

Drug use among police detainees, 2005

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The Drug Use Monitoring in Australia (DUMA) program is a crime monitoring program that focuses on illegal drug use amongst police detainees. It involves the collection of self-report and urinalysis data from people detained in police watchhouses, and the timely output of this data to police, policy-makers, criminal justice practitioners and other professionals every three months. The scale of the program enables the collection of a large quantity of information, and its strong foundation of state-based teams (some of whom have spent over seven years working on the program) and the use of urinalysis ensures the quality of the data collected. This paper summarises the annual data and provides information about drug use and its link to crime. Trend data on those testing positive across all sites indicate that use of heroin has largely remained stable while codeine has increased; MDMA has increased while methylamphetamine has remained stable, and cannabis has declined, although it still remains the most commonly used drug.

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Director

Introduction

The Drug Use Monitoring in Australia (DUMA) program is a quarterly collection of information from police detainees in seven sites across Australia. These sites are: Southport and Brisbane City watchhouses in Queensland, Bankstown and Parramatta police stations in Sydney, New South Wales, Adelaide City watchhouse and Elizabeth police station cells in South Australia and East Perth watchhouse in Western Australia.

The year 2005 was the seventh year in which the DUMA program monitored drug use among police detainees across Australia. The ability of DUMA to provide both snapshots and long term trend analysis indicates its value as a policy- and decision-making tool for law enforcement. In 2005, 3,786 detainees (adults and juveniles) were interviewed in the seven sites and of these, 81 percent provided a urine sample. Long term trends are also discussed noting for example, that following the heroin shortage in 2000–01, there was an increase in the use of methylamphetamine, but since 2003 the levels have remained relatively stable.

Profile of police detainees, 2005

In 2005, a total of 3,786 detainees (adults and juveniles) were interviewed in the seven DUMA sites. The demographic profile of the detainees shows:

- the majority of adults were males (85%)
- around two out of five (42%) were aged 21–30 years, 14 percent were aged 18–20 years, 17 percent were aged 31–35 years and 27 percent were aged 36 years and over

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- almost half the adult detainees had less than 10 years of formal education (48%); 17 percent had finished a TAFE course and 11 percent were currently at TAFE or university, but only four percent had completed university
- almost half (47%) reported that they had lived in their own house during the past 30 days and six percent reported that they had lived on the street during the past 30 days – an increase from only one percent in 2004
- just under a third of detainees (31%) had a full-time job in the past 30 days
- most adult detainees (62%) obtained money through government benefits
- females were much less likely than males to obtain an income from full-time work (10% compared with 35%) and more likely to rely on government benefits (83% compared with 59%)
- females were more likely than males to have lived in their own house (52% versus 46%)
- family/friends represent a significant source of money – 28 percent of males and 30 percent of females reported income from this source
- females were more likely than males to report income from sex work (7% versus 1%) and shoplifting (10% versus 6%)
- males were slightly more likely than females to report an income from drug dealing (10% versus 7%) and other income generating crimes (9% versus 6%).

Drug use among adult detainees

Of the adult detainees who agreed to be interviewed, 81 percent (2,997 detainees) also agreed to provide a urine sample. Unless otherwise stated, the following

All urine samples undergo a screening test for six classes of drugs – amphetamines, benzodiazepines, cannabis, cocaine, methadone and opiates. If a positive result is obtained for amphetamines, opiates and benzodiazepines a further set of tests is performed (confirmatory testing) to ascertain which specific drugs are present in the urine.

results are based on those adult detainees who provided urine.

Benzodiazepines

In all sites, females tested positive to benzodiazepines more frequently than males. Averaged across the seven sites, 19 percent of males and 33 percent of females tested positive.

The percentage of adult males testing positive to benzodiazepines varied between the sites. Averaged across the year, 14 percent tested positive in Bankstown, 18 percent in Elizabeth, 19 percent in Southport, Brisbane, and East Perth, 22 percent in Parramatta and 25 percent in Adelaide. Compared with the previous year, there was a slight increase in the percentage testing positive to benzodiazepines in Bankstown, Elizabeth and Adelaide, with slight decreases in Brisbane and Southport. East Perth recorded a six percent decrease and there was a four percent drop in Parramatta.

As benzodiazepines are widely available under prescription, a positive result does not necessarily mean illegal use of the drug. The urine testing can detect use for up to 14 days. As a result, DUMA asks detainees about both legal and illegal use. Detainees are asked to report if they had taken any medication that had been prescribed to them by a doctor (or health professional), or any over the counter medication over the past two weeks. Fifteen percent of females and nine percent of males reported that they had taken prescription benzodiazepines during the past fortnight. Twenty-nine percent of these detainees also reported using benzodiazepines illegally in the past 30 days.

Few detainees (n=29) reported that they had injected illegal benzodiazepines in the past 12 months. Of those who had

injected in the past 30 days, detainees reported injecting an average of 15 times in the past 30 days, an increase over the 2004 figure of 11 times.

Cannabis

Irrespective of the population surveyed (general or police detainees), cannabis is the most commonly consumed illicit drug in Australia (AIHW 2005). It was also the most commonly detected drug among police detainees. Averaged across the sites, 54 percent of both males and females tested positive to cannabis in 2005. This could partly be due to the fact that the urine testing can detect use up to 30 days as compared with less than four days for some of the other drugs. Similar figures were also found in the self-report data with 57 percent of males and 56 percent of females reporting use in the past 30 days. Across all sites, the percentage of detainees testing positive to cannabis declined between 2004 and 2005.

A site comparison revealed that cannabis was least likely to be detected in the Sydney site of Bankstown (29% of males and 30% of females) and most likely to be detected in Elizabeth for males (69%) and East Perth for females (73%).

Cannabis use tends to be concentrated among younger aged detainees. Overall, 65 percent of males and 64 percent of females aged 18–20 years, and 65 percent of males and 59 percent of females aged 21–25 years tested positive compared with 41 percent of males and 47 percent of females aged 36 years or older.

In terms of broad trends, since 2002 the use of cannabis in Adelaide, Elizabeth and Brisbane has fluctuated. Cannabis usage rates were constant in East Perth over time. There was a sudden increase in the second half of 2004, but this decreased during 2005 to record some of the lowest rates since monitoring began in East Perth.

Cannabis use has been consistently declining in Bankstown since 2002. In 2005, rates declined sharply by

10 percent (from 39% to 29%). Although there have been fluctuations over the past five years in both Parramatta and Southport, like Bankstown both sites recorded sharp declines in 2005. Parramatta recorded a 12 percent decline from 2004 and Southport a 10 percent decline.

Cocaine

Cocaine is the least likely of all drugs to be used. There were 31 detainees (1%) testing positive to cocaine in 2005 compared with 29 detainees in 2004. During 2005, Bankstown had the highest number of detainees testing positive to cocaine with 14 people (6%). This was similar to the 2004 figure of 16 people (also 6%). The other sites detected very few people having recently used cocaine, with five in Parramatta, four in Adelaide, three in Southport and Brisbane, two in Elizabeth and none in East Perth. Self-reported drug use data over the past 30 days indicated that averaged across sites, five percent of detainees self-reported use of cocaine in the past month.

Over time the largest proportions testing positive to cocaine occurred in the Sydney sites, particularly Bankstown in 2001. Since then there has been a downward trend. The proportions of detainees testing positive to cocaine have always been relatively small, particularly in the non-Sydney sites.

Heroin

Heroin, once ingested, rapidly breaks down into its metabolites. The confirmatory test allows for the positive identification of these constituent parts. Heroin use is indicated with MAM (monoacetylmorphine) and morphine alone or where the morphine concentration is greater than or equal to the codeine concentration. Of the 530 positive tests for opiates across all the sites, 85 were confirmed with MAM. This indicates that use of heroin had occurred very shortly prior to arrest. These were mainly concentrated in the two Sydney sites. A further 301 were confirmed with

either morphine alone or where the morphine concentration was greater than or equal to the codeine concentration. The balance of probabilities is that 73 percent of those detainees testing positive to opiates were using heroin within 48 hours prior to the interview.

Prior to the heroin shortage that occurred in 2000–01, the level of positive heroin tests varied significantly between sites. The Sydney sites were almost double the proportions of the other two original sites (Southport and East Perth). Since then the proportions testing positive in the Sydney sites have been lower and comparable to all other sites. In 2005, 17 percent of all adult detainees in Bankstown, Parramatta and Brisbane tested positive to heroin, 12 percent in Adelaide, 11 percent in Southport, 10 percent in East Perth and nine percent in Elizabeth.

Compared with 2004, the overall average proportion of detainees testing positive to heroin remained relatively stable. Twelve percent of males and 17 percent of females tested positive to heroin compared with 13 percent of males and 19 percent of females in 2004. However, these averages could be masking some key changes in the local heroin markets. For individual sites, the average figures showed that since 2004:

- heroin use declined in the Adelaide and Southport sites, with a greater decline at the Bankstown site
- Parramatta and Elizabeth have remained the same
- there was a slight increase in the East Perth and Brisbane sites.

Compared with the other illicit drugs such as cannabis and methylamphetamine, heroin was more likely to be detected in a slightly older age group of males, which is consistent with the age progression associated with drug use among male and female incarcerated offenders (Johnson 2004; Makkai & Payne 2003). Averaged across the sites, 17 percent of males aged 26–35 years tested positive to heroin, while only 12 percent of males aged 21–25 years tested

positive. Six percent of male detainees aged 18–20 years tested positive, as did 11 percent of male detainees aged 36 years or older.

The self-reported use of heroin in the past 30 days was:

- 20 percent at Brisbane
- 14 percent at Parramatta
- 13 percent at Bankstown
- 11 percent at Adelaide
- 11 percent at Southport
- eight percent at Elizabeth
- six percent at East Perth.

Of those detainees who reported use of heroin in the past 12 months, the majority (89%) reported that they had injected the drug in the past 12 months. Those who had injected in the past 30 days reported injecting an average of 37 times in that time (ranging from once to 232 times).

Of all the sites, the main change noted was at Bankstown where the percentage of detainees who tested positive to heroin, and self-reported use of heroin in the past 30 days decreased in 2005 compared with 2004. Heroin use at Bankstown began declining in mid 2000 through to 2001. It remained stable throughout 2002 and 2003, increased during 2004 and declined during 2005.

Heroin use at Parramatta remained high through 1999 and 2000. There was a significant and sudden drop at the end of 2000. Rates remained constantly low through 2001. Since then there was a slow but steady increase through to the end of 2004. The trend has since stabilised.

Heroin use had been slowly but consistently declining in East Perth, but there was a slight increase during 2005. Despite some fluctuations, the rates in Elizabeth, Adelaide and Brisbane have remained fairly stable throughout the time period.

Codeine

The other 27 percent of opiate users tested positive to a substance containing an opiate metabolite which was unlikely

to be heroin. As medications that contain more than 8 mg of codeine require a prescription from a doctor, use may have been legal or illegal. The proportion of detainees who have used an opiate metabolite not identified as heroin has been steadily increasing. In 2000, 10 percent tested positive to an opiate metabolite, increasing to 18 percent in 2001, 23 percent in 2002 and 2003 and falling slightly in 2004 to 21 percent before rising again to 27 percent in 2005.

Across the sites in 2005, 11 percent of detainees in Bankstown tested positive to codeine, nine percent in Parramatta, eight percent in Brisbane and Adelaide, seven percent in East Perth and six percent in Elizabeth and Southport. Females were twice as likely as males to test positive to codeine, and the drug was most likely to be detected in the 26–30 year age group for males and the 21–25 year age group for females. When asked about taking prescription or over the counter medications in the past two weeks ten percent said they had taken codeine. This figure has doubled since 2004.

Methylamphetamine

One of the limitations of urine testing is that it cannot distinguish between legal and illegal use. It is possible for some amphetamine use to be prescription use. However, the detection of methylamphetamine is confirmation of illegal use, as it is not a component of any medication. The confirmatory tests indicated that out of 929 positive amphetamine screens across all sites in 2005, 805 were confirmed with methylamphetamine alone or in combination with amphetamines; 74 persons were confirmed with MDMA being present in their urine and over half of these were in combination with methylamphetamine (62%), and 96 persons tested positive to amphetamines only. This indicates that 90 percent of amphetamine use was illegal.

Across all seven sites, the use of amphetamine-type stimulants increased until 2004 when methylamphetamine use stabilised. The percentage of detainees testing positive was highest in the two South Australian sites, with East Perth also recording a high percentage. The lowest percentage of detainees testing positive continued to be in the two Sydney sites.

As with previous years, the percentage of detainees who tested positive to methylamphetamine varied between the sites. In 2005, 35 percent of detainees tested positive in Adelaide and 34 percent in Elizabeth. In East Perth 32 percent of detainees tested positive. Brisbane recorded 25 percent and Southport 24 percent. Those testing positive in Parramatta and Bankstown were 17 and 12 percent respectively.

While it is important to note that there were differences between sites in the percentage testing positive, averaged across the seven sites:

- 39 percent of females tested positive
- 25 percent of males tested positive.

Methylamphetamine use tended to be concentrated among those aged under 30 years. Aggregated across the sites:

- 54 percent of males and 57 percent of females who tested positive to the drug were aged 30 years or younger
- eight percent of males and 10 percent of females who tested positive were aged 18–20 years
- 26 percent of females and 22 percent of males were aged 21–25 years.

Similar rates of use of methylamphetamine in the past 30 days were reported by the detainees:

- 44 percent at Adelaide
- 43 percent at Elizabeth
- 42 percent at East Perth
- 38 percent at Brisbane
- 32 percent at Southport
- 20 percent at Parramatta
- 14 percent at Bankstown.

Compared with the previous year, there appeared to have been little change in self-reported use of methylamphetamine in the past 30 days with the exception of a six percent increase at Elizabeth and a seven percent decrease at Parramatta.

Of those detainees who had used methylamphetamine in the past 12 months, almost three-quarters (71%) reported injecting it. Of those who had injected in the past 30 days, detainees reported injecting an average of 25 times (ranging from injecting once to 300 times). This was a decrease from the 2004 figure of 33 times in the past 30 days.

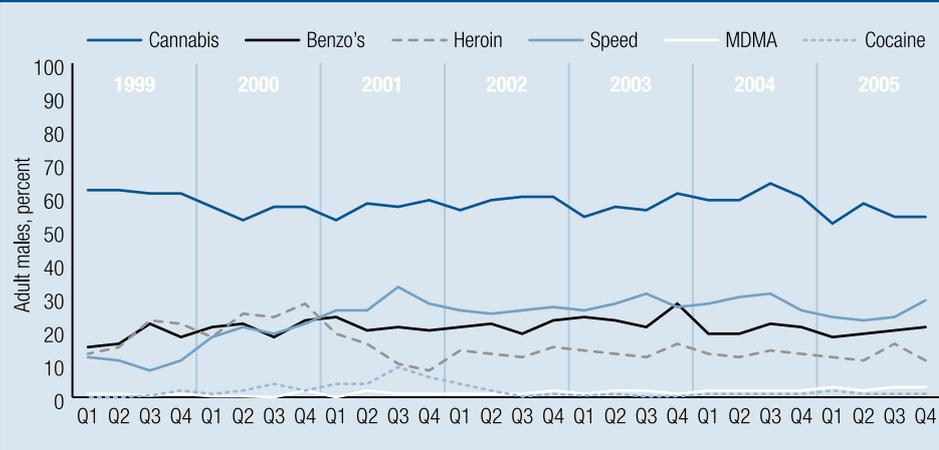
MDMA (ecstasy)

The recent use of MDMA was uncommon in all sites. Overall in 2005, four percent of detainees tested positive to MDMA in Southport; three percent tested positive in East Perth; two percent tested positive in Adelaide, Brisbane, Bankstown and Parramatta, and one percent tested positive in Elizabeth. Since 2000, there has been a slight but consistent increase observed in the proportion of detainees testing positive to MDMA and this trend was sustained for the current year.

In 2000, 0.5 percent of the total sample tested positive to MDMA, increasing slightly to 0.7 percent in 2001, 1.1 percent in 2002, 1.3 percent in 2003, two percent in 2004 and in the most recent year 2.5 percent. It is important to note that overall numbers testing positive were relatively small.

Self-report data over the past 30 days showed that averaged across the sites, 10 percent of detainees had used MDMA in the past 30 days, compared with nine percent in 2004. The highest rates of self-reported use in the past 30 days were found in the sites of Southport (13%) and Adelaide and East Perth (11%). Nine percent reported use of MDMA in Brisbane and Elizabeth and seven percent in Bankstown and Parramatta.

Figure 1: Trends in adult male detainees testing positive, 1999–2005



Source: AIC, DUMA collection 1999–2005 [computer file]

There was a greater discrepancy between the urinalysis results and self-report data for MDMA than methylamphetamine. Thirty-nine percent of detainees who stated that they had used MDMA in the past 48 hours did not test positive to MDMA. In 2004 it was a little higher at 50 percent. Of those who did not test positive to MDMA, but self-reported using MDMA in the past 48 hours, 55 percent tested positive to methylamphetamine, suggesting that a substantial proportion of detainees, who believe they have taken MDMA, may have actually consumed methylamphetamine.

Illicit drug use and most recent serious charge

In 2005, the following results were obtained in relation to the most recent serious charge:

- 24 percent of detainees were charged with a violent offence
- 27 percent with a property offence
- seven percent with a drug offence

- four percent with drink driving
- 11 percent with a traffic offence
- six percent with disorder offences
- 17 percent with breaches
- four percent of detainees had a charge that did not come under any of these categories, such as public health and safety offences, regulation offences, property damage and pedestrian offences.

Overall males were more likely to be charged with a violent offence (25%) than females (18%), while females (38%) were more likely than males (25%) to be charged with a property offence. A substantial minority of both males (18%) and females (13%) were charged with breaches of good order offences.

There are some changes worth noting (see Table 1). Compared with 2004, in 2005 there was:

- a decrease in the proportion of detainees charged with a property offence testing positive to methylamphetamine (39% down to 33%)

- a decrease in the proportion of detainees charged with a drug offence testing positive to benzodiazepines (22% down to 14%)
- a decrease in the proportion of detainees charged with a drink driving offence testing positive to any drug (61% down to 43%)
- an increase in the proportion of detainees charged with a traffic offence testing positive to benzodiazepines (7% up to 13%)
- a decrease in the proportion of detainees charged with a disorder offence testing positive to any drug (69% down to 60%)
- a decrease in the proportion of detainees charged with breaches of good order offences testing positive to cannabis (68% down to 50%) or any drug (80% down to 66%).

Drug related crime

DUMA collects information on the proportion of detainees who attribute their own offending to alcohol and/or drug use. In 2005, the majority of detainees did not attribute any of their offending to drugs (64%); 36 percent reported that at least some of their offences were drug related (this excludes alcohol). Results from the Drug Use Careers of Offenders (DUCO) project found that 30 percent of incarcerated males and 32 percent of incarcerated female offenders attributed their offending to illicit drugs (Johnson 2004; Makkai & Payne 2003). A third of incarcerated youths (33%) reported drugs, including alcohol as a causal risk factor in their offending (Prichard & Payne 2005).

Table 1: Most serious offence by percent testing positive, adult male detainees, 2004–2005

	Violent		Property		Drugs		Drink driving		Traffic		Disorder		Breaches	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
Benzodiazepines	19	18	28	30	22	14	7	9	7	13	15	15	22	17
Cannabis	55	52	64	60	63	58	51	38	62	61	59	52	68	50
Heroin	11	8	21	21	16	17	4	4	8	11	5	4	10	12
Methylamphetamine	24	22	39	33	37	35	12	8	28	27	15	16	28	24
Any drug (excl cannabis)	38	37	61	58	58	52	20	17	36	38	28	26	43	39
Any drug	65	64	83	79	85	80	61	43	74	71	69	60	80	66

Source: AIC, DUMA collection 2004–2005 [computer file]

The proportions who had attributed at least some of their offending to illegal drugs were:

- 49 percent in Brisbane
- 38 percent in Elizabeth
- 37 percent in Adelaide
- 37 percent in Southport
- 28 percent in East Perth
- 21 percent in Parramatta
- 18 percent in Bankstown.

Adult male detainees reported that they had been on average, arrested twice in the past 12 months. This varied slightly among the sites, with the two New South Wales sites having slightly lower averages than the other sites (ranging from 0.9 in Bankstown to 1.2 in Parramatta), with East Perth having the highest number of arrests (2.8) in the past 12 months. An examination of criminal behaviour and drug use patterns among police detainees indicates that the average number of arrests in the past 12 months is higher for offenders who report having used illegal drugs in the past 12 months than those who never used (2.4 versus 0.6). The average number of arrests is similar for those who report illegal use of drugs in the past 30 days or who test positive (2.5). Detainees who were classified as drug dependent had the highest average number of arrests (3.0) in the past 12 months.

Conclusion

While some patterns of drug use among police detainees in 2005 remained similar to previous years, there were some notable shifts in patterns. Cannabis use declined in all sites during 2005

compared with 2004, with Bankstown, Parramatta and Southport all recording sharp declines for detainees testing positive to cannabis. East Perth recorded some of the lowest rates since monitoring began there. Despite this decrease, cannabis still remains the most commonly used drug.

Compared with 2004, the percentage of detainees testing positive to heroin remained relatively stable. Despite this, within each site there were some notable changes, especially in the two Sydney sites. After the significant and sudden drop of rates in 2000, heroin use in Parramatta displayed a slow but steady increase up until 2004, and in 2005 this rate has stabilised. In Bankstown, the decline in rates in 2000 continued on through to 2001. After remaining stable in 2002 and 2003, there was an increase in 2004 followed by a considerable decline (10 percent) in 2005.

Although the percentage of detainees testing positive to heroin remains stable, the proportion of opiate users testing positive to a substance containing an opiate metabolite unlikely to be heroin, has increased. In 2004, 21 percent of detainees tested positive, while in 2005 the figure increased to 27 percent. Those detainees taking over the counter codeine has also increased. Ten percent of detainees in 2005 said they had taken this form of codeine, a figure that has doubled since 2004.

For other drugs the patterns were similar to previous years. The percentage testing positive to methylamphetamine remained relatively stable in 2005 compared with 2004. For MDMA, although numbers

are small, the percentage of detainees testing positive to MDMA continued to increase gradually.

In 2005 the majority of detainees' most serious charge was for either a violent or property offence (51%). Drink driving was the offence detainees were least likely to be charged with as their most serious. Detainees charged with a property offence as their most serious offence were more likely than any other offence type to test positive to heroin. Those detainees charged with a traffic offence were more likely to test positive to cannabis than detainees charged with any other offence.

The relationship between drugs and crime continues to be a focus for the DUMA program. In 2005, more than a third of detainees reported that at least some of their offending was drug related. Detainees who were classified as drug dependent were arrested an average of three times in the past 12 months.

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All URLs were correct at 15 June 2006

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