What’s the big deal about drugs and driving?

by Katherine Papafotiou, Manager/Coordinator
Drugs and Driving Research Unit, Centre for Neuropsychology, Swinburne University of Technology

Drug surveys report that the prevalence of drug use, particularly among 18–35 year old individuals, and the incidence of drugs in road traffic crashes resulting in injury or death in Victoria, has increased during the past 15 years. In 2003, 28 per cent of drivers killed in Victoria had a blood alcohol content of 0.05 per cent or higher. In the same year, 31 per cent of Victorian drivers killed tested positive to drugs other than alcohol. The high incidence of drugs in drivers involved in traffic crashes has raised much concern over the impairing effects of drugs other than alcohol on driving behaviours. Since Australia has the highest percentage of cannabis and amphetamine users compared to the rest of the world (New Zealand second and United States of America third highest), it is likely that driving under the influence of drugs occurs more frequently than is reported.

Research into the effects of cannabis and amphetamines on driving performance reveals that cannabis increases lane weaving, and amphetamine use is associated with running stop signs and slowed reaction to emergencies. Unfortunately, it doesn’t seem that this information is reaching the community, since 52 per cent of Victorian clubbers surveyed, have admitted to driving under the influence of cannabis. In addition, Victorian roadside saliva testing statistics report that, to date, one in every 73 Victorians pulled over on the road have tested positive to drugs.

A 2005 Queensland study that examined the nature of drug driving revealed that 26 per cent of the sample surveyed admitted to driving while under the influence of drugs. The strongest predictor of the incidence of drug driving was drug use. In addition, the factors that influenced drug-driving attitudes were opinions of peers and perceived harm. In contrast, the factors that influenced drink driving attitudes were law
The link between cannabis use and psychosis: what does recent evidence suggest?

by Louisa Degenhardt, Senior Lecturer, National Drug and Alcohol Research Centre, University of New South Wales

There is now good epidemiological evidence of an association between cannabis use and psychosis (Hall, Degenhardt & Teesson 2004), but debate continues about the reasons for this link. This debate may be motivated by polarised political views about the drug, but the area has benefited from recent studies providing good data on the nature of the link from prospective longitudinal population-based cohort studies.

There is reasonable evidence that cannabis use exacerbates the symptoms of schizophrenia among those who already have the disorder. This is supported by the findings of a number of retrospective and prospective studies that have controlled for confounding variables. It is also biologically plausible: psychotic disorders involve disturbances in the dopamine neurotransmitter systems, and neuroleptic drugs that reduce psychotic symptoms also reduce dopamine levels (Stahl & Muntner 1996; Moore, West & Grace 1999). Cannabinoids, such as tetrahydrocannabinol (THC), increase dopamine release in the brain.

There is also consistent evidence from prospective epidemiological studies that cannabis use precipitates schizophrenia in persons who are vulnerable because of a personal or family history of schizophrenia (Verdoux et al. 2002). This hypothesis is consistent with the stress–diathesis model of schizophrenia (Gottesman 1991) in which the likelihood of developing schizophrenia is the product of stress acting upon a genetic liability to develop the illness.

The most contentious issue is whether cannabis use can cause schizophrenia that would not have otherwise occurred. Some have suggested that the attributable risk may be as high as 50 per cent of cases that require treatment (van Os et al. 2002). This is not consistent with the fact that the treated incidence of schizophrenia, and particularly of early onset, acute cases, has not increased (Jablensky 1999) despite substantial increases in cannabis use among young adults in Australia and North America over past decades (Degenhardt, Hall & Lynskey 2003).

Australia has high rates of cannabis use among adolescents and young adults, and a vulnerable minority appear to be at increased risk of negative outcomes; the evidence suggests that cannabis use would best be discouraged among this group. The major challenge will be in communicating with young people about the risks, particularly because of the polarisation of views regarding the legal status of cannabis. Careful, evidence-based messages are needed to ensure that young people do not become sceptical about the messages they hear.

References

Cannabis is the illicit drug that is used most frequently by adolescents, with over 40 per cent of 17-year-old Australian students reporting experimental use. Despite these high rates and the growing link between early cannabis use and later risk for mental health problems, there has been limited research carried out on the effects of regular cannabis use during adolescence. This includes local data on increased depression rates among young women who used cannabis regularly from an early age during adolescence, as well as New Zealand research on the relationship between daily cannabis use during adolescence and subsequent psychotic symptomatology.

Interestingly, studies of psychiatric populations also report high levels of cannabis use. For example, research undertaken by our group at ORYGEN Youth Health (a youth-focused public mental health service covering the Northern and Western regions of Melbourne) has shown that over 60 per cent of individuals presenting with a first-episode of psychosis meet criteria for a substance use disorder, of which cannabis is the most prevalent. Significantly, cannabis use appears to precede the development of psychosis by several years, suggesting that it may precipitate (or “unmask”) psychosis in vulnerable or at-risk groups. The exact mechanism underpinning this process remains unclear.

Attempts to understand this relationship have led to a growing international interest in understanding the effects of drugs in general on the developing adolescent brain.

“Attempts to understand the relationship between cannabis and psychosis have led to a growing international interest in understanding the effects of drugs in general on the developing adolescent brain.”

In terms of cannabis, while the current evidence base is limited, there are a number of studies reporting that individuals who start to use cannabis at an early age perform poorly on a number of neuropsychological tasks and have associated structural brain changes. In a recent preliminary study, our group found a compelling association between the size of a number of brain regions implicated in depression and psychosis (i.e. the hippocampus and amygdala) and age of first cannabis use, suggesting that early cannabis use may impact on the development of these brain regions. However, more comprehensive longitudinal studies are needed to fully examine the interaction between early cannabis use, adolescent brain development and later mental health problems. To this end, our group is examining the effect of cannabis use on brain structure in both psychotic and non-psychotic populations, as well as recruiting a prospective cohort of 10–12 year olds in order to more clearly delineate the effect of early cannabis use on the cognitive and emotional development of the adolescent brain.
What is dual diagnosis?

"Dual diagnosis" is an issue of increasing concern in alcohol and drug services. The term "dual diagnosis" (or sometimes, "comorbidity") is used to identify people who have problematic substance use and, at the same time, a mental health problem. A person with comorbid substance use and mental health problems might use any substance, although often polydrug use is common. The mental health problem could be any disorder ranging from an anxiety disorder to a full-blown psychosis.

People with dual diagnosis who attend alcohol and drug services are more likely to suffer from what are called “high prevalence disorders mental disorders”; these are anxiety, personality and depressive disorders, rather than psychosis.

People with a dual diagnosis commonly experience problems in multiple areas of their lives. They also tend to have poorer outcomes, for example, when compared with people who have a mental illness alone. People with a dual diagnosis, on average, experience earlier onset of mental illness, a worse course of mental illness, more severe signs and symptoms, more prominent positive symptoms, more frequent hospital admissions, greater use of emergency services, poorer rehabilitation outcomes and higher rates of unemployment, homelessness, incarceration and suicide than people with a mental illness alone (Teesson & Proudfoot 2003; Mueser, Noordsy, Drake & Fox 2003). Their dual diagnosis is also more likely to become chronic and disabling, and to result in greater service use (Teesson, Hall, Lynskey & Degenhardt 2000).

There is ample research showing that dual diagnosis is highly prevalent and has become the rule rather than the exception within both alcohol and drug services and mental health services (George & Krystal 2000; Teesson et al. 2000).

The Victorian response

In 1998, recognising the scope of this issue, the Victorian Government Department of Human Services (DHS) funded a pilot project and established the Substance Use & Mental Illness Treatment Team (SUMITT). After the favourable evaluation of SUMITT in 2000, the Mental Health Branch and the Drugs and Health Protection Branch of the DHS jointly planned and provided funding for a broader dual diagnosis response.

The Victorian Dual Diagnosis Initiative (VDDI) was established in 2001. This consisted of four teams (SUMITT, Northern NEXUS, Eastern Health Dual Diagnosis Service and Southern Dual Diagnosis Service) to cover the western, northern, eastern and southern regions of Victoria. The 30 staff across the four teams provide a mix of direct primary, secondary and tertiary clinical consultation, as well as education and training and service improvement work, such as service linkages development to the Adult Clinical Mental Health Services (AMHS), Alcohol & Drug Services (ADS) and Psychiatric Disability Rehabilitation and Support Services (PDRSS) in metropolitan and rural Victoria. In 2003, the Mental Health Branch of DHS provided extra funding to add eight new positions to the VDDI, specifically for Youth Dual Diagnosis.

The goal of the VDDI is to assist AMHS, ADS and PDRSS to achieve better outcomes for clients who have concurrent mental illness and problematic drug use. The brief of the VDDI is capacity building; that is, to use a range of strategies to assist services in improving their capacity to respond effectively to clients with dual diagnosis.

The prevalence of comorbid substance use disorder and mental illness is such that most clients present with both issues at either of the established services. The majority of these clients are catered for appropriately. However, some clients experience significant problems, and both services and their staff struggle to adequately meet their needs. If all clients with a dual diagnosis were to be provided with a...
direct clinical service by the dual diagnosis service, then this service would need to be larger than the present alcohol and drug and mental health service sectors combined. The VDDI was established to assist services and workers in these situations, and this is why the focus of the VDDI is on capacity building with a limited direct clinical role.

What is capacity building?

Capacity building has been described as an approach to developing sustainable skills, organisational structures, resources and commitment to health improvement in order to prolong and multiply health gains many times over (Hawe, King, Noort, Gifford et al. 1998; Hawe, King, Noort, Jordens et al. 2000).

The VDDI puts the notion of capacity building into action by providing clinical consultation and training, and assisting to build and improve partnerships between mental health services and alcohol and drug services.

Evaluation

Turning Point Alcohol and Drug Centre evaluated VDDI in 2004 and found that the VDDI’s effectiveness was strongly supported. The evaluation stated that the VDDI needed a renewal of vision and leadership in capacity building. Other recommendations included a joint strategy for promoting the VDDI at sector management and policy levels; the development of formal and specific requirements concerning the level of use of the Dual Diagnosis Initiative by stakeholder services; work with auspice agencies to support appropriate local and consistent data collection and retrieval systems; coordination and collaboration in education and training design and delivery; and the further development of a VDDI planning and evaluation framework.

The evaluation also found some shortcomings. It reported that the teams were too thinly spread across the State, with 30 workers servicing approximately 5000 mental health services staff, approximately 900 alcohol and drug services staff and approximately 1000 psychiatric disability rehabilitation support services staff. There were also logistical difficulties in providing adequate coverage to the rural and remote regions of Victoria identified in the report.

Conclusion

The design and focus of the Victorian response to the challenges raised by the issue of dual diagnosis seems to have been appropriate. Capacity building has been the model of choice in Victoria.

The ultimate aim of the VDDI’s capacity building is to enhance and empower agencies and staff of both service sectors through clinical support, workforce development and service links, in order to ensure continual and sustainable improvement in service delivery for dual diagnosis clients. Once this is achieved there will be no need for the initiative. In other words, the paradox for the VDDI staff is to work themselves out of a job by supporting mental health services and alcohol and drug services so that dual diagnosis services will no longer be required. However, we are not there yet. A solid foundation to respond to dual diagnosis has been built in Victoria, but demand continues to increase while our capability to respond remains static.

References

George TP & Krystal JH 2000
Hawe P, King L, Noort M, Jordens C, Gifford S & Lloyd B 2000 Indicators to help with capacity building in health promotion, New South Wales: Australian Centre for Health Promotion, NSW Health Department
Teesson M & Proudfoot H (eds) 2003 Comorbid mental disorders and substance use disorders: Epidemiology, prevention and treatment, prepared by the National Drug and Alcohol Research Centre for the National Drug Strategy, Canberra: Commonwealth Department of Health and Ageing

* The author would like to acknowledge the assistance of Peter R. Nathan, Senior Policy Advisor, Mental Health Branch, Victorian Department of Human Services, in the writing of this article.
Cautious with Cannabis — a way into treatment
by Sally Laurie, Manager of Education and Training, UnitingsCare Moreland Hall

The majority of those who come to an alcohol and other drug (AOD) treatment service to attend a Cautious with Cannabis education program report that they have never sought treatment for their cannabis use, nor have they been to a treatment service before. Usually they have no clear idea of what an AOD counsellor does and certainly they do not know about a harm-minimisation approach and the fact that it supports a client “wherever they are” in relation to their drug use.

The 500 or more people who attend Cautious with Cannabis sessions across the State in any one year offer those of us who work in the treatment area an opportunity and a challenge.

If we can generalise about those who attend the two-hour program, they are typically male, in their 20s, of Australian origin, and somewhat ambivalent about their use of cannabis. Often, they are accompanied by a parent (in the case of younger participants) or by a friend who is also welcomed to participate in the group session. Many are there because they have been told to attend by a Magistrates’ Court or by the police following a cannabis caution. What they usually have in common is wariness about coming to a treatment service where they expect to be talked to by a person who will remind them of the illegality of their drug use and somehow convey to them that their actions are morally wrong. After registration processes are completed the first part of the session is spent allaying these fears — explaining that psychological education is not about making value judgements — and establishing rapport and an open atmosphere for discussion.

The cannabis quiz, which comes next, usually provokes lively discussion and reveals the myths and misconceptions that exist about the subject of cannabis use. There are some common misconceptions about the drug’s addictive nature, with many people believing that there are no withdrawal symptoms after use of the drug ceases.

The question of the legality of cannabis in Australia is also a topic that requires clarification, as does the relationship between cognitive impairment and psychosis and cannabis use. Exploring these questions provides an opportunity to give details of the most up-to-date and accurate information available about cannabis use. This is also an opportunity to look at the individual nature of the experience of a drug and validate each person’s particular experience. The issue of personal disclosure is dealt with explicitly, but the discussions that take place provide an opportunity for personal reflection.

Often, a group contains someone who puts themselves forward as an “expert” participant. This person will know a great deal about cannabis based on their research as well as personal experience. However, they will be less knowledgeable about harm-minimisation strategies. Often, people are surprised when told about the risks associated with “holding the smoke in” and the pointlessness of this action, given that 95 per cent of the delta-9 tetrahydrocannabinol (THC) is absorbed within seconds of inhalation. The increased risks associated with the use of bongs and in mixing cannabis with tobacco are also explored.

Other topics of real interest to participants are cannabis and psychosis, the effects of cannabis on driving, cannabis and pregnancy and risks associated with mixing drugs. The program acknowledges people’s fears and anxieties about their drug use and provides them with evidence derived from the latest research rather than from hearsay or from dubious websites.

Much discussion arises when the model of the “drug triangle” is presented. The group suggests a cannabis use scenario and then looks at contributions to the effect of the drug made by factors such as the user, the drug and the environment. One facilitator suggested that this way of looking at the subject of drug use helps participants reflect on the multitude of factors that may be influencing their drug use. Another part of the program that engages participants is when the Prochaska and DiClemente “Stages of Change” model is presented and participants are invited to identify where they are in this cycle. Ideas of lapse and relapse are useful for all participants, including members of participants’ families who sometimes attend to provide support.

Given the very high level of diversity in experience and knowledge of participants, as well as their readiness to change, it is important that the program offers something for everyone. Some participants willingly admit that they do not want to change their drug use. They are often there just to obtain the attendance certificate to produce at a court hearing.

Whatever the level of knowledge and motivation to change, there is something within the program that each participant will find new, even if it is just the demystification of the role of an alcohol and other drug clinician. If the program does nothing else, this is a worthwhile outcome, perhaps bringing potential clients one step closer to treatment.
Cannabis Cautioning program
by Rebecca May, Drug Diversion Project Officer, Drug and Alcohol Strategy Unit, Victoria Police

The Cannabis Cautioning program is a police diversion program that involves the provision of a cautioning notice for use and/or possession of cannabis to offenders aged 17 years and over. The offender must only be in possession of a small (non-traffickable) amount of cannabis and admit to the offence. The offender must consent to the caution and not be involved in any other offence at the time of apprehension by the police. A person can accumulate two drug-related cautions only.

As part of the National Illicit Drug Strategy (NIDS) Drug Diversion Initiative, a voluntary cannabis education program, Cautious with Cannabis, is offered to offenders as part of the cautioning process. UnitingCare Moreland Hall delivers this education program (see page 6) and bookings are coordinated through DirectLine (tel. 1800 888 236). The first program was delivered towards the end of 2001, and is currently available in 24 metropolitan and rural locations across Victoria.

Initially, Cautious with Cannabis was offered only to offenders who had been given a cannabis caution from the Victoria Police. However, it was recognised that the education programs represented an early intervention resource that would be of great value to a number of other potential participants, such as those appearing in court on other charges, but with a cannabis problem.

Cautious with Cannabis is now open to family members of a person using cannabis or who has received a Cannabis Caution from the police, and to people who have not yet had contact with the police but are concerned about their cannabis use. This provides an opportunity for people to deal with their cannabis use at a stage when it may be beginning to cause concern, but before they become involved with the criminal justice system.

The Cannabis Cautioning program is well received by police members as an expedient way to deal with cannabis offenders. Victoria Police supports operational members to implement this program with education, training and resources. Every operational vehicle in Victoria is equipped with a drug diversion satchel containing the resources to enable members to issue cannabis cautions at point of arrest. Since commencing in November 2000, over 6500 people have been diverted from the criminal justice system.

Introducing the new DrugInfo Clearinghouse prevention research team
by Cameron Duff, Director, Centre for Youth Drug Studies

After two years and 13 issues, Associate Professor John Toumbourou and his team at the Centre for Adolescent Health have passed responsibility for the preparation of the prevention research evaluation reports and summaries to the research staff at the Centre for Youth Drug Studies. I would like to thank John for his outstanding intellectual and creative leadership in developing the research component of the DrugInfo “suites” during the past two years.

Commencing with the current DrugInfo suite on cannabis, the Centre for Youth Drug Studies will now contribute all prevention science evaluation reports and summaries. Led by Dr Cameron Duff and Mr Netzach Goren, we hope to continue to build on the magnificent work begun by John and his group of dedicated research staff.

In order to maintain the high academic standards set by the previous research group, we would also like to announce the formation of a Prevention Research Advisory Group. This group will be led by Associate Professor John Toumbourou and will include well-established research scientists to guide the development of future prevention science suites. The following academics have agreed to join this group:

- Associate Professor John Toumbourou, Centre for Adolescent Health
- Dr Louisa Degenhardt, National Drug and Alcohol Research Centre
- Associate Professor Richard Midford, National Drug Research Institute
- Dr Simon Lenton, National Drug Research Institute
- Associate Professor John Fitzgerald, The University of Melbourne
- Dr John Howard, Ted Noffs Foundation
- Dr Pamela Snow, La Trobe University
- Associate Professor Peter D’Abbs, James Cook University

We have a number of new research topics in mind for future DrugInfo suites, and these will be communicated in future issues of the newsletter. I’m sure these topics will continue to inspire informed debate on the direction of prevention science and practice. Readers who have ideas or suggestions for topics they would like to see us investigate are invited to write to the Editor.
Prevention research summaries

Harms associated with cannabis use

Introduction

The summaries that follow provide a sample of the recent literature relating to contentious issues associated with cannabis use. The first two summaries evaluate studies examining cannabis and psychosis. The following two examine the relationship between cannabis use and social and emotional development, and cannabis use and suicide.

Cannabis use and psychosis


**Key findings** Using a large and representative sample of Australian adults, this study found a higher prevalence of psychosis among regular and dependent cannabis users. Using DSM-IV criteria, approximately 11 per cent of people in the sample were classified as abusers of cannabis and 21 per cent were classified as dependent. Of the sample, 1.2 per cent screened positively for psychosis. Persons screening positively for psychosis were significantly more likely to report cannabis use in the previous 12 months, than those who did not screen positively (30 per cent versus 10 per cent). Weekly cannabis use was four times more common among persons who screened positively for cannabis, and six times more common among individuals who met criteria for DSM-IV cannabis abuse or dependence.

**Study quality was high** The large cross-sectional design provided an excellent basis for Australian prevalence estimation. This study used data from the Australian Bureau of Statistics National Survey of Mental Health and Wellbeing. As the data for this study were selected using random multistage area sampling, and the sample size was extremely large (N=10641), its findings are based on a representative sample of residents in private dwellings, and therefore can be generalised to the Australian population. The response rate for the study was good; 78 per cent of all individuals approached agreed to participate in the study. The study provides strong evidence supporting the notion that in an Australian population problematic substance use is more likely to occur among persons reporting psychotic symptoms.


**Key findings** In a large follow-up study conducted in The Netherlands, the likelihood of developing psychosis over a three-year period was increased by cannabis use. This risk was greatly elevated for those with a history vulnerable to psychosis, but was also evident for those without such history. Overall findings suggested that a baseline history of cannabis use increased the risk of an individual reporting having had a psychotic episode. A baseline history of cannabis use was a stronger predictor (compared to psychostimulants, cocaine, phencyclidine and psychedelics) for an individual reporting to have a psychotic episode over the three-year follow-up, after controlling for baseline psychosis and other confounders. Findings also indicated that cannabis users who at the start of the study indicated a vulnerability to psychosis were at greater risk of cannabis use contributing
to the development of psychotic symptoms. The study also suggested that a psychosis outcome for individuals who used cannabis was related to chronic use, rather than short-term use.

**Study quality was high** This large (N=4505) longitudinal study had a reasonable retention rate over three years and controlled for a range of relevant confounders. This study was based on a large stratified (representative) sample from The Netherlands, and therefore its findings can be generalised. Moreover, the study is longitudinal and thus provides evidence to support causality — it does this by documenting factors that precede psychotic episodes, independent of known influences. Although one factor preceding another does not definitively prove causality, longitudinal studies provide evidence that can rule out logical challenges to the notion of causality.

A strength of the study is in the fact that it adjusted for confounding factors such as previous diagnosis of psychosis, age, sex and level of education. However, the study did not adjust for other confounding factors such as traumatic history or abusive family history. Attrition rates were not high (69 per cent of participants completed the study), and no analysis assessing participants who did not complete the study was undertaken, thus suggesting the study may not be a reasonable representation of long-term cannabis users.

**Cannabis use and social and emotional development**


**Key findings** Using seven waves of data collection and adolescents from government, Catholic and independent schools, this study found that, after adjusting for other substance use, there was a strong association between daily use of cannabis and depression in young women. Frequent cannabis use in teenage girls predicts higher rates of depression and anxiety. Depression and anxiety in teenagers does not predict later cannabis use.

**Study quality was high** The study used a stratified sampling method and thus participants in the first wave could be considered representative. The attrition rate was higher than optimal. Seventy per cent of respondents missed at least one wave of data collection. However, analysis did indicate that depression, anxiety or cannabis use was not associated with loss to follow-up. A particular strength of the study was its accounting for confounding factors such as concurrent drug use and family background of depression and anxiety. The overall findings contribute to the evidence that frequent cannabis use may have a deleterious effect on mental health, beyond a risk of psychotic symptoms.

**Cannabis use and suicide**


**Key findings** This study found that for males cannabis use and risk of suicidal behaviour (patterns of deliberate self-harm) were not related. However, for females weekly marijuana use was related to an increased risk in suicidal behaviour. It used data collected from subjects in the third wave of a statewide cohort study of adolescents in Victoria, Australia.

**Study quality was moderate** Although this study was part of a longitudinal study, the data used in the analysis were drawn from only the third wave of data collection, and thus the study was principally cross-sectional. The study provided estimates of prevalence and initial information regarding the association of risk factors. The large stratified sample and high attrition rate (82 per cent) of individuals who participated in the third wave of data collection suggest that the findings of the study are generalisable. Longitudinal cohort studies and randomised control studies are required to provide causal evidence for the link between cannabis use and suicidal behaviour.

For more summaries of current research on cannabis, see our website at [www.druginfo.adf.org.au](http://www.druginfo.adf.org.au). These summaries attempt to make research publications more accessible to practitioners. They also aim to help inform clinicians of good practice and key findings and developments in alcohol and drug research.
The Victorian Alcohol and Drug Treatment Service System: treatment options and prevention services

by Lisa Clifford, Senior Policy Officer, Drug Policy Coordination Unit, Department of Human Services

The Victorian Government’s drug policy is underpinned by the philosophy of harm minimisation, which aims to reduce the harms associated with drug use to individuals, their families and society as a whole.

The Government funds a range of non-government and local government services, community health centres and hospitals to deliver alcohol and drug treatment, and counselling, referral, education and prevention services for adults, young people and Indigenous Victorians. Currently there are over 90 agencies on the Victorian Alcohol and Drug Treatment Service System.

Cannabis as a principle drug of concern

The Department of Human Services records the number of people seeking treatment for alcohol and other drug use on the Alcohol and Drug Information System (ADIS). ADIS indicates that cannabis is now second to alcohol as the principal drug of concern for people entering treatment, followed by heroin.

In 2003–2004, cannabis use was reported in 21 per cent of calls to the DirectLine counselling service. In addition, cannabis was the principal drug of concern for 22 per cent of courses of treatment delivered by specialist drug treatment services, with over 20 per cent of clients in the 15–19 year age group. Cannabis was identified as the principal drug of concern in over 9800 courses of treatment delivered to over 6200 clients (62 per cent men, 38 per cent women).

Hospitalisation as a result of cannabis use

During 2002–2003, an estimated 478 in-patient hospitalisations in Victoria were attributable to cannabis consumption. This represents a 20 per cent decrease on the previous year’s figures. It is estimated that cannabis accounted for 6 per cent of all illicit drug hospitalisations and 10 per cent of hospital bed days.

Most cannabis hospitalisations were for psychotic effects (47 per cent), with dependence accounting for an additional 26 per cent of hospitalisations. Fifty-one per cent of cannabis-related hospitalisations were people under 25 years of age.

The Australian Treatment Outcome Study (Turning Point)


Brief interventions are quick, effective tools that health professionals can use to encourage patients to modify drug-using behaviour and reduce harms caused by the use of drugs. Brief interventions usually consist of five components:

- providing feedback about the drug-using behaviour
- recommending a change in behaviour
- presenting options to facilitate the change
- checking and responding to the client’s reaction
- providing follow-up care.

Brief interventions are either opportunistic (co-occurring with another health intervention) or planned. Motivational interviewing, when carried out as a single intervention, is also classified as a brief intervention.

Turning Point Alcohol and Drug Centre has developed clinical guidelines for brief interventions that are currently being field tested to determine the situations that are appropriate and effective.

Victorian Government initiatives

For young people in particular, the Victorian Government funds counselling, support and specialist youth services, including counselling to support lifestyle change, reduce risky behaviour and encourage the development of skills to cope with drug-use triggers.

In addition, the Government has funded a number of cannabis initiatives such as:

- cannabis intervention workshops for general health and welfare professionals and general practitioners to conduct brief interventions in cannabis use
- research into early interventions for young people experiencing psychosis and using cannabis as well as investigating the relationship between cannabis use and psychosis
- research into substance abuse in young people with recent onset psychotic disorders
- the production of a cannabis and psychosis video and training manual for health professionals in the mental health field
- the “Cannabis Cautioning” program, which is a police diversion program for people found in possession of small amounts of cannabis or other illicit drugs.
Use of cannabis among secondary students in 2002

by Victoria White and Jane Hayman, Centre for Behavioural Research in Cancer, The Cancer Council Victoria

In 2002, the seventh Australian Secondary Students’ Alcohol and Drug Survey (ASSAD) was conducted, and for the third time students answered questions about their use of cannabis and other illicit substances. This study surveyed 23,417 male and female students aged 12–17 years from 363 schools.

As in previous years and similar to the findings from the National Drug Strategy Household Survey, the ASSAD study found that cannabis was the most commonly used illicit substance among secondary school students. Figure 1 shows the prevalence of cannabis use compared to the use of other illicit substances. Overall, one in every four secondary school students surveyed (25 per cent) reported using cannabis at some time in their lives, and use of this substance was more common as students grew older. Around 20 per cent of students indicated they had used cannabis in the previous year and 11 per cent reported using it in the previous month. Among students who reported using cannabis in the previous year, 31 per cent of males and 37 per cent of females had used it only once or twice, while around 38 per cent of males and 31 per cent of females had used it on 10 or more occasions.

Bongs were the most common means of using cannabis, with 65 per cent of males and 59 per cent of females who had used cannabis in the previous year indicating that this was how it was usually used. Joints were smoked by 38 per cent of females and 31 per cent of males.

Cannabis use was generally a social event. Adolescents who used cannabis in the previous year usually used it with others (81 per cent of males and 85 per cent of females) and generally used it at a friend’s place (31 per cent of males and 37 per cent of females) or at a party (27 per cent of males and 28 per cent of females). Using alcohol at the same time as using cannabis was also common, with 66 per cent of students who had used cannabis in the previous year reporting that they had also used alcohol on the same occasion.

Students in 2002 were less likely to have used cannabis than were their same-age counterparts in 1999. Among all 12–17 year olds at school, the proportion reporting use of cannabis in their lifetime decreased from 29 per cent in 1999 to 25 per cent in 2002. In 2005 the eighth ASSAD survey will be conducted, allowing us to determine whether this trend for decreasing prevalence of cannabis use among secondary students has been maintained.

Acknowledgements

The ASSAD study is a collaborative project between state and territory cancer councils across Australia and health departments at both the Federal and state and territory level.

continued from page 1

What’s the big deal?

and detection and peer norms. These findings highlight that law enforcement procedures have the potential to influence an individual’s attitude and behaviour towards driving while intoxicated. These findings also support the implementation of drug detection procedures (sobriety tests and random saliva drug testing) that aim to reduce the number of people driving under the influence of drugs.

Research on drugs and driving is limited, therefore continued investigations are essential to influence changes in attitudes and behaviours. Ideally, random drug testing should serve as a deterrent, and public awareness of the effects of illicit drugs on driving performance should encourage responsible drug taking and driving behaviours.
A community forum held by Youth Solutions in 2003 for young people living in the Macarthur and Wingecarribee regions highlighted issues of concern about young people's cannabis use and identified a long list of associated harms. This resulted in a response to provide a locally relevant campaign that involved young people and the general community.

The campaign called for an understanding about the "real issues" for young people in the region, so 165 young people were asked about their concerns through focus groups and surveys. Issues about personal safety (including health, violence and sexual assault) were predominant in the surveys and focus groups. This made it possible to determine what the important issues were and how young people wanted health messages delivered to them.

A further 189 young people were then consulted about the types of campaign message that would be relevant to them.

Following this, 12 young people participated in an intensive one-day "creative workshop", enabling young people to increase their knowledge about cannabis use and to choose the mediums/designs for the campaign, including: radio and newspaper advertisements, postcards, stickers, wrist bands, posters (for schools and community spaces) and T-shirts.

Dope-EFX u is a pretty clear message designed by young people for young people. Although the messages are directed at 15–18 year olds, they really are universal.

The ever-evolving website resource www.dope-EFXu.com.au aims to support the campaign and includes information about cannabis as well as a host of local services that can assist young people and the general community (without replicating the fantastic resources already on offer).

For further information about Youth Solutions or the Dope-EFX u campaign, contact Youth Solutions, tel. (02) 4628 2319, or log onto www.youthsolutions.com.au.

Dope-EFX u is funded by the Australian Government National Illicit Drug Strategy under the Community Partnerships Initiative.

Cannabis and psychosis

The Mental Illness Fellowship of Victoria has produced a series of facts sheets about mental illness and drugs and alcohol. One of these fact sheets, titled "Cannabis and psychosis" outlines general information about cannabis and its effects and how cannabis use may impact on people with mental illness. It lists reasons that people with a mental illness may use cannabis and what family and friends can do to help. There is also a very useful brief description about the difference between substance-induced psychosis and psychotic disorders. The fact sheet provides a good starting point for general information, especially for people who have a family member or friend who has a mental illness and uses cannabis.

For more information and copies of the fact sheet, contact the DrugInfo Clearinghouse on tel. 1300 85 85 84, email druginfo@adf.org.au or visit the Mental Illness Fellowship of Victoria website at www.mifellowship.org/drugs_facts.htm.
**Review**  
**Trimming the grass**  
*by Johanna de Wever, Marketing Manager, Information Services*

This handy booklet, published by Manly Drug Education and Counselling Centre, is aimed at young people who are considering or trying to cut back their cannabis use. A comprehensive resource, it covers the health, social, financial and legal reasons a young person would decide to change their cannabis use and a diary to help document their use. Once a decision has been made, the booklet assists with planning, dealing with negative thinking, managing withdrawal and cravings. Very stylishly designed, it includes youth-friendly illustrations and “fill in at home” sections on use and triggers.

The booklet is available through the ADF resource catalogue, for details call tel. 1300 85 85 84. AUS. A5 booklet. 2002. (Cat no. 544) $1.60 each.

---

**Review**  
**Getting out of it: How to cut down or quit cannabis**  
*by Cindy Van Rooy, InfoDesk Coordinator, DrugInfo Clearinghouse*

The InfoDesk receives many requests from people who wish to stop using cannabis but aren’t sure how to go about it. “Getting out of it: how to cut down or quit cannabis” is a workbook published by the Eastern Drug and Alcohol Service that addresses this. It presents a range of issues and practical strategies aimed to help people cut down or quit using cannabis. The workbook uses questions and checklists to encourage self reflection about cannabis use. This is supported by numerous suggestions and tips for cutting down, coping with cravings and withdrawal, managing relapses, and dealing with other cannabis smokers. While the A4-sized workbook is a bit big to carry around with you all the time, the larger size means there is plenty of room to keep notes and write thoughts and comments directly into it. More information and copies of the booklet are available at [www.edas.org.au/publications.html](http://www.edas.org.au/publications.html).

---

**Review**  
**Messing with heads: the long term effects of cannabis**  
*by Linda Rehill, Library Technician, DrugInfo Clearinghouse*

Most parents of teenagers would be far more anxious about the effects and ingredients of an ecstasy pill than about a more familiar drug, such as cannabis. However, these same parents would probably be disturbed to find that the cannabis used today is not quite the same as that used 20 years ago, and recent evidence suggests that it can be extremely harmful to the developing brain. According to “Messing with heads”, an episode of ABC Television’s Four Corners program that was televised earlier this year, young people who smoke cannabis regularly run a very real risk of triggering a predisposition to psychosis.

Experts point out that constant improvements in cannabis production methods have resulted in a vast increase in the quality and strength of the drug, while changes in the way it is used have meant that, in general, average users are increasing their risks by taking in more of the drug each time they smoke.

This moving investigation highlights the horrific effects of cannabis use on two young people and their families and close friends who struggle to support them through their terrifying experiences, while remaining powerless to actually stop the drug use. It is a graphic warning to both parents and young people that cannabis use cannot be considered harmless. This program is available to view online at [http://abc.net.au/4corners/special_eds/20050321/default_2.htm](http://abc.net.au/4corners/special_eds/20050321/default_2.htm).
### News

**Annual Boozie Award goes to the Footy Show (AFL)**

The Australian Drug Foundation’s annual Boozie Award was awarded to the *Footy Show* (AFL). The Australian Drug Foundation (ADF) presents the Boozie to an Australian-produced show that demonstrates excessive, inappropriate or unconscionable marketing of alcohol. This is the fourth annual award. Previous awards have gone to *The Secret Life of Us* and the *Chilli Factor*, both aired on Channel 10. The Footy Show was awarded the Boozie for its 2005 season, which includes a sponsorship by Jim Beam Bourbon. The sponsorship ensures bottles of Jim Beam are displayed in most shots and mentions of Jim Beam occur consistently throughout the show. The Director of the Community Alcohol Action Network (CAAN) at the ADF, Mr Geoff Munro, said the 2005 Boozie was awarded to the *Footy Show* (AFL) particularly for its second show of the 2005 season, which featured a skolling incident by Sam Newman.

**New resources for CLD workers and communities**

The CLD Access Project, an initiative of the Australian Drug Foundation that has been working to increase the accessibility of drug and alcohol information and services to culturally and linguistically diverse (CLD) workers and communities in Victoria, will be launching three important new resources in June. The Multicultural DrugInfo website ([www.druginfo.adf.org.au/multicultural](http://www.druginfo.adf.org.au/multicultural)) will provide a comprehensive database of multilingual drug and alcohol information in Victoria. The site lists over 650 resources in 49 community languages, and also features a multicultural drug and alcohol service directory and the latest prevention research relating to ethnic communities and drugs and alcohol. The project is also launching a community awareness campaign on khat, a stimulant drug chewed by members of some East and North African communities. A new brochure, *Drugs and their effects* has also been translated into five community languages (Amharic, Somali, Tigrinya, Dari and Persian), providing emerging communities with an important new resource.

**Primary Pathways: an integrated approach to drug education**

This easy-to-use education resource is for use by primary schools and offers learning activities that promote the development of self-esteem, identity,
responsibility, decision making and problem solving. Covering early, middle and upper primary school years, Primary Pathways is a comprehensive resource that integrates drug education into the primary curriculum. This resource has been tested in schools and reviewed by experts to ensure that it provides a positive and effective approach to building resilience and connectedness across the school community. The manual is available from the ADF resource catalogue, for details call tel. 1300 85 85 84. AUS. 2005. Manual. 200pp. (Cat no. 634) $71.50.

New in the library

Smith P 2003 Cannabis on the Brain, Wellington: Dunmore Press
During the past few decades, cannabis users and an increasing number of doctors and scientists have demanded the reform of cannabis laws. But do we know how cannabis works? What effect does it have on the brain? What ill-effects are associated with its use? Is there any convincing evidence supporting its use as a medicine? Should it be decriminalised?

In Cannabis on the Brain, Paul Smith critically assesses the scientific study of cannabis and cannabinoids in the context of clinical, experimental and social use. Smith is a pharmacologist and so provides a detailed discussion based on the latest scientific information from pharmacology and medicine with clarity and balance. After briefly describing the history of use in New Zealand and Australia, he explores how cannabis gets into the brain, its impact on behaviour, adverse effects, evidence of dependence, therapeutic applications and, finally, social and legal issues. Despite the considerable pharmacological depth, Smith’s limited technical and jargon-free discussion, his easily understood graphs and diagrams, short chapters each with concise conclusions and the wealth of references make for a straightforward and rewarding read.

This work will be of use to educators, doctors, counsellors and psychologists.

Druginfo Clearinghouse no. BE2 COL

WEBSITES

Ybblue http://beyondblue.org.au/ybblue/
YYblue is a website for young people who are experiencing depression. The site aims to help young people by providing them with information about depression in a way that is relevant and accessible. The site also aims to increase awareness of depression among the family and friends of sufferers so that they are able to recognise the warning signs. Resources include fact sheets, e-cards, posters and postcards.

Legislative options for cannabis use in Australia
This site provides the legislative options for cannabis use in Australia from the Department of Health and Ageing. This section of the Department’s website features detailed discussion and comparison of different policies and legislative models relating to cannabis. Of particular interest is the information placing cannabis use within historical, cultural and legal contexts.

FUNDING OPPORTUNITIES

Parliamentary Library Guide to Community Grants
This is a useful website that lists selected Commonwealth, state and territory government funding sources, non-government organisations and grant news subscription sites.

The Fund for Drug Policy Reform: The Tides Foundation
This foundation promotes innovative approaches to reduce the harm of drug use and drug prohibition and to increase public support for alternatives to the war on drugs. It encourages reform efforts undertaken by people most affected by drugs; and non-traditional allies such as law enforcement, physicians and religious leaders. It aims to strengthen groups working to achieve reform at state, national and international levels, and will also consider, on a limited basis, research initiatives that are closely connected to the reform agenda.
www.tidesfoundation.org/aboutus.cfm
**FROM THE EDITOR**

Given that cannabis is the most commonly used illicit drug in Australia and New Zealand, it's quite remarkable to find that ignorance about the harms associated with its use is just about as widespread. However, given the limited research available on cannabis — particularly on the effects of regular use during adolescence — perhaps it is not so surprising after all.

In recent years, there has been increasing interest in the degree of harm associated with frequent, heavy and long-term use of cannabis, particularly in relation to vulnerable groups such as adolescents, epileptics, pregnant women and people with a history of mental health problems.

The legal status of cannabis, random drug testing and dual diagnosis are among the more contentious issues being debated at present.

This month's issue of DrugInfo provides a snapshot of these issues, and profiles some of the latest research and practice in cannabis-related prevention. I hope you find these of value in your work, and heartily invite your feedback — at our seminar in July (see Calendar on page 14) or via email. If you'd like to submit an article or review, or have some feedback on the topics and articles, do give us a call or send an email.

**Coming up**

Our theme for the next issue of DrugInfo (early September 2005) is social marketing. Meanwhile, make sure you check our website (or call the InfoDesk on 1300 85 85 84) regularly for latest on drugs and drug prevention — the website is updated several times a week.

**Acknowledgements**

This month's issue of DrugInfo is brought to you by Guest Editor Betty Vassiliadis, our Content Coordinator in the DrugInfo Clearinghouse. My grateful thanks to Betty for (I'm sure you'll agree) a magnificent job! A big thank-you also to the usual suspects for your enthusiastic and insightful contributions: Wendy Fortington, Johanna de Wever, Linda Rehill and Cindy Van Rooy (reviews), Amy Gray (web reviews) and Rosemary McLean (funding opportunities).

**Free membership**

If you would like to receive quarterly issues of DrugInfo as well as our regular information resources, complete and mail in the form below, or join up online at our website www.druginfo.adf.org.au, or call tel. 1300 85 85 84 (Victoria only).

---

**BECOME A MEMBER OF DRUGINFO CLEARINGHOUSE**

<table>
<thead>
<tr>
<th>First name:</th>
<th>..................................................</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surname*:</td>
<td>..................................................</td>
</tr>
<tr>
<td>Position/Program:</td>
<td>..................................................</td>
</tr>
<tr>
<td>Organisation:</td>
<td>.......................................................................</td>
</tr>
<tr>
<td>Postal Address*:</td>
<td>.......................................................................</td>
</tr>
<tr>
<td>Tel*: (.............)</td>
<td>Fax: (.............)</td>
</tr>
<tr>
<td>Email:</td>
<td>.......................................................................</td>
</tr>
<tr>
<td>Postcode:</td>
<td>..................................................</td>
</tr>
</tbody>
</table>

Library membership is free and open to Victorians working or studying at postgraduate level in alcohol and other drugs, health, education or related fields.

Would you like to join the library?

☑ Yes  ☐ No

* Essential fields

Would you like to receive free quarterly prevention resources, including DrugInfo newsletter, fact sheets and the latest reports on prevention research?

☐ Yes  ☐ No

If "yes", preferred format:

☐ email  ☐ post (Victoria only)

Mail this form to: DrugInfo Clearinghouse, Australian Drug Foundation, PO Box 818, North Melbourne Victoria 3051