

ncpic e-zine

april 2010

national cannabis
prevention and
information centre

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what's new in cannabis?

The website's Workforce section has been enhanced through the addition of a new resource for those working with young people experiencing problems with cannabis use, the *Young People and Cannabis Use* training package. The package includes downloadable resources including a self-directed learning package for youth sector workers and a video modelling a Motivational Enhancement approach and is available at <http://ncpic.org.au/workforce/gps-and-nurses/young-people-training-package/>.

director's report

Jan Copeland (PhD)
Professor/Director, NCPIC

This month's E-zine is not nearly as colourful as last month's but then again the Communications Team is much more rested. Nonetheless, we have all been busy with a number of new resources being made available on our website and further developing our collaborations with State and Territory government departments, this month across the Northern Territory in particular. A good proportion of my own time was devoted to our joint submission with ADCA and the jurisdictional peak non-government alcohol and other agency representatives to the Queensland Legislative Assembly's Social Development Committee's "Inquiry into addressing cannabis-related harm in Queensland." This inquiry focussed on the *Cannabis: Suicide, schizophrenia and other ill-effects* document published by Drug Free Australia Ltd last year. The Committee is considering the risks associated with cannabis use, particularly for young people, and strategies to reduce the level of cannabis use in Queensland. At this stage our submission is confidential but we hope to be able to post it on our website in the future.

The two areas of resource development this month have been in the Workforce section of the website. One has been a resource for those working with young people experiencing problems with cannabis use and the other is a suite of factsheets specifically tailored for GPs.

Dr John Howard led the production of the *Young People and Cannabis Use* resource for the website which incorporates a self-directed learning package for those working in the

youth sector to assist young people experiencing cannabis-related difficulties. It also includes a video featuring a youth worker demonstrating a Motivational Enhancement approach. The webpage, at the following link: <http://ncpic.org.au/workforce/alcohol-and-other-drug-workers/young-people-training-package/> also features other NCPIC resources that may be of use to workers. The training package aims to assist workers to gain up-to-date information on cannabis the drug, how it is used by young people, and to help workers gain confidence and competence in dealing with the young people with whom they come into contact who are willing to think about making changes in their cannabis use.

This month we have also uploaded a suite of factsheets specifically designed for use by GPs with patients experiencing cannabis-related problems. A selection of these are for the information of GPs themselves, while others may be printed out and given to patients. Factsheet 1 contains a flow chart with suggested pathways GPs can take in their intervention approach with cannabis users, depending on their patient's stage and level of use, age and willingness to reduce or cease their cannabis use. These may be downloaded and printed from the following webpage: <http://ncpic.org.au/workforce/gps-and-nurses/factsheets-for-gps-and-patients/>.

As mentioned in the February E-zine, NCPIC was invited to present at the recent ADAN Symposium, run by the Aboriginal Health & Medical Research Council in Newcastle in late April. Participants at the Symposium gave positive feedback about the 'Cannabis: It's not our culture' project, and were keen to order the factsheet resources

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research publications

Relevant publications examining issues to do with cannabis that have been published in the last month include the following:

Agrawal, A., Silberg, J.L., Lynskey, M.T., Maes, H.H., & Eaves, L.J. (2010). Mechanisms underlying the lifetime co-occurrence of tobacco and cannabis use in adolescent and young adult twins. *Drug and Alcohol Dependence* 108, 49-55.

Barkus, E. & Murray, R.M. (2010). Substance use in adolescence and psychosis: Clarifying the relationship. *Annual Review of Clinical Psychology* 6, 365-389.

Brenneisen, R., Meyer, P., Chtioui, H., Saugy, M., & Kamber, M. (2010). Plasma and urine profiles of Delta9-tetrahydrocannabinol and its metabolites 11-hydroxy-Delta9-tetrahydrocannabinol and 11-nor-9-carboxy-Delta9-tetrahydrocannabinol after cannabis smoking by male volunteers to estimate recent consumption by athletes. *Analytical and Bioanalytical Chemistry* 396, 2493-2502.

Canfield, D.V., Dubowski, K.M., Whinnery, J.E., Lewis, R.J., Ritter, R.M., & Rogers, P.B. (2010). Increased cannabinoids concentrations found in specimens from fatal aviation accidents between 1997 and 2006. *Forensic Science International* 197, 85-88.

Degenhardt, L., Coffey, C., Carlin, J.B., Swift, W., Moore, E., & Patton, G.C. (2010). Outcomes of occasional cannabis use in adolescence: 10-year follow-up study in Victoria, Australia. *British Journal of Psychiatry* 196, 290-295.

Degenhardt, L., Dierker, L., Chiu, W.T., Medina-Mora, M.E., Neumark, Y., Sampson, N., Alonso, J., Angermeyer, M., Anthony, J.C., Bruffaerts, R., de Girolamo, G., de Graaf, R., Gureje, O., Karam, A.N., Kostyuchenko, S., Lee, S., Lépine, J.P., Levinson, D., Nakamura, Y., Posada-Villa, J., Stein, D., Wells, J.E., & Kessler, R.C. (2010). Evaluating the drug use "gateway" theory using cross-national data: Consistency and associations of the order of initiation of drug use among participants in the WHO World Mental Health Surveys. *Drug and Alcohol Dependence* 108, 84-97.

Ehlers, C.L., Gizer, I.R., Vieten, C., & Wilhelmsen, K.C. (2010). Linkage analyses of cannabis dependence, craving, and withdrawal in the San Francisco family study. *American Journal of Medical Genetics. Part B, Neuropsychiatric Genetics* 153B, 802-811.

Izzo, A.A. & Sharkey, K.A. (2010). Cannabinoids and the gut: New developments and emerging concepts. *Pharmacology & Therapeutics* 126, 21-38.

Legleye, S., Obradovic, I., Janssen, E., Spilka, S., Le Nézet, O., & Beck, F. (2010). Influence of cannabis use trajectories, grade repetition and family background on the school-dropout rate at the age of 17 years in France. *European Journal of Public Health* 20, 157-163.

Mann, R.E., Stoduto, G., Ialomiteanu, A., Asbridge, M., Smart, R.G., & Wickens, C.M. (2010). Self-reported collision risk associated with cannabis use and driving after cannabis use among Ontario adults. *Traffic Injury Prevention* 11, 115-122.

Mario, J.R. (2010). A probability-based sampling approach for the analysis of drug seizures composed of multiple containers of either cocaine, heroin, or cannabis. *Forensic Science International* 197, 105-113.

Morgan, C.J., Rothwell, E., Atkinson, H., Mason, O., & Curran, H.V. (2010). Hyperpriming in cannabis users: A naturalistic study of the effects of cannabis on semantic memory function. *Psychiatry Research* 176, 213-218.

Robledo, P. (2010). Cannabinoids, opioids and MDMA: Neuropsychological interactions related to addiction. *Current Drug Targets* 11, 429-439.

Solinas, M., Tanda, G., Wertheim, C.E., & Goldberg, S.R. (2010). Dopaminergic augmentation of delta-9-tetrahydrocannabinol (THC) discrimination: Possible involvement of D(2)-induced formation of anandamide. *Psychopharmacology* 209, 191-202.

Spano, M.S., Fadda, P., Fratta, W., & Fattore, L. (2010). Cannabinoid-opioid interactions in drug discrimination and self-administration: Effect of maternal, postnatal, adolescent and adult exposure to the drugs. *Current Drug Targets* 11, 450-461.

commentary on research

plasma and urine profiles of Δ^9 -tetrahydrocannabinol and its metabolites 11-hydroxy- Δ^9 -tetrahydrocannabinol and 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol after cannabis smoking by volunteers to estimate recent consumption by athletes – a comment on Brenneisen and colleagues (2010)

Peter Gates

In January 2004, cannabis was made a prohibited substance for all sports in competition by the World Anti-Doping Agency (WADA). Consumption of Δ^9 -tetrahydrocannabinol (THC) is screened for in sport via urine analysis for the presence of 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol (THC-COOH; the main THC metabolite). In a review of recent literature regarding urine testing for THC and its metabolites, Brenneisen and colleagues (2010) concluded that testing urine for the presence of THC-COOH will not accurately determine recent use due to the expanse of time that this compound can be detected in the system. Rather, urine analysis more accurately detects any use for up to 24 days. Analysing urine for THC-COOH is therefore a problematic method for determining if athletes should be sanctioned for being under the influence of cannabis during competition. As such, the authors investigated if urine testing could be more accurately used to determine recent cannabis use if other analytes of cannabis, that are known to have shorter urinary excretion time, are analysed.

The authors analysed samples taken over a period of 11 days from 12 healthy males who smoked cannabis once or less per month. In order to take part, participants had to agree not to smoke cannabis during the testing period. After providing a clean urine test, all participants were given a standardised seven per cent THC cigarette and then had their urine sampled at baseline, and at two, four, six, eight, 12 and 24 hours on the first

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commentary on research

day and daily for the final ten days. In addition, blood was taken fifteen minutes before baseline and then at five, 10, 20, 40, 60, 90, 120, 180, 240 and 480 minutes after baseline. The results from blood testing showed that: the THC disappeared within 20-360 minutes after administration; 11-hydroxy- Δ^9 -tetrahydrocannabinol (THC-OH) was detectable for between 40-480 minutes (five participants had THC-OH detectable at the 480 minute test); and THC-COOH was detectable at the 480 minute test for all participants. The results from urine testing showed that: the THC was detected at two hours and remained detectable for four to six

hours (with the exception of subject I who had a final positive test at eight hours); THC-OH was detectable for 12 to 72 hours (with the exception of subject G who had a final positive test at 96 hours); and THC-COOH was detectable for 72-96 hours (with the exception of subject E who had a final positive test at 120 hours).

These results are consistent with previous research highlighting extreme variability in the bioavailability of THC despite standardising the inhalation technique. Thus variability may be due to differences in cannabis use histories and metabolism. Despite the variability between subjects, the detection windows for THC and THC-OH were always shorter than that of THC-COOH; therefore, the authors concluded that

these compounds should be included when testing urine for cannabis to enhance chances of detecting more recent use. To further improve the accuracy of testing for recent use the authors also recommended blood testing in combination with urine analysis. Further work is required to replicate these results with females.

Brenneisen, R., Meyer, P., Chtioui, H., Saugy, M., & Kamber, M. (2010). Plasma and urine profiles of Δ^9 -tetrahydrocannabinol and its metabolites 11-hydroxy- Δ^9 -tetrahydrocannabinol and 11-nor-9-carboxy- Δ^9 -tetrahydrocannabinol after cannabis smoking by volunteers to estimate recent consumption by athletes. *Analytical and Bioanalytical Chemistry* 396, 2493-2502.



Each issue we will examine some of the cannabis-related stories that have received media attention across the country. The headlines are listed below in bold, with a short summary and/or commentary regarding the content of the news story beneath.

If you are interested in obtaining a copy of a particular story, please contact Clare Chenoweth at c.chenoweth@unsw.edu.au

report reveals drug diversion success

Australian Pharmacist: April, 2010

A University of Queensland study has revealed that “Queensland drug-users experience significant positive outcomes from drug intervention”, with nearly fifty per cent of participants reducing “drug use following diversionary tactics.” The study recruited 235 participants from Queensland “who had been apprehended by police with small quantities of illicit drugs, including 50g

or less of cannabis.” Positive results from the study include a reduction in the percentage of participants using cannabis following their involvement in the study, from 80.3 per cent when recruited, to 66.7 per cent at the follow-up interview.

hard habit to break

Newcastle Herald: April 3, 2010

This extensive feature article about cannabis use and the Hunter Cannabis Clinic features statistics about cannabis use, cannabis potency and effects, the progress and effectiveness of the Clinic, and comments from NCPI’s Prof Jan Copeland. Cannabis Clinic Service Manager Bill Robertson says “People start thinking: Is this [cannabis] impacting on my life, my relationships, my finances, my motivation, is it causing depression?” Prof Copeland comments on the risks associated with young adolescents using cannabis, including the risk that using at such a young age is “likely to interfere with the many ‘triggers’ that occur in brain development around 16, especially in young males.” In addition, she explains that older cannabis users have “more deeply entrenched physical and mental problems.”

For a copy of this article please contact Clare Chenoweth at c.chenoweth@unsw.edu.au

pot users turn to detox

Illawarra Mercury: April 4, 2010

According to this article, more than 30 per cent of the Illawarra’s detox clients are current cannabis users, compared to only 5 per cent in 2000, and increasingly, users are aged in their 30s and 40s. Will Temple, CEO of the region’s detox facility, Watershed, says the shift could be in part due to the drug becoming more potent following the introduction of hydroponic growing methods. The article also cites Australian research recently published in the journal *Addiction*, which found that while overall use of cannabis has declined in the past 10 years, the rate of hospital treatments has risen.

drug warning

Launceston Examiner: April 5, 2010

A recently published paper by NDARC researcher, Prof Louisa Degenhardt, in the *British Journal of Psychiatry*, received widespread media attention. The article stated that approximately “2000 Australian school children were tracked over a decade in a study that found those who had used cannabis occasionally at the age of 13 and 14 were more likely to be taking ecstasy, cocaine or amphetamines at 24.”

Unfortunately much of the media coverage this study received incorrectly intimated that occasional adolescent cannabis use *leads* to other illicit drug use. In fact, the report does not state

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media stories this issue

this at all. Rather, early cannabis use is an *indicator* or *marker* of future illicit drug use. As Prof Degenhardt emphasises, “Where you’re talking about drugs that are not legal, if you’re using one illegal drug you’re probably going to have greater opportunity to use and know more people who are using other illicit drugs as well.”

tackling cannabis in the community

Southern Courier: April 6, 2010

Deon Jones, the Indigenous artist from Griffith who contributed his artwork to NCPIC’s Cannabis: It’s not our culture exhibition, has had his painting featured in this article. His painting Walk Away, was one of the collection of artworks from seven Indigenous communities around Australia that appeared in the exhibition and are now available to view, along with their stories, at the website:

www.notourculture.org.au

cannabis use in the spotlight as locals speak their minds

Area News: April 7, 2010

The Griffith Aboriginal Medical Service’s (AMS) involvement in NCPIC’s Cannabis: It’s not our culture project and exhibition, is featured in this article. SBS’s *Living Black* program visited the AMS and interviewed Drug and Alcohol Program Coordinator Mr Sid Barone, about the Service’s involvement. Mr Barone explains why the community agreed to be featured on *Living Black*, “We agreed to do the program to try and alleviate some of the bad press that has been focussed on Griffith recently and to show the positive contribution the AMS is having within the Indigenous community.”

let them smoke weed

Adelaide Advertiser: April 10, 2010

Adelaide magistrate, Clynt Johansen, has called for the South Australian state government to relax cannabis laws for people in chronic pain. Cannabis and cannabis products are prohibited in South Australia under the Controlled Substances Act (1984). Mr Johansen urged MPs to review the laws around cannabis for medical reasons.

driving on drugs

Sunday Mail Brisbane: April 11, 2010

Research obtained by The Sunday Mail has shown a trend in roadside drug tests, in which offenders have been found to be on a “cocktail of drugs” having the effect of “making them more dangerous than drunk motorists”. According to the research, one third of drug driving offenders are combining cannabis with ecstasy and amphetamines. The research also found that a group of drug users, similar to some drunk drivers 20 years ago, think nothing of driving while under the influence. Professor Jeremy Davey, from the Centre for Accident Research and Road Safety Queensland, says, “You have to change not only driving behaviour but drug-use behaviour” and that the state government needed to introduce more education programs to back up the positive impact of law enforcement.

the health test every man should do

Sunday Herald Sun: April 11, 2010

This article about testicular cancer in men touches on US research that “found that frequent and/or long-term marijuana use might significantly increase a man’s risk of developing the most aggressive type of testicular cancer.” According to the research, being a cannabis “smoker at the time of diagnosis meant a 70 percent increased risk.”

nearly half of young admit to drug use

Sunday Age: April 11, 2010

A 2008 study, recently published in the *Drug and Alcohol Review*, and conducted by the Burnet Institute, Monash University and the University of Melbourne, found that 44 per cent of 16-29 year olds surveyed at the Big Day Out music festival in Melbourne admitted to taking an illicit substance at least once in the previous month. Thirty-seven per cent of those who had used an illicit drug in the last month used cannabis, which was the “most popular” illicit drug of choice amongst the sample. A survey conducted at the same event in 2005 showed that 40 per cent of attendees had used cannabis in the last month. Study author, Dr Campbell Aitken, said the research “suggested youth drug use in Australia was being underestimated because national surveys were often

conducted on the phone, leading to a lot of young people being missed.” He also commented that “It’s a cultural thing; drugs and music have gone together for a very long time.” He suggests that public health campaigns could be held at music festivals to target music fans.

drug numbers jump

Sunraysia Daily: April 19, 2010

This article states that “the number of people seeking help for drug and alcohol problems in Mildura has risen by almost half in the past decade.” Sunraysia Community Health Services statistics show alcohol is Sunraysia residents’ first-preference drug, followed by cannabis.

researcher urges new approach to tackling youth cannabis use

Border Watch: April 20, 2010

This article reports on NCPIC staff member, Dr John Howard and his role as host of a forum on “Youth and Cannabis” for 30 drug and alcohol, Indigenous and youth workers in Mount Gambier as part of Youth Week. Dr Howard commented that services needed to engage cannabis users more and help users reflect on their circumstances and identify the problems arising from drug use. “We need to recognise the signs and intervene earlier in ways that don’t turn young people away from treatment,” said Dr Howard. “We are trying to look at ways of better engaging young people rather than the traditional approach, which gets us nowhere.”

addictive types turn on to tanning booths

Sydney Morning Herald: April 21, 2010

Research published in the medical journal, *Archives of Dermatology* has shown that about one third of American college students who tried indoor tanning became dependent on the artificial rays and also used more cannabis than other students. About 42 per cent of those dependent on tanning reported using more than one drug in the previous month which was twice the rate of casual tanners. This is said to be due to the fact that “individuals who use drugs may be more likely to develop a dependence on indoor tanning because of a similar addictive process”.

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what do we know?

factsheets for GPs and their patients

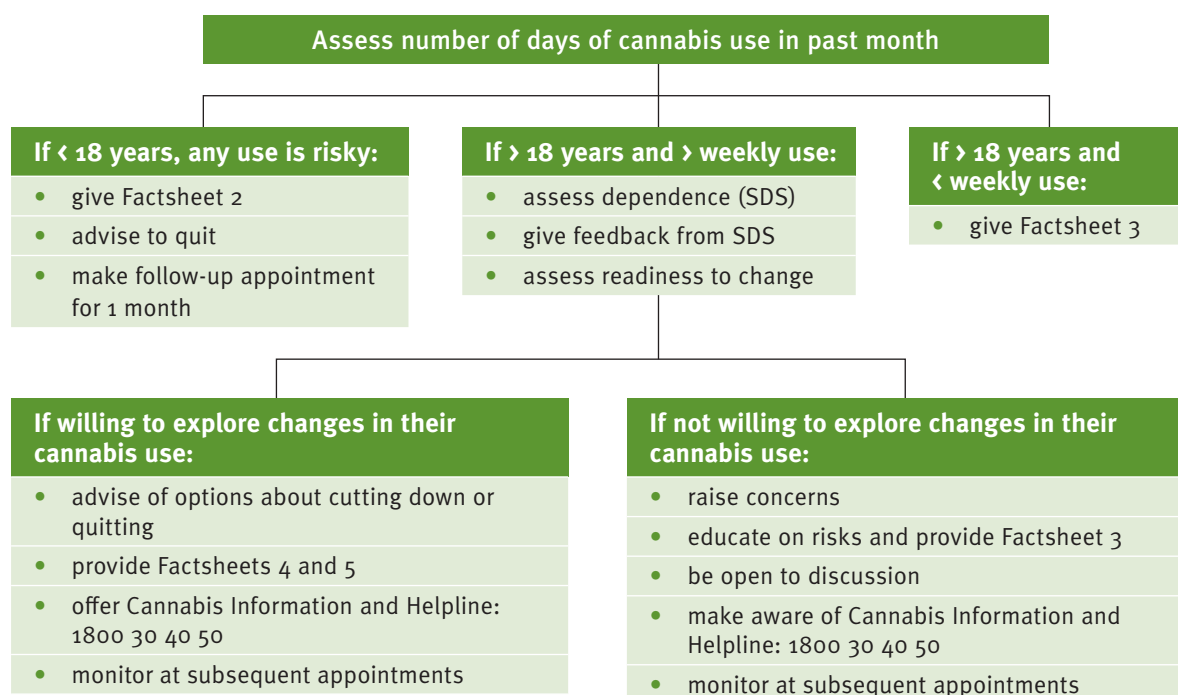
NCPIE has produced a series of factsheets that have recently been uploaded onto the website, specifically for use by GPs in their treatment of patients experiencing cannabis-related issues. The factsheets can be downloaded from the GPs and Nurses page which is part of the Workforce section of our website: <http://ncpic.org.au/workforce/gps-and-nurses/factsheets-for-gps-and-patients/>.

All of the factsheets are easy to download and can be quickly printed when needed.

There are factsheets for the information of GPs themselves, as well as others that are designed to be given to patients. The factsheets include:

- GP guidelines for the assessment and management of cannabis use disorder
- adolescent risks
- cannabis: what are the risks?
- dependence
- cannabis withdrawal syndrome: patient information
- cannabis withdrawal syndrome: GP information
- cannabis and mental health
- key messages on cannabis
- cannabis use and fertility, pregnancy and breastfeeding
- cannabis: what is it?

Factsheet 1, GP guidelines for the assessment and management of cannabis use disorder, is a particularly valuable resource for GPs. It aids GPs to firstly identify cannabis users and groups that are more at risk of cannabis use disorder. The factsheet includes a flow chart (below) that sets out the steps in the assessment, with suggested pathways GPs can take in their treatment of cannabis users, depending on their patient's stage and level of use, age and willingness to reduce or cease their cannabis use.



After reviewing the flow chart, GPs can also complete the Severity of Dependence Scale (SDS) questions with their patients, which include scoring and suggested feedback.

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media stories this issue

dazed in DC: medical marijuana for capital

Sydney Morning Herald: April 22, 2010

This article reports that Washington DC's District of Columbia Council has recently approved a measure, due to come into effect by the end of 2010, to allow chronically ill residents to purchase cannabis for medicinal use. A patient who has HIV, glaucoma, cancer or a "chronic and lasting disease" will be able to receive a doctor's recommendation to possess up to 56 grams of cannabis in a 30-day period. Patients will not be allowed to grow cannabis but will be able to buy it from dispensaries licensed and regulated by the Department of Health.

grass greener on other side

Northern Rivers Echo: April 29, 2010

This article discusses the Mardi Grass parade in Nimbin and highlights the probable controversies and issues arising from the event.

ask bossy

Hobart Mercury: April 30, 2010

In this advice column a reader describes how her partner's use of cannabis is negatively affecting their relationship, as he is constantly tired, not interested in sex and always eating. Bossy's advice is to confront her partner about how his cannabis use is negatively affecting their relationship. NCPIC's 2009 [Poster](#) and [Short Film](#) competitions also dealt with the theme of how cannabis impacts on relationships.

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director's report

and artwork posters for their various Aboriginal Medical Services and related organisations across New South Wales. A highlight of the presentation was the attendance of the artist who painted the Griffith artwork, Mr Deon Jones, who was available to talk about his artwork following the presentation.

The last and most important piece of work was the preparation, along with some consortium members and NCPIC managers, of our response to the draft report of our evaluation from Urbis. It has been a great opportunity to receive feedback from external stakeholders in particular, and we look forward to further consultation in preparation for our next strategic planning cycle.

Jan Copeland (PhD)
(Professor/Director, NCPIC)



NCPIC is a consortium led by the National Drug and Alcohol Research Centre and is an Australian Government Department of Health and Ageing initiative

For further information on NCPIC, its work and activities please contact Clare Chenoweth on (02) 9385 0218

Street address:

National Cannabis Prevention and Information Centre (NCPIC)
UNSW Randwick Campus
NDARC UNSW
R1 Level 1
22-32 King Street
Randwick NSW 2031

Postal address:

National Cannabis Prevention and Information Centre (NCPIC)
PO Box 684
Randwick NSW 2031