25 **Amphetamine's invention and marketing as the first 'anti-depressant', 1929-1950**
Dr Nicolas Rasmussen
Senior Lecturer
School of History & Philosophy of Science, UNSW
- Sep 22 **The clinical and political aspects of substance abuse testing within the community**
Dr John Lewis
Head, Toxicology Unit
Pacific Laboratory Medical Services
- Oct 13 **Borderline personality disorder**
Dr Mark Montebello
The Langton Centre
- Nov 03 **Getting off methadone: Heroin dependence, personality disorder and the proper focus of psychotherapy**
Dr Jeff Ward
Senior Lecturer
Australian National University
- Nov 15 **Studies of substitution treatment of opiate dependence in Sweden in a changing policy**
Associate Professor Romelsjö
Centre for Social Research on Alcohol and Drugs
Stockholm University, Sweden
- Nov 17 **Improving illicit drug policy in Australia: The Drug Policy Modelling Project (DPMP)**
Associate Professor Alison Ritter
Deputy Director
Turning Point
- Nov 24 **Prediction models for those who develop alcohol problems by 21 years of age**
Professor Jake Najman
Director
QADREC

APPENDIX B

STAFF LIST

Richard Mattick	Director, Professor	Emma Black	Research Officer
Maree Teesson	Deputy Director, Associate Professor	Matthew Dunn	Research Officer
Shane Darke	Associate Professor	Peter Gates	Research Officer
Jan Copeland	Senior Lecturer	Alys Havard	Research Officer
Louisa Degenhardt	Senior Lecturer	Grace Ho	Research Officer
Kate Dolan	Senior Lecturer	Erin Kelly	Research Officer
Lucy Burns	Lecturer	Briony Larance	Research Officer
Joanne Ross	Lecturer	Sarah Larney	Research Officer
Wendy Swift	Lecturer	Elizabeth Maloney	Research Officer
Delyse Hutchinson	Research Fellow	Caitlin McCue	Research Officer
Peter Lawrinson	Research Fellow	Katherine Mills	Research Officer
Rebecca McKetin	Research Fellow	Edmund Silins	Research Officer
Claudia Sannibale	Research Fellow	Sarah Stewart	Research Officer
Anthony Shakeshaft	Research Fellow	Michelle Torok	Research Officer
Eva Congreve	Archivist	Anna Williamson	Research Officer
Paul Dillon	Media Liaison/Information Manager	Elissa Wood	Research Officer
Stuart Gilmour	Statistical Officer	Rox DeLuca	Administrative Assistant
Marian Shanahan	Health Economist	Julie Hodge	Administrative Assistant/ Receptionist
Heli Wolk	Professional Officer	Josephina Kim	Personal Assistant to Director
Courtney Breen	Senior Research Officer	Carla Santos	Administrative Assistant/ Receptionist
Elizabeth Conroy	Senior Research Officer		
Cathy Finney Lamb	Senior Research Officer		
Amy Gibson	Senior Research Officer		
Cherie Kam	Senior Research Officer		
Sharlene Kaye	Senior Research Officer		
Greg Martin	Senior Research Officer		
Etty Matalon	Senior Research Officer		
Jen McLaren	Senior Research Officer		
Susannah O'Brien	Senior Research Officer		
Heather Proudfoot	Senior Research Officer		
Amanda Roxburgh	Senior Research Officer		
Fiona Shand	Senior Research Officer		
James Shearer	Senior Research Officer		
Jenny Stafford	Senior Research Officer		
Kate Hetherington	Doctoral Candidate		
Devon Indig	Doctoral Candidate		
Laura Vogl	Doctoral Candidate		
Maria Agaliotis	Research Officer		

CONJOINT APPOINTMENT

Wayne Hall	Visiting Professor
James Bell	Associate Professor
Andrea Mant	Associate Professor
Catherine Spooner	Senior Lecturer
Adam Winstock	Senior Lecturer
Alex Wodak	Senior Lecturer
Mark Montebello	Lecturer

VISITING FELLOWS

Robert Ali	Visiting Fellow
John Howard	Visiting Fellow
John Lewis	Visiting Fellow
Ingrid Van Beek	Visiting Fellow

APPENDIX C

GRANTS FROM EXTERNAL SOURCES

Projects	Funding Source	Total Award (\$)	Expenditure 2004	Expenditure 2005	Fund
Illicit Drug Reporting System	AGDHA	\$707,505 (2 years)*	\$377,821	\$334,788	RM01826 RMM3869
Illicit drug statistical analysis	AGDHA	\$387,661 (2 years)*	\$188,949	\$191,716	RMM3408 RM01827
Randomised controlled trial of naltrexone, methadone, alcohol and other drug treatment programs in NSW prisons	NSW CHS	\$259,176 (3 years)	\$22,889	\$3,686	RM00343
Development of appropriate interventions for amphetamine users	AGDHA	\$259,291 (2 years)*	\$116,075	\$143,112	RM01829
Cost analysis of pharmacotherapies for nicotine and alcohol dependence	AGDHA	\$336,470 (3 years)*	\$118,424	\$79,209	RM01830
Extension of IDU survey component of IDRS	NDLERF	\$364,765 (2 years)*	\$185,704	\$183,002	RM01579 RM02567 RM03439
The emergence of potent forms of methamphetamine in Sydney	NDLERF	\$245,781	\$128,147	\$39,604	RM01239
Monitoring party drug markets in Australia	NDLERF	\$1,201,169 (3 years)*	\$427,136	\$386,136	RM01570 RM03238
Pharmacology of amphetamine abuse	HT	\$9,091	\$5,402	\$2,209	RM01537
Alcohol Action in Rural Communities	NHMRC	\$126,000 (3 years)	\$41,507	\$17,558	RM01786
Modelling the costs and the outcomes of changing general practitioner behaviours with respect to at-risk drinking	AERF	\$37,878	\$25,604	\$4,536	RM01795
Club drugs study: USA/Australia	NIH	\$174,618 (2 years)	\$82,868	\$12,196	RM01813
A prospective cohort study of mortality, abstinence, criminality and psychiatric comorbidity	NHMRC	\$419,500 (2 years)	\$194,777	\$197,964	RM01999
Cocaine use in NSW and Victoria	NDLERF	\$185,981	\$150,068	\$35,913	RM02213
A multisite randomised controlled trial of the Adolescent Cannabis Check-up	NHMRC	\$211,250 (2 years)	\$74,594	\$89,457	RM01985
Opioid dependence: Candidate genes and GxE effects	WU NIH	\$1,411,114 (5 years)	\$120,342	\$409,731	RM02064
Using population health data to improve health services, policy and planning	NHMRC	\$415,625 (5 years)	\$85,389	\$97,806	RM02205
Trends in drug use and driving among nightclub attendees	VR	\$13,628	\$10,664	\$2,964	RM02450
Reducing alcohol related harm in rural communities: A randomised control trial	AERF UN	\$750,000 (5 years)	\$35,910	\$280,885	PS06470
Young people and alcohol: Taste perceptions, attitudes and experiences	AGDHA	\$122,818	\$44,613	\$78,205	RM02612
Developing an information brochure for people with coexisting mental health and substance use disorders	AGDHA	\$60,081 (2 years)	\$26,855	\$12,165	RM02611
The policing implications of petrol sniffing and other inhalant misuse in Aboriginal and Torres Strait Islander peoples' communities	NDLERF CUT	\$15,439	\$866	–	RM02649
The design and production of an evidence-based harm reduction resource for users of performance and image enhancing drugs	AGDHA	\$74,650	–	\$74,650	RM02745
Rapid assessment of use and side effects of performance and image enhancing drugs	AGDHA	\$80,873	–	\$78,900	RM02744
Career Advancement Fund	UNSW	\$31,000	–	\$1,401	PS08062 PS08290 PS07823
Longitudinal treatment outcomes for methamphetamine dependence: a treatment cohort study	NHMRC	\$709,500 (4 years)	–	\$66,647	RM02720
The impact of alcohol use disorder on family functioning	AGDHA	\$77,000	–	\$70,607	RM03078
Mental health, drug use and risk behaviours among female street-based workers	AGDHA	\$8,600	–	\$8,600	RM03080

APPENDIX C

GRANTS FROM EXTERNAL SOURCES

(Continued)

Projects	Funding Source	Total Award (\$)	Expenditure 2004	Expenditure 2005	Fund
Development of a brief multi-dimensional treatment outcome measure	AGDHA	\$135,000	–	\$135,000	RM03081
Metadone, buprenorphine and naltrexone related deaths in Australia – National Coronial Information System (NCIS)	AGDHA	\$18,625	–	\$18,625	RM03082
Testing of confiscated injecting equipment from prisons	UNILIFE	37,936	–	\$32,368	RM03138
The development of standardised treatment monitoring tool for use by researchers and clinicians: AATOM	AERF	\$350,000 (2 years)	–	\$86,436	RM03140
Research to identify barriers around school-based prevention programmes for ecstasy and related drugs	DEST	\$109,800	–	\$85,930	RM03188
Sexual behaviour and drug use among UK backpackers	JMU	\$47,744	–	\$24,573	RM03229
The efficacy of parental drug testing in child protection	DOCS	\$14,479	–	\$14,479	RM03239
The evaluation of treatment outcomes for methamphetamine users	AGDHA	\$175,000 (3 years)	–	\$26,315	RM03297
Psychostimulant mortality, coronary disease and other serious health effects study	AGDHA	\$149,229 (3 years)	–	\$24,647	RM03298
Two concurrent randomised placebo controlled trials of modafinil in amphetamine and cocaine dependence	AGDHA	\$210,902 (2 years)	–	\$62,725	RM03299
An empirical investigation of psychosis proneness in amphetamine users	NHMRC (GU)	\$180,750	–	\$21,701	RM03406
Documenting good practice in harm reduction	WHO	\$9,714	–	\$4,450	RM03413
Development of the National Cannabis Strategy	AGDHA	\$155,239	–	\$108,919	RM03423
The development of a booklet on ice	AGDHA	\$69,190 (2 years)	–	\$2,000	RM03477
ACON rapid assessment	AC	\$10,000	–	\$10,000	RM03500
Assessment of HIV & drug use articles	IHRA	\$9,392	–	\$9,392	PS07578
Needle and Syringe Program information kit	AGDHA	\$51,284	–	\$7,915	PS08021
Malaysian study tour of HIV prevention services in Sydney	UNAIDS	\$39,749	–	\$14,862	PS08268
Development of harm reduction training package	WHO	\$17,086	–	\$8,478	PS08044
SUB-TOTALS FOR PROJECTS (OVER 1 TO 5 YEARS)		\$10,487,583	\$2,464,604	\$3,602,462	

Infrastructure	Funding Source	Total Award (\$)	Expenditure 2003	Expenditure 2004	Fund
Support for research infrastructure	DEST	\$787,947 (2 years)	\$283,983	\$207,854	RIBG & RQ

Scholarships	Funding Source	Total Award (\$)	Expenditure 2003	Expenditure 2004	Fund
Postgraduate scholarships (2)	AGDHA	\$236,207 (5 years)	\$66,166	\$40,477	RMM3868 RM01825
Research Fellowship	AERF	\$305,130 (3 years)	\$18,458	\$84,195	RM02422
PhD Scholarship	AERF	\$121,709 (4 years)	–	\$21,984	RM02423
Postgrad scholarship	DH	\$133,653 (3 years)	–	\$16,724	RM03226
SUB-TOTALS FOR SCHOLARSHIPS & FELLOWSHIPS (OVER 3 TO 5 YEARS)		\$796,699	\$84,624	\$163,380	
GRAND TOTAL OF AWARDS TO NDARC (OVER 1 TO 5 YEARS)		\$12,072,229	\$2,891,000	\$4,212,017	

* Continuing Project

APPENDIX D PUBLICATIONS

MONOGRAPHS

55. Stafford, J., Degenhardt, L., Black, E., Bruno, R., Buckingham, K., Fetherston, J., Jenkinson, R., Kinner, S., Moon, C., & Weekley, J. (2005). *Australian Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

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57. Stafford, J., Degenhardt, L., Agalotis, M., Chanteloup, F., Fischer, J., Matthews, A., Newman, J., Proudfoot, P., Stooove, M., & Weekley, J. (2005) *Australian Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

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207. McKetin, R., Kelly, E., Indig, D., & McLaren, J. (2004). *Characteristics of treatment provided for amphetamine users in NSW, 2002-03*. Sydney: National Drug and Alcohol Research Centre.

209. Degenhardt, L., Dillon, P., Duff, C., & Ross, J. (2004). *Driving and clubbing in Victoria: a study of drug use and risk among nightclub attendees*. Sydney: National Drug and Alcohol Research Centre.

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212. Jenkinson, R. & O'Keefe, B. (2005). *Vic Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

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216. Fetherston, J. & Lenton, S. (2005). *WA Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

217. Buckingham, K., Ward, J., Sparks, R., & Proudfoot, P. (2005). *ACT Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

218. Moon, C. (2005). *NT Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

219. Shanahan, M., Shakeshaft, A., Fawcett, J., Doran, C., & Mattick, R.P. (2005). *Modelling the costs and outcomes of changing general practitioner behaviours with respect to screening for at-risk drinking*. Sydney: National Drug and Alcohol Research Centre.

220. Chanteloup, F. & Lenton, S. (2005). *WA Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

221. Degenhardt, L., Agalotis, M., White, B. & Stafford, J. (2005). *NSW Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

222. Newman, J. & Moon, C. (2005). *NT Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drug Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

223. Fischer, J. & Kinner, S. (2005). *Queensland Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

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226. Stooové, M., Laslett, M-A. & Barratt, M. (2005). *Victorian Trends in Ecstasy and Related Drug Markets: Findings from the Party Drugs Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

227. Proudfoot, P., Ward, J., Buckingham, K., & Sparks, R. (2005). *ACT Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

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229. Gibson, A. & Degenhardt, L. (2005). *Mortality related to naltrexone in the treatment of opioid dependence: A comparative analysis*. Sydney: National Drug and Alcohol Research Centre.

230. McKetin, R., McLaren, J., Kelly, E., Hall, W., & Hickman, M. (2005). *Estimating the number of regular and dependent methamphetamine users in Australia*. Sydney: National Drug and Alcohol Research Centre

231. Dolan, K. (2005). *Writing for publication: The basics*. Sydney: National Drug and Alcohol Research Centre.

232. Larance, B., Degenhardt, L., Dillon, P., & Copeland, J. (2005). *Use of performance and image enhancing drugs among men: A review*. Sydney: National Drug and Alcohol Research Centre.

233. Kelly, E., McKetin, R. & McLaren, J. (2005). *Health service utilisation among regular methamphetamine users*. Sydney: National Drug and Alcohol Research Centre.

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236. Degenhardt, L., Stafford, J., Kinner, S., Johnston, J., Fry, C., Bruno, R., & Agaliotis, M. (2005). *Reflections on a two-year national pilot study of the Party Drugs Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

239. Larance, B., Degenhardt, L., Dillon, P., & Copeland, J. (2005). *Rapid assessment of performance and image enhancing drugs (PIEDs) in New South Wales: Feasibility study 2005*. Sydney: National Drug and Alcohol Research Centre.

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APPENDIX E

CONFERENCE PRESENTATIONS

Black, E. *Cannabis use and the NSW cannabis market*. Presentation to the National Drugs Trends Conference, Melbourne, 4 November.

Copeland, J. *The Australian Adolescent Cannabis Check-up*. The National Drug Treatment Conference, London, UK, 22 February.

Copeland, J. *Developments in the treatment of cannabis related problems*. Invited paper at the 2nd Perspectives on Cannabis Conference, Liverpool, UK, 24 February.

Copeland, J. *Regional differences in substance use related treatment needs and BBV risk-taking behaviour among OMP clients in NSW, Australia*. Paper presented at 2005 NIDA International Forum on International Research Development, Orlando, USA, 18 June.

Copeland, J. *Young people and alcohol: Taste perception, attitudes and experiences*. Paper presented at 67th Annual Meeting of the College on Problems of Drug Dependence, Orlando, Florida, 22 June.

Copeland, J. *The Adolescent Cannabis Check-up*. Paper presented at 67th Annual Meeting of the College on Problems of Drug Dependence, Orlando, Florida. 23 June.

Copeland, J. *The development of a treatment outcome monitoring tool for use by researchers and clinicians: The Australian Alcohol Treatment Outcome Measure (AATOM)*. Presentation at the Australasian Professional Society on Alcohol and Other Drugs Conference (APSAD), Melbourne, 7 November.

Copeland, J. *Young people and alcohol: Taste perception, attitudes and experiences*. Presentation at the Australasian Professional Society on Alcohol and Other Drugs Conference (APSAD), Melbourne, 8 November.

Copeland, J. *Regional differences in injecting practices and other substance use-related behaviour among opioid maintenance pharmacotherapy treatment entrants in New South Wales.* Paper presented at APSAD 2005 National Conference "Drugs: Meeting New Challenges", Melbourne, 8 November.

Degenhardt, L. *Differential impacts of reduced drug supply upon youth: Effects of a "heroin shortage" in NSW, Australia.* Paper presented at the 16th International Conference on the Reduction of Drug Related Harm, Belfast, Ireland, 20-24 March.

Degenhardt, L. *Was an increase in cocaine use among injecting drug users associated with an increase in street based sex work?* Paper presented at the 16th International Conference on the Reduction of Drug Related Harm, Belfast, Ireland, 20-24 March.

Degenhardt, L. *Drug trends in Australia: Methods and recent market changes* (invited plenary). Community Epidemiology Working Group (CEWG) meeting, Denver, Colorado, 13-17 June.

Degenhardt, L. *Differential impacts of reduced drug supply upon youth: Effects of a "heroin shortage" in NSW, Australia.* Poster presented at the 67th Meeting of the College on Problems of Drug Dependence, Orlando Florida, 18-23 June.

Degenhardt, L. *Drug use in Australia.* Paper presented at the 2005 YAPA Conference, Sydney, 14 September.

Degenhardt, L. *Examining trends in ecstasy and related drug use in Australia.* Paper presented at the 2005 Club Health Conference, Sydney, 29 September.

Degenhardt, L. *The IDRS and PDI: What they can and cannot tell us.* Paper presented at the 2005 Drug Trends Conference, Melbourne, 5 November.

Degenhardt, L. *Australian Party Drug Trends, 2005.* Paper presented at the 2005 Drug Trends Conference, Melbourne, 5 November.

Degenhardt, L. *Evaluating hypotheses about the causes of the Australian "heroin shortage".* Invited plenary presentation at the Australasian Professional Society on Alcohol and Other Drugs Conference (APSAD), Melbourne, 8 November.

Degenhardt, L. *Youth drug use and issues.* Invited paper presented at the 4th International Adolescent Health Conference, Melbourne, 11 November.

Dillon, P. *Cannabis education and young people: The Australian experience.* Invited paper at the 2nd Perspectives on Cannabis Conference, Liverpool, UK, 24 February.

Dillon, P. *Current issues in drugs.* Keynote presentation to the Drug Court Practitioners' Conference, Parramatta, 13 May.

Dillon, P. *The new illicit drugs.* Invited presentation to The General Practitioner Conference and Exhibition, Homebush Bay, Sydney, 22 May.

Dillon, P. *Teenagers and drugs in 2005: The what, when and how.* Invited presentation to The Royal Australian and New Zealand College of Psychiatrists 40th Congress, Sydney, 24 May.

Dillon, P. *Synergies: Drugs and sex.* Invited presentation to the Australasian Sexual Health Conference 2005, Hobart, 22 August.

Havard, A. *The impact of treatment for heroin dependence on current major depression: 12 month findings from the Australian Treatment Outcome Study (ATOS).* Poster presented at the 67th Meeting of the College on Problems of Drug Dependence, Orlando, Florida, 20-24 June.

Hutchinson, D. *Maternal caregiving attitudes in pregnancy predict drinking initiation in adolescence.* Presentation at the Australasian Professional Society on Alcohol and Other Drugs Conference (APSAD), Melbourne, 8 November.

Larance, B. *Rapid assessment of performance and image enhancing drugs in NSW: findings and feasibility.* Presentation at the Australasian Professional Society on Alcohol and Other Drugs Conference (APSAD), Melbourne, 9 November 2005.

Mattick, R. *New directions in research in drug and alcohol: Methamphetamine, cannabis and co-morbidity.* Keynote presentation to Creating Synergy II Conference: New Directions in the Drug & Alcohol Field, Wollongong, 16-17 June.

McKetin, R. *Mental health and comorbidity among stimulant users.* Paper presented at The Mental Health Service Summer Forum 2005, Bondi, 24 February.

Mills, K. *The impact of post traumatic stress disorder on 2-year treatment outcomes for heroin dependence.* Paper presented at the 67th Meeting of the College on Problems of Drug Dependence, Orlando, Florida, 20-24 June.

Mills, K. *One year outcomes for heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS).* Presentation to the World Psychiatric Association Section of Epidemiology and Public Health Meeting, Brisbane, 6 July.

Mills, K. *Substance use, dependence and treatment seeking in the United States and Australia: A cross-national comparison.* Keynote presentation to the World Psychiatric Association Section of Epidemiology and Public Health Meeting, Brisbane, 7 July.

Shakeshaft, A. *The Alcohol Action in Rural Communities (AARC) project: Whole of community approaches.* Invited presentation at the Annual Liquor Regulators' Conference, Darwin, 14 September.

Shanahan, M. *Modelling the costs and outcomes of changing general practitioner behaviours with respect to screening for at-risk drinking.* Paper presented at Australian Health Economics Conference, Auckland NZ, 28 October.

Shanahan, M. *Patterns and costs of treatment for heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS).* Paper presented at Health Services Research Conference, Canberra, ACT, 16 November.

Shearer, J. *Evaluation of an oral naltrexone program for imprisoned male heroin users.* Paper presented at the International Conference on the Reduction of Drug Related Harm, Belfast, Northern Ireland, 20-24 March.

Shearer, J. *Cocaine in Australian nightlife.* Paper presented at the 2005 Club Health Conference, Sydney, 29-30 September.

Shearer, J. *The cocaine market in Sydney and Melbourne.* Presentation at the Australasian Professional Society on Alcohol and Other Drugs Conference (APSAD), Melbourne, 8 November.

Stafford, J. *Preliminary findings from the Illicit Drug Reporting System (IDRS).* Presentation to the National Drugs Trends Conference, Melbourne, 4 November.

Stafford, J. *Driving risk behaviours among regular ecstasy users.* Presentation at the Australasian Professional Society on Alcohol and Other Drugs Conference (APSAD), Melbourne, 8 November.

Williamson, A. *The effect of cocaine use on treatment outcomes for heroin dependence: Twelve-month results from the Australian Treatment Outcome Study.* Poster presented at the 67th Meeting of the College on Problems of Drug Dependence, Orlando, Florida, 20-24 June.

EXTERNAL LECTURES, WORKSHOPS, PRESENTATIONS

Black, E. *The Rural Injector Project.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Burns, L. *Alcohol and pregnancy: An overview.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Conroy, E. *Findings from the rural IDU project: Where to from here?* Invited presentation at the 2005 NSW Statewide Needle & Syringe Program Workers' Meeting, Sydney, 30 September.

Conroy, E. *Drug use and harms among rural injecting drug users.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Copeland, J. *Interventions for cannabis use disorder.* A workshop for treatment providers, HIT, Liverpool, UK, 23 February.

Copeland, J. *Working with adult and adolescent cannabis users – evidence and practice from The National Drug and Alcohol Research Centre, Sydney.* A workshop for clinical staff at South London and Maudsley NHS, London, 28 February.

Copeland, J. *An Australian perspective on the management of cannabis use disorder.* Invited presentation to the National Addiction Centre, King's College Institute of Psychiatry, London, 1 March.

Copeland, J. *Young people and alcohol: Taste perception – interim findings.* Invited presentation to the Australian Government Department of Health and Ageing, Canberra, 20 April.

Copeland, J. *Young people and alcohol: Taste perception.* Presentation to the New Zealand Assistant Minister for Health, Sydney, 20 May.

Copeland, J. *Young People and Alcohol Study: First results.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Copeland, J. *Harms and interventions for cannabis use disorder.* Presentation to NSW Institute of Psychiatry, Parramatta, 24 November.

Darke, S. *Residential rehabilitation for the treatment of heroin dependence: 24 month outcomes from the Australian Treatment Outcome Study (ATOS).* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Degenhardt, L. *The Australian heroin shortage: Overview of study methods, and examining the causes of the shortage.* Presentation to the National Addiction Centre, London, 31 March.

Degenhardt, L. *Evaluating causes of the Australian heroin shortage.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Degenhardt, L. *Cannabis.* Presentation to Family Drug Support information evening, Newcastle, 1 September.

Degenhardt, L. *What are the PDI and IDRS, and what do they tell use?* Presentation to AIVL annual general meeting, Adelaide, 30 November.

Degenhardt, L. *Overview of the PDI and IDRS.* Presentation to NSW Expert Advisory Group on Drugs, Sydney, 1 December.

Degenhardt, L. *Trends in ecstasy and related drug markets.* Presentation to Sydney Sexual Health Centre, Sydney, 7 December.

Degenhardt, L. *Trends in psychostimulant use and harms: Overview of existing data.* Presentation to National Psychostimulants Initiative Workshop, Sydney, 5 December.

Dillon, P. *Overview of synthetic drug use in Australia.* Precursor Training Workshops for the Australian Customs Service, Brisbane, 13-15 April.

Dillon, P. *Overview of synthetic drug use in Australia.* Precursor Training Workshops for the Australian Customs Service, Brisbane, 19-21 April.

Dillon, P. *Current drug trends.* Presentation to Alcohol and Other Drugs Program for TAFE Counsellors, Sydney, 25 May.

Dillon, P. *Alcohol use, effects and trends.* Invited presentation to Sydney Community Alcohol Action Forum, Sydney, 1 June.

Dolan, K. *An examination of supply demand and harm reduction strategies in Australian prisons.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Gibson, A. *Deaths related to oral naltrexone in the treatment of opioid dependence.* Presentation to School of Public Health and Community Medicine Postgraduate Research Student Conference, Sydney, Australia, 9 September.

Larance, B. *Performance and image enhancing drugs (PIEDs): The current situation.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Martin, G. *Cannabis.* Presentation to Master of Public Health course, University of Sydney, 20 April.

McKetin, R. *A discussion of findings from the Methamphetamine Market Project.* Precursor Training Workshops for the Australian Customs Service, Brisbane, 13-15 April.

McKetin, R. *A discussion of findings from the Methamphetamine Market Project.* Precursor Training Workshops for the Australian Customs Service, Brisbane, 19-21 April.

McKetin, R. *Methamphetamines: The current situation.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Mills, K. *The impact of post traumatic stress disorder on 2 year treatment outcomes for heroin dependence.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Sannibale, C. *Substance use disorders: Epidemiology & treatment.* Invited presentation to Doctor of Clinical Psychology (year two) students, University of Sydney, 17 and 31 May.

Sannibale, C. *Substance use disorders and psychopathology.* Invited presentation to Master of Clinical Psychology and Neuropsychology students, Macquarie University, Sydney, 26 May.

Sannibale, C. *Adolescent substance use and problems.* Invited presentation to the staff of Rivendell Child and Adolescent Unit, Sydney, 27 May.

Sannibale, C. *Brief interventions for hazardous alcohol use.* Presentation to medical students, University of Sydney, 27 June.

Sannibale, C. *Treating alcohol and co-existing anxiety: An overview.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Sannibale, C. *Assessment of substance use.* Presentation to Master of Clinical Psychology students, Macquarie University, Sydney, 31 October.

Sannibale, C. *Naltrexone versus acamprosate in the treatment of alcohol dependence: a multi-centre, randomised, double blind, placebo controlled trial.* Quarterly meeting of the Drug Health Services staff, Sydney South West Area Health Service, Bankstown, 12 December.

Shakeshaft, A. *Alcohol: Identifying and reducing social harms.* Presentation to students at UNSW General Education Course, Sydney, 8 February.

Shanahan, M. *Modelling the costs and outcomes of changing general practitioner behaviours with respect to at-risk drinking.* Presentation to the National Drug and Alcohol Research Centre Annual Symposium, Sydney, 28 July.

Shearer, J. *Evaluation of an oral naltrexone program for imprisoned male heroin users.* Invited presentation to Research Series, Alcohol and Other Drug Services, Department of Corrective Services, Sydney, 19 May.

Shearer, J. *The Cocaine Market in Sydney.* Presentation to the Expert Advisory Group to the New South Wales Minister for Health, Sydney, 8 December.

Shearer, J. *Four year follow-up of imprisoned male heroin users and methadone maintenance treatment: mortality, re-incarceration and hepatitis C infection.* Keynote presentation at the Centre of Health Research in Criminal Justice Annual General Meeting, Sydney, 13 December.



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