

**NATIONAL DRUG AND  
ALCOHOL RESEARCH CENTRE  
2004 ANNUAL REPORT**



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Research Centre**

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Designed by John Fear

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Director,  
National Drug & 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, and 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 drug and alcohol 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; and
- (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 are 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

This year saw the adoption of our strategic plan for 2004-2008. This has provided firm and positive directions that will ensure the vitality, relevance and high professional standards which have become hall-marks of the Centre's work.

We continue to gain benefit from the strong interagency relationships we enjoy with government departments, collaborating centres, stakeholders and partnerships. Our international reputation continues to grow as the high quality of our research commands the attention of those in the field in many countries. Our participation is sought in many forums and our contribution highly regarded.

I would particularly like to acknowledge the role of the Australian Government through its Drug Strategy and Health Promotion Branch of the Department of Health and Ageing in encouraging, supporting and promoting our work. In particular we are indebted to the dedicated officers of the Branch for their continuing assistance and for the close and productive level of co-operation which provides tangible benefit to everyone in our fight against the insidious impact of substance abuse in our community. We are indeed fortunate to have the co-operation and personal support of the Assistant Secretary of the Australian Government Department of Health and Ageing (AGDHA) Jenny Hefford and Tess Hill, Acting Director, Research, Data and Policy Development Section.

The Centre continues to grow. This creates challenges for accommodation and funding, especially around the infrastructure necessary to support the wide range of projects with which we are now involved.

Our efforts to meet these challenges are greatly assisted by the continuing support and co-operation of the University of New South Wales. Our thanks especially to Professor Bruce Downton, Dean of the Faculty of Health and Professor Elspeth McLachlan, Pro Vice Chancellor (Research).

I would like to once again place on record my great appreciation of the outstanding achievement of our staff who continually amaze me with their enthusiasm and application to quality outcomes. It is a source of pride and pleasure to be associated with such a wonderful organisation. Much of this is attributable to the outstanding leadership of our Director, Richard Mattick, Deputy Director Maree Teesson and senior staff members.

Finally I recognise the continuing commitment of my fellow Board members. Their learned and astute contribution is vital to the well-being 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

The last two years have marked a period of important development for NDARC in terms of planning and strategic development. NDARC was halfway through the strategic planning process at the time that last year's Annual Report was being prepared. Since that time our Strategic Plan 2004-2008 has been completed by the Board of Management and the senior management of the centre, with significant input from staff, a range of key stakeholders and collaborating research centres. The 2004-2008 strategic planning process re-examined our mission statements, the arising goals and introduced the concept of values with definitions and performance indicators.

Although much of the work was conducted during 2003, the Planning Committee, chaired by Dr Jan Copeland, continued the process throughout the early part of 2004 to prepare a draft plan by February. This was then circulated to key stakeholders and the general community for their comments. The plan was then finalised and adopted by NDARC in April.

As a result of the consultation process a number of planning factors were acknowledged. Firstly, NDARC's reputation as a robust, quality and reliable research centre was very high amongst stakeholders. Some of the areas highlighted included the calibre of the staff and the supportive/collegial, friendly atmosphere/culture which existed within the Centre; the Centre's ability to respond in a quick and timely manner to research needs and topical issues; NDARC's multi-disciplinary approach to research; and a capacity by the Centre to secure media interest and provide a media face.

One of the many challenges facing the Centre is our continued growth. Our success in attracting funding and co-ordinating a wide range of projects needs to be balanced by ensuring that this does not place undue pressure on staff and partner communication, project management, and administrative support. As the Centre continues to grow, the subsequent trends in the level and quantity of research being undertaken demand significant structural and facility considerations. Requests from other Centres for increased dialogue and cross representation also place significant time demands on senior NDARC personnel. As we continue to grow (at the time of writing NDARC had 57 staff, including support staff, part-time staff, conjoint and honorary appointments), it is important to ensure that the quality of the research conducted continues to be of the highest standard, whilst ensuring that the quality of the working environment is not compromised for NDARC employees. Due to the great work conducted by the Planning Committee and the tremendous input by a variety of stakeholders, our Strategic Plan 2004-2008 will hopefully ensure that this is achieved.

In November of this year work began on the 'Comorbidity and Trauma Study (CATS)'. This project is a large case-control study of heroin dependence and its relationship to childhood trauma, funded by the National Institute on Drug Abuse. This is just one of a number of NDARC projects being conducted on an international basis: in this case, Washington University, St Louis and also the Queensland Institute of Medical Research, Brisbane. This project is the result of a successful application

for international research funds offered by the United States and allows for collaboration with researchers with complementary areas of expertise.

In addition to research projects currently being carried out independently within the Centre, NDARC continued to engage in collaborative projects with other researchers throughout Australia to provide a national focus for research in this field. NDARC has had a history of strong links with researchers overseas. This focus on strong international links continues today. Throughout 2004 Dr Rebecca McKetin's work continued to strengthen the relationship between NDARC and the United Nations Office on Drugs and Crime (UNODC) Regional Centre for East Asia and the Pacific. NDARC currently has a Memorandum of Understanding with the UNODC to support their project 'Improving ATS Data and Information Systems' through the provision of technical assistance and information sharing.

The project itself consists of developing national systems through which data on amphetamine-type stimulants can be collected, a regional network of focal points through which information can be shared and synthesized, and a regional clearinghouse for amphetamine-type stimulant trends in East Asia and the Pacific. NDARC will begin contributing information on the Australian ATS situation to this project early next year.

The Program of International Research and Training (PIRT) was developed by Dr Kate Dolan to build capacity among researchers in developing countries. Funded by the Australian Government Department of Health and Ageing for the last two years, PIRT has carried out nine projects for organisations such as UNAIDS, AusAID, Iranian Prison Service, the Centre for Harm Reduction, and the World Health Organization. Currently PIRT is co-ordinating and editing a special issue of the *Harm Reduction Journal* on HIV, injecting drug use and Islam. One of the major initiatives of the project has been the providing of training in writing skills to researchers in developing countries.

2004 saw a number of new academic positions created at NDARC, with Dr Claudia Sannibale returning to NDARC in October as an AERF Research Fellow. Dr Sannibale completed her PhD at NDARC in 1995. Another successful doctoral candidate gaining a lectureship at the Centre was Dr Lucy Burns who is now working on the Health Evaluation and Research Outcomes Network (HERON): Opioid use in pregnancy stream. Finally, Dr Louisa Degenhardt, who was awarded her PhD in 2001, was promoted to Senior Lecturer. All of these positions demonstrate the continuing importance given to doctoral candidates at the Centre and NDARC's support of their academic careers.

The coming year promises to be another busy one. Alcohol and other drug use continues to be the focus of public attention and many of the findings of our current projects play an important part in shaping public policy. A major task for NDARC will be ensuring that research on topics of relevance continues to be completed in a timely way so that its findings continue to play this important role.

## 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. The increasing use of more potent forms of methamphetamine, ecstasy and related drugs (ERDs) and alcohol use and abuse 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, 2004 saw a number of NDARC projects generate far more media interest than others. The Party Drugs Initiative (PDI) and the heroin shortage project were just two key projects that attracted media attention across the country. Another research project which examined the use of ERDs in association with pharmaceutical drugs such as anti-depressants and Viagra also received wide coverage.

NDARC's Media Liaison Manager, Mr 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 drug and alcohol workers and policymakers. *Centre Lines* has continued to expand its readership across Australia and internationally and is currently being received by almost 1000 subscribers. Some of the topics examined throughout 2004 included socio-economic inequalities and drug use and opiate use in pregnancy.

Our webpage 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: 2003 Edition*, as well as *Cocaine and Methamphetamine Mentions in Accidental Drug-Induced Deaths in Australia, 2003*. Including these publications on the webpage has ensured that this important data is made available to a potentially large audience quickly and effectively. NDARC's webpage is located as <http://ndarc.med.unsw.edu.au/ndarc.nsf>.

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 this year; rather, the day was broken up into four sections with projects being highlighted in one of the following areas: the Australian Treatment Outcome Study (ATOS); ERDs; alcohol; and methamphetamine. 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.



As the public interest in drug issues continues there has been great pressure on NDARC staff to speak at a variety of different forums. Mr Dillon has spent much of his time giving presentations to schools, community groups and other interested parties on a variety of drug issues. Youth alcohol and other drug use, ERDs and current drug trends have proved the most popular topics with audiences.

NDARC resources continue to be popular with both workers in the field, as well as drug users. *Double Trouble: Drugs and Mental Health* is a new booklet developed by the Centre this year which examines the link between drug use and mental health. Jointly produced by NDARC and the Mental Health Services Conference Inc. of Australia, the booklet has introduced our range of resources to a new audience within the mental health sector. In 2003 Mr Dillon was approached by the Australian Institute of Sport (AIS) to assist in the development of a drug education resource relevant for people who play sport. The resulting resource *What's the score? The facts on alcohol, drugs and sport* was jointly produced by the AIS, a program of the Australian Sports Commission and NDARC.

NDARC's expertise in producing quality resources has resulted in a number of resource production projects being funded by the Australian Government Department of Health and Ageing (AGDHA). Earlier this year a series of resources were distributed through the AGDHA written by Ms Susannah O'Brien, which examined treatment options for heroin dependence for three specific groups – users, families and carers and frontline workers. These were based on the highly successful National Evaluation of Pharmacotherapies for Opioid Dependence (NEPOD) research project findings.

Two further projects were also funded. One of these was to develop a comorbidity brochure, and the other, a 'sister' publication to an already existing NDARC resource, *Steroid Facts*, which would provide information on a range of performance and image enhancing drugs (PIEDs). Both of these resources, *Feeling Good: Answering your questions about alcohol, drugs and mental health* and *Performance and Image Enhancing Drugs*, will be available early in 2005.

## STAFFING

As of 31 December 2004, NDARC staff numbered 57, 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: Prof Mattick (Chair); A/Prof Maree Teesson; A/Prof Shane Darke; Dr Copeland; Dr Degenhardt; Dr Dolan; Dr McKetin; Dr Anthony Shakeshaft; Dr Catherine Spooner; Dr Wendy Swift; Dr Joanne Ross; Dr Peter Lawrinson; Dr Burns; Mr Stuart Gilmour; Ms Marian Shanahan; Mr 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 2003/04 was \$1,384,322. This was expended as follows

	2002-2003 \$	2003-2004 \$
SALARIES	930,747	1,031,046
OPERATIONAL	324,682	322,184
EQUIPMENT AND FURNITURE	16,905	31,092
<b>TOTAL</b>	<b>1,272,334</b>	<b>1,384,322</b>

Expenditure during 2004 of funds from external grants awarded to NDARC was \$3,505,862. 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 Lucy Burns who was awarded her PhD in 2004. Examples of current PhD projects include:

- Reducing alcohol-related harm in rural communities in NSW
- Hepatitis C infection among injecting drug users
- Heroin dependence and personality disorders
- Patterns of psychiatric morbidity in opioid dependent subjects and matched control subjects
- Evaluation of the health impacts of a medically supervised injection centre
- Development of a routine outcome measure for opioid maintenance pharmacotherapy services in NSW
- Brief intervention for adolescent cannabis users
- Post traumatic stress disorder among people with heroin dependence
- Health Service Evaluation: The regulation of injecting behaviour in Kings Cross

- CLIMATEschools alcohol module: Evaluating the efficacy of a computer-based preventative alcohol module for schools
- Comorbid cocaine and heroin dependence

The students have a representative on the Research Committee and meet quarterly with the 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 2004.

**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.

**Day, C.** (2000-2004).

Blood borne viruses and injecting drug use. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Dolan and Dr Ross. Submitted May 2004.

**Donnelly, N.** (1995-present).

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.

**Kimber, J.** (2000-present).

Health services evaluation. Part-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Dolan and Prof Mattick. Expected date of submission May 2005.

**Lawrinson, P.** (2000-2004).

Development of a brief treatment outcome measure for alcohol and other drug treatment services. Full-time PhD in School of Community Medicine, UNSW. Joint supervision by Dr Copeland and Dr Swift. Submitted December 2004.

**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 June 2005.

**Mills, K.** (2003-present).

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. Expected date of submission December 2005.

**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. Expected date of submission December 2005.

**Thetford, C.** (2001-2004).

Childbearing decision-making among hepatitis C positive women. Full-time PhD in School of Geography, Australian National University, based at NDARC. Joint supervision by Dr Copeland and Dr Swift. Submitted August 2004.

**Vogl, L.** (2003-present).

CLIMATEschools 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 March 2006.

**Williamson, A.** (2003-present).

Comorbid cocaine and heroin dependence. Part-time PhD in School of Community Medicine, UNSW. Joint supervision by A/Prof Darke and Dr Ross. Expected date of submission December 2006.

## EPIDEMIOLOGY

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**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 is a collaboration between researchers at NDARC and Imperial College, London, which is being supported by a University of New South Wales John Yu Fellowship to Europe. The aim of this project is 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, currently no robust estimates exist. This project aims to explore the feasibility of different prevalence estimation techniques in the context of dependent stimulant use and pilot these techniques in Australia.

**Start Date:** August 2004

**Expected Completion Date:** August 2005

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

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**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

**Aim:** This study will partially replicate the previous series of studies of NESB community's 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

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**TITLE:** NATIONAL ILLICIT DRUG INDICATORS PROJECT (NIDIP)

**NDARC Staff:** Louisa Degenhardt and Amanda Roxburgh

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

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.

**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 webpage. This will provide an accessible and more complete picture of trends in use and harms over time.

**Start Date:** June 2002

**Expected Completion Date:** Ongoing

**Funding:** Australian Government Department of Health and Ageing

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

**NDARC Staff:** Lucy Burns and Richard Mattick

**Other Investigators:** Prof Bruce Armstrong, A/Prof Richard Taylor and Prof Judy Simpson (School of Public Health, USyd), Dr Louisa Jorm (NSW Health), Dr Anne Krickler (School of Public Health, USyd), A/Prof Dianne O'Connell (Cancer Council of NSW), Dr Christine Roberts (Centre for Perinatal Health Services Research, USyd), Dr Elizabeth Sullivan (NPSU, UNSW) and Prof Anthony Zwi (PH&CM, UNSW)

**Aim:** To assess the magnitude and outcomes of opioid 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 opioid-dependent women and non-opioid 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

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

**NDARC Staff:** N/A

**Other Investigators:** This project is conducted through the UNODC Regional Centre for East Asia and the Pacific. Project Staff: Jeremy Douglas and Eduardo Hidalgo

NDARC has a Memorandum of Understanding with the United Nations Office on Drugs and Crime Regional Centre 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 itself consists of developing national systems through which data on amphetamine-type stimulants can be collected, a regional network of focal points through which information can be shared and synthesized, and a regional clearinghouse for amphetamine-type stimulant trends in East Asia and the Pacific. NDARC will be contributing information on the Australian ATS situation to this project from 2004. Further information on the project can be found at [www.apaic.org](http://www.apaic.org).

**Start Date:** September 2002

**Expected Completion Date:** Ongoing pending continued funding

**Funding:** United National Office on Drugs and Crime

## IDENTIFICATION OF POTENTIAL HARMS

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

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

**Other Investigators:** Elliot Nelson (Washington Uni), Michael Lynskey (Washington Uni), Grant Montgomery (QIMR), Dixie Stratham (QIMR), Megan Campbell (QIMR), Yong Pan (POWH) and Bill Rawlinson (POWH)

**Aim:** 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, 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:** January 2008

**Funding:** National Institute on Drug Abuse

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**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' (IDUs) 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 subgroup 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 IDUs to gain a greater insight into their understanding of hepatitis C.

**Start Date:** August 2004

**Expected Completion Date:** December 2004

**Funding:** Australian National Council on Drugs

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**TITLE:** SURVEY OF MEDICAL CANNABIS USE

**NDARC Staff:** Wendy Swift, Peter Gates and Paul Dillon

**Aims:** The NSW Government recently announced a proposed trial of the therapeutic benefits of cannabis. Cannabis (and other cannabinoids) has been indicated as a potential therapeutic tool for numerous medical conditions, and many people claim relief from symptoms of medical conditions that they have been unable to obtain from other sources. One of the recommendations of the recent 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 aims to examine people's experiences, behaviours and attitudes surrounding medicinal cannabis use.

**Design and Method:** Participants will be recruited via media stories, inviting people who use cannabis for its perceived therapeutic value to contact the researchers. Those interested in participating will be mailed a brief, anonymous survey which they will complete and return in a post-paid envelope.

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

**Start Date:** November 2003

**Expected Completion Date:** March 2005

**Funding:** National Drug and Alcohol Research Centre

**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, Michael Gascgoine, Peter Gates, Saul Gerber, Greg Martin and Ety Matalon

**Other Investigators:** Linda Cottler

**Aim:** This is the international arm of a US study on club drugs and emerging trends that aims to assess the psychometric properties and sources of unreliability in identifying abuse and dependence on club drugs. The Sydney arm will interview 150 ecstasy and other club drug users over two years.

**Start Date:** February 2002

**Expected Completion Date:** June 2005

**Funding:** National Institute on Drug Abuse (NIDA)

**TITLE:** RURAL INJECTOR PROJECT

**NDARC Staff:** Carolyn Day and Kate Dolan

**Aims:** This project aims:

- to examine patterns of drug use and treatment utilisation among rural injecting drug users (IDUs)
- to determine the prevalence of blood-borne virus risk behaviours among rural IDUs
- to determine the prevalence of HIV and hepatitis C among rural IDUs
- to examine patterns of migration from areas with low prevalence of blood-borne viruses to high prevalence areas.

**Design and Method:** Cross-sectional survey of IDUs in rural and regional areas of NSW. The survey will also cover a wider range of issues related to treatment and migration between rural and metropolitan areas. To examine the prevalence of HIV and hepatitis C, finger prick blood samples will be collected.

**Start Date:** June 2003

**Expected Completion Date:** December 2004

**Funding:** Australian Department of Health and Ageing and AIDS and Infectious Diseases Branch, NSW Health

## HEALTH ECONOMICS

**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:** This project aims to conduct economic modelling of various strategies for altering general practitioners' clinical behaviours with respect to screening and providing brief interventions to individuals with risky alcohol consumption. Short and long-term health benefits to risky drinkers, and the resource implications of various strategies for altering general practitioner (GP) behaviours will be modelled. The economic costs of altering GP behaviours and the outcomes will be estimated.

**Design and Method:** This study will be obtaining effectiveness data from Australian and the international literature on the effectiveness of various strategies to alter GP behaviours; costs used will be Australian. The economic modelling will be done using decision modelling software.

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

**Start Date:** June 2002

**Expected Completion Date:** February 2005

**Funding:** Alcohol Education Research Fund

## 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:** Dr Jeff Ward, Kirsten Buckingham, Phoebe Proudfoot and Randolph Sparks, School of Psychology, Australian National University (ACT), Christopher Moon and Jaclyn Newman, Department of Health and Community Services (NT), Jane Fischer, Stuart Kinner and Prof Jake Najman, Queensland Alcohol and Drug Research and Education Centre (QLD), Josephine Weekley, Sophie Pointer and A/Prof Robert Ali, Drug and Alcohol Services Council (SA), Raimondo Bruno and A/Prof Stuart McLean, University of Tasmania (TAS), Craig Fry and Rebecca Jenkinson, Turning Point Alcohol and Drug Centre Inc. (VIC) and James Fetherston and Simon Lenton, National Drug Research Institute (WA)

**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 (IDUs)
- 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 2004, 948 regular IDUs were interviewed across Australia, providing information on their use patterns and drug markets. Two hundred and eighty five KIs provided information on the drug users they had contact with.

**Output:** The annual National Drug Trends Conference was held in Perth in November, in conjunction with the 2004 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 policymakers. Throughout the year, quarterly bulletins outlining current drug trends or issues of interest were also disseminated. These bulletins are available on the National Drug and Alcohol Research Centre (NDARC) webpage to ensure broader dissemination. More detailed findings from each jurisdiction, and a national overview, are documented in comprehensive reports and are listed below.

**Breen, C., Degenhardt, L., Roxburgh, A., Bruno, R., Fetherston, J., Jenkinson, R., Kinner, S., Moon, C., Proudfoot, P., Ward, J., & Weekley, J.** (2004). *Australian Drug Trends 2003: Findings of the Illicit Drug Reporting System*. Monograph No. 51. Sydney: National Drug and Alcohol Research Centre.

**Bruno, R. & McLean, S.** (2004). *Tasmanian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 178. National Drug and Alcohol Research Centre.

**Fetherston, J. & Lenton, S.** (2004). *Western Australian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 179. National Drug and Alcohol Research Centre.

**Jenkinson, R., Miller, P. & Fry, C.** (2004). *Victorian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 175. National Drug and Alcohol Research Centre.

**Kinner, S. & Fischer, J.** (2004). *Queensland Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 177. National Drug and Alcohol Research Centre.

**Moon, C.** (2004). *Northern Territory Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 181. National Drug and Alcohol Research Centre.

**Roxburgh, A., Breen, C. & Degenhardt, L.** (2004). *New South Wales Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 174. National Drug and Alcohol Research Centre.

**Ward, J. & Proudfoot, H.** (2004). *ACT Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 180. National Drug and Alcohol Research Centre.

**Weekley, J., Pointer, S. & Ali, R.** (2004). *South Australian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Technical Report No. 176. 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, Kirtsen Buckingham, and Randolph Sparks (Australian National University, ACT), Craig Fry and Jennifer Johnston (Turning Point Alcohol & Drug Centre, Victoria), Raimondo Bruno, Allison Matthews and Stuart McLean (University of Tasmania), Josephine Weekley, Sophie Pointer and Robert Ali (Drug & Alcohol Services Council, South Australia), Francoise Chanteloup and Simon Lenton (National Drug Research Institute, Western Australia), 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, Queensland)

**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 other party drugs across Australia
- to examine participants' 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 party drug market that may require further investigation.

**Design and Method:** The Party Drugs Initiative (PDI) is coordinated by the National Drug and Alcohol Research Centre, 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 party drug users that are able to provide the required information on patterns of party drug use, the current availability, price and purity of party drugs and perceived drug-related health issues associated with party drug use. A semi-structured survey of experts in the field of party drugs (e.g. party promoters, treatment providers, law enforcement personnel) is also conducted and indicator (e.g. purity of drug seizures and overdose rates) is analysed. These data sources are examined together to identify convergent trends in party drug use and markets.

**Progress:** The PDI was conducted successfully in every state and territory in 2004. Over eight hundred regular ecstasy users were interviewed on their drug use patterns and provided information on drug markets. One hundred and thirty five key informants provided information on party drug users they had contact with. Indicator data including custom seizures, purity analysis and treatment data was examined.

**Output:** The results of the 2004 PDI were presented as part of the National Drug Trends Conference which was held in Perth in November in conjunction with the 2004 APSAD Conference. The December 2004 Party Drugs Bulletin presents a brief overview of the 2004 results. Detailed state and national reports are being finalised and will be available in early 2005.

**Breen, C., Degenhardt, L., White, B., Bruno, R., Chanteloup, F., Fischer, J., Johnston, J., Kinner, S., Moon, C., Proudfoot, P., & Weekley, J.** (2004). *Australian Party Drug Trends 2003: Findings from the Party Drugs Initiative*. Monograph No. 52. Sydney: National Drug and Alcohol Research Centre.

**Bruno, R. & McLean, S.** (2004). *Tasmanian Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Technical Report No. 186. Sydney: National Drug and Alcohol Research Centre.

**Chanteloup, F. & Lenton, S.** (2004). *Western Australian Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Technical Report No. 187. Sydney: National Drug and Alcohol Research Centre.

**Fischer, J. & Kinner, S.** (2004). *Queensland Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Technical Report No. 185. Sydney: National Drug and Alcohol Research Centre.

**Johnston, J., Laslett, A.M., Jenkinson, R., Miller, P., & Fry, C.** (2004). *Victorian Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Technical Report No. 183. Sydney: National Drug and Alcohol Research Centre.

**Moon, C. & Newman, J.** (2004). *Northern Territory Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Technical Report No. 189. Sydney: National Drug and Alcohol Research Centre.

**Proudfoot, P. & Ward, J.** (2004). *Australian Capital Territory Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Technical Report No. 188. Sydney: National Drug and Alcohol Research Centre.

**Weekley, J., Pointer, S. & Ali, R.** (2004). *South Australian Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Technical Report No. 184. Sydney: National Drug and Alcohol Research Centre.

**White, B., Degenhardt, L. & Breen, C.** (2004). *New South Wales Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Technical Report No. 182. Sydney: National Drug and Alcohol Research Centre.

**Start Date:** January 2003

**Expected Completion Date:** Ongoing

**Funding:** National Drug Law Enforcement Research Fund

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**TITLE:** PERFORMANCE AND IMAGE ENHANCING DRUGS (PIEDS): A RAPID ASSESSMENT OF THE NSW SITUATION

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

**Aims:** This project aims:

- to describe the characteristics of a sample of current regular performance and image enhancing drugs (PIEDs) users interviewed in Sydney
- to examine the patterns of PIEDs and other drug use of this sample
- to document the current price, purity and availability of PIEDs in Sydney



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

**Design and Method:** The rapid assessment of PIEDs use in NSW uses a similar methodology to the Illicit Drug Reporting System (IDRS):

- regular PIEDs users will be interviewed for information on patterns of PIEDs use, the current availability, price and purity of PIEDs and perceived drug-related health issues associated with PIEDs use. A sample size of 100 has been selected to ensure adequate recruitment from key target groups (young men, gay men and people working in the security industry)
- a semi-structured survey of key experts in the field of PIEDs (e.g. health workers, law enforcement personnel, people working in the gym and fitness industry) will be conducted
- indicator data (e.g. purity of drug seizures and hospital morbidity rates) will be identified and analysed.

These three data sources are examined together to identify convergent trends in PIEDs use and markets.

**Start Date:** November 2004

**Expected Completion Date:** October 2005

**Funding:** Australian Government Department of Health and Ageing

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**TITLE:** CHARACTERISTICS AND DYNAMICS OF COCAINE SUPPLY AND DEMAND IN SYDNEY AND MELBOURNE

**NDARC Staff:** James Shearer, Paul Dillon and Sharlene Kaye

**Other Investigators:** Craig Fry, Paul Dietze (Turning Point) and Linette Collins (NSW Police Service)

**Aim:** Describe and analyse the characteristics, interaction and dynamics of supply and demand in cocaine markets in Sydney and Melbourne.

**Design and Method:** A cross-sectional multimodal study of 180 cocaine users and suppliers (90 interviewed in each city) including internet, face-to-face and telephone interviews. Sample size has been selected to ensure adequate recruitment in each market segment (affluent, recreational, injecting drug users (IDUs)).

**Start Date:** December 2003

**Expected Completion Date:** April 2005

**Funding:** National Drug Law Enforcement Research Fund

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**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:** A/Prof Dennis Gray (National Drug Research Institute (Chief Investigator)), Dr Peter d'Abbs, (James Cook University) and Ms Anne Mosey and Ms Gill Shaw, (Independent Consultants)

**Aim:** 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.

**Design and Method:** This project will have five stages which are as follows:

- 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 predominantly in rural and remote, but also urban communities; and best practice in addressing this issue.

**Start Date:** January 2003

**Expected Completion Date:** December 2004

**Funding:** National Drug Law Enforcement Research Fund

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**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, Erin Kelly and Richard Mattick

**Other Investigators:** Robert Rushby (Australian Customs Service), and Emily Pritchard and Nerys Evans (NSW Police)

**Aims:** This project aims to develop a better understanding of the availability and use of more pure forms of methamphetamine such as crystal methamphetamine or 'ice'. The project will tie together specialist law enforcement data relating to both the importation and local manufacture of these drugs, with data collected from users themselves relating to the dynamics of the methamphetamine market and the patterns of use and associated harms. It will also consider in detail the implications for the health and law enforcement sectors of the increases in Australia in recent years of the availability and use of these forms of methamphetamine.

**Start Date:** April 2003

**Expected Completion Date:** April 2005

**Funding:** National Drug Law Enforcement Research Fund

## PREVENTION AND EARLY INTERVENTIONS

**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 will be recruited to participate in a confidential, anonymous interview on their behaviours and attitudes towards DUIC. To be eligible, participants must be aged 18 years or older, have used cannabis within the previous 12 months and have 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 will be excluded.

Sampling methods will attempt to achieve a cross-section of younger (18-29) and older (30+) cannabis users, males and females and a wide range of cannabis use levels.

The study comprises a cross-sectional analytic survey design. This will incorporate a between-subjects factorial design to address the degree to which the certainty and severity of sanctions might reduce DUIC. Participants will be presented with one of four vignettes giving a hypothetical situation where they are presented with the opportunity to DUIC and asked to rate their likelihood of driving under those circumstances. We hypothesise that, if roadside testing and harsher penalties for DUIC would exhibit a deterrent effect, those subjects who are led to believe that the certainty and severity of punishment are high will indicate that they are 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, will be the first of its kind in Australia to address these issues.

**Start Date:** March 2004

**Expected Completion Date:** June 2006

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

**TITLE:** YOUNG PEOPLE AND ALCOHOL STUDY: TASTE PERCEPTIONS, ATTITUDES AND EXPERIENCES

**NDARC Staff:** Jan Copeland, Paul Dillon and Peter Gates

**Other Investigators:** Richard Stevenson (Macquarie University)

**Aims:** 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. This study involves a questionnaire relating to the participants' 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. The study hopes to determine (1) the palatability of a range of alcoholic and non-alcoholic beverages among teenagers and young adults; (2) whether this pattern changes with age; and (3) the extent to which packaging affects these palatability ratings.

**Start Date:** April 2004

**Expected Completion Date:** April 2005

**Funding:** Australian Government Department of Health and Ageing

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**TITLE:** REDUCING ALCOHOL-RELATED HARM IN RURAL COMMUNITIES

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

**Other Investigators:** Rob Sanson-Fisher, Chris Doran, John Wiggers, Catherine D'Este and Don Weatherburn

**Aims:** This project aims to evaluate the cost-effectiveness of a community-wide intervention strategy to reduce alcohol-related harm in rural towns in NSW. The specific interventions that comprise the community-wide approach are random breath testing, computerised screening and brief advice in GP settings, strategies targeted at alcohol licensees, media advocacy, provision of information to high school students and community feedback. The two main outcomes that will be used to measure the success of this strategy are alcohol-related hospital emergency department incidents and alcohol-related criminal incidents.

**Start Date:** January 2004

**Expected Completion Date:** August 2006

**Funding:** National Health and Medical Research Council

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

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

**Other Investigators:** Rob Sanson-Fisher, Ann Roche, Chris Doran and Catherine D'Este

**Aims:** 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 2009

**Funding:** Alcohol Education and Rehabilitation Foundation

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**TITLE:** CLIMATESCHOOLS: A SCHOOL-BASED INTERACTIVE COMPUTER PROGRAM FOR EDUCATING ADOLESCENTS ON PREVENTATIVE HEALTH ISSUES INCLUDING ALCOHOL-RELATED HARMS, ANXIETY, DEPRESSION AND PHYSICAL HEALTH AND NUTRITION

**NDARC Staff:** Laura Vogl, Maree Teesson and Paul Dillon

**Other Investigators:** Helen Van Vliet, Prof Gavin Andrews, Prof Mark Dadds and Dr John McCormick

**Aim:** To develop and evaluate computer delivered preventative health education programs (CLIMATEschools) for adolescents in Year 8 of high school. CLIMATEschools is being developed in consultation with teachers and clinical psychologists to ensure that it is evidence-based and meets the objectives set out in the PDHPE school curriculum.

**Design and Method:** A cluster randomised controlled trial involving 20 schools will be done to assess the feasibility and efficacy of CLIMATEschools. The effectiveness of the interventions will be measured 6 and 12 months post-intervention.

**Start Date:** January 2003

**Expected Completion Date:** June 2008

**Funding:** National Drug and Alcohol Research Centre

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**TREATMENT AND OTHER INTERVENTIONS**

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**TITLE:** DEVELOPING APPROPRIATE INTERVENTIONS FOR METHAMPHETAMINE USERS

**NDARC Staff:** Rebecca McKetin, Jennifer McLaren, Erin Kelly and Richard Mattick

**Aims:** This project consists of a series of small inter-linked activities aimed toward improving research on interventions for methamphetamine users. One main activity is the continuation of a forum of experts to discuss issues around providing interventions for methamphetamine use (Australian methamphetamine research forum). The second is exploring where and why methamphetamine users come into contact with health services through analysis of NSW Health datasets. The third component is development of methods to estimate the number of dependent methamphetamine users.

**Start Date:** January 2003

**Expected Completion Date:** June 2004

**Funding:** Australian Government Department of Health and Ageing

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

**NDARC Staff:** Jan Copeland and Greg Martin

**Other Investigators:** A/Prof Steve Allsop (Curtin University) and A/Prof Robert Ali (University of Adelaide)

**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 randomized 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:** January 2004

**Expected Completion Date:** December 2005

**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)

**Aims:** 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. Data has been sought 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. These data have been used to examine the rates of methamphetamine presentations in different geographic areas in NSW and also the characteristics of stimulant admissions (e.g. socio-demographics, concurrent diagnoses, poly-drug use, route of administration, number of repeat admissions). In 2004/05 use of this data will be used to undertake some preliminary cost analysis of stimulant use on health services in collaboration with NDARC's Health Economist.

**Start Date:** July 2003

**Expected Completion Date:** December 2005

**Funding:** Australian Government Department of Health and Ageing

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

**NDARC Staff:** Maree Teesson

**Other Investigators:** Paul Haber (Royal Prince Alfred Hospital), James Bell (Langton Centre), Claudia Sannibale, Kirsten Morley (Royal Prince Alfred Hospital) and Clare Thomson

**Aims:** The aims of this study are 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 improves (i) treatment compliance and (ii) therapeutic outcome for pharmacotherapy of alcohol dependence, compared to usual care.

**Design and Method:** A randomised controlled study was conducted to address the third aim of the project (listed above). Subjects with a DSM-IV diagnosis of alcohol dependence were randomly allocated to receive usual medical care (n = 20) or usual medical care plus compliance therapy (n = 20). All subjects were prescribed acamprosate for four months. Compliance therapy was adapted from Kemp et al. (1996), pilot tested, and a treatment manual was written. This therapy consists of 4-6 sessions in which beliefs about medication, side effects, ambivalence, the benefits of treatment, treatment maintenance and relapse prevention are addressed and explored with motivational interviewing and CBT techniques. Subjects who attended at least 3 sessions of compliance therapy adhered to pharmacotherapy with acamprosate significantly longer than control subjects. The second phase of the project involves the randomised treatment trial to address the remaining aims.

**Benefits:** This will be the largest and most complex pharmacotherapy study conducted in Australia for alcohol dependence. The resulting Sydney-wide recruitment infrastructure has laid important foundations for continuing research on alcohol dependence and is the largest in Australia.

**Start Date:** March 2002

**Expected Completion Date:** June 2005

**Funding:** National Health and Medical Research Council

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**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 randomized control trial, conducted at two sites in Sydney, which recruits subjects on days 3-5 post-inception to buprenorphine for the study. Participants will be randomized 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, the 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:** March 2003

**Expected Completion Date:** June 2005

**Funding:** Reckittbenckiser and NSW Health

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**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:** October 2005

**Funding:** NSW Health

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**TITLE:** SELF-EFFICACY, EXPECTANCY AND ABSTINENCE ACCEPTANCE: OUTCOMES OF A COMMUNITY-BASED FORENSIC DRUG RELAPSE INTERVENTION

**NDARC Staff:** Jan Copeland

**Other Investigators:** Susan Wojciechowski and Jeanna Sutton

**Aim:** This study will investigate the belief in the ability to control drug use, confidence about ability to remain drug free in high-risk situations, the anticipated negative consequences of further drug use and the acceptance of life-long abstinence as a predictor of positive treatment outcome of a drug and alcohol intervention in a community-based program for criminal offenders.

**Start Date:** March 2004

**Expected Completion Date:** June 2006

**Funding:** NSW Department of Corrective Services

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**TITLE:** ALCOHOL AND OTHER DRUG USE DISORDERS COMORBID WITH PSYCHOSIS, DEPRESSION AND ANXIETY: TREATMENT OUTCOMES

**NDARC Staff:** Jan Copeland

**Other Investigators:** Vaughan Carr, Amanda Baker, Margaret Terry, Andrew Taylor, Ulrich Dchall, Richard Clancy, Terry Lewin, Agatha Conrad and Martin Cohen

**Aim:** This study aims to document and compare conventional drug and alcohol services, mental health services and specialised treatment services for people with comorbid mental illness and drug use problems in terms of the client characteristics, staff attitudes and clinical outcomes.

**Start Date:** October 2003

**Expected Completion Date:** October 2005

**Funding:** National Health and Medical Research Council

**TITLE:** A DRUGS IN PREGNANCY CONSUMER CONSULTATION**NDARC Staff:** Jan Copeland**Other Investigators:** Marijke Boers, Merinda Epstei, Louise Clifford and Adam Winstock**Aim:** This qualitative project is being conducted in New South Wales 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; and 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.**Start Date:** December 2003**Expected Completion Date:** December 2004**Funding:** NSW Health**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, St Louis, USA), Robert Ali, Richard Cooke, Danielle Bament (Drug & Alcohol Services Council, South Australia), and Alison Ritter, Tracey Holt and Amy Swan (Turning Point Alcohol & Drug Centre, Victoria)**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). NDARC's Health Economist, Marian Shanahan, will provide an evaluation of the health care costs and resource use of the ATOS cohort. Extended follow up of the NSW cohort will provide valuable data on the natural histories of heroin users.

**Progress:** The 3 and 12 month follow-up interviews have been completed, with follow-up rates of 89% and 80%, respectively (NSW). Twenty four month interviews are due to be finalised in August 2004, and 36 month follow up has commenced.**Output:** Papers related to the ATOS project published in 2004 include the following:

**Darke, S., Ross, J., Teesson, M., & Lynskey, M.** (2004). Attempted suicide among entrants to three treatment modalities for heroin dependence in the Australian Treatment Outcome Study (ATOS): prevalence and risk factors. *Drug and Alcohol Dependence* 73, 1-10.

**Darke, S., Williamson, A., Ross, J., Teesson, M., & Lynskey, M.** (2004). Borderline personality disorder, antisocial personality disorder and risk-taking among heroin users: findings from the Australian Treatment Outcome Study (ATOS). *Drug and Alcohol Dependence* 74, 77-83.

**Darke, S., Hetherington, K., Ross, J., Lynskey, M., & Teesson, M.** (2004). Non-injecting routes of administration among entrants to three treatment modalities for heroin dependence. *Drug and Alcohol Review* 23, 177-183.

**Mills, K., Teesson, M., Lynskey, M., Ross, J., & Darke, S.** (2004). Young people with heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS). *Journal of Substance Abuse Treatment* 27, 67-73.

Technical Reports published in 2004 are as follows:

**Ross, J., Teesson, M., Darke, S., Lynskey, M., Ali, R., Ritter, A. & Cooke, R.** (2004) *Twelve month outcomes of treatment for heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS)*. Technical Report No. 196. Sydney: National Drug and Alcohol Research Centre.

**Shanahan, M., Havard, A., Mills, K., Williamson, A., Ross, J., Teesson, M., Darke, S., Ali, R., Ritter, A., Cooke, R., & Lynskey, M.** (2004). *Health services use and treatment costs over 12 months among heroin users: Findings from the Australian Treatment Outcome Study (ATOS)*. Technical Report No. 203. Sydney: National Drug and Alcohol Research Centre.

**Teesson, M., Ross, J., Darke, S., Lynskey, M., Mills, K., Williamson, A., Hetherington, K., Fairbairn, S., Havard, A., Wilhelm, E., & Shanahan, M.** (2004). *Twelve month outcomes of the treatment of heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS)*. Technical Report No. 191. Sydney: National Drug and Alcohol Research Centre.

**Williamson, A., Darke, S., Ross, J., & Teesson, M. (2004).** *The effect of cocaine use on short-term outcomes for heroin dependence.* Technical Report No. 190. Sydney: National Drug and Alcohol Research Centre.

**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 at three and twelve months. 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.

**Start Date:** January 2004

**Expected Completion Date:** January 2005

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

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**TITLE:** THE ROLE OF COMMERCIAL DRUG INJECTING ROOMS (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

**NDARC Staff:** Jo Kimber and Kate Dolan

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

**Aims:** To investigate the use of commercial drug injecting rooms (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:** June 2005

## INFORMATION AND TRAINING

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**TITLE:** THE DESIGN AND PRODUCTION OF AN EVIDENCE-BASED HARM REDUCTION 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). 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.

**Design and Method:** NDARC will produce a series of resources covering the pharmacology of the substances, how they are used, history of use, legitimate uses, perceived positive benefits and harms associated with use. The fact sheets will be designed so that they can be downloadable from the internet and made available on a number of internet sites. These sites will include, but not be limited to, the NDARC webpage, the Australian Drug Information Network, and the Australian Drug Foundation.

A distribution plan for the PIEDs fact sheets and resource booklet will be developed, in conjunction with the Australian Government Department of Health and Ageing 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. Currently very little reliable information is available on these substances.

**Start Date:** December 2004

**Expected Completion Date:** June 2005

**Funding:** Australian Government Department of Health and Ageing

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

**NDARC Staff:** Maree Teesson, Paul Dillon, Heather Proudfoot and Fiona Demetriou

**Other Investigators:** Mental Health Services Conference Inc. Board

**Aims:** This project aims:

- 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 organize and facilitate two stakeholder forums.

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

Following production of the brochure there will be a trial distribution and follow-up evaluation carried out through a telephone survey.

**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.

**Start Date:** August 2004

**Expected Completion Date:** April 2005

**Funding:** Australian Government Department of Health and Ageing

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**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

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**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 policymakers, the media and the general community on answers to common questions about cannabis.

**Start Date:** July 2003

**Expected Completion Date:** June 2004

**Funding:** Australian National Council on Drugs

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**TITLE:** PROGRAM OF INTERNATIONAL RESEARCH AND TRAINING (PIRT)

**NDARC Staff:** Kate Dolan, Carolyn Day, Anthony Shakeshaft 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. Once NDARC is experienced in such research, we will be in a position to apply for grants.

There are a number of activities to undertake in the research and training aspects for PIRT. In particular these activities are as follows:

**Research:** Some of the work conducted under PIRT includes:

- hosting a meeting in Asia for drug and alcohol professionals from a range of countries
- conducting a survey of Iranian GPs’ knowledge of drug and alcohol treatment and modes of BBVI transmission
- conducting a clinical audit of IDUs and non-IDU patients at a GP surgery in Iran. Two hundred records of drug users and injecting drug users will be analysed. Data analysed will include drug use history, drug treatment and prison history
- conducting a survey of Iranian IDUs’ drug use and injecting risk behaviour
- identifying drug and alcohol programs in developing countries that may be suitable for evaluation.

**Training:** Some of the training work being considered under PIRT includes:

- exploring the possibility of running a 1 year Certificate Course in research that will target researchers in Asia
- developing generic packaged evaluations for drug treatment programs.

**Start Date:** March 2003

**Expected Completion Date:** December 2006

**Funding:** Australian Government Department of Health and Ageing



## COMPLETED PROJECTS

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### **TITLE:** THE CHARACTERISTICS OF AMPHETAMINE TREATMENT CLIENTS

**NDARC Staff:** Rebecca McKetin, Erin Kelly and Jen McLaren

**Other Investigators:** Devon Indig (NSW Health)

**Aims:** Most previous Australian research on amphetamine treatment is based on treatment seeking among out-of-treatment samples of amphetamine users. There is very little information available on the characteristics of people who are receiving treatment for their amphetamine use or on the types of services they receive. This project involves analyzing data from the NSW Minimum Data Set for Alcohol and Other Drug Treatment Services to understand (i) the characteristics of people that seek treatment for amphetamine use, (ii) the type of treatment they receive, and (iii) the geographic areas most affected by methamphetamine use in NSW.

**Benefits:** The research found that the majority of amphetamine treatment episodes occurred outside of the Sydney metropolitan region, and were particularly concentrated in the urban regional areas surrounding Sydney. Treatment clients were overwhelmingly unemployed injecting drug users and the main secondary drug of concern among this population was cannabis.

**Outputs:** McKetin, R., Kelly, E., Indig, D., & McLaren, J. (2004). *Characteristics of treatment provided for amphetamine use in NSW, 2002-03*. Technical Report No. 207. Sydney: National Drug and Alcohol Research Centre.

**Start Date:** July 2003

**Completion Date:** December 2004

**Funding:** Australian Government Department of Health and Ageing

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### **TITLE:** COMPUTER DELIVERED BRIEF INTERVENTION FOR ALCOHOL PROBLEMS IN GENERAL PRACTICE: A RANDOMISED CLINICAL TRIAL

**NDARC Staff:** Anthony Shakeshaft and Richard Mattick

**Other Investigators:** Prof Mark Harris (General Practice, UNSW), Dr Alex Wodak (St Vincents Drug and Alcohol Services), A/ Prof Robyn Richmond (Community Medicine, UNSW) and Prof Enrico Coiera (Centre for Health Informatics)

**Aims:** This project aimed:

- to assess the feasibility of computerised screening for problem drinking in general practitioner (GP) settings
- to evaluate the cost-effectiveness of GP versus computer-based brief intervention for problem drinking in metropolitan and rural Australian settings
- to explore the feasibility of a web-based version of computer delivered brief intervention for problem drinking.

**Design and Method:** The study was a randomised controlled trial (RCT) with GP surgeries as the unit of randomisation. Patients were screened in GP waiting rooms by hand-held computer. Of those identified as problem drinkers, half received a computer-based brief intervention. Patients were asked questions about their satisfaction with the screening programme and the extent to which they used the internet.

**Benefits:** This project has demonstrated the advantages of using hand-held computers in clinical settings and the feasibility of using them in GP settings as a means of increasing the integration of prevention initiatives into the provision of routine clinical care. Various possibilities for optimising the sustainability of this technology have been identified, such as greater integration with existing patient records. Their cost-effectiveness in improving patient outcomes now needs to be evaluated.

**Outputs:** Fawcett, J., Shakeshaft, A., Harris, M.F., Wodak, A., Mattick, R.P., & Richmond, R.L. (2004). Using AUDIT to classify patients into Australian Alcohol Guideline categories. *Medical Journal of Australia* 180, 598.

**Start Date:** March 2001

**Completion Date:** December 2004

**Funding:** National Health and Medical Research Council and Australian Postgraduate Award

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**TITLE:** INVESTIGATING THE HARMS ASSOCIATED WITH INJECTING AND NON-INJECTING COCAINE USE IN NEW SOUTH WALES, AUSTRALIA

**NDARC Staff:** Shane Darke and Sharlene Kaye

**Other Investigators:** Johan Duflou, (Department of Forensic Medicine, Central Sydney Area Health Service)

**Aims:** The use of cocaine has increased markedly in New South Wales, Australia since 1998. Cocaine use has emerged as a particularly significant drug problem in Sydney, where the majority of cocaine use in Australia occurs. This research will encompass three major studies:

1. The physical and psychological morbidity associated with injecting and non-injecting cocaine use in Sydney;
2. An investigation of the nature and circumstances of cocaine overdose among injecting and non-injecting cocaine users in Sydney; and
3. Examining the extent and nature of cocaine-related fatalities in New South Wales 1993-2002.

**Start Date:** July 2002

**Completion Date:** Studies 1 and 2 were completed in 2002 and 2003, respectively. Study 3 was completed in June 2004.

**Benefits:** This research has provided a better understanding of the nature and extent of cocaine-related problems (physical and psychological), cocaine overdose, and cocaine-related death. Increased awareness of cocaine-related morbidity and mortality, on the part of users, health workers, and the community in general, is essential in reducing the harm that cocaine use can cause.

**Output:** The findings from this research are documented in several technical reports and journal articles. Output pertaining to each study is as follows:

**1. The physical and psychological morbidity associated with injecting and non-injecting cocaine use in Sydney**

**Kaye, S. & Darke, S.** (2004). Injecting and non-injecting cocaine use in Australia: physical and psychological morbidity. *Drug and Alcohol Review* 23, 391-398.

**2. An investigation of the nature and circumstances of cocaine overdose among injecting and non-injecting cocaine users in Sydney**

**Darke, S. & Kaye, S.** (2004). Attempted suicide among injecting and non-injecting cocaine users in Sydney, Australia. *Journal of Urban Health* 81, 505-515.

**Kaye, S. & Darke, S.** (2004). Non-fatal cocaine overdose among injecting and non-injecting cocaine users in Sydney, Australia. *Addiction* 99, 1315-1322.

**Kaye, S. & Darke, S.** (2003). Non-fatal cocaine overdose and other adverse events among injecting and non-injecting cocaine users. Technical Report No. 170. Sydney: National Drug and Alcohol Research Centre.

**3. Examining the extent and nature of cocaine-related fatalities in New South Wales 1993-2002**

**Darke, S., Kaye, S., & Duflou, J.** (2004). Cocaine-related fatalities in New South Wales, Australia 1993-2002. *Drug and Alcohol Dependence* 77, 107-114.

**Darke, S., Kaye, S. & Duflou, J.** (2003). *Cocaine-related fatalities in New South Wales, Australia, 1993-2002*. Technical Report No. 171. Sydney: National Drug and Alcohol Research Centre.

**Darke, S.** *Cocaine-related fatalities in New South Wales, Australia, 1993-2002*. Poster presentation at the 66th Annual Meeting of the College on Problems of Drug Dependence, San Juan, Puerto Rico, 14 June.

**Funding:** Australian Government Department of Health and Ageing

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**TITLE:** THE PRISON OPIATE DEPENDENCE TREATMENT TRIAL

**NDARC Staff:** Kate Dolan

**Other Investigators:** Alex Wodak

**Aims:** We compared effects of naltrexone maintenance, methadone maintenance and drug-free usual care among heroin using inmates. The main outcome measures were retention in treatment, heroin use, HIV and HCV incidence, fatal overdose and reincarceration.

**Benefits:** The research found that naltrexone was not acceptable to the prison population. The study found very poor induction and retention rates for oral naltrexone. Only seven percent of all subjects started naltrexone over the two year study period. Among those subjects, only seven percent were retained in treatment at six-months. Six-month retention was significantly lower in the 14 subjects who started naltrexone (7%) compared to the 12 subjects who started methadone (58%) ( $p=0.0007$ ). Mean days in treatment were 59 (95% CI, 32-86) for naltrexone, 100 (95% CI, 70-130) for buprenorphine and 149 (95% CI, 117-181) for methadone. While compliance to daily doses was good when subjects were receiving naltrexone (98%), most ceased naltrexone once they were released from prison, even when specific arrangements were made for community dosing at no cost to the patient. No deaths or serious adverse events were noted during the study.

**Outputs:** Shearer, J., Wodak, A. & Dolan, K. (2005). *The prison opiate dependence treatment trial*. Technical Report No. 199. Sydney: National Drug and Alcohol Research Centre.

**Start Date:** March 2001

**Completion Date:** December 2004

**Funding:** Corrections Health Service

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**TITLE:** REVIEW OF THE RELATIONSHIP BETWEEN CANNABIS AND MENTAL HEALTH

**NDARC Staff:** Wendy Swift and Susannah O'Brien

**Aims:** The aim of this review was to provide current evidence-based information on the relationship between cannabis and mental health, with a focus on adolescents, for teachers and school counsellors.

**Design and Method:** A review of the literature was produced as a resource for teachers and school counsellors. A focus of the review was an examination of the nature of the relationship between cannabis use and psychosis, depression, anxiety and suicide among young people. It also examined the implications for schools and further research on this issue.

**Outputs:** The review *Mental Health and Adolescent Cannabis Use* by Susannah O'Brien and Wendy Swift, as well as a plain English version of the report, will be made available to every NSW school.

**Benefits:** This project is part of the New South Wales Drug Summit recommendations which have already led to the production of other cannabis resources for schools. This information may improve the capacity for school personnel to provide support for students and their families affected by this issue and assist in future policy directions.

**Start Date:** June 2003

**Expected Completion Date:** March 2005

**Funding:** NSW Department of Education and Training

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**TITLE:** EVALUATION OF THE ODYSSEY HOUSE AFTERCARE PROGRAM

**NDARC Staff:** Jan Copeland and Peter Lawrinson

**Aim:** This project involved the design, staff training, supervision, analysis and write-up of an evaluation of treatment outcome for clients attending an innovative aftercare program provided by Odyssey House following their residential rehabilitation program during 2003.

**Benefits:** The outcome of the Aftercare Evaluation provided planning information for Odyssey House and enabled them to access additional funds to maintain and develop the service.

**Outputs:** Copeland, J. (2004). *The Odyssey House Aftercare Program: Outcome evaluation report*. Drug and Alcohol Research and Training Australia: Sydney.

**Start Date:** February 2004

**Completion Date:** February 2005

**Funding:** Odyssey House

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**TITLE:** ASSESSMENT OF THE PSYCHOMETRIC PROPERTIES OF THE ADULT AND ADOLESCENT VERSIONS OF THE CANNABIS PROBLEMS QUESTIONNAIRES

**NDARC Staff:** Jan Copeland, Peter Gates and Wendy Swift

**Aim:** This project aimed to establish the reliability and validity of the adult and adolescent versions of the Cannabis Problems Questionnaires (CPQ) that were developed for use in clinical trials with cannabis using clients at the Centre. The studies involved interviewing 100 adults and 100 adolescents who were recent cannabis users on two separate occasions over one to two weeks. The assessment also involved examination of the factor structure and internal reliability of the two measures. This study allowed for the publication of these measures for use in clinical and research settings with cannabis using populations.

**Benefits:** This study demonstrated the CPQ in versions for adult and adolescent cannabis users are a valid and reliable measure of cannabis-related problems that are sensitive to change and clinically appropriate. This has facilitated their adoption in a number of clinical and research settings.

**Start Date:** March 2001

**Completion Date:** October 2004

**Funding:** Australian Government Department of Health and Ageing

**TITLE:** THE CAUSES, EFFECTS AND IMPLICATIONS OF THE HEROIN SHORTAGE IN NSW, SA AND VICTORIA

**NDARC Staff:** Louisa Degenhardt, Carolyn Day, Rebecca McKetin, Linette Collins, Elizabeth Conroy and Amy Gibson

**Other Investigators:** Paul Dietze, Craig Fry and Peter Miller (Turning Point) and Paul Christie and Adam Harrison (DASC)

**Aims:** The aims of this project were to:

- examine the context and parameters of the heroin shortage
- examine the possible causes of the heroin shortage
- determine the effect of the shortage on the price, purity and availability of heroin, distribution and using practises
- assess the effect of the heroin shortage on heroin and other drug use, public health, crime and the work of law enforcement, health and emergency services
- examine the characteristics of those who left the heroin market as a result of the shortage.

**Design and Method:** Existing research was reviewed and available indicator data analysed. Injecting drug users (IDUs) were interviewed regarding their patterns of drug use prior to, during and subsequent to the heroin shortage. Additional cohorts of IDUs who did not inject heroin for at least one month or who entered methadone maintenance treatment (MMT) during the peak period of the shortage, were also interviewed. Data was collected on treatment seeking behaviour, overdose, presentation to emergency services and criminal behaviour. A range of key informants from law enforcement, drug treatment and detoxification agencies, NSP, and ambulance services were interviewed. To examine the causes of the heroin shortage, plausible theories were collated and assessed according to the available evidence. Following this process, the most plausible model(s) was developed based on the identified factors.

**Output:** The findings from this important research project are documented in a number of papers as well as a series of comprehensive National Drug Law Enforcement Research Fund (NDLERF) monographs:

**Day, C., Collins, L., Degenhardt, L., Thetford, C., & Maher, L. (2004).** Reliability of heroin users' reports of drug use behaviour using a 24 month timeline follow-back technique to assess the impact of the Australian heroin shortage. *Addiction Research and Theory* 12, 433-443.

**Day, C., Degenhardt, L., Gilmour, S., & Hall, W. (2004).** Effects of reduction in heroin supply on injecting drug use: analysis of data from needle and syringe programmes. *BMJ* 329, 428-429.

**Degenhardt, L., & Day, C. (editors) (2004).** *The course and consequences of the heroin shortage in New South Wales.* NDLERF Monograph Series No. 4. National Drug Law Enforcement Research Fund: Adelaide.

**Degenhardt, L., Day, C. & Hall, W. (eds) (2004).** *The causes, course and consequences of the heroin shortage in Australia.* Monograph No. 53. Sydney: National Drug and Alcohol Research Centre.

**Degenhardt, L., Day, C. & Hall, W. (editors) (2004).** *The causes, course and consequences of the heroin shortage in Australia.* NDLERF Monograph Series No. 3. National Drug Law Enforcement Research Fund: Adelaide.

**Dietze, P., Miller, P., Clemens, S., Matthews, S., Gilmour, S., & Collins, L. (2004).** *The course and consequences of the heroin shortage in Victoria.* NDLERF Monograph Series No. 6. National Drug Law Enforcement Research Fund: Adelaide.

**Harrison, A., Christie, P., Longo, M., Pointer, S., & Ali, R. (2004).** *The course and consequences of the heroin shortage in South Australia.* NDLERF Monograph Series No. 5. National Drug Law Enforcement Research Fund: Adelaide.

The results have also been presented at a number of national and international conferences, as well as a special presentation to the Ministerial Council on Drug Strategy (MCDS) in November 2004. A press release was also issued at that time.

**Completion Date:** September 2004

**Funding:** National Drug Law Enforcement Research Fund

**TITLE:** PHARMACOTHERAPIES FOR NICOTINE DEPENDENCE: ECONOMIC CONSIDERATIONS

**NDARC Staff:** Marian Shanahan, Jenny Stafford, James Shearer and Richard Mattick

**Aims:** This project aimed to:

- assess practitioners prescribing patterns of pharmacotherapies for smoking cessation
- assess impact of pharmacotherapies on consumers' smoking cessation attempts
- evaluate the cost and effectiveness of pharmacotherapies for assisting with smoking cessation.

**Design and Method:** The project used a number of methods to assess the use and economic impact of the pharmacotherapies for assisting with smoking cessation. Information was obtained through a survey of medical practitioners done in collaboration with Adelaide University, Department of General Practice; a survey of consumers done with the cooperation of the Pharmacy Guild; and a review of outcome and cost-effectiveness literature on methods for assisting with smoking cessation.

**Benefits:** This project will contribute to the government's understanding of the uptake of the pharmacotherapies bupropion and nicotine replacement therapies (NRTs), and the economic impact of the various treatment options in the Australian policy context.

**Output:** The findings from this research project are documented in an NDARC monograph:

**Shanahan, M., Doran, C., Stafford, J., Shearer, J., & Mattick, R.P.** (2004). *Pharmacotherapies for nicotine dependence: Social and economic considerations*. Monograph No. 54. Sydney: National Drug and Alcohol Research Centre.

**Completion Date:** December 2004

**Funding:** Australian Government Department of Health and Ageing

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**TITLE:** PHARMACOTHERAPIES FOR EXCESSIVE ALCOHOL USE: ECONOMIC CONSIDERATIONS

**NDARC Staff:** Marian Shanahan, Amy Gibson, Jenny Stafford and Richard Mattick

**Aims:** This project aimed to:

- assess practitioners' prescribing patterns of pharmacotherapies for relapse prevention among dependent drinkers
- assess rate of use of pharmacotherapies among dependent drinkers
- evaluate the cost and effectiveness of treatments for risky and dependent drinkers.

**Design and Method:** The project used a number of methods to assess the use and economic impact of the pharmacotherapies for relapse prevention among dependent drinkers. Information was obtained through a survey of medical practitioners done in collaboration with Adelaide University, Department of General Practice; the evaluation of Health Insurance Commission data on prescriptions for acamprosate and naltrexone; and evaluation of the costs and effects obtained from a literature review for treatments for assisting risky and dependent drinkers.

**Benefits:** This project will contribute to the government's understanding of the uptake of the pharmacotherapies, acamprosate and naltrexone, and the economic impact of the various treatment options for risky and dependent drinkers in the Australian policy context.

**Outcome:** A final report has been delivered to the funding body and will be published as a National Alcohol Strategy Occasional Paper in 2005. Findings from this report include documenting the limited use of pharmacotherapies for relapse prevention among dependent drinkers and an assessment of costs and outcomes of various treatments for excessive alcohol use in Australia. Other findings include identifying bibliotherapy as providing the most value for money spent as a public health endeavour when dealing with risky alcohol consumption.

**Completion Date:** December 2004

**Funding:** Australian Government Department of Health and Ageing

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**TITLE:** TRENDS IN DRUG USE AND DRIVING AMONG NIGHTCLUB ATTENDEES

**NDARC Staff:** Louisa Degenhardt, Paul Dillon and Joanne Ross

**Other investigators:** Cameron Duff (Centre for Youth Studies)

**Aims:** To examine trends in drug use and driving among Melbourne nightclub attendees with an aim to provide information on the methods with which persons attending nightclubs travel to attend venues, and the extent to which such persons may drive after consuming illicit drugs. This would serve to establish a baseline measure of these behaviours prior to the implementation of the new roadside drug testing in Victoria in July 2004. This baseline study could also serve as a model for further follow-up studies, in which potential changes in such behaviours could also be assessed.

**Benefits:** This research has provided baseline results for possible follow-up studies to look at the impact of roadside drug testing upon nightclub attendees. The findings of the current study are suggestive of potentially positive impacts of the introduction of roadside drug testing in Victoria upon drug use and driving risk behaviours among a sample of young persons attending nightclubs. It will be of interest to examine whether such persons' intentions to change their behaviours may be borne out once such testing is introduced in the coming months.

**Outputs:** A report has been submitted to the funding body and a Technical Report is being prepared.

**Start Date:** March 2004

**Completion Date:** October 2004

**Funding:** VicRoads

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**TITLE:** STRUCTURAL DETERMINANTS OF DRUG ABUSE

**NDARC Staff:** Catherine Spooner and Kate Hetherington

**Aims:** This project aimed to:

- describe current research on societal factors that contribute to drug abuse, including the economic, social and physical environment
- identify ways that societal institutions (in particular, national, state and local government) can contribute to the prevention of drug abuse
- conduct research that will increase knowledge about societal factors that contribute to drug abuse and about what societal (particularly government) institutions can do to prevent drug abuse.

**Design and Method:** Information from a broad range of disciplines (including public health, sociology, psychology, and urban design) was collected from key informants and published and unpublished literature. Much of this information was not specifically concerned with drug use. For example, there is currently substantial research and policy interest in the impacts of social capital and socio-economic factors on health, and the importance of early child development for adolescent and adult outcomes, but drug use is rarely a key outcome variable. The project sought information from these broader fields that is, or could be, relevant to the aetiology and prevention of drug use behaviours.

**Benefits:** This project will contribute to the government's understanding of how it can prevent drug abuse and dependence.

**Output:** A final report has been submitted to the funding body.

**Completion Date:** November 2004

**Funding:** Australian Government Department of Health and Ageing

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**TITLE:** EDUCATING TERTIARY STUDENTS IN SYDNEY ABOUT WHAT CONSTITUTES A 'STANDARD DRINK'

**NDARC Staff:** Fiona Shand, Jenny Stafford and Annie Bleeker

**Aims:** Little is known about community knowledge of what a standard drink is. However, a number of studies suggest that people's knowledge of standard drinks and safe-drinking levels is low. These results imply the need for educational campaigns to encourage safe and responsible drinking practices; however, before these can be effective the terminology used should be familiar and well understood by the community.

The aim of this project was to:

- educate tertiary students about what a standard alcoholic drink is for a range of alcoholic beverages
- provide a method for ongoing education of tertiary education students.

**Design and Method:** The Research Officer's major role was to liaise with Universities and TAFE colleges, their student associations and unions to promote what a standard drink is and safe levels of drinking. This was carried out as follows:

- set-up stalls in residential colleges, bar areas and other areas to ask people to pour a standard drink, provide posters, coasters and information booklets
- set-up stalls and provide resource packages at orientation weeks
- provide articles about standard drinks and safe levels of drinking in student magazines
- liaise and work with medical services, counselling and career services within each of these organisations to provide information to health professionals and their clients.

Material/resources (posters, coasters, etc) produced by the National Health and Medical Research Council (NHMRC) were used for all promotional activities.

**Benefits:** The 'standard drink' stalls provided an opportunity to encourage safe and responsible drinking practices among tertiary students by increasing their knowledge about what constitutes a 'standard drink' and the recommended drinking levels. By using the Alcohol Use Disorders Identification Test (AUDIT) staff could engage students in conversation about 'what is a standard drink?' as well as provide feedback about their drinking patterns.

**Outcome:** Over the course of the project over 900 students from tertiary institutions in the Sydney region received education on what constitutes a 'standard drink', a brief intervention (using the AUDIT), feedback, information and NHMRC materials on alcohol. Forty-five students and volunteers received specifically tailored training on 'standard drinks' and how to conduct a brief intervention using the AUDIT. A further 30 staff (counsellors) from three tertiary institutions attended an Alcohol Treatment seminar conducted by NDARC staff. Several hundred NHMRC brochures, booklets, coasters and posters on alcohol and standard drinks were also distributed throughout the project.

**Completion Date:** November 2004

**Funding:** Alcohol Education and Rehabilitation Foundation

**TITLE:** PATTERNS OF USE AND EXPERIENCES OF RECREATIONAL PHARMACEUTICAL DRUG USE AMONGST 'PARTY DRUG' USERS

**NDARC Staff:** Paul Dillon, Jan Copeland and Michael Gascoigne

**Background:** Recent anecdotal evidence suggests that it is becoming increasingly popular among ecstasy and related drugs (ERDs) users to attempt to negate certain side effects through the concomitant use of pharmaceutical drugs or supplements. This is of concern, as some of these ERDs-pharmaceutical combinations can have potentially serious health consequences.

**Aims:** This survey was designed to examine the patterns of use and experiences of ERDs users who combine their drug of choice (ecstasy) with pharmaceutical drugs, including a range of anti depressants and sildenafil citrate (Viagra). These findings will assist in the development of harm reduction strategies among current and potential young party drug users.

**Design and Method:** One hundred ERDs users who have combined their drug of choice with one or more of a range of pharmaceutical products, either to increase intoxication, to lengthen intoxication, or to prevent or reduce perceived negative effects of the drug, were interviewed using a structured face-to-face questionnaire.

**Benefits:** This study has raised a number of concerns for primary health care practitioners and pharmacists, particularly on how and why ecstasy and pharmaceuticals are used by this group and to question young males in particular on their need for Viagra, antidepressants and sedative-hypnotics. Accurate information from medical practitioners and pharmacists to ERDs users may reduce this diversion and unsafe use of pharmaceuticals; improve screening for ecstasy-related symptoms; and reduce the likelihood of the additional health risk of mixing ecstasy with other illicit drugs, antidepressants and products that affect the serotonergic pathways.

**Output:** An NDARC Technical Report was produced and a paper has been submitted to an international journal. A number of papers have been presented at a range of national and international conferences. A press release was issued and the results of this study received national coverage.

**Gascoigne, M., Copeland, J. & Dillon, P. (2004).** *Ecstasy and the concomitant use of pharmaceuticals*. NDARC Technical Report 201. Sydney: National Drug and Alcohol Research Centre.

**Completion Date:** September 2004

**Funding:** Australian Government Department of Health and Ageing

**TITLE:** DRUG INFORMATION NEEDS, SOURCES AND CREDIBILITY AMONG 'PARTY DRUG' USERS

**NDARC Staff:** Jan Copeland, Paul Dillon and Michael Gascoigne

**Background:** The prevalence of ecstasy use has been increasing steadily within Australia since 1995. Given the potential risks associated with ecstasy use, the provision of accurate prevention or harm reduction information is imperative in reducing drug-related morbidity and mortality. Knowing which information sources are deemed credible will aid the efficacy of prevention or harm reduction efforts, as they can ideally be concentrated toward the more credible information sources.

**Aims:** This survey was designed to examine the drug information needs, sources of information and their credibility among 'party drug' users. This information will assist in informing a strategy for the dissemination of factual information on party drugs to current and potential users.

**Design and Method:** One hundred party drugs users in Sydney were interviewed using a structured face-to-face questionnaire. Questions covered what information they wished to have on their drug or drugs of choice, where they currently accessed information from and the credibility of these sources. They were also asked what type of information they do not believe to be credible and who or what organisations/departments they regarded as lacking credibility.

**Findings:** Participants had used a variety of information sources. Friends were overwhelmingly the most popular usual source for ecstasy information, followed by the internet, dealers and print media. The more credible information sources included drug counselling hotlines, doctors, libraries and friends. The sample also identified four specific sources of information that they did not believe: government agencies, the police, drug dealers and the media.

**Benefits:** Promising approaches to the reduction of harm associated with the use of ecstasy in the Australian community included judicious use of the frequently accessed internet sites for the dissemination of information on high risk behaviours and warnings on specific issues; the development and evaluation of peer networks for the dissemination of harm reduction information (including accessing interventions); and the training of medical practitioners and drug hotline staff in their role as highly credible sources of health-related information on ecstasy use.

**Output:** An NDARC Technical Report was produced and a paper has been submitted to an international journal. A number of papers have been presented at a range of national and international conferences.

**Gascoigne, M., Dillon, P. & Copeland, J. (2004).** *Sources of ecstasy information: Use and perceived credibility*. NDARC Technical Report 202. Sydney: National Drug and Alcohol Research Centre.

**Completion Date:** September 2004

**Funding:** Australian Government Department of Health and Ageing

**TITLE:** DEVELOPMENT OF A BRIEF MULTI-DIMENSIONAL INSTRUMENT DESIGNED TO MEASURE OUTCOMES FOR CLIENTS RECEIVING ALCOHOL AND OTHER DRUG TREATMENT: THE BRIEF TREATMENT OUTCOME MEASURE (BTOM)

**NDARC Staff:** Jan Copeland, Peter Lawrinson and Saul Gerber

**Other Investigators:** Devon Indig (NSW Health Drug Program Bureau)

**Aims:** To assess the psychometric properties of, and clinically trial, a brief multi-dimensional instrument for the ongoing assessment of treatment outcomes for clients receiving alcohol and other drug abuse treatment in NSW. The instrument is designed to investigate the characteristics of persons entering treatment, capture the disability of the client population, document treatment outcomes, inform the planning and development of alcohol and other drug treatment services and aid quality assurance activities.

**Design and Method:**

**Pilot:** 185 clients who were receiving Opioid Maintenance Pharmacotherapy (OMP) and 150 clients who were receiving treatment for alcohol and other drug abuse at the drug and alcohol treatment agencies were recruited and interviewed on two occasions 3-7 days apart. The data collected was used to establish the psychometric properties of the questionnaire.

**Feasibility Study - MMT:** Over 2000 clients were administered the BTOM at the commencement of their treatment, from November 2000 – July 2003, across public OMP clinics in NSW. Participants included all “new” clients entering methadone maintenance treatment (MMT) from the date of the commencement of the study. The instrument was administered to clients by clinician interview upon induction to MMT and every 3 months thereafter.

**Trial- Non-MMT:** Selected D&A treatment services across NSW were approached to seek their participation in a limited trial of the BTOM for clients receiving counselling, detoxification and rehabilitation services. Agencies that agreed to participate recruited clients into the study over a 3-4 month period, administering the questionnaire at the commencement of treatment and 3 months after the commencement of treatment. The second interview necessitated following up clients who had left treatment, in most cases. In order to encourage an unbiased response from clients, these interviews were conducted by an NDARC researcher.

Staff involved with the study were formally surveyed to gain their view of the content, utility and burden of administering the BTOM. All agencies participating in the BTOM trial received a report detailing analysis of their own aggregated, de-identified client data as well as a summary of state-wide aggregated data.

The successful implementation of the BTOM across treatment services in NSW is contingent upon a broad acceptance of the questionnaire and its aims.

**Output:** The BTOM and BTOM-C (condensed version) have been adopted as the preferred platform for the routine collection of treatment outcome data, by clinicians, in all OMP services in NSW, from July 2004. It has also been adopted as the preferred health outcome measure by the Network of Alcohol and Other Drugs Agencies (NADA) and incorporated into their webpage. The BTOM has good psychometric properties and, in addition to its use in outcome monitoring systems, is currently being used in treatment evaluation studies.

**Benefits:** The implementation of routine outcome monitoring using the BTOM, in NSW, will provide for the first time in Australia an on-going, standardised treatment outcome database. Demands for greater accountability in the use of public funds, cost containment and continuous quality improvement across the health and other government sectors are increasing. Outcome monitoring systems continuously evaluate existing treatment regimes. They are responsive to changes in client performance, and by aggregating clients into homogenous sub-groups, can reveal which treatments, delivered in what manner, work more effectively for which type of clients.

This information can be used by policymakers, clinicians and researchers, to inform the sector of changes to make in systems level service provision that may lead to improved outcomes.

**Completion Date:** April 2004

**Funding:** NSW Health

**TITLE:** REVIEW OF CORRECTIONAL SERVICES RESPONSES TO REDUCE THE INITIATION, LEVEL AND IMPACT OF DRUG USE WITHIN AUSTRALIAN PRISONS

**NDARC Staff:** Kate Dolan and Emma Black

**Aim:** This research study collated information about supply reduction and demand reduction programs in Australian prisons throughout all states and territories. This information provided detail to draw conclusions about the types and extent of supply and demand reduction responses to these problems, and the strengths and weaknesses of these responses. The ultimate objective of the study was to identify gaps in drug strategies in Australian prisons and ways in which these strategies may be improved.

**Design and Method:** A review of the literature, including both peer-reviewed material and Australian Government reports and publications (in particular those relating to prison drug program expenditure and evaluation) was conducted to assemble the available evidence pertaining to supply and demand reduction strategies in Australian prisons.

A survey of the management of Corrective Services in each state and territory elicited information about the types of programs in operation, the expenditure and costs associated with these programs and any evaluative evidence recorded by



these authorities. The survey of prison authorities comprised two sections: one pertaining to supply reduction and the other to demand reduction strategies.

The supply reduction section obtained data on the:

- range of supply reduction strategies in place
- costs of these supply reduction strategies
- number of drug tests conducted
- results of these drug tests
- dog drug detection units
- results of drug detection units
- efficacy of testing and other supply reduction strategies in reducing drug use.

The demand reduction section obtained data on the:

- range of demand reduction strategies in place
- costs of drug treatment
- the number of treatment places available to prisoners with drug problems
- results of drug treatment
- unmet demand for treatment
- efficacy of treatment in reducing drug use.

**Output:** A report has been prepared for the Australian National Council on Drugs (ANCD) and has been published as an ANCD Research Paper:

**Black, E., Dolan, K. & Wodak, A. (2004).** *Supply, demand and harm reduction strategies in Australian prisons: Implementation, cost and evaluation.* ANCD Research Paper 9. Canberra: Australian National Council on Drugs.

**Completion Date:** August 2004

**Funding:** Australian National Council on Drugs

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**TITLE:** RISKS FOR HEPATITIS C TRANSMISSION: TRANSITION AND INITIATION TO INJECTING DRUG USE AMONG YOUTH IN A RANGE OF INJECTING DRUG USER NETWORKS

**NDARC Staff:** Jan Copeland

**Other Investigators:** National Centre for HIV Social Research (Prof Sue Kippax and colleagues), Annie Madden (IV League) and Dr John Howard (Ted Noffs Foundation)

**Aims:** To document the history of initiation and transition to injecting among a range of current injectors 25 years and under and the relationship between the circumstances of the initial injecting episodes and current risk practices with respect to the transmission of hepatitis C.

**Design and Method:** A number of cross-sectional surveys of young injecting drug users in Sydney, Brisbane and Dubbo using peer interviewers.

**Outputs:** The findings of the study have been disseminated at a number of national and international conferences and the final report was formally launched. A number of international peer-reviewed journal articles are under preparation.

**Completed:** December 2003

**Funding:** National Health and Medical Research Council

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**TITLE:** ADOLESCENTS' BELIEFS ABOUT PSYCHOSTIMULANTS AND PSYCHOSTIMULANT DRUG EDUCATION

**NDARC Staff:** Jan Copeland, Paul Dillon and Michael Gascoigne

**Aims:** This survey was designed to determine what young current psychostimulant (ecstasy or amphetamine-like drugs) users believed to be important issues regarding these drugs. It also examined psychostimulant drug education in schools, the users' experience of drug education and their opinions of how it might be made more effective.

**Design and Method:** A literature review on the prevalence and effects of psychostimulants was written, with a particular focus on the 12-18 years age group. This was supplemented by targeted research with young people aged 15-19 years who have used psychostimulant drugs in the last 12 months and were currently or recently (in the last 12 months) attending NSW high schools, to inform the development of school-based prevention strategies.

**Outputs:** A report has been written and provided to the NSW Department of Education and Training which will assist in guiding policy decisions around psychostimulant drug education. The report will also be disseminated to NSW public high school teachers through the Department in 2005.

**Funding:** NSW Department of Education and Training

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**TITLE:** DISSEMINATING AND IMPLEMENTING THE GUIDELINES FOR THE TREATMENT OF ALCOHOL PROBLEMS

**NDARC Staff:** Fiona Shand, Jenny Stafford and Richard Mattick

**Aims:** To ensure that the *Guidelines for the Treatment for Alcohol Problems* influence and improve the treatment of alcohol dependence and other alcohol problems, by:

- increasing knowledge among treatment providers about which treatments are effective and most suited to their patients' needs
- increasing the community's knowledge of appropriate and effective treatments.

**Design and Method:** A number of methods were implemented to disseminate the *Guidelines for the Treatment for Alcohol Problems*, including:

- distribution to general practitioners, alcohol and other drug professionals, nurses, psychologists, psychiatrists, and social workers
- a telephone campaign to all specialist alcohol and drug treatment services to alert them to the distribution of the guidelines and to upcoming workshops in their area, and to assess their training needs with respect to the guidelines
- a series of 100 training workshops across Australia for a range of health professionals
- conference presentations at health conferences across Australia
- negotiating for the inclusion of the guidelines in education curricula
- development of educational materials to support the guidelines
- needs analysis for software which helps clinicians to prepare a treatment plan for each client.

**Benefits:** The workshops provided current information to health professionals to improve and influence the treatment of alcohol dependence and other alcohol problems, by increasing their knowledge about which treatments are effective and most suited to their clients' needs. By running small, interactive workshops, the guidelines were able to be introduced nationally and can be used to guide treatment, education, and professional development for health professionals.

**Outputs:** During the course of the project around 100 training workshops were held throughout Australia introducing health professionals to the *Guidelines for the Treatment for Alcohol Problems* and the National Health and Medical Research Council's *Australian Alcohol Guidelines*. Presentations were delivered at Australian and New Zealand conferences and materials distributed to drug and alcohol agencies, universities, TAFES and other organisations nationally.

**Completion Date:** August 2004

**Funding:** Australian Government Department of Health and Ageing

## GLOSSARY

<b>AGDHA</b>	Australian Government Department of Health and Ageing
<b>AERF</b>	Alcohol Education and Rehabilitation Foundation Ltd
<b>ANCD</b>	Australian National Council on Drugs
<b>CUT</b>	Curtin University of Technology
<b>DETYA</b>	Department of Education, Training and Youth Affairs
<b>DH</b>	Department of Health, NSW
<b>HT</b>	Humanity Trust
<b>NDLERF</b>	National Drug Law Enforcement Research Fund
<b>NHMRC</b>	National Health and Medical Research Council
<b>NIH</b>	National Institute of Health (USA)
<b>NSW CO</b>	NSW Cabinet Office
<b>NSW CHS</b>	NSW Corrections Health Service
<b>NSW DEAT</b>	NSW Department of Education and Training
<b>UN</b>	University of Newcastle
<b>US</b>	University of Sydney
<b>VR</b>	VicRoads
<b>WHO</b>	World Health Organization
<b>WU</b>	Washington University, USA

## APPENDIX A

### SEMINARS

#### IN-HOUSE SEMINARS

- 
- Feb 19 **Cocaine-related deaths in NSW 1993-2002**  
*Shane Darke*
- 
- Feb 26 **Sources of ecstasy information**  
*Paul Dillon*
- 
- Mar 11 **Medical cannabis survey**  
*Wendy Swift and Peter Gates*
- 
- Mar 18 **CLIMATE: Young people and alcohol harms**  
*Laura Vogl*
- 
- Apr 29 **Borderline personality disorder, antisocial personality disorder and risk-taking among heroin users: findings from the Australian Treatment Outcome Study (ATOS)**  
*Shane Darke*
- 
- May 13 **Four-year follow-up of imprisoned male heroin users: mortality, reincarceration and HCV infection**  
*James Shearer*
- 
- May 20 **12-month outcomes for the Australian Treatment Outcome Study (ATOS)**  
*Maree Teesson*
- 
- Jun 10 **Structural determinants of drug use**  
*Catherine Spooner and Kate Hetherington*
- 
- Jul 8 **NEACID and the National Drug Strategy**  
*Sue Henry-Edwards*
- 
- Jul 15 **Survey of smokers using nicotine replacement therapies or Zyban**  
*Jenny Stafford*
- 
- Aug 12 **Adolescent cannabis check up**  
*Greg Martin*
- 
- Sep 23 **The heroin drought**  
*Louisa Degenhardt*
- 
- Oct 21 **Effectiveness and cost-effectiveness of smoking cessation interventions**  
*James Shearer*
- 
- Nov 11 **Drug information training in a culturally sensitive environment: the Indonesian experience**  
*Annie Bleeker*
- 
- Sep 9 **The Rural InjectorProject: preliminary results**  
*Elizabeth Conroy*
- 
- Nov 18 **Use of engineering quality control methods to develop a predictive model of heroin overdose deaths**  
*Stuart Gilmour*
- 
- Dec 9 **Costs and outcomes of treatments for excessive alcohol consumption**  
*Amy Gibson*

#### INVITED SEMINARS

- 
- Feb 26 **Crystal, Viagra and sex practices among men who have sex with men**  
*Dr Patrick Rawstone*  
Research Fellow  
National HIV Social Research Centre
- 
- Mar 25 **Incidence of HCV in a cohort of injecting drug users**  
*Virginia McDonald*  
Research Coordinator  
Kirketon Road Centre
- 
- Apr 8 **Prevalence estimation in England: back calculation and capture-recapture estimates**  
*Dr Matthew Hickman*  
Deputy Director  
Centre for Research on Drugs and Health Behaviour
- 
- May 27 **Streetwise Communications: what do we do, how can we work together?**  
*Liz Skelton*  
General Manager  
Streetwise Communications
- 
- Jun 17 **Substitution treatment of injecting opioid users for the prevention of HIV**  
*Dr Linda Gowing*  
Drug and Alcohol Services Council of SA
- 
- Jul 22 **Medical uses of cannabis**  
*Professor Laurence Mather*  
Department of Medicine  
University of Sydney
- 
- Aug 26 **The forensic investigative process and drug-related death**  
*Associate Professor Jo Duflou*  
Deputy Director of the NSW Department of Forensic Medicine
- 
- Sep 13 **Clinical predictors of treatment outcome for alcohol use disorders**  
*Dr Simon Adamson*  
National Addiction Centre  
Christchurch, NZ
- 
- Oct 28 **Delivering interventions for depression by using the internet**  
*Professor Helen Christensen*  
Deputy Director  
Centre for Mental Health  
Australian National University
- 
- Nov 11 **Genetics, biotechnology and tobacco control**  
*Professor Wayne Hall*  
Director, Office of Public Policy and Ethics  
Institute for Molecular Bioscience  
University of Queensland

## APPENDIX B

### STAFF LIST

<b>Richard Mattick</b>	Director, Professor	<b>Laura Vogl</b>	Doctoral Candidate
<b>Maree Teesson</b>	Deputy Director, Associate Professor	<b>Maria Agalotis</b>	Research Officer
<b>Shane Darke</b>	Associate Professor	<b>Emma Black</b>	Research Officer
<b>Jan Copeland</b>	Senior Lecturer	<b>Peter Gates</b>	Research Officer
<b>Louisa Degenhardt</b>	Senior Lecturer	<b>Alys Havard</b>	Research Officer
<b>Kate Dolan</b>	Senior Lecturer	<b>Erin Kelly</b>	Research Officer
<b>Catherine Spooner</b>	Senior Lecturer	<b>Briony Larence</b>	Research Officer
<b>Lucy Burns</b>	Lecturer	<b>Caitlin McCue</b>	Research Officer
<b>Wendy Swift</b>	Lecturer	<b>Jen McLaren</b>	Research Officer
<b>Joanne Ross</b>	Lecturer	<b>Katherine Mills</b>	Research Officer
<b>Rebecca McKetin</b>	Research Fellow	<b>Amanda Roxburgh</b>	Research Officer
<b>Peter Lawrinson</b>	Research Fellow	<b>James Shearer</b>	Research Officer
<b>Anthony Shakeshaft</b>	NHMRC Fellow	<b>Anna Williamson</b>	Research Officer
<b>Eva Congreve</b>	Archivist	<b>Rox DeLuca</b>	Administrative Assistant
<b>Paul Dillon</b>	Media Liaison/Information Manager	<b>Fiona Ashton</b>	Personal Assistant
<b>Stuart Gilmour</b>	Statistical Officer	<b>Julie Hodge</b>	Personal Assistant/Receptionist
<b>Marian Shanahan</b>	Health Economist	<b>Josephina Kim</b>	Personal Assistant to Director
<b>Annie Bleeker</b>	Senior Research Officer		
<b>Courtney Breen</b>	Senior Research Officer		
<b>Elizabeth Conroy</b>	Senior Research Officer		
<b>Amy Gibson</b>	Senior Research Officer		
<b>Cherie Kam</b>	Senior Research Officer		
<b>Sharlene Kaye</b>	Senior Research Officer		
<b>Greg Martin</b>	Senior Research Officer		
<b>Etty Matalon</b>	Senior Research Officer		
<b>Susannah O'Brien</b>	Senior Research Officer		
<b>Heather Proudfoot</b>	Senior Research Officer		
<b>Fiona Shand</b>	Senior Research Officer		
<b>Jenny Stafford</b>	Senior Research Officer		
<b>Heli Wolk</b>	Professional Officer		

### CONJOINT APPOINTMENT

<b>Wayne Hall</b>	Visiting Professor
<b>James Bell</b>	Associate Professor
<b>Andrea Mant</b>	Associate Professor
<b>Mark Montebello</b>	Conjoint Lecturer
<b>Adam Winstock</b>	Senior Lecturer
<b>Alex Wodak</b>	Senior Lecturer

### VISITING FELLOWS

<b>Robert Ali</b>	Visiting Fellow
<b>John Howard</b>	Visiting Fellow
<b>John Lewis</b>	Visiting Fellow
<b>Ingrid Van Beek</b>	Visiting Fellow

## APPENDIX C

## GRANTS FROM EXTERNAL SOURCES

Projects	Funding Source	Total Award (\$)	Expenditure 2003	Expenditure 2004
Illicit Drug Reporting System	AGDHA	\$553,113 (2 years)*	\$302,429	\$377,821
Illicit drug statistical analysis	AGDHA	\$316,102 (2 years)*	\$154,617	\$188,949
Research support	DETYA	\$286,433 (2 years)*	\$152,515	\$133,918
Adolescent cannabis check up and intervention trial	AGDHA	\$330,257 (3 years)	\$74,409	\$4,190
The development of a comorbidity monograph	AGDHA	\$99,849	\$979	\$17,884
Randomised controlled trial of naltrexone, methadone, alcohol and other drug treatment program in NSW prisons	NSW CHS	\$259,176 (3 years)	\$84,818	\$22,889
Evaluation of the medically supervised injecting centre	DH	\$300,312 (3 years)	\$104,629	\$8,621
Development of a brief multi-dimensional instrument to measure outcomes of alcohol and other drug treatments	DH	\$343,700	\$130,601	\$13,696
Development of appropriate interventions for amphetamine users	AGDHA	\$211,522 (2 years)*	\$91,092	\$116,075
Cost analysis of pharmacotherapies for nicotine and alcohol dependence	AGDHA	\$427,109 (2 years)*	\$205,786	\$118,424
Drug use and HIV HCV prevalence among rural injecting drug users	AGDHA	\$20,000 (1.5 years)	\$4,268	\$956
Physical and psychological health of cocaine users	AGDHA	\$93,851 (2 years)*	\$43,216	\$31,766
Monitoring of global indicators for NSW	CO, NSW	\$63,416 (2 years)	\$23,936	\$11,824
Extension of IDU survey component of IDRS	NDLERF	\$325,850 (2 years)	\$183,721	\$185,704
The emergence of potent forms of methamphetamine in Sydney	NDLERF	\$245,781	\$53,378	\$128,147
Program of International Research and Training	AGDHA	\$124,000 (2 years)	\$91,305	\$32,508
Patterns of injecting drug use, risk behaviours and blood-borne viral incidence following changes in the drug market	DH	\$49,900	\$16,058	\$33,842
Adolescents' beliefs about psychostimulants and psychostimulant drug education	NSW DEAT	\$34,598	\$12,388	\$22,210
Effectiveness of HIV prevention and care interventions for young and new injecting drug users	WHO	\$5,855	\$5,477	\$378
Identifying strategies to achieve behaviour change among providers of health care services	NHMRC	\$12,500	\$3,570	\$8,930
Monitoring party drug markets in Australia	NDLERF	\$801,224 (2 years)	\$186,123	\$427,136
Estimating the number of heroin users in NSW and Australia	NSW CO DH	\$32,900	\$24,131	\$8,769
Evidence-based answers to cannabis questions	ANCD	\$55,937	\$24,204	\$31,733
Pharmacology of amphetamine abuse	HT	\$9,091	\$1,480	\$5,402
Alcohol Action in Rural Communities	NHMRC	\$126,000 (3 years)	\$12,956	\$41,507
Modelling the costs and the outcomes of changing general practitioner behaviours with respect to at risk drinking	AERF	\$37,878	\$7,738	\$25,604
Club drugs study: USA/Australia	NIH	\$174,618 (2 years)	\$23,540	\$82,868
Implementation of the guidelines for the treatment of alcohol problems	AGDHA	\$161,690	\$37,977	\$123,713
Structural determinants of drug use	AGDHA	\$150,000	\$29,226	\$120,774
Review of the relationship between cannabis use and mental health	NSW DEAT	\$21,553	-	\$21,553

Projects	Funding Source	Total Award (\$)	Expenditure 2003	Expenditure 2004
Exploration of drug injectors' understanding of Hepatitis C infection and implications for transmission	DH	\$79,973	\$7,153	\$72,820
A prospective cohort study of mortality, abstinence, criminality and psychiatric comorbidity	NHMRC	\$411,500 (2 years)	–	\$194,777
Educating tertiary students re a standard drink	AERF	\$17,376	–	\$17,376
Cocaine use in NSW and Victoria	NDLERF	\$185,981	–	\$150,068
A multisite randomised controlled trial of the adolescent cannabis check-up	NHMRC	\$208,125	–	\$74,594
Opioid dependence: candidate genes and GxE effects	WU NIH	\$862,107 (2 years)	–	\$120,342
Using population health data to improve health services, policy and planning	NHMRC	\$415,625 (5 years)	–	\$85,389
Trends in drug use and driving among nightclub attendees	VR	\$13,628	–	\$10,664
Reducing alcohol-related harm in rural communities: a randomised control trial	AERF UN	\$750,000 (5 years)	–	\$35,910
Young people and alcohol: taste perceptions, attitudes and experiences	AGDHA	\$122,818	–	\$44,613
Developing an information brochure for people with coexisting mental health and substance use disorders	AGDHA	\$60,081 (2 years)	–	\$26,855
The policing implications of petrol sniffing and other inhalant misuse in Aboriginal and Torres Strait Islander peoples' communities	NDLERF CUT	\$15,439	–	\$866
The design and production of an evidence-based harm reduction resource for users of performance and image enhancing drugs	AGDHA	\$74,650	–	–
Rapid assessment of use and side effects of performance-enhancing drugs	AGDHA	\$80,873	–	–
<b>SUB-TOTALS FOR PROJECTS (OVER 1 TO 5 YEARS)</b>		<b>\$8,972,391</b>	<b>\$2,093,720</b>	<b>\$3,182,065</b>

Infrastructure	Funding Source	Total Award (\$)	Expenditure 2003	Expenditure 2004
Support for Research Infrastructure	DETYA	\$491,837 (2 years)	\$283,983	\$207,854

Scholarships	Funding Source	Total Award (\$)	Expenditure 2003	Expenditure 2004
Postgraduate scholarships (2)	AGDHA	\$220,231 (5 years)	\$43,539	\$66,166
Post Doctoral Research Scholarship: computer delivered brief intervention for alcohol abuse	NHMRC	\$221,516 (4 years)	\$49,763	\$4,045
Neil Hamilton Fairley Fellowship: examining pharmacotherapy treatment systems for heroin dependence	NHMRC	\$366,838 (4 years)	\$136,856	\$27,274
Research Fellowship	AERF	\$305,130 (3 years)	–	\$18,458
PhD Scholarship	AERF	\$121,709 (4 years)	–	–
<b>SUB-TOTALS FOR SCHOLARSHIPS (OVER 3 TO 5 YEARS)</b>		<b>\$1,235,424</b>	<b>\$230,158</b>	<b>\$115,943</b>
<b>GRAND TOTAL OF AWARDS TO NDARC (OVER 1 TO 5 YEARS)</b>		<b>\$10,699,652</b>	<b>\$2,607,861</b>	<b>\$3,505,862</b>

## APPENDIX D

## PUBLICATIONS

## MONOGRAPHS

**54. Shanahan, M., Doran, C., Stafford, J., Shearer, J., & Mattick, R.P.** (2004). *Pharmacotherapies for nicotine dependence: Social and economic considerations*. Sydney: National Drug and Alcohol Research Centre.

**53. Degenhardt, L., Day, C. & Hall, W.** (eds) (2004). *The causes, course and consequences of the heroin shortage in Australia*. Sydney: National Drug and Alcohol Research Centre.

**52. Breen, C., Degenhardt, L., White, B., Bruno, R., Chanteloup, F., Fischer, J., Johnston, J., Kinner, S., Moon, C., Proudfoot, P., & Weekley, J.** (2004). *Australian Party Drug Trends 2003: Findings of the Party Drugs Initiative*. Sydney: National Drug and Alcohol Research Centre.

**51. Breen, C., Degenhardt, L., Roxburgh, A., Bruno, R., Fetherston, J., Jenkinson, R., Kinner, S., Moon C., Proudfoot, P, Ward J., & Weekley, J.** (2004). *Australian Drug Trends 2003: Findings of the Illicit Drug Reporting System*. Sydney: National Drug and Alcohol Research Centre.

## TECHNICAL REPORTS

**202. Gascoigne, M., Dillon, P. & Copeland, J.** (2004). *Sources of ecstasy information: Use and perceived credibility*. Sydney: National Drug and Alcohol Research Centre.

**201. Gascoigne, M., Copeland, J. & Dillon, P.** (2004). *Ecstasy and the concomitant use of pharmaceuticals*. Sydney: National Drug and Alcohol Research Centre.

**200. Martin, G., Swift, W. & Copeland, J.** (2004). *The adolescent cannabis check-up: A brief intervention for young cannabis users. Findings and Treatment Manual*. Sydney: National Drug and Alcohol Research Centre.

**199. Shearer, J., Wodak, A. & Dolan, K.** (2004). *The prison opiate dependence treatment trial*. Sydney: National Drug and Alcohol Research Centre.

**198. Degenhardt, L., Rendle, V., Hall, W., Gilmour, S., & Law, M.** (2004). *Estimating the number of current regular heroin users in NSW and Australia 1997-2002*. Sydney: National Drug and Alcohol Research Centre.

**197. Degenhardt, L., Rendle, V., Hall, W., Gilmour, S., & Law, M.** (2004). *Estimating the size of a heroin using population after a marked reduction in heroin supply*. Sydney: National Drug and Alcohol Research Centre.

**196. Ross, J., Teesson, M., Darke, S., Lynskey, M., Ali, R., Ritter, A., & Cooke, R.** (2004). *Twelve-month outcomes of treatment for heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS)*. Sydney: National Drug and Alcohol Research Centre.

**195. Shanahan, M., Degenhardt, L. & Hall, W.** (2004). *Estimating the economic consequences of a reduced heroin supply in Australia 2000-2003*. Sydney: National Drug and Alcohol Research Centre.

**191. Teesson, M., Ross, J., Darke, S., Lynskey, M., Mills, K., Williamson, A., Hetherington, K., Fairbairn, S., Havard, A., Wilhelm, E., & Shanahan, M.** (2004). *Twelve-month outcomes of the treatment of heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS) New South Wales*. Sydney: National Drug and Alcohol Research Centre.

**190. Williamson, A., Darke, S., Ross, J., & Teesson, M.** (2004). *The effect of cocaine use on short term outcomes for heroin dependence*. Sydney: National Drug and Alcohol Research Centre.

**189. Moon, C. & Newman, J.** (2004). *Northern Territory Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

**188. Proudfoot, P. & Ward, J.** (2004). *Australian Capital Territory Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

**187. Chanteloup, F. & Lenton, S.** (2004). *Western Australian Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

**186. Bruno, R. & McLean, S.** (2004). *Tasmanian Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

**185. Fischer, J. & Kinner, S.** (2004). *Queensland Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

**184. Weekley, J., Pointer, S. & Ali, R.** (2004). *South Australian Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

**183. Johnston, J., Laslett, A.M., Jenkinson, R., Miller, P., & Fry, C.** (2004). *Victorian Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

**182. White, B., Degenhardt, L. & Breen, C.** (2004). *New South Wales Party Drug Trends 2003: Findings from the Party Drug Initiative (PDI)*. Sydney: National Drug and Alcohol Research Centre.

**181. Moon, C.** (2004). *Northern Territory Drug Trends 2003: Findings from the Illicit Drug Reporting System*. Sydney: National Drug and Alcohol Research Centre.

**180. Ward, J. & Proudfoot, H.** (2004). *ACT Drug Trends 2003: Findings from the Illicit Drug Reporting System*. Sydney: National Drug and Alcohol Research Centre.

**179. Fetherston, J. & Lenton, S.** (2004). *Western Australian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.



**178. Bruno, R. & McLean, S.** (2004). *Tasmanian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

**177. Kinner, S. & Fischer, J.** (2004). *Queensland Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

**176. Weekley, J., Pointer, S., & Ali, R.** (2004). *South Australian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

**175. Jenkinson, R., Miller, P. & Fry, C.** (2004). *Victorian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

**174. Roxburgh, A., Breen, C. & Degenhardt, L.** (2004). *New South Wales Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre.

**173. Day, C., Gibson, A., Collins, L., Degenhardt, L., & Dietze, P.** (2004). *Research methodologies used to obtain retrospective self-reports of the impact of changes in heroin supply on regular users*. Sydney: National Drug and Alcohol Research Centre.

**172. McKetin, R. & McLaren J.** (2004). The methamphetamine situation in Australia: A review of routine data sources. Sydney: National Drug and Alcohol Research Centre.

## PUBLISHED ARTICLES

**651. Bell, J., Byron, G., Gibson, A., & Morris, A.** (2004). A pilot study of buprenorphine-naloxone combination tablet (Suboxone®) in treatment of opioid dependence. *Drug and Alcohol Review* 23, 311-317.

**652. Breen, C., Degenhardt, L., Bruno, R., Roxburgh, A., & Jenkinson, R.** (2004). The effects of restricting publicly subsidised temazepam capsules on benzodiazepine use among injecting drug users in Australia. *Medical Journal of Australia* 181, 300-304.

**653. Copeland, J.** (2004). Developments in the treatment of cannabis use disorder. *Current Opinion in Psychiatry* 17, 161-167.

**654. Copeland, J. & Indig, D.** (2004). Patterns and correlates of treatment: findings of the 2000-2001 NSW minimum dataset of clients of alcohol and other drug treatment services. *Drug and Alcohol Review* 23, 185-194.

**655. Copeland, J. & Martin, G.** (2004). Web-based interventions for substance use disorders: a qualitative review. *Journal of Substance Abuse Treatment* 26, 109-116.

**656. Copeland, J., Swift, W. & Reid, A.** (2004). Young cannabis users' attitudes and beliefs about cannabis drug education. *Journal of Drug Education and Awareness* 1, 119-127.

**657. Darke, S.** (2004). Heroin supply and health: new perspectives (Editorial). *Addiction* 99, 275.

**658. Darke, S., Hetherington, K., Ross, J., Lynskey, M., & Teesson, M.** (2004). Non-injecting routes of administration among entrants to three treatment modalities for heroin dependence. *Drug and Alcohol Review* 23, 177-183.

**659. Darke, S. & Kaye, S.** (2004). Attempted suicide among injecting and non-injecting cocaine users in Sydney, Australia. *Journal of Urban Health* 81, 505-515.

**660. Darke, S., Kelly, E. & Ross, J.** (2004). Drug driving among injecting drug users in Sydney, Australia: prevalence, risk factors and risk perceptions. *Addiction* 99, 177-185.

**661. Darke, S., Ross, J., Lynskey, M., & Teesson, M.** (2004). Attempted suicide among entrants to three treatment modalities for heroin dependence in the Australian Treatment Outcome Study (ATOS): prevalence and risk factors. *Drug and Alcohol Dependence* 73, 1-10.

**662. Darke, S., Williamson, A., Ross, J., Teesson, M., & Lynskey, M.** (2004). Borderline personality disorder, antisocial personality disorder and risk-taking among heroin users: findings from the Australian Treatment Outcome Study (ATOS). *Drug and Alcohol Dependence* 74, 77-83.

**663. Day, C., Collins, L., Degenhardt, L., Thetford, C., & Maher, L.** (2004). Reliability of heroin users' reports of drug use behaviour using a 24 month timeline follow-back technique to assess the impact of the Australian heroin shortage. *Addiction Research and Theory* 12, 433-443.

**664. Day, C., Degenhardt, L., Gilmour, S., & Hall, W.** (2004). Effects of reduction in heroin supply on injecting drug use: analysis of data from needle and syringe programmes. *BMJ* 329, 428-429.

**665. Day, C., Jayasuriya, R. & Stone, G.** (2004). Hepatitis C-related discrimination in New South Wales. *Australian Health Review* 27, 58-61.

**666. Day, C., Ross, J. & Dolan, K.** (2004). Characteristics of Aboriginal Injecting Drug Users in Sydney, Australia: Prison history, hepatitis C status and drug treatment experiences. *Journal of Ethnicity in Substance Abuse* 2, 51-58.

**667. Dean, A.J., Bell, J., Christie, M.J., & Mattick, R.P.** (2004). Depressive symptoms during buprenorphine versus methadone maintenance: findings from a randomized controlled trial. *European Psychiatry* 19, 510-513.

**668. Degenhardt, L., Barker, B. & Topp, L.** (2004). Patterns of ecstasy use in Australia: findings from a national household survey. *Addiction* 99, 187-195.

**669. Digiusto, E., Shakeshaft, A.P., Ritter A., O'Brien, S., Mattick, R.P., & NEPOD Research Group.** (2004). Serious adverse events in the Australian National Evaluation of Pharmacotherapies for Opioid Dependence (NEPOD). *Addiction* 99, 450-460.

**670. Dolan, K., Clement, N., Rouen, D., Rees, V., Shearer, J., & Wodak, A.** (2004). Can drug injectors be encouraged to adopt non-injecting routes of administration (NIROA) for drugs? *Drug and Alcohol Review* 23, 281-286.

- 671. Dolan, K., Lowe, D. & Shearer, J.** (2004). Evaluation of the condom distribution program in NSW prisons, Australia. *Journal of Law, Medicine and Ethics* 32, 124-128.
- 672. Dolan, K., Murdo, B. & White, B.** (2004). HIV education in a Siberian prison colony for drug dependent males. *International Journal for Equity in Health* 3, 3-7.
- 673. Dolan, K., Rouen, D. & Kimber, J.** (2004). An overview of the use of urine, hair, sweat and saliva to detect drug use. *Drug and Alcohol Review* 23, 213-217.
- 674. Doran, C., Shakeshaft, A. & Fawcett, J.** (2004). General practitioners' role in preventive medicine: scenario analysis using alcohol as a case study. *Drug and Alcohol Review* 23, 399-404.
- 675. Doran, C., Shanahan, M., Bell, J., & Gibson, A.** (2004). A cost-effectiveness analysis of buprenorphine-assisted heroin withdrawal. *Drug and Alcohol Review* 23, 171-175.
- 676. Fawcett, J., Shakeshaft, A.P., Harris, M.F., Wodak, A., Mattick, R.P., & Richmond, R.L.** (2004). Using AUDIT to classify patients into Australian Alcohol Guideline categories. *Medical Journal of Australia* 180, 598.
- 677. Hall, W., Degenhardt, L. & Teesson, M.** (2004). Cannabis use and psychotic disorders: an update. *Drug and Alcohol Review* 23, 433-443.
- 678. Hickman, M., Taylor, C., Chatterjee, A., Degenhardt, L., Frischer, M., Hay, G., Tilling, K., Weissing, L., Griffiths, P., & McKetin, R.** (2004). Estimating the prevalence of problematic drug use: a review of methods and their application. *Bulletin on Narcotics, vol LIV, Nos 1 and 2*, 15-32.
- 679. Kavanagh, D.J., Baker, A. & Teesson, M.** (2004). Special Section: Co-morbidity of mental disorders and substance misuse Introduction. *Drug and Alcohol Review* 23, 405-406.
- 680. Kaye, S. & Darke, S.** (2004). Injecting and non-injecting cocaine use in Sydney, Australia: physical and psychological morbidity. *Drug and Alcohol Review* 23, 391-398.
- 681. Kelly, E., Darke, S. & Ross, J.** (2004). A review of drug use and driving: epidemiology, impairment, risk factors and risk perceptions. *Drug and Alcohol Review* 23, 311-317.
- 682. McPherson, M. & Spooner, C.** (2004). Police contribution to illicit drug harm minimisation. *Australian Police Journal* September, 146-149.
- 683. Mills, K. L., Teesson, M., Darke, S., Ross, J., & Lynskey, M.** (2004). Young people with heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS). *Journal of Substance Abuse Treatment* 27, 67-73.
- 684. Post, J., Pan, Y., Freeman, A., Harvey, C., White, P., Palladinetti, P., Haber, P., Marinos, G., Levy, M., Dolan, K., French, R., Lloyd, A., Rawlinson, W., & the Hepatitis C Incidence and Transmission in Prison Study (HITS) Group** (2004). Clearance of hepatitis C viremia associated with cellular immunity in the absence of seroconversion in the Hepatitis C Incidence and Transmission in Prisons Study Cohort. *Journal of Infectious Diseases*, 189, 1846-55.
- 685. Rea, F., Bell, J.R., Young, M.R., & Mattick R.P.** (2004). A randomized controlled trial of low dose naltrexone for the treatment of opioid dependence. *Drug and Alcohol Dependence* 75, 79-88.
- 686. Roxburgh, A., Degenhardt, L. & Breen, C.** (2004). Changes in patterns of drug use among injecting drug users following changes in the availability of heroin in New South Wales, Australia. *Drug and Alcohol Review* 23, 287-294.
- 687. Shearer, J. & Gowing, L.** (2004). Pharmacotherapies for problematic psychostimulant use: A review of current research. *Drug and Alcohol Review* 23, 203-211.
- 688. Topp, L., Barker, B. & Degenhardt, L.** (2004). The external validity of results derived from ecstasy users recruited using purposive sampling strategies. *Drug and Alcohol Dependence* 73, 33-40.
- 689. Topp, L., Breen, C., Kaye, S., & Darke, S.** (2004). Adapting the illicit drug reporting system (IDRS) to examine the feasibility of monitoring trends in the markets for 'party drugs'. *Drug and Alcohol Dependence* 73, 189-197.

### BOOKS, BOOK CHAPTERS, GOVERNMENT REPORTS, RESOURCES & CONFERENCE PROCEEDINGS

- 290. Black, E., Dolan, K. & Wodak, A.** (2004). *Supply, demand and harm reduction strategies in Australian prisons: Implementation, cost and evaluation*. ANCD Research Paper 9. Canberra: Australian National Council on Drugs.
- 291. Copeland, J.** (2004). Cannabis. In: **National Centre for Education and Training on Addiction (NCETA) Consortium** (eds.). *Alcohol and Other Drugs: A Handbook for Health Professionals*. Canberra: Australian Government Department of Health and Ageing.
- 292. Degenhardt, L. & Day, C.** (editors) (2004). *The course and consequences of the heroin shortage in New South Wales*. NDLERF Monograph Series No. 3. National Drug Law Enforcement Research Fund: Adelaide.
- 293. Degenhardt, L., Day, C. & Hall, W.** (editors) (2004). *The causes, course and consequences of the heroin shortage in Australia*. NDLERF Monograph Series No. 3. National Drug Law Enforcement Research Fund: Adelaide.
- 294. Degenhardt, L., Hall, W. & Lynskey, M.** (2004). What is comorbidity and why does it occur? In: **Teesson, M. & Proudfoot, H.** (eds). *Comorbid mental disorders and substance use disorders: epidemiology, prevention and treatment*. Canberra: Australian Government Department of Health and Ageing.

**295. Degenhardt, L., Hall, W., Warner-Smith, M., & Lynskey, M.** (2004). Illicit drug use. In: **Ezzati, M., Lopez, A.D., Rodgers, A., & Murray C.J.L.** (eds), *Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors Volume 1*, (pp 1109-1175). Geneva: Switzerland.

**296. Dietze, P., Miller, P., Clemens, S., Matthews, S., Gilmour, S., & Collins, L.** (2004). *The course and consequences of the heroin shortage in Victoria*. NDLERF Monograph Series No. 6. National Drug Law Enforcement Research Fund: Adelaide.

**297. Dillon, P., Cox, G. & O'Connor, M.** (2004). *What's the score? The facts on alcohol, drugs and sport*. Canberra: Australian Sports Commission Publications.

**298. O'Brien, S.** (2004). *Treatment options for heroin and other dependence: A guide for frontline workers*. Canberra: Australian Government Department of Health and Ageing.

**299. O'Brien, S.** (2004). *Treatment options for heroin and other dependence: A guide for families and carers*. Canberra: Australian Government Department of Health and Ageing.

**300. O'Brien, S.** (2004). *Treatment options for heroin and other dependence: A guide for users*. Canberra: Australian Government Department of Health and Ageing.

**301. Proudfoot, H. & Teesson, M.** (2004). Conclusion: Comorbid mental disorders and substance use disorders: epidemiology, prevention and treatment. In: **Teesson, M. & Proudfoot, H.** (eds). *Comorbid mental disorders and substance use disorders: epidemiology, prevention and treatment*. Canberra: Australian Government Department of Health and Ageing.

**302. Proudfoot, H., Teesson, M., Brewin, E., & Gournay, K.** (2004). Comorbidity and delivery of services. In: **Teesson, M. & Proudfoot, H.** (eds). *Comorbid mental disorders and substance use disorders: epidemiology, prevention and treatment*. Canberra: Australian Government Department of Health and Ageing.

**303. Shearer, J. & Gowing, L.** (2004). Pharmacological Interventions. In: **Baker, A., Lee, N.K. & Jenner, L.** (eds) *Models of intervention and care for psychostimulant users*, Second Edition. National Drug Strategy Monograph Series No. 51. Canberra: Australian Government Department of Health and Ageing.

**304. Teesson, M. & Proudfoot, H.** (eds) (2004). *Comorbid mental disorders and substance use disorders: epidemiology, prevention and treatment*. Canberra: Australian Government Department of Health and Ageing.

**305. Teesson, M. & Proudfoot, H.** (2004). Responding to comorbid mental disorders and substance use disorders. In: **Teesson, M. & Proudfoot, H.** (eds). *Comorbid mental disorders and substance use disorders: epidemiology, prevention and treatment*. Canberra: Australian Government Department of Health and Ageing.

## APPENDIX E

### CONFERENCE PRESENTATIONS

**Black, E.** *Gender differences in injecting drug use patterns and behaviours*. Poster presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Breen, C.** *The emergence of crystalline methamphetamine among party drug users in Australia*. Paper presented at Club Health 2004, the 3rd International Conference on Nightlife, Substance Use and Related Health Issues, Melbourne, 19 April.

**Breen, C.** *The emergence of crystalline methamphetamine among IDUs and party drug users in Australia*. Paper presented at the 15th International Conference on the Reduction of Drug-Related Harm, Melbourne, 21 April.

**Breen, C.** *The emergence of crystalline methamphetamine in Australia: findings of the Illicit Drug Reporting System and the Party Drugs Initiative*. Poster presentation at the 66th Annual Meeting of the College on Problems of Drug Dependence, San Juan, Puerto Rico, 14 June.

**Breen, C.** *Gender differences among IDUs in Sydney, Australia; 1996-2003*. Poster presentation at the 66th Annual Meeting of the College on Problems of Drug Dependence, San Juan, Puerto Rico, 16 June.

**Burns, L.** *Co-morbidity between alcohol use disorders, anxiety and depression: prevalence and treatment outcomes*. Poster presentation at the 15th International Conference on the Reduction of Drug-Related Harm, Melbourne, 21 April.

**Burns, L.** *The use of data linkage to examine the prevalence and outcomes of opiate use in pregnancy*. Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Conroy, E.** *Change in acquisitive crime associated with a reduction in heroin supply*. Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Conroy, E.** *Quality of life among injecting drug users in urban and rural areas*. Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Conroy, E.** *The impact of the heroin shortage on the number and type of drug overdose deaths*. Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Copeland, J.** *Adolescent substance use: influences and responses*. Keynote address to the Victorian Service Providers Conference, Melbourne, 30 April.

**Copeland, J.** *The Adolescent Cannabis Check-up: feasibility and evaluation.* Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Darke, S.** *Cocaine-related deaths in New South Wales, 1993-2002.* Paper presented at the Royal College of Australian Pathologists Annual Conference, Sydney, 13 March.

**Darke, S.** *Twelve month outcomes of treatment for heroin dependence: findings from the Australian Treatment Outcome Study (ATOS).* Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Degenhardt, L.** *Examining trends in party drug use and harms in Australia.* Paper presented at Club Health 2004, the 3rd International Conference on Nightlife, Substance Use and Related Health Issues, Melbourne, 19 April.

**Degenhardt, L.** *Examining trends in party drug use and harms in Australia.* Paper presented at the 15th International Conference on the Reduction of Drug-Related Harm, Melbourne, 22 April.

**Degenhardt, L.** *The impact of the Australian heroin shortage on the number and type of drug overdose deaths.* Poster presentation at the 66th Annual Meeting of the College on Problems of Drug Dependence, San Juan, Puerto Rico, 14 June.

**Degenhardt, L.** *The impact of the Australian heroin shortage on the demand for and compliance with treatment for drug dependence.* Poster presentation at the 66th Annual Meeting of the College on Problems of Drug Dependence, San Juan, Puerto Rico, 14 June.

**Dillon, P.** *Trends in drug use.* Invited presentation at Double Trouble; Comorbidity, THEMHS Summer Forum, Bondi Beach, 20 February.

**Dillon, P.** *Contemporary drug use in the fertility-aged population.* Invited presentation at the Perinatal Substance Use Workshop, Randwick, Sydney, 19 March.

**Dillon, P.** *Drug information needs, sources and credibility among 'party drug' users.* Paper presented at Club Health 2004, the 3rd International Conference on Nightlife, Substance Use and Related Health Issues, Melbourne, 19 April.

**Dillon, P.** *Recreational pharmaceutical use amongst party drug users.* Paper presented at Club Health 2004, the 3rd International Conference on Nightlife, Substance Use and Related Health Issues, Melbourne, 20 April.

**Dillon, P.** *Help or hindrance? The media and harm reduction.* Paper presented at the 15th International Conference on the Reduction of Drug-Related Harm, Melbourne, 22 April.

**Dillon, P.** *Amphetamines: what's the story?* Paper presented at the Sydney community Drug Action Teams Conference 2004, Rosehill, 2 June.

**Dillon, P.** *Current hot topics.* Presentation to ACHPER National Conference, Wollongong University, Wollongong, 9 July.

**Dillon, P.** *Recreational pharmaceutical drug use amongst ERDs users.* Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Dolan, K.** *Results of a four-year follow-up of imprisoned male Australian heroin users: mortality, re-incarceration, hepatitis C seroconversion and methadone retention.* Paper presented at the 15th International Conference on the Reduction of Drug-Related Harm, Melbourne, 21 April.

**Lawrinson, P.** *A brief treatment outcome measure for clients of alcohol and other drug treatment services.* US National Institute on Drug Abuse Ninth Forum on Building International Research on Drug Abuse: Treatment Innovations, Puerto Rico, 13 June.

**Lawrinson, P.** *A brief treatment outcome measure for clients of alcohol and other drug treatment services.* US National Institute on Drug Abuse Ninth Forum on Building International Research on Drug Abuse: Treatment Innovations, Puerto Rico, 14 June.

**Lawrinson, P.** *A comparison of national minimum data collections on service utilisation from alcohol and other drug treatment services.* Poster presentation at the 66th Annual Meeting of the College on Problems of Drug Dependence, San Juan, Puerto Rico, 16 June.

**Lawrinson, P.** *A comparison of national minimum data collections on service utilization from alcohol and other drug treatment services.* Poster presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Mattick, R. & Gowing, L.** *Establishing future therapeutic community research directions.* Paper presented at the Australasian Therapeutic Communities Association National Convention, Gold Coast, 29 October.

**Mattick, R.** *National Evaluation of Pharmacotherapies for Opioid Dependence (NEPOD).* Paper presented at the Mental Health & Addictions Research Meeting, Christchurch, New Zealand, 18-19 November

**Mattick, R.** *Heroin dependence: risk factors, consequences and societal differences.* Paper presented at the Mental Health & Addictions Research Meeting, Christchurch, New Zealand, 18-19 November

**McKetin, R.** *Characteristics of methamphetamine seizures: using forensic data to understand the drug market.* Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**McKetin, R.** *Amphetamine-type stimulants in south-east Asia: a regional overview of ATS trends and related data collection systems.* Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**McKetin, R.** *Characteristics of people receiving treatment for amphetamine use in New South Wales.* Poster presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**McLaren, J.** *Estimating the number of dependent methamphetamine users in Sydney, Australia.* Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Shanahan, M.** *Considering the cost and outcomes of treatment for excessive alcohol consumption.* Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Shanahan, M.** *Use of acamprosate and naltrexone among dependent alcohol populations.* Poster presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Shearer, J.** *Effectiveness and cost-effectiveness of smoking cessation interventions.* Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**Stafford, J.** *Guidelines for treating alcohol problems: What's changed?* Presentation made at the Royal Australian New Zealand College of Psychiatrists (RANZCP) Congress, Christchurch, New Zealand, 12 May.

**Stafford, J.** *Characteristics of Australian smokers using Bupropion and Nicotine replacement therapies: results from a computer assisted telephone survey.* Poster presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

**White, B.** *Party drug users' perceptions of risk.* Paper presented at Club Health 2004, the 3rd International Conference on Nightlife, Substance Use and Related Health Issues, Melbourne, 20 April.

**White, B.** *Risk perception of party drug users.* Paper presented at the 15th International Conference on the Reduction of Drug-Related Harm, Melbourne, 22 April.

**White, B.** *Risk behaviour among party drug users.* Presentation at Beyond the Drug: APSAD 2004 National Conference, Fremantle, Western Australia, 14-17 November.

## APPENDIX F

### EXTERNAL LECTURES, WORKSHOPS, PRESENTATIONS

**Burns, L.** *Treatment for alcohol use disorders: do anxiety and depression make a difference?* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**Copeland, J. & Matalon, E.** *Cannabis: patterns of use, harms and brief interventions.* Invited workshop to the Australian Defence Force's Mental Health Professionals, Darwin, 8 March.

**Copeland, J. & Martin, G.** *The Adolescent Cannabis Check-up: background and rationale.* Next Step Youth Services, Perth, 13 May.

**Copeland, J. & Martin, G.** *The Adolescent Cannabis Check-up: rationale and referral.* Alcohol and Drug Information Service, Adelaide, SA, 24 May.

**Copeland, J. & Martin, G.** *The Adolescent Cannabis Check-up: background and rationale.* Drug and Alcohol Services Council, Parkville, SA, 25 May.

**Copeland, J. & Matalon, E.** *Cannabis: patterns of use, harms and brief interventions.* Invited workshop to the Australian Defence Force's Mental Health Professionals, Melbourne, 24 June.

**Copeland, J.** *The nature and extent of self-reported dependence on ecstasy, GHB and ketamine in two US and one Australian city (CD-SLAM): preliminary findings.* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**Copeland, J. & Matalon, E.** *Cannabis: patterns of use, harms and brief interventions.* Invited workshop to the Australian Defence Force's Mental Health Professionals, Perth, 24 September.

**Copeland, J.** *Cannabis interventions in a drug court environment.* Seminar presentation to the NSW Drug Court, Cronulla, 19 November.

**Darke, S.** *Cocaine-related deaths in New South Wales, 1993-2002.* Drug Dependency Seminar Series, Concord Hospital, Central Sydney Area Health Service, Sydney, 6 April.

**Darke, S.** *Heroin overdose, treatment exposure and client characteristics: findings from the Australian Treatment Outcome Study (ATOS).* Langton Centre, Central Sydney Area Health Service, Sydney, 20 April.

**Darke, S.** *Heroin overdose, treatment exposure and client characteristics: findings from the Australian Treatment Outcome Study (ATOS).* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**Dillon, P.** *Alcohol and young people: when is the right time to strike?* Keynote Address to the Parliament of Victoria Drugs and Crime Prevention Committee Inquiry into Strategies to Reduce Harmful Alcohol Consumption. Parliament House, Melbourne, 18 May.

**Dillon, P.** *Ecstasy and other party drugs: an overview.* Lecture to Anthropology students, Macquarie University, 1 June.

**Dillon, P.** *Harm minimisation: what are clubs, events and users doing?* Presentation to Australian College of Ambulance Professionals Party Drug Workshop, HOME Nightclub, Sydney, 8 June.

**Dillon, P.** *Patterns of drug use in NSW: how much is out there?* Presentation to Australian College of Ambulance Professionals Party Drug Workshop, HOME Nightclub, Sydney, 8 June.

**Dillon, P.** *Methamphetamine, GHB and ketamine: what's the story?* Presentation at HIT Seminar Series, Liverpool Maritime Museum, Liverpool, UK, 1 July.

**Dillon, P.** *What's the deal on grass? international cannabis interventions.* One-day seminar presentation as part of the HIT Training Calendar, HIT, Liverpool, UK, 2 July.

**Dillon, P.** *Recreational pharmaceutical use amongst party drug users.* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**Dillon, P.** *Research indicates that most young people don't abuse drugs.* Invited keynote address to 25th Anniversary of Life Education Australia Educational Symposium, Sydney, 13 September.

**Dolan, K.** *Heroin use in Australia: public health and public order.* Presentation to Masters of Public Health course, University of Sydney, 25 August.

**Lawrinson, P.** *A comparison of national minimum data collections on service utilisation from alcohol and other drug treatment services.* Poster presentation as part of the Faculty of Medicine Research Day, University of NSW, 23 September.

**Lawrinson, P.** *A brief treatment outcome measure for clients of alcohol and other drug treatment services.* Presentation as part of the Faculty of Medicine Research Day, University of NSW, 23 September.

**Mattick, R.** *Standing Committee on Social Issues Inquiry into the Inebriates Act 1991.* The evidence base for treatment of severe alcohol and other drug dependence. Legislative Council, NSW Parliament, Parliament House, Sydney, 8 April.

**McKetin, R.** *Amphetamine-type stimulant trends in East Asia and the Pacific.* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**McKetin, R.** *Purity, packaging and trends in ice, base, powder and pills.* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**McLaren, J.** *Amphetamine treatment presentations in NSW: client characteristics and treatment provision based on the NSW Minimum Data Set for AOD Treatment Services.* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**Mills, K.** *The impact of PTSD on 12 month outcomes for the treatment of heroin dependence.* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**Ross, J.** *The Australian Treatment Outcome Study (ATOS): NSW 12 month findings.* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**Shakeshaft, A.** *The feasibility of hand-held computers in general practice.* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**Shand, F.** *Treating alcohol problems: guidelines, clinical practice and new research.* Presentation at the NDARC Annual Symposium, Sydney, 29 July.

**White, B.** *Party drug users' perceptions of risk.* Presentation at the NDARC Annual Symposium, Sydney, 29 July.