

## The post-release experience of prisoners in Queensland

Stuart A Kinner

*Most prisoners are highly likely to re-offend once released into the community and as a consequence, have a high rate of return to prison. This is a costly cycle: in 2004–05 \$1.7 billion was spent on 120 custodial facilities housing a daily average of 24,092 offenders. Given increasing imprisonment rates these costs will continue to escalate unless we actively seek to prevent re-offending among prisoners post-release. Although this particular study is based on a relatively small non-random sample, the findings provide important insights for policy makers and practitioners seeking to implement throughcare programs. Of note is that within an average of 34 days post release, 64 percent of males and 37 percent of females report using illicit drugs, particularly cannabis and amphetamines. There were also significant levels of risky alcohol use and elevated levels of physical and mental distress. Within one year 19 percent of the group had been reincarcerated. Effective crime control strategies will ultimately fail if they do not include pre- and post-release intervention programs designed to reduce the likelihood of re-offending among prisoners.*

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### Background

At the last prison census 19 percent of prisoners were serving sentences of less than 12 months and 39 percent were serving sentences of less than two years; over a third were incarcerated for nonviolent property or drug-related offences (ABS 2005). There are currently no reliable data on the number of prisoners released from secure custody each year, but given the high proportion of prisoners serving short sentences, 44,000 releases per year may be a reasonable estimate (Baldry et al. 2003).

The majority of released prisoners return to custody at some point (Australian Bureau of Statistics 2003) and many re-offend within a relatively short period of time. Across Australia, 32 percent of prisoners released in 2000–01 returned to custody within two years, with another 17 percent receiving a non-custodial order (SCRGSP 2004). The UK Home Office has identified a number of factors thought to influence re-offending including social disadvantage, drug and alcohol misuse, and mental and physical health (Great Britain. Social Exclusion Unit 2002). Prisoners released to the community are distinguished by extreme social disadvantage: a recent Australian longitudinal study of 238 ex-prisoners found that at least 21 percent were homeless, 84 percent were unemployed, and over 50 percent reported having outstanding debts. Each of these factors significantly predicted re-incarceration (Baldry et al. 2003).

Meta-analyses have identified substance misuse as a robust predictor of recidivism (Dowden & Brown 2002; Gendreau, Little & Goggin 1996), but relatively little is known about the prevalence of illicit drug use among prisoners prior to and during incarceration, and even less is known about patterns of use post-release. Retrospective studies in Australia (Butler & Milner 2003; Johnson 2004; Makkai & Payne 2003) and overseas (Great Britain. Social Exclusion Unit 2002; Shewan et al. 2001; 2000) suggest high rates of substance use among prisoners prior to and during incarceration, but few studies have explored patterns of use post-release.

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An understanding of patterns of substance use among recently released prisoners is important for at least two reasons. First, given the well-established link between substance use and crime, the high proportion of prisoners incarcerated for drug-related offences, and the high rate of recidivism among ex-prisoners, an understanding of substance use among this group would inform pre-release programs, post-release service delivery and crime prevention policies. In particular, such information would assist in the evidence based application of the principle of throughcare, which emphasises continuity of service provision from the custodial to the community setting (Borzycki & Baldry 2003; Burrows et al. 2000). Second, given the high incidence of illicit drug use among both prisoners and ex-prisoners, and the fact that illicit drug use is linked to a wide range of health risks including hepatitis C, mental health problems and overdose, an understanding of alcohol and drug use patterns in this group is important from a public health perspective (Levy 2005).

**Aims**

In recognition of the need for an improved understanding of the experiences of prisoners in Australia after they are released, this project had two key objectives:

- describe the patterns of drug and alcohol use, mental health status and broader socioeconomic status of recently released prisoners
- identify predictors of re-incarceration within a six-month period (including pre-incarceration patterns of substance use).

**Method**

The PREP-Q study was a longitudinal study of a sample of adult prisoners released from custody in Queensland. Participants were recruited and interviewed prior to release from custody, and again on two occasions post-release. Seventy percent of those invited to participate chose to do so, and recruitment was not biased by age, gender or Indigenous status (all  $p > .05$ ).

The pre-release survey covered sociodemographics, sentence details, physical and mental health, substance use and risk-taking behaviour, and post-release expectations. Post-release

surveys covered many of the same issues, and inquired about contact with health and justice agencies since release.

**Key findings**

*Sample*

Participants were a convenience sample of 160 male (n=108) and female (n=52) adult prisoners. Consistent with the overall prison population (ABS 2005), the mean age of participants was 32.6 years and 23 percent identified as Indigenous. Compared with non-Indigenous participants (n=123), Indigenous participants (n=37) were less likely to have completed grade 10 education (38% vs. 70%,  $p < .05$ ), and more likely to have a history of both juvenile (41% vs. 14%,  $p < .01$ ) and adult (84% vs. 56%,  $p < .001$ ) incarceration. Almost two thirds of participants reported prior incarceration as an adult and 20 percent reported a juvenile prison history. Whereas the average aggregate sentence length among Australian prisoners is three years (ABS 2005), in this sample it was only six months. Given that prisoners about to be released from custody were recruited, this

bias towards prisoners serving shorter sentences was expected.

Prior to incarceration about half of the sample was unemployed, more females than males reported that they had been living with dependent children (46% vs. 13%,  $p < .001$ ), and more males than females reported that they had been living alone (20% vs. 8%,  $p < .05$ ).

Based on responses to the Alcohol Use Disorders Identification Test (AUDIT: Babor et al. 1992), over a third of participants reported harmful levels of alcohol consumption in the 12 weeks prior to incarceration, with a further 16 percent reporting hazardous consumption. Males were significantly more likely than females to report harmful levels of consumption (45% vs. 19%,  $p < .01$ ).

The vast majority of participants (92%) reported a history of illicit drug use, although males (95%) were significantly more likely than females (85%) to report illicit drug use ( $p < .05$ ). For males and females, the most commonly used illicit drugs were cannabis and amphetamines. Almost two thirds of the sample (64%)

**Table 1: Substance use history (percent)**

	Male	Female	Full sample
<b>Alcohol (AUDIT category)**</b>			
Non-drinker	19	31	23
Non-hazardous	19	35	24
Hazardous	17	15	16
Harmful	45	19	37
<b>Tobacco</b>			
Ever used	89	89	89
Current smoker	85	77	83
<b>Illicit drug use history (ever used)</b>			
Cannabis**	94	75	88
Inhalants	25	25	25
Hallucinogens**	64	35	54
Ecstasy (MDMA)	44	42	43
Amphetamines*	76	60	71
Cocaine	38	35	37
Benzodiazepines	41	50	44
Heroin	44	33	41
Morphine	34	31	33
Any illicit*	95	85	92
IV drug use history	69	54	64
(Mean number of drugs injected) <sup>(a)</sup>	(3.53)	(4.04)	(3.67)
<b>(n)</b>	<b>(108)</b>	<b>(52)</b>	<b>(160)</b>

(a) among those with a history of injecting, from a list of 13 drug classes  
 \* statistically significant at  $p < .05$ , \*\* statistically significant at  $p < .01$   
 Source: QADREC, PREP-Q [computer file]

reported a history of intravenous (IV) drug use (see Table 1).

Figure 1 compares lifetime rates of substance use in the sample with rates reported among Australians aged 14 years or over, from the 2004 National Drug Strategy household survey (AIHW 2005). As expected, reported rates of substance use were markedly higher among participants than among the general population, with participants 41 times more likely to report heroin use, 32 times more likely to report injecting drug use, and at least 5 times more likely to report ecstasy, inhalant, amphetamine and cocaine use.

**Pre-release**

Despite the fact that all participants were interviewed within four weeks of their expected release date, many had not made firm arrangements regarding accommodation and income, and some had made unsuitable arrangements such as planning to sleep on a friend’s floor. Nineteen percent of males and 15 percent of females reported having made no accommodation arrangements, and 44 percent of males and 33 percent of females had made no arrangements for income; 16 percent of males and 33 percent of females had arranged to receive unemployment benefits or a pension upon release. These findings are consistent with those of a recent UK Home Office study (Niven & Stewart 2005) which found that three weeks prior to release only 30 percent of prisoners had arranged employment, education or training, and 29 percent had made no accommodation arrangements.

The majority of participants reported an intention to use one or more substances post-release, most commonly alcohol (60% of males and 60% of females). A substantial proportion reported an intention to use an illicit drug (49% of males and 35% of females). The illicit drugs most commonly nominated were the same ones that participants reported having used prior to incarceration: cannabis (40% males and 19% females) and methamphetamine (13% males and 17% females).

When challenged to consider what they thought might realistically happen post-release, females did not change their expectations regarding substance use, but males were more likely to report expecting to use illicit drugs (particularly cannabis and methamphetamine) and

slightly more likely to report expecting to drink alcohol.

**Post-release**

Post-release interviews occurred on average 34 days (Follow-up 1) and 120 days (Follow-up 2) post-release. The follow-up rates were 65 percent for the first post-release interview and 55 percent for the second post-release interview. Compared with those who were successfully followed up post-release, those who were lost to follow-up were more likely to be Indigenous ( $p < .01$ ) and more likely to have had a history of previous incarceration ( $p < .05$ ). There was no significant relationship between attrition and drug use history, pre-release psychological distress, mental health or physical health (all  $p > .05$ ).

At Follow-up 1 males were significantly more likely than females to report recent alcohol ( $p < .05$ ) and illicit drug ( $p < .01$ ) use. Although 49 percent of males had reported an intention to use illicit drugs post-release, 64 percent reported actually doing so. There was greater consistency between intention and behaviour for females, with 35 percent reporting an intention to use drugs post-release and 37 percent reporting actually using illicit drugs at Follow-up 1 (Table 3). The most commonly used illicit drugs were cannabis and amphetamines. Given the growing evidence of an association between use of these substances and mental health and

behavioural problems (Degenhardt, Hall & Lynskey 2001), this is of some concern.

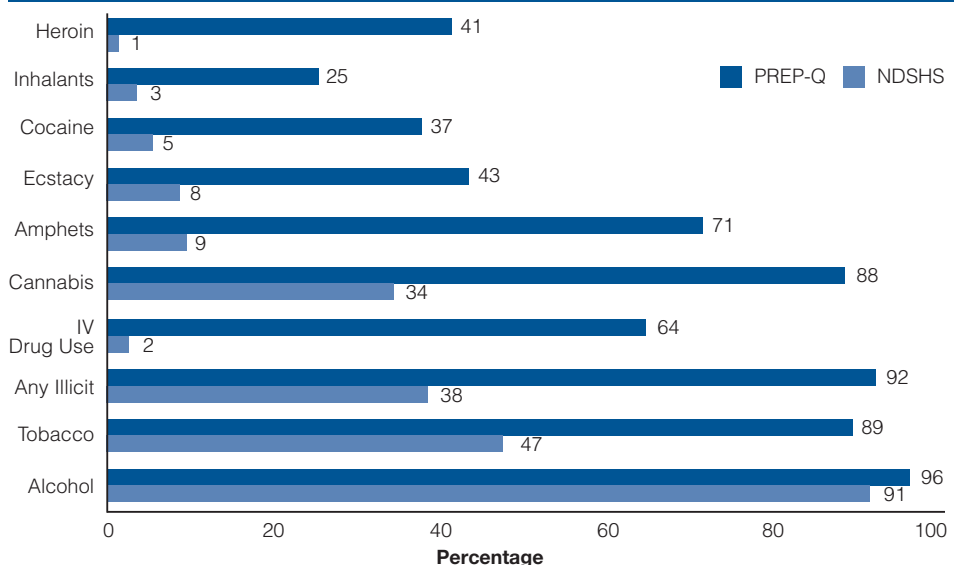
At Follow-up 2, 75 percent of participants were drinking alcohol. More males (61%) than females (46%) reported illicit drug use in the past 4 weeks, with males significantly more likely than females to report recent cannabis use (57% vs 31%,  $p < .05$ ). Forty-two percent of participants reported usually drinking at hazardous (22%) or harmful (20%) levels over the past 12 weeks, with males significantly more likely than females to drink at this level ( $p < .05$ ). Overall, 29 percent of male participants reported usually drinking at hazardous levels in the months prior to interview, with almost one in four (24%) drinking at harmful levels (Table 4).

These data draw attention to the proportion of males who do not intend to drink alcohol post-release, but who for one reason or another end up doing so. Clearly, while illicit drug use is a problem for many prisoners, risky alcohol use is also common, particularly for males. Given the association between alcohol use and offending, particularly violent offending (Dowden & Brown 2002), this discrepancy between intentions and realistic expectations among male prisoners might usefully be targeted in pre-release intervention programs.

**Physical and mental health**

Based on responses to the SF-8 health measure (Ware et al. 2001), prior to release

**Figure 1: Lifetime use of a range of drugs, participants and Australian adult population (percent)**



Percentages rounded to the nearest integer  
Source: QADREC, PREP-Q [computer file] and NDSHS (AIHW 2004)

males reported their physical health to be roughly comparable to that of age-matched males in the general population (ABS 1997), but their mental health was on average poorer than that of the general population. Following release, physical health declined (although not significantly,  $p > .05$ ), and there was no detectable change in mental health.

The pattern was different for females. Prior to release, female participants reported physical and mental health scores slightly below the age- and sex-matched population norm (ABS 1997). At Follow-up 1 there had been little change in physical health, but the average mental health score dropped. Conversely, at Follow-up 2 mental health scores returned to pre-release levels, while physical health scores fell. None of these changes over time was statistically significant ( $p > .05$ ).

Prior to release about half of the sample reported at least moderate psychological distress, as measured by the Kessler Psychological Distress Scale (K10: Kessler et al. 2002). The proportion of males reporting high/very high distress increased slightly post-release, but for both males and females this proportion had declined by Follow-up 2, when around one in four participants reported high or very high levels of distress (Figure 2). The prevalence of high/very high psychological distress among participants did not change significantly during the study period ( $p > .05$ ).

Overall, there was evidence of both physical and mental health impairment among ex-prisoners, particularly among males. Both male and female prisoners reported a decline in physical health post-release, although these changes did not reach statistical significance. While pre-release programs may assist prisoners in preparing for a return to the community, these findings suggest that such programs should be complemented by post-release support, including interventions to sustain or improve physical and mental health.

**Recidivism**

After a median of 340 days in the community, DCS records were examined to identify instances of recidivism. At this point 19.4 percent of participants had been reincarcerated in Queensland. These were significantly more likely to be male (OR=6.1, 95%CI 1.8–21.2), to have a history of injecting

drug use (OR=3.0, 95%CI 1.2–7.9) and to report an expectation, prior to release, that they would use illicit drugs post-release (OR=2.7, 95%CI 1.1–6.3). Although not statistically significant, there was also evidence of an increased risk of reincarceration for those who had a poorer

education (OR=2.2, 95%CI 0.98–4.9) and for those who reported drinking alcohol at hazardous or harmful levels prior to incarceration (OR=1.9, 95%CI 0.8–4.3) (Table 5).

It is noteworthy that generally, those who used illicit drugs or consumed alcohol at risky levels post-release were those who

**Table 2: Pre-release arrangements and expectations (percent)**

	Males (n=108)		Females (n=52)	
	Arranged/intended	Expected	Arranged/intended	Expected
<b>Accommodation</b>				
None	19	–	15	–
Own/family home	41	29	44	46
Privately rented flat/house	27	49	31	32
Public housing	3	5	4	10
Boarding house/hostel	0	3	2	4
Squat/improvised/street	1	2	0	2
Other	10	13	4	6
<b>Employment/income</b>				
None	44	–	33	–
Full-time	26	40	17	21
Part-time/casual	12	17	8	10
Allowance/benefits/pension	16	38	33	58
Home duties	0	1	8	10
Criminal activity	1	5	0	0
<b>Substance use</b>				
None	7	6	6	6
Tobacco	80	82	77	77
Alcohol	60	66	60	62
Cannabis	40	48	19	21
Methamphetamine	13	21	17	19
Heroin	7	9	4	4
Any illicit	49	61	35	35

Source: QADREC, PREP-Q [computer file]

**Table 3: Follow-up 1: substance use in past four weeks (percent)**

	Male	Female	All
Tobacco	87	77	84
Alcohol*	79	57	71
Cannabis	49	33	44
Inhalants	0	0	0
Hallucinogens	3	0	2
Ecstasy (MDMA)	18	3	13
Amphetamines	36	23	32
Cocaine	13	3	10
Benzodiazepines	13	3	10
Heroin	15	7	12
Morphine	7	3	6
Any illicit drug**	64	37	55
<b>(n)</b>	<b>(61)</b>	<b>(30)</b>	<b>(91)</b>

\* statistically significant at  $p < .05$ , \*\* statistically significant at  $p < .01$   
 Source: QADREC, PREP-Q [computer file]

had engaged in the same behaviours prior to incarceration and reported expecting to use these substances post-release. Many of the participants were serving short sentences and were thus ineligible for either substance-related or pre-release support programs, despite the apparent need for support of this

sort. Given the well-established association between drug use and re-offending, it seems that appropriate treatment for substance use and mental health problems, both pre- and post-release, may be of benefit not only to the prisoner, but also to the society to which they are returning.

## Conclusions

This study is one of few to prospectively follow a cohort of prisoners from custody into the community. Due to the small sample size the findings can be considered only suggestive, but a number of important issues have been identified. First, despite the availability of health services and a range of treatment programs in the prison setting, there is strong evidence of continuity of substance-related, mental health and psychosocial problems experienced by this group (Kinner in press). There is scope to expand and enhance treatment, support and harm reduction interventions for prisoners and ex-prisoners. Second, consistent with previous studies addressing the issue of ex-prisoner integration (Baldry et al. 2003; Niven & Stewart 2005), there remains a large unmet need for support of recently released prisoners, particularly in the period immediately following release. Substance use is a significant problem, with risky alcohol consumption particularly common for males. Many ex-prisoners experience problems in multiple domains including impaired physical health and chronic illness, poor mental health and high levels of distress, and chronic social disadvantage and marginalisation. In the absence of appropriate support, the evidence shows that many of these individuals will return to prison, often on multiple occasions.

In recent years the concept of throughcare has received increasing attention from researchers and policy makers (Borzycki 2005), and this principle has been adopted by correctional services in a number of jurisdictions. In Queensland, the introduction of the Transitions pre-release program has assisted some prisoners in preparing for a return to the community, but there is more that can be done. In particular, a number of authors (e.g. Borzycki & Baldry 2003; Burrows et al. 2000; Ogilvie 2001) have called for pre-release programs to be complemented by effective, evidence-based post-release programs to assist the individual to integrate back into the community and access appropriate support and treatment. At present, the few programs for ex-prisoners in Australia are fragmented, often under-funded and usually based on limited evidence. A useful next step in bringing throughcare into policy and practice would be the development and rigorous

**Table 4: Follow-up 2: substance use in past four weeks (percent)**

	Male	Female	All
Tobacco	78	77	78
Alcohol	80	65	75
Cannabis*	57	31	48
Inhalants	0	0	0
Hallucinogens	2	0	1
Ecstasy (MDMA)	10	4	8
Amphetamines	28	15	23
Cocaine	6	0	4
Benzodiazepines	14	15	14
Heroin	8	12	9
Morphine	8	4	7
Any illicit drug	61	46	56
<b>AUDIT usual alcohol consumption (%)*</b>			
Non-drinker	14	27	18
Non-hazardous	33	54	40
Hazardous	29	8	22
Harmful	24	12	20
<b>(n)</b>	<b>(51)</b>	<b>(26)</b>	<b>(77)</b>

\* statistically significant at  $p < .05$   
Source: QADREC, PREP-Q [computer file]

**Table 5: Pre-release predictors of reincarceration (percent)**

	Not reincarcerated	Reincarcerated	OR (95% CI)
Gender male	61	90	6.09 (1.75, 21.18)
Indigenous	22	29	1.46 (0.60, 3.56)
Education <grade 10	33	52	2.19 (0.98, 4.88)
Employed pre-prison	25	42	2.14 (0.94, 4.89)
Index offence drug or property related	50	36	0.56 (0.25, 1.27)
SF-8 PCS bottom quartile at Phase 1	28	16	0.50 (0.18, 1.42)
SF-8 MCS bottom quartile at Phase 1	27	16	0.52 (0.19, 1.48)
AUDIT hazardous/harmful at Phase 1	49	65	1.91 (0.84, 4.34)
K10 high/very high at Phase 1	29	23	0.70 (0.28, 1.77)
Injecting drug use history	58	81	3.02 (1.15, 7.91)
Expect alcohol use at Phase 1	63	71	1.45 (0.62, 3.44)
Expect illicit drug use at Phase 1	48	71	2.66 (1.13, 6.25)
<b>(n)</b>	<b>(119)</b>	<b>(31)</b>	

Note: DCS recidivism data were obtained on 16 Jan 2006 and were unavailable for two participants, and eight participants were not released  
Source: PREP-Q surveys [computer file], DCS records, n=150

evaluation of an integrated post-release support program, building on the pre-release programs already in place, and linking prisoners with the communities to which they will eventually return.

## Limitations and recommendations

Due to resource limitations a relatively small, convenience sample of prisoners was recruited, limiting both generalisability and statistical power. The study nevertheless serves as a valuable pilot for future work. There was a considerable degree of sample attrition in post-release interviews and the prevalence of poor health and risk behaviours among those interviewed at follow-up may under-estimate the prevalence of these problems in the full sample. This is to be expected given the chaotic nature of the study participants. However some of the effects of attrition are mitigated by the availability of pre-release data and recidivism data from DCS, for all participants.

As with many studies exploring patterns of illicit behaviour, the study relied heavily on self-report data. Particularly with respect to socially sanctioned behaviours such as illicit

drug use and criminal activity, these reports may underestimate the true rate in the target population as has been found in the Drug Use Monitoring in Australia study (McGregor & Makkai 2003).

## Research report

The full report on which this paper is based, *The post-release experience of prisoners in Queensland* is available at <http://www.aic.gov.au/crc/reports/200304-27.html>

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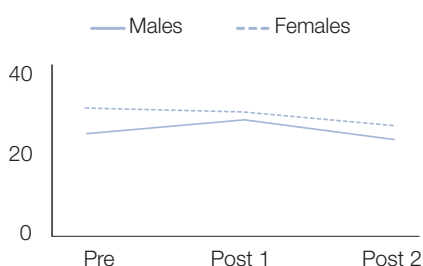
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**Figure 2: Post-release psychological stress<sup>(a)</sup>**



(a) Participants reporting high or very high levels of psychological distress at each phase of data collection (percent)