

## Research Bulletin

Corrective Services New South Wales
Corporate Research, Evaluation and Statistics

## Drug-related patterns and trends in NSW inmates Overview of the 2007-08 biennial data collection

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This bulletin presents drug problem indicators pertaining to the inmate population within the NSW correctional system. These indicators are drawn from the biennial data collection survey which monitors drug-related patterns and trends, drug-related crime and drug treatment engagement in NSW inmates and also agency responses to this problem area. The present survey was conducted with a representative sample of 306 male and 52 female sentenced inmates about to be discharged to the community in 2007-08. It is the fifth survey in the series which commenced in 1998. The comprehensive data set builds on existing knowledge on drug misuse in NSW inmates, providing an updated baseline for informing preventative, treatment and security mechanisms in this challenging area. This survey series is listed as one of the global illicit drug indicator data sets in NSW . It is worth noting that a number of the drug problem indicators from 2007-08 show decreases relative to those recorded in 2005-06.

#### **KEY FINDINGS**

#### A representative sample of 358 NSW inmates in 2007-08

#### **Drug-related offending**

 72% of males and 67% of females reported that at least one of their current offences was related to their use of alcohol and/or other drugs.

#### Patterns of drug use

• In the six months prior to their current prison term, 70% of males and 79% of females reported illicit drug use while in the community. Use of 'heavy-end' drugs (i.e. heroin, amphetamine or cocaine) in the six months prior to current imprisonment was reported by 42% of males and 65% of females.

#### Drug problem profile

 More than three-quarters of both males and females reported a drug problem history. Almost 1 in 2 males (44%) and two in three females (67%) reported experiencing drug withdrawal symptoms on reception to full-time custody for their current prison term.

#### Participation in prison drug treatment and health promotion programs

 More than one in three males (38%) and two in three females (69%) participated in drug treatment programs (non-pharmacotherapeutic interventions, e.g. counselling, structured group or residential treatment unit) during their current prison term. Almost two in three males (61%) and three in four females (71%) reported receiving health promotion information during their current prison term.

#### Exposure to prison drug screening and detection measures

Around three in four males (77%) and nine in ten females (87%) had either been tested by urinalysis or searched by drug detector dogs during their current prison term. Consistent with prior surveys in this series, from the range of contraband detection strategies surveyed, urinalysis was rated as having the greatest drug deterrence effect.

#### **METHODOLOGY**

The key aim of the survey was to obtain data on the drug-related offending and patterns of drug use of NSW inmates prior to and while serving a custodial sentence. The study also sought to gain an increased understanding of drug use within the social context of imprisonment. Uptake of prison-based services and exposure to drug screening and detection measures were also gauged. The methodology replicated the research design adopted in the prior surveys. The survey only included those inmates serving a sentence of at least one month, approaching the end of their sentence and with no outstanding matters before the courts. Pre-release is a key transition point and it was reasoned that those approaching release would be more willing to provide honest details about their offences and use of illicit drugs. In addition, these inmates would have had sufficient exposure time to the prison environment. A stratified random sample design was used with male inmates to ensure an adequate representation of the State-wide inmate discharge population. As females comprised just 7.3% of the sentenced population, approximately half of all females discharged within the study's timeframe were included to allow for larger numbers and more meaningful findings.

The data were collected by way of personal interview using a structured questionnaire across NSW correctional centres in 2007-08. Inmate participation was voluntary. Consistent with earlier collections, a very low refusal rate (4%) was recorded. The achieved

Table 1: Demographic and criminal profile (Base = total sample [n=358])

	Male inmates (n=306)	Female inmates (n=52)
Australian born	84.0%	80.8%
Age (median)*	30.0 years	32.5 years
Australian Indigenous background	25.7%	26.9%
Number of years at school (average)	9.1 years	9.8 years
English usually spoken at home	93.8%	92.2%
Resided within Sydney prior to current term	46.1%	53.8%
Employed prior to current term	42.8%#	21.2%
Prior prison sentence term as an adult	73.2%#	57.7%
Prior detention as a juvenile	35.5%#	21.2%

<sup>\*</sup>Age range: males (18 to 64 years); and females [19 to 55 years]

\*# statistically significant at .05 level

sample consisted of 358 full-time inmates (306 males and 52 females) who were approaching release into the community. The survey captured 29.6% of the male and 51.5% of the female discharge populations during the period of the survey and was found to be generally representative of those populations (see Annexe).

#### **RESULTS**

#### 1. Demographic and criminal profile

**Table 1** shows the demographics and criminal history of the overall sample categorised by gender. While the overall profile of the male and female inmates was similar, some notable differences were observed: sentence history both as an adult and juvenile (73.2% versus 57.7%; and 35.5% versus 21.2%, respectively); residence in the Sydney metropolitan area prior to current prison term (46.1% versus 53.8%); and employment in six months prior to current prison term (42.8% versus 21.2%).

#### 2. Drug-related crime

In 2007-08, 71.6% of male inmates and 67.3% of female inmates reported that at least one of the offences for which they were currently imprisoned was related to their use of alcohol and/or other drugs (drugrelated) (Figure 1). The rate of drug-related offending was slightly higher for males, yet lower for females when compared with the 2005-064 rates (65.2% and 72.7% respectively). The increase in self-reported drugrelated offending in males in 2007-08 appeared to be accounted for by an increase in the rate of alcoholrelated offending (25.2%), when compared with 2005-06 (19.1%). Noteworthy, is that there was not a marked difference between males and females in the drug-related proportional rate of offending. Furthermore, the majority of male and female inmates were currently serving sentences for more than one offence.

The mechanisms of the drug-crime relationship were examined more closely by collecting data on the type of drugs involved and the type of the attributions between drug use and the commission of the Most Serious Offence (main offence). The response sets allowed for the identification of more than one type of drug and more than one type of causal attribution (intoxication, withdrawal, and obtain money to finance drug use). These attributions were not exhaustive, but selected as relevant markers of potential drug treatment candidates.

For males, the drugs most commonly linked to their main offence were alcohol (58.7%) and amphetamine (35.0%) (**Table 2**). For females, heroin (50.0%) and amphetamine (35.3%) were the drugs most commonly linked to their main criminal offence.

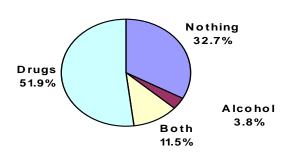
In 2007-08 there was a rise in amphetamine-related offending in both males and females when compared with 2005-06 levels (29.9% of males and 12.9% of females in 2005-06).

Figure 1. Self-reported current drug-related offences

#### Male inmates\*

# Drugs 29.4% 28.4% Alcohol 25.2%

#### Female inmates



(Base=total sample [n=358] \*1 missing case)

Importantly, 41.7% of males and 58.8% of females with a drug-related main offence identified more than one type of drug as being involved.

**Table 3** shows the type of relationship between drug use and Most Serious Offence (offence). When asked to identify the type of the relationship, males most commonly cited intoxication from alcohol (58.3%) followed by intoxication from drugs (53.9%). Females most commonly cited intoxication from drugs (61.8%) followed by obtain money to finance drugs (58.8%). Intoxication from alcohol was cited by 20.6% of females (**Table 3**).

When the self-reported relationship between drug use was cross-analysed with offence type some interesting patterns were evident (Table 4). Even though the simple dichotomy of alcohol and violence versus and illicit drugs and acquisitive crime was generally upheld, more complex attribution patterns were commonly reported. Around half of those with a drug-related offence, attributed more than one type of drug or more than one type of relationship to that offence. While the large majority of drug-related assault offenders (86.4%) reported that they were intoxicated by alcohol at the time of offence, more than one third reported to be intoxicated by drugs. As expected, the majority (66.0%) of the drug-related property offenders were intoxicated by drugs at the time of offence and most (50.0%) attributed the offence to the purchase of drugs. However, more than one-third of these property offenders were intoxicated by alcohol at the time of their offence and almost one-tenth linked their property offence to the purchase of alcohol.

As with prior collections in this series, a pattern of polydrug use and polycriminal activity was commonly reported.

A measure on gambling-related offending was introduced in the 2007-08 collection. This addition to the data set was prompted by the concerns of field staff. Anecdotal reports had indicated that problem gambling was widespread among inmates. It was found that 6.3% of males and 9.5% of females related at

least one of their current offences to their gambling activity.

#### 3. Patterns of drug use

Self-reported drug use behaviour in the six months prior to and during the current prison term is shown separately for males and females (Tables 5 and 6). The last occasion of use of the listed drug, both in the community and in prison is presented as the median number of days that had elapsed since last use (i.e. firstly, prior to reception to prison and secondly, prior to the interview in prison).

Table 2: Type of drugs linked to current Most Serious Offence (MSO)

(Base = those with a drug-related MSO [n=240])

	Male inmates (n=206)	Female inmates (n=34)	Total (n=240)
	%	%	%
Alcohol	58.7	23.5	53.8
Amphetamine	35.0	35.3	35.0
- Crystal Meth/Ice	22.8	26.5	23.3
Cannabis	30.6	20.6	29.2
Heroin	20.4	50.0	24.6
Cocaine	11.2	20.6	12.5
Pills*	9.2	14.7	10.0
Ecstasy	5.8	5.9	5.8
Methadone	4.4	11.8	5.4
Other Opiates	4.4	5.9	4.6
Buprenorphine	3.4	-	2.9
Steroids	0.5	-	0.4

Multiple responses as a percentage of total cases;

<sup>\*</sup>pills=benzodiazepines/sedatives

Table 3: The type of relationship between drug use and current Most Serious Offence (MSO)

(Base = those with a drug-related MSO [n=240])

	Male inmates (n=206)	Female inmates (n=34)	<b>Total</b> (n=240)
	%	%	%
Drug intoxication	53.9	61.8	55.0
Alcohol intoxication	58.3	20.6	52.9
Money to finance drugs	29.6	58.8	33.8
Drug withdrawal	5.8	20.6	7.9
Finance drugs for other	4.9	17.6	6.7
Money to finance alcohol	4.4	2.9	4.2
Alcohol withdrawal	1.9	-	1.7

Multiple responses as a percentage of cases.

In 2007-08, 69.9% of males reported that they used an illicit drug and 45.8% used a 'heavy-end' illicit drug (heroin, cocaine or amphetamine) just prior to their current prison term **(Table 5)**. The most commonly used drugs (excluding tobacco) by males prior to prison were alcohol (75.4%), cannabis (53.6%), amphetamine (32.4%) and heroin (21.6%).

The prevalence of pre-prison illicit drug use and 'heavy-end' illicit drug use in males showed a downward trend when compared with 2005-06 rates (79.0% and 56.0%, respectively). Whereas, tobacco use (82.6% versus 87.9%) and alcohol use in males (70.7% versus 75.4%) increased over the same period.

In 2007-08, a large majority of females reported illicit drug use (78.8%) and 'heavy-end' illicit drug use (65.4%) just prior to their current prison term (Table 6). The most commonly used drugs by females prior to prison were alcohol (59.6%), cannabis (48.1%) and heroin (42.3%).

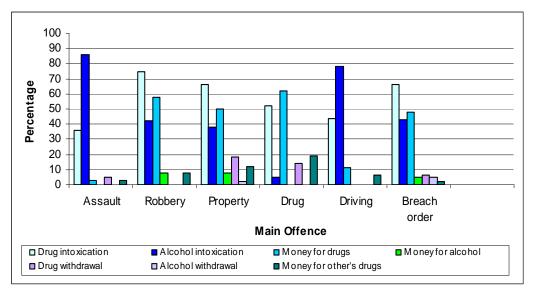
Between 2005-06 and 2007-08 there was a decline in pre-prison illicit drug use in females (84.1% and 78.8%, respectively). There were notable decreases in the use of cannabis (63.3% versus 48.1%), pills (47.7% versus 36.5%) and heroin (50.0% versus 42.3%). Whereas, amphetamine use (27.3% versus 34.6%) increased over this same period.

In 2007-08, just under half of inmates surveyed (42.2% of males and 46.2% of females) reported that they had used illicit drugs at least once during their current prison term. As with prior collections, this was largely accounted for by cannabis use (31.7% of males and 34.6% of females). A small proportion of inmates reported 'heavy-end' drug use at least once during their current prison term (11.4% of males and 15.4% of females).

Over time there has been a declining trend across gender, in both prison-based illicit drug use and prison-based 'heavy-end' illicit drug use in NSW inmates.

The *frequency* of pre-prison drug use is shown for males and females in **Tables 7 and 8**, respectively. Only those drugs used by more than five per cent of the sample are shown. In terms of daily use, the most commonly used drug by males was cannabis (31.4%), followed alcohol (21.6%), amphetamine (12.4%) and heroin (11.1%). For females, the most commonly used drugs on a daily basis, were cannabis (25.0%), heroin (23.1%), amphetamine (19.2%) and pills (17.3%). As opposed to males, females showed higher rates of daily heroin, amphetamine, pill and cocaine use. This suggests comparatively greater drug problem severity

Table 4: Type of current Most Serious Offence by type of relationship to drug use (Total sample of those with a drug-related MSO [base =240])



<sup>\* 6</sup> missing cases, i.e. offence type 'other'

in female inmates prior to entering custody.

The length of time which had elapsed since last occasion of drug use in prison was used as a proxy measure for frequency of drug use in prison. For comparison purposes, this was compared with last occasion of drug use in the community (Tables 5 and 6). Consistent with prior collections, it was found that frequency of drug use declined sharply upon imprisonment for pre-prison drug users.

#### 4. Injecting drug use

In 2007-08, pre-prison injecting drug use was more prevalent in females (63.5%) than males (31.4%). The equivalent rates for 2005-06 were 61.4% and 44.4% respectively.

The rate of in-prison injecting drug use in females declined between 2005-06 (20.5%) and 2007-08 (15.4%). For males, the rate of in-prison injecting drug use remained stable across this same period (10.7% in 2005-06; 10.5% in 2007-08). Of the pre-prison injecting sample, 23.6% continued to inject in prison. Further, of those who reported injecting drugs in prison (11.2% of the overall sample); the majority (65.0%) had shared injecting equipment on their last occasion of injecting drugs in prison. Of this group, 96.2% reported that they cleaned their injecting equipment with water and bleach on that last occasion.

Table 5: Patterns of drug use by male inmates in 2007-08: both six months before entering prison and during current prison term

[base=total male sample, n=306]

Drug	Community %	# Prison %	[median no. days]	
Tobacco	87.9	91.2	0	0*
Alcohol	75.4*	2.6	1*	
Cannabis	53.6	31.7	1*	25*
Amphetamine	32.4	4.9	1*	90
- Crystal Meth./Ice	22.2	3.3	1*	
Heroin	21.6	8.5	1*	90*
Pills	17.3	6.9	1*	31
Ecstasy	16.0	1.3	14*	-
Cocaine	12.7	2.0	7*	-
Medication**	4.2	11.1	-	21
Illicit Buprenorphine	3.6	10.8	-	60
Illicit Methadone	2.6	2.0	-	-
Hallucinogens	2.6	0.3	-	-
Steroids	1.6	0.7	-	-
Kava	0.7	0	-	-
Inhalants/solvents	0.3	0	-	-
Any illicit*1 drug use	69.9	42.2*2		
Illicit drug use – heavy- end (heroin, amphetamine or cocaine)	45.0	44.4		
,	45.8	11.4		
Injecting drug use	31.4	10.5		

Note: Due to small numbers, medians are not reported for those drugs which were used by less than 5% of the sample; #median term of imprisonment = 6 months; \*\*medication not prescribed for self; \*some missing cases (< 10); \*¹drug use (excluding alcohol and tobacco); \*²Alcohol is an illicit drug in prison.

Table 6: Patterns of drug use by female inmates in 2007-08: both six months before entering prison and during current prison term

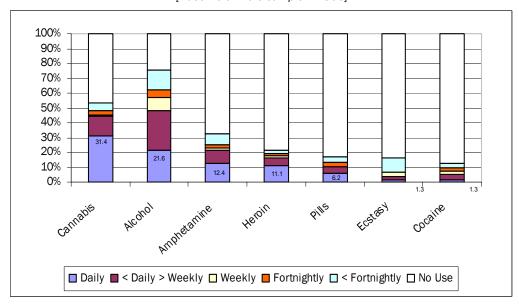
[base=total female sample, n=52]

Drug	Community	Prison#	Last occasion of use before entry to prison	Last occasion of use in prison and before interview [median no.
	%	%	[median no. days]	days]
Tobacco	84.6	90.4	0*2	0*2
Cannabis	48.1	34.6	0	20
Alcohol	59.6	5.8	7	182
Heroin	42.3	13.5	0	93
Pills	36.5	11.5	1	140*2
Amphetamine	34.6	11.5	2	365
- Crystal Meth./Ice	23.1	5.8	2	365
Cocaine	21.2	3.8	2	-
Ecstasy	5.8	3.8	7	-
Illicit Methadone	13.5	1.9	7	-
Medication**	7.7	32.7	11	3
Hallucinogens	0	0	-	-
Steroids	2.0	0	-	-
Illicit Buprenorphine	0	13.5	-	122*2
Inhalants/solvents	0	0	-	-
Kava	0	0	-	-
Any illicit*1 drug use	78.8	46.2*3		
Illicit drug use –heavy- end (heroin, ampheta- mine or cocaine )	65.4	15.4		
Injecting drug use	63.5	15.4		

Note: Due to small numbers, medians are not reported for those drugs which were used by less than 5% of the sample; #median term of imprisonment = 6 months; \*\* medication not prescribed for self; \*1drug use (excluding alcohol and tobacco); \*2 missing case; \*3Alcohol is an illicit drug in prison.

Table 7: Frequency of drug use in males in the six months prior to current prison term: 2007-08

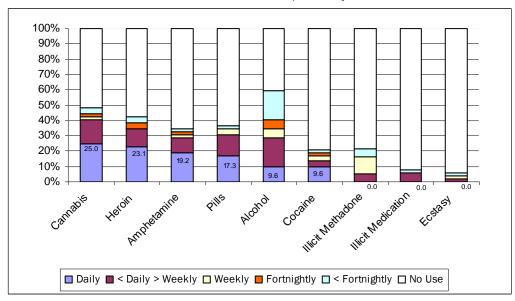
[Base=total male sample: n=306]



Note: Rates of daily use are highlighted as daily use is a proxy measure of drug dependency for 'heavy-end' illicit drugs.

Table 8: Frequency of drug use in females in the six months prior to current prison term: 2007-08

Base=total female sample: n=52]



Note: Rates of daily use are highlighted as daily use is a proxy measure of drug dependency for 'heavy-end' illicit drugs.

#### 5. Drug treatment profile

Reception to prison is a critical time with regard to inmate care and managing risk of harm. Drug withdrawal syndrome is an acute health condition which is common among inmates on reception. The management of this condition places considerable demands on prisons. To be effective, it is important for service providers to be able to estimate the prevalence of drug withdrawal syndrome among inmates so appropriate resources may be allocated to care arrangements. In 2007-08, just under half of males (43.9%) reported that they were withdrawing from

drugs (including alcohol) on reception to prison for their current prison term (Figure 2). More than half of females (67.3%) reported that they were withdrawing from drugs (including alcohol) on reception for their current prison term (Figure 2).

The occurrence rates of drug withdrawal syndrome on reception to prison remained stable between 2005-06 (43.3% of males and 68.2% of females) and 2007-08. Importantly, current findings suggest that serious drugrelated morbidity in inmates on reception to prison remains widespread.

More than three-quarters of inmates (79.7% of males and 80.8% of females) reported having had a drug problem at some stage in their lives. For these males and females, the median age at which their problem developed was 16 years (age range: 7 to 59 years in males and 12 to 31 years in females). Of those with a drug problem history, 37.7% of males and 59.5% of females rated their problem as serious in the six months prior to their current prison term (Figure 5). This represents 30.1% of the total male sample and 48.1% of the total female sample.

Almost all of those males with a drug problem history (96.3%) reported abstaining from their main problem drug at some stage in their life. The majority of this group (75.3%) reported that they had periods of abstinence while in the community and while in prison. A further 21.7% reported abstaining only while in prison and 3.0% reported abstaining only while in the community. A large majority of males with a drug problem history (87.2%) had received drug treatment (counselling, structured group or residential program) at some stage. A breakdown of drug treatment history by location (community or prison) and gender is provided in **Table 9**.

All of those females with a drug problem history reported abstaining from their main problem drug at some stage. Of this group, a large majority (92.7%)

reported that they had periods of abstinence while in the community and while in prison. A further 7.3% reported abstaining only while in prison. Almost all females (95.2%) with a drug problem history had participated in drug treatment programs (counselling, structured group or residential program) in the past (Table 9).

Of the overall male sample, over one-quarter (28.8%) had received methadone maintenance treatment and one-tenth (9.8%) had received buprenorphine maintenance treatment at some stage in the past. Just under half of the overall female sample (46.2%) reported that they had received methadone maintenance treatment and 17.3% had received buprenorphine maintenance treatment in the past.

Consistent with 2005-06 findings, in some cases prison had provided the only lifetime treatment experience for those with drug-related problems, as 15.9% of males and 14.3% of females reported that they had participated in counselling, structured groups or residential programs only while in prison. Otherwise stated, more than one-tenth of those with drug-related problems had no treatment exposure before undertaking drug treatment in prison.

Figure 2. Experience of drug withdrawal syndrome on reception to current prison term

(Base=total sample [n=358])

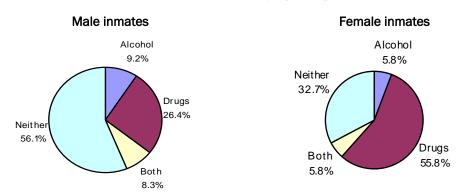
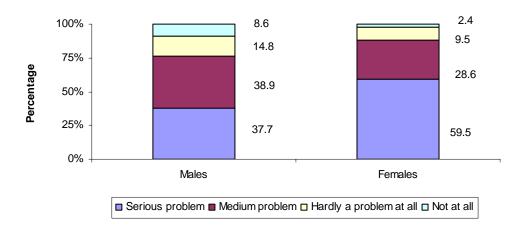


Figure 5: Perceived drug problem severity in the six months prior to current prison term
(Base = inmates who reported having had a drug problem history [n=286])



## Table 9: Inmate drug treatment history -(counselling, structured groups or Residential programs)

(Base = inmates with a drug problem history who participated prior drug treatment [n=250\*)

Treatment location	Male inmates (n=210*) %	Female inmates (n=40) %	<b>Total</b> (n=250) %
Community only	31.4	20.0	29.6
Prison only	18.1	15.0	17.6
Both	50.5	65.0	52.8
Total	100.0	100.0	100.0

<sup>\* 2</sup> missing cases

#### 6. Demand reduction in NSW prisons

## Participation in drug treatment services in current prison term

CSNSW Offender Services and Programs provides a range of drug treatment services - structured group programs, residential treatment units, individualised counselling and other individualised assistance, such as the preparation of court reports and community referrals (pharmacotherapeutic treatments are managed by a separate appropriate health authority - known as Justice Health).

In 2007-08, 38.2% of male inmates received drug treatment services during their current prison term, declining from 47.7% in 2005-06. An additional 4.7% were 'wait-listed' for service at the time of interview. Almost half (46.6%) of those males who were experiencing drug withdrawal symptoms on entry to prison went on to receive drug treatment services during their current prison term. In 2007-08, more than two-thirds (69.2%) of female inmates had received drug treatment services during their current term, increasing from 63.6% in 2005-06. In addition, 3.8% reported that they were 'wait-listed' for service. Of those females who were experiencing drug withdrawal symptoms on reception, 68.6% went on to receive drug treatment services. Table 10 shows a breakdown of the type of service/program undertaken. Males most commonly participated in self-help groups (60.1%). It is worth noting that the distribution of responses to this measure may have been confounded by inmates' inability to differentiate between the CSNSW structured group program, Getting SMART and the self-help group SMART Recovery. What can be concluded from the findings is that males most commonly participated in groups and females most commonly participated in one-to-one counselling (80.6%). It is worth noting that more than half (52.8%) of those females who received treatment, participated in self-help groups.

#### 7. Harm reduction in NSW prisons

#### Education in health promotion in current prison term

Offender Services and Programs provides a number of health promotion programs and resources to inmates, including structured group programs, peer support training and information booklets. The primary focus of these strategies is disease prevention in the areas of HIV and hepatitis C (HCV) infection. In terms of reach, 61.4% of males and 71.2% of females reported that they received at least one of these forms of education during their current prison term. Table 11 lists the different types of health promotion strategies received by inmates. It was standard practice to distribute the Health Promotion Diary to inmates on reception to prison. For those who received information/education, the Diary (90.2%) was the most commonly received resource. In relation to programs, 39.6% of inmates participated in the Health Survival Program and 12.0% had participated in a Peer Supporter Program. When compared with the low rate recorded in 2005-06 (11.1%), the rate of participation in peer-based education remained unchanged.

Table 10: Type of contact with prison-based drug treatment during current term

(Base= those who received the AOD services [n=151\*)

Type of treatment	Male inmates (n=115*) %	Female inmates (n=36) %	<b>Total</b> (n=151) %
Self-help group (NA/AA/SMART Recovery)	60.1	52.8	58.4
One-to-one counselling	50.9	80.6	57.7
Structured group program	38.9	50.6	41.6
Report preparation interviews (e.g. court, parole)	16.8	25.0	18.8
Residential program	2.7	19.4	6.7

<sup>[</sup>Set=multiple responses as % of cases - hence does not total 100.0%] \* 5 missing cases

Table 11: Type of health promotion strategy received in current prison term

(Base=those inmates who received health promotion information [n=225])

Type of strategy	Male inmates (n=188) %	Female inmates (n=37) %	Total (n=225 %
Health Promotion Diary	89.4	94.6	90.2
Health Survival Program	41.5	29.7	39.6
Harm Reduction Peer Supporter Program	13.8	2.7	12.0

[Set=multiple responses as % of cases - hence does not total 100.0%]

#### 8. Supply reduction in NSW prisons -

### Drug screening and detection strategies – exposure and perceptions

A range of drug screening and detection strategies are used to reduce the supply and use of drugs within the NSW correctional centre system. Cell searches, 'patdown' searches (body searches), urinalysis and drug detector dogs, are the most common. Cell searches and 'pat-downs' are simple, low-cost procedures used in the detection of general contraband which would include drugs and drug paraphernalia. Urinalysis and drug detector dogs are comparatively expensive, drugdedicated procedures. To gauge the level of exposure, inmates were asked how often they had personally experienced these measures during their current prison term.

Not surprisingly, both male and female inmates most commonly experienced cell searches and 'patdowns' (Table 12). In 2007-08, more than two in three males (69.0%) reported being searched by a drug detector dog at least once during their current prison term, increasing from 56.4% in 2005-06. Almost three in four females (70.6%) reported being searched by a drug detector dog at least once during their current term.

In addition, almost one in two males (47.3%) and three in four females (74.5%) reported that they had undergone a urinalysis test at least once during their current prison term (Table 12). When compared with males, females reported a higher rate of exposure to drug testing (urinalysis). It is worth noting that females were also more likely to report being on pharmacotherapy treatment, such as methadone maintenance and other drug treatment programs. It is routine practice for urinalysis testing to be a condition of treatment and this could explain the higher rate of exposure in females.

Table 13 shows the perceived deterrence effect of the

various drug screening and detection measures on reducing illicit drugs in prison. Urinalysis was rated by inmates as having the greatest deterrence effect (medium to high rating) by both males (74.3%) and females (81.6%). Cell searches and drug detector dogs were rated equally in terms of deterrence effect (58.8% and 58.5% respectively).

#### 9. Inmate conventions on drug use

The survey gathered information on the social rules, adopted by inmates that shape the nature of drug use in prison. It was intended that these findings would improve understanding of the evolving context of prison-based drug use. Further, this would enable trends to be monitored on the extent of inmate awareness of drug harm reduction messages.

When asked to describe the conventions (rules) that apply to using drugs in prison, 94.4% of the inmate sample provided a response. The open-ended response set allowed for up to four rules to be identified. Almost half of those who responded (49.2%) provided at least three rules associated with using drugs in prison. As with prior collections, even though responses were widely spread they were relatively consistent across gender. The most commonly cited rule was not to engage in drug use (Table 14). Awareness of the risks associated with unclean drug paraphernalia featured largely in the rules. In addition to avoiding sharing injecting equipment (32.2%) and ensuring clean injecting equipment (13.0%), other rules put forward were 'not to inject' (9.0% of males) and not to share any drug equipment (10.4% of females). Males were more likely to put forward rules concerning the avoidance of financial debts, with onethird citing either "don't go on tick/credit" (25.9%) or "pay your debts" (7.9%). The themes put forward in 2007-08 corresponded with those recorded in prior data collections. Across data collections, the overriding parlance that has emerged among inmates is that drug use in prison, particularly injecting drug use, is a potentially high risk and harmful activity

Table 12: Exposure to drug screening and detection measures during current prison term

(Base = total sample [n=358])

Type of measure	Male inmates (n=300*) %	Female inmates (n=51*1) %	<b>Total</b> (n=351) %
Cell searches	95.3	94.1	95.2
'Pat-down' searches (body)	94.3	90.2	93.7
Drug detector dogs	69.0	70.6	69.2
Urinalysis	47.3	74.5	51.3

<sup>\* 6</sup> missing cases \* 1 1 missing case

Table 13: Perceived deterrence effect of drug screening and detection measures during current prison term  $(Base = total\ sample\ [n=358^*])$ 

Type of measure	Male inmates (n=295*1) % Perceived deterrence		of measure $(n=295^{*1})$ $(n=49^{*2})$ $\%$		Total inmates (n=344) % Perceived deterrence				
	Low	Medium	High	Low	Medium	High	Low	Medium	High
Cell searches	41.7	35.9	22.4	38.8	32.7	28.6	41.3	35.5	23.3
'Pat-down' body searches	53.6	31.9	14.6	59.2	32.7	8.2	54.2	32.2	13.6
Drug detector dogs	41.7	26.8	31.5	40.8	34.7	24.5	41.4	28.1	30.4
Urinalysis	25.8	39.0	35.3	18.4	22.4	59.2	24.6	36.5	38.8

 $<sup>^{*1}</sup>$ 11 missing cases  $^{2}$ 3 missing cases

Table 14: Inmate social rules on prison drug use: most frequently cited rules Base = total sample [n=358])

Drug rule	Male inmates* (n=290) %	Female inmates* 1 (n=48) %	<b>Total</b> (n=338) %
Don't use drugs	64.1	52.1	62.4
Don't share needles	30.0	45.8	32.2
Don't obtain drugs on credit/pay debts	33.8	4.2	29.6
Use clean syringes and needles	12.4	16.7	13.0
Keep drug use to yourself (discretion)	10.7	16.7	11.6
Don't associate with the drug scene	10.3	8.3	10.1

<sup>\* 16</sup> missing cases  $^{*1}$ 4 missing cases

#### **CONCLUSIONS**

This research bulletin presents summary drug statistics derived from interviews with sentenced inmates in NSW about to be released in 2007-08. This is the fifth survey in a series that commenced in 1998. The comprehensive data set builds on existing knowledge on drug misuse in NSW inmates, providing an updated baseline for informing preventative, treatment and security mechanisms in this challenging area. This survey series is listed as one of the global illicit drug indicator data sets in NSW (Barker et al: 2005) .As the prevalence rates in this series (Kevin, 2000, 2003, 2005 and 2007) have remained relatively constant and consistent with other studies on prison populations, the drug-related indicators in this data collection are to be regarded as robust and reliable.

The coverage of the survey was extensive, including the following subject areas:

- taxonomies of drug-related crime
- 'pre-prison' drug use
- 'in-prison' drug use
- participation in drug intervention programs
- exposure to drug interdiction strategies, and
- experience of imprisonment.

This survey therefore provides broad performance measures on the reach of drug-related programs in NSW correctional centres.

Encouragingly, a number of the drug problem indicators from 2007-08 showed decreases relative to those recorded in 2005-06.

'Pre-prison' drug use in both males and females showed a downward trend between 2005-06 and 2007-08, with the exception of alcohol, diverted prescription medication and amphetamine. More importantly, 'in-prison' drug use also showed a corresponding downward trend (with the exception of diverted prescription medication).

There was a rise in tobacco use in females, both 'preprison' and 'in-prison' which contrasts sharply with the declining trend in the community. Tobacco use by all inmates was four times greater than in the general community in NSW (Australian Institute of Health and Welfare, 2008).

Around three-quarters of males and two-thirds of females reported that their current offences were drugrelated. Relative to 2005-06, there was a slight increase in self-reported drug-related offending in males, but a decrease in females. The increase in males appeared to be primarily due to a rise in self-reported alcohol-related offending. This increase in alcohol-related offending corresponded with a marked increase in the number of inmates serving sentences for assault offences (NSW Department of Corrective Services; 2008). Given the corresponding increases in self-reported alcohol-related offending and assault offenders, a possible marker of a rise in alcohol-related

violent offending in the community is indicated. This is a complex area of study and further research is indicated. The upward trend in alcohol-related offending in sentenced inmates may have more to do with police operations in the area of alcohol-related violence, than any increase in this behaviour.

Current findings suggest an upward trend in amphetamine-related offending in both males and females relative to the 2005-06 levels. In 2007-08, around one-third of those with a drug-related main offence linked amphetamine to that offence.

In examining the mechanisms involved in drug-related offending, this study upheld the simple dichotomy of alcohol and violence versus illicit drugs and acquisitive crime. However, attribution patterns were found to vary both between and within inmates' explanations. Further, the causal relationships delineated were not exhaustive but selected on the basis that they would be markers of potential drug treatment candidates (those offenders whose criminal activity was causally related to intoxication, withdrawal or the acquisition of alcohol and/or other drugs).

NSW inmates with drug-related offences are shown to be polydrug users. Around half of those whose main offence was drug-related typically attributed more than one type of drug or more than one type of drug-crime connection to their offence. Unexpectedly, one in three of those property offenders with a drug-related offence, reported that they were intoxicated by alcohol at the time of that offence. Further, more than one-third of those assault offenders with a drug-related offence reported to be intoxicated by illicit drugs at the time of that offence. It would appear that there are many different sub-types within the explanatory framework of drug-related crime.

Current findings also suggest that serious drug-related morbidity in inmates on reception to prison remained widespread. Encouragingly, a sizeable proportion of inmates went on to receive drug treatment services and health promotion education during their sentence term in 2007-08.

The previous report in this series recommended that programs for females be strengthened. This recommendation was adopted by the agency with two-thirds of females receiving drug treatment services - an increase on the 2005-06 drug treatment participation rate

Between 2005-06 and 2007-08, there was a decline in participation in drug treatment services by males. This decline in program participation combined with the apparent increase in alcohol-related offending indicates that existing service delivery could be reviewed and strengthened for male inmates. The computer-assisted delivery of treatment and prevention programs could be further utilised to maximise program reach.

Consistent with 2005-06 findings, prison was seen to provide a critical window for treatment engagement for

many of those with drug problems. In 2007-08, prison had provided the only lifetime drug treatment experience in over one-tenth of those with drug-related problems.

The conventions around prison drug use (as defined by inmates) indicated widespread awareness of harm reduction messages. However, a low rate of participation in harm reduction peer education has remained unchanged since 2005-06. With greater emphasis on peer-based prevention education there would be broader coverage and ongoing reinforcement of harm reduction messages in this important area of disease prevention.

More than three-quarters of males personally experienced drug interdiction measures in their current term - a rise from the 2005-06 rate. Females showed a higher rate of experience of drug interdiction than males.

The reach and balance of the drug demand reduction, harm reduction and supply reduction strategies delivered by CSNSW remains convincing. A substantial proportion of inmates reported personal experience of these three strategies during their current prison term.

While the lower rates of illicit drug use in both male and female inmates are encouraging, this must be placed against a backdrop of a rise in absolute inmate numbers and the knowledge that drug use remains a key criminogenic factor in the offending behaviour of the majority of inmates. Services and resources in the key areas of drug prevention and treatment should be maintained, if not strengthened.

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#### **ANNEXE**

#### 1. Binomial test for sample size determination

Based on a specified accuracy level of 5%, the sample size was derived by applying the following formula:

 $\pi$ = 0.65 represents a conservative estimated proportion of inmates received into correctional centres with drug-related offences

 $\eta = (1.96/d)^2 \pi (1-p)$ 

 $\eta = (1.96/0.05)^2 \ 0.65(1 - 0.65)$ 

 $\eta = 349$ 

#### 2. Discharge population frame [males]

Population frame: 01/02/08 to 31/03/08 discharges - stratification by region and security classification for the two-month time period prior to fieldwork.

	Non-metropolitan				Metrop	oolitan		
	Population	%	Achieved Sample	%	Population	%	Achieved Sample	%
Minimum	443	59.5	122	59.3	170	49.6	49	49.5
Medium	248	33.4	70	33.3	73	21.3	21	21.2
Maximum	53	7.1	15	7.4	100	29.1	29	29.3
TOTAL	744	100.0	207	100.0	343	100.0	99	100.0

Noteworthy is that the population frame included those inmates due for parole with an earliest date of release within the research time-frame who may have subsequently had their parole refused by the State Parole Authority.

#### 3. Achieved sample capture rate

The sampling frame excluded remandees, appellants & those with sentences of less than one month.

Males: Captured approximately 29.6% (n=306) of actual discharges to freedom (n=1034) in the study's time period. Females: Captured approximately 51.5% (n=52) of actual discharges to freedom (n=101) in the study's time period.

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