

# Multiple drug use among police detainees

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*Previous publications have shown that a high proportion of police detainees use drugs. The present paper describes the extent and nature of multiple drug use among police detainees at two Sydney police stations. Urinalysis test results indicate that 69 per cent of the sample of 1,161 detainees had used at least one drug within the three days prior to their apprehension by police. The vast majority of these drug users tested positive to more than one drug type, with more than one in five persons testing positive to a combination of three or more drugs. Of this group, more than 80 per cent tested positive to opiates in conjunction with other drugs, most commonly cannabis and benzodiazepines.*

## INTRODUCTION

Drug use is highly prevalent among police detainees in New South Wales (Makkai et al. 2000, Makkai & MacGregor 2001). This paper examines the extent to which police detainees engage in multiple drug use, and measures the likelihood and nature of multiple drug use for specific types of drug users.

Since mid-1999 the Drug Use Monitoring in Australia (DUMA) project has been conducted at Bankstown and Parramatta police stations in New South Wales (NSW). Interviews are conducted with people detained at these stations every three months. In addition to completing a questionnaire about drug use behaviour and demographic factors, participants are asked to supply a urine sample which is tested for traces of specific drug types. Participation in all aspects of the study is voluntary. Of the participants who complete the questionnaire, approximately 68 per cent provide a urine sample. The urinalysis test detects recent use of cannabis, opiates, methadone, cocaine, amphetamines and benzodiazepines. The tests cannot determine if the drug has been used legally or illegally, or the extent of use outside the detection time. As the urinalysis generally detects drugs used only within the last three days, the results refer only to very recent drug

use. The number of detainees who occasionally engage in multiple drug taking may therefore be higher than that reported here.

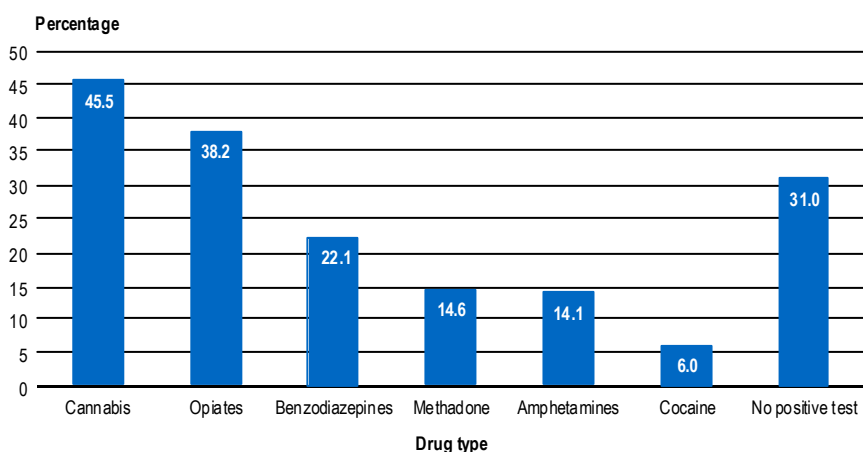
## PREVALENCE OF DRUG USE AMONG DETAINEES

This paper considers data gathered in the first two years of the DUMA project, from July 1999 to June 2001. During this period urine samples were collected from 1,161 persons detained in police custody for a criminal offence at either

Parramatta (608 persons) or Bankstown (553 persons) police stations. Of the 1,161 arrestees who participated in the urinalysis testing over this time period, 69 per cent of persons tested positive to at least one drug type. Figure 1 shows the percentage of persons with positive screens for each drug in the urinalysis tests. (Note that the percentages graphed sum to more than 100 per cent because many individuals use more than one drug.)

Figure 1 shows that cannabis was the drug most commonly used by detainees

Figure 1: Urinalysis results for police detainees (n = 1,161)



Source: Australian Institute of Criminology, DUMA Collection, 1999, 2000, 2001 [Computer File]

**Table 1: Positive drug tests by the number of drugs used**

| Offence type                           | Number of positive drug tests |              |            |              |             |              |            |              |            |              |              |              |
|--|-------------------------------|--------------|------------|--------------|-------------|--------------|------------|--------------|------------|--------------|--------------|--------------|
|  | one drug                      |              | two drugs  |              | three drugs |              | four drugs |              | five drugs |              | all persons* |              |
|  | No.                           | %            | No.        | %            | No.         | %            | No.        | %            | No.        | %            | No.          | %            |
| Cannabis                               | 173                           | 56.9         | 155        | 62.2         | 136         | 76.8         | 50         | 87.7         | 12         | 100.0        | 528          | 45.5         |
| Opiates                                | 83                            | 27.3         | 158        | 63.5         | 142         | 80.2         | 49         | 86.0         | 10         | 83.3         | 444          | 38.2         |
| Methadone                              | 4                             | 1.3          | 43         | 17.3         | 75          | 42.4         | 35         | 61.4         | 11         | 91.7         | 170          | 14.6         |
| Cocaine                                | 5                             | 1.6          | 17         | 6.8          | 24          | 13.6         | 17         | 29.8         | 5          | 41.7         | 70           | 6.0          |
| Amphetamines                           | 19                            | 6.3          | 60         | 24.1         | 43          | 24.3         | 30         | 52.6         | 10         | 83.3         | 164          | 14.1         |
| Benzodiazepines                        | 20                            | 6.6          | 65         | 26.1         | 111         | 62.7         | 47         | 82.5         | 12         | 100.0        | 257          | 22.1         |
| Total persons                          | <b>304</b>                    | <b>100.0</b> | <b>249</b> | <b>100.0</b> | <b>177</b>  | <b>100.0</b> | <b>57</b>  | <b>100.0</b> | <b>12</b>  | <b>100.0</b> | <b>1,161</b> | <b>100.0</b> |
| % of persons testing positive to drugs |                               | <b>26.2</b>  |            | <b>21.4</b>  |             | <b>15.2</b>  |            | <b>4.9</b>   |            | <b>1.0</b>   |              | <b>100.0</b> |

Source: Australian Institute of Criminology, DUMA Collection, 1999, 2000, 2001 [Computer File]

\* Total includes 2 detainees who tested positive to all 6 drugs.

with 45 per cent of the sample testing positive to this substance. The next most commonly used drugs were opiates (38%) and benzodiazepines (22%). Cocaine was the drug for which the fewest number of detainees tested positive, with only 6 per cent of the sample showing traces of this substance.

### PREVALENCE OF MULTIPLE DRUG USE

The DUMA urinalysis tests confirm that more than half of the detainees with a positive drug test result had used more than one drug type recently. Figure 2 illustrates the scale of multiple drug use among the DUMA sample. More than one in five of all detainees (21.4%) tested positive to two drugs, while about the same proportion (21.7%) tested positive to three or more drugs.

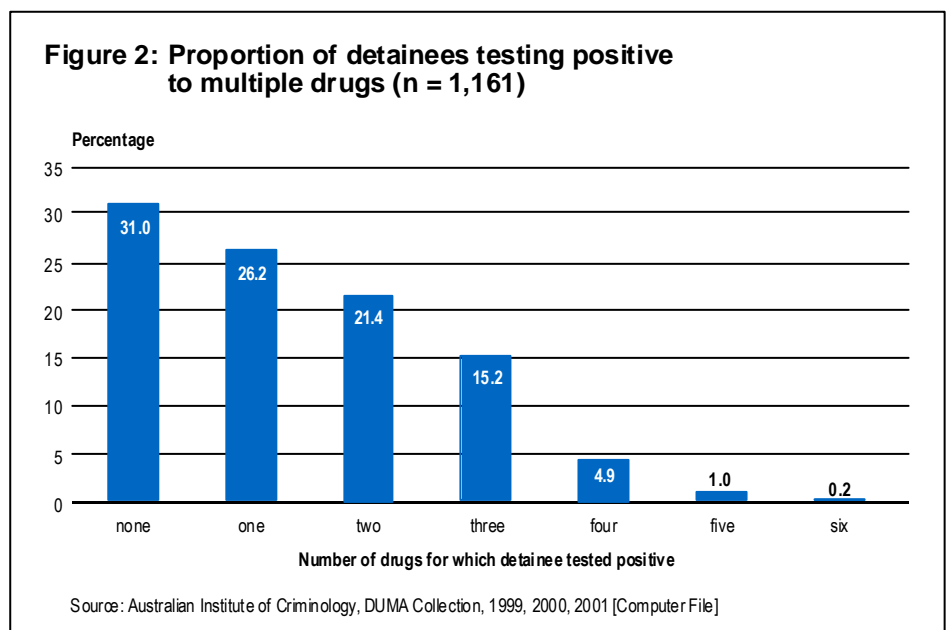
Table 1 shows the percentage of persons who use each specific drug type, by the number of drugs used in combination. For example, the first column of Table 1 shows that, of the 26.2 per cent of the entire sample who registered a positive screen to just one drug (304 persons of the total 1,161 tested over the time period), almost 85

per cent used either cannabis or opiates (56.9% and 27.3% respectively).

Cannabis and opiates were also the most prevalent drugs among those persons in the sample who tested positive to just two drug types. The second column in Table 1 shows that 62.2 per cent of the DUMA sample who used exactly two drugs tested positive to cannabis and, similarly, that 63.5 per cent of such persons tested positive to opiates.

It is noteworthy that the two drugs included in the urinalysis tests which may be used legitimately, methadone and benzodiazepines, are infrequently used in isolation (comprising 1.3% and 6.6% of persons using just one drug respectively). This indicates that the exclusive use of licit drugs is uncommon among the positive drug-testing sample.

In the following section we consider the likelihood of particular drug combinations among police detainees who test positive to each drug type.



**Table 2: Urinalysis test results, frequency with which particular drugs are used in combination**

| Drug type       | Cannabis |      | Opiates |      | Methadone |      | Cocaine |      | Amphetamines |      | Benzodiazepines |      | No other drug |      | Total positive tests |       |
|-----------------|----------|------|---------|------|-----------|------|---------|------|--------------|------|-----------------|------|---------------|------|----------------------|-------|
|                 | No.      | %    | No.     | %    | No.       | %    | No.     | %    | No.          | %    | No.             | %    | No.           | %    | No.                  | %     |
| Cannabis        | -        | -    | 237     | 44.9 | 103       | 19.5 | 32      | 6.1  | 108          | 20.5 | 155             | 29.4 | 173           | 32.8 | 528                  | 100.0 |
| Opiates         | 237      | 53.4 | -       | -    | 101       | 22.7 | 55      | 12.4 | 76           | 17.1 | 170             | 38.3 | 83            | 18.7 | 444                  | 100.0 |
| Methadone       | 103      | 60.6 | 101     | 59.4 | -         | -    | 19      | 11.2 | 39           | 22.9 | 90              | 52.9 | 4             | 2.4  | 170                  | 100.0 |
| Cocaine         | 32       | 45.7 | 55      | 78.6 | 19        | 27.1 | -       | -    | 16           | 22.9 | 24              | 34.3 | 5             | 7.1  | 70                   | 100.0 |
| Amphetamines    | 108      | 65.9 | 76      | 46.3 | 39        | 23.8 | 16      | 9.8  | -            | -    | 47              | 28.7 | 19            | 11.6 | 164                  | 100.0 |
| Benzodiazepines | 155      | 60.3 | 170     | 66.1 | 90        | 35.0 | 24      | 9.3  | 47           | 18.3 | -               | -    | 20            | 7.8  | 257                  | 100.0 |

Source: Australian Institute of Criminology, DUMA Collection, 1999, 2000, 2001 [Computer File]

### MULTIPLE DRUG USE COMBINATIONS

Table 2 shows the frequency with which particular drugs were used in combination among DUMA detainees. The data in the table indicate how often each drug was found in the presence of every other drug. For example, the first row in Table 2 shows that of the 528 detainees who tested positive to cannabis, 44.9 per cent (237 persons) also tested positive to opiates, 20.5 per cent also tested positive to amphetamines, and 32.8 per cent did not test positive to any other drug. Therefore, there is a 33 per cent chance (or probability) that a cannabis user detained by police will not be using any other drug, a 45 per cent chance that he or she will also be using opiates, and a 21 per cent chance that he or she will also be using amphetamines.

In the sub-sections which follow, some significant drug use patterns which are evident from the information presented in Table 2 will be highlighted.

### CANNABIS USERS

It was shown in Table 1 that cannabis was the most prevalent drug among police detainees, with 45.5 per cent of all persons tested having a positive result for cannabis. Table 2 shows that, of these cannabis users:

- almost one-third (32.8%) used no other drug (making cannabis the drug most likely to be used alone),
- almost one-half (44.9%) also used opiates, and
- almost one-third (29.4%) also tested positive to benzodiazepines.

### OPIATE USERS

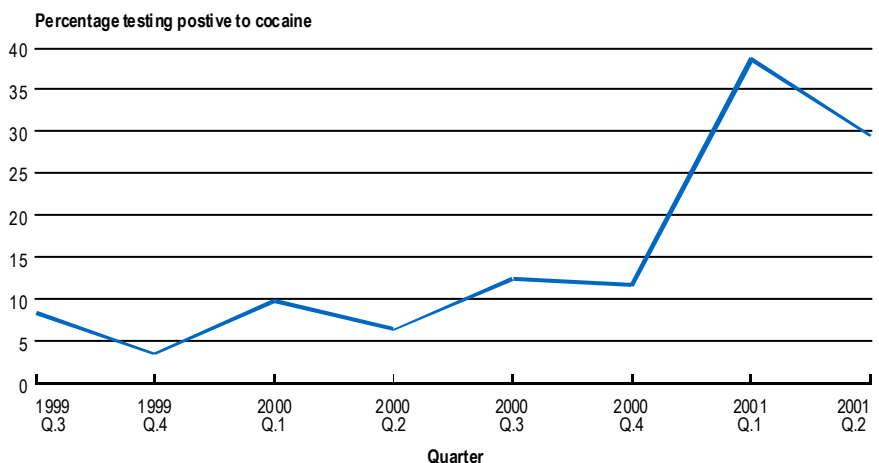
Opiates are the second most commonly used drugs amongst police detainees. Overall, more than one-third (38.2%) of the DUMA sample tested positive to opiates. Of these 444 people:

- only 83 detainees (18.7%) used no other drug,

- more than one-half (53.4%) also used cannabis, and
- almost one-quarter (22.7%) also used methadone.

It is noteworthy that cocaine use among opiate users has increased significantly over the period of the study. Table 2 shows that, over the entire two-year period, 12.4 per cent of opiate users also used cocaine. Further examination of the DUMA data, however, shows that this proportion has changed over the period. Figure 3 shows trends in cocaine use among persons using opiates for the eight quarterly DUMA collection periods. It can be seen from this graph that the use of cocaine by opiate users

**Figure 3: Trends in cocaine use among persons testing positive to opiates**



Source: Australian Institute of Criminology, DUMA Collection, 1999, 2000, 2001 [Computer File]

has increased significantly over the course of the DUMA study (Kendall's  $T = 0.643$ ,  $n = 8$ ,  $p = 0.026$ ). In the first year of the study less than ten per cent of opiate users also tested positive to cocaine. This figure rose to 39 per cent in the first quarter of 2001. It should be noted that the timing of this increased use of cocaine among opiate users coincides with a decrease in the availability of heroin in Sydney (Weatherburn et. al. 2001).

### BENZODIAZEPINE USERS

The third most commonly used drug type among the DUMA sample are benzodiazepines, which are used by 22.1 per cent of the sample. Table 2 shows that benzodiazepines were used by 257 persons in the sample. Of these persons:

- 92 per cent also used another drug,
- almost two-thirds (66.1%) also tested positive to opiates, and
- almost two-thirds (60.3%) also used cannabis.

### METHADONE USERS

Of the sample, 14.6 per cent of persons tested positive to methadone. Of this group:

- nearly 60 per cent also tested positive to opiates (i.e. 40% of methadone users were *not* also using heroin), and
- 61 per cent also tested positive to cannabis.

### COCAINE USERS

Positive tests for cocaine were found infrequently among the sample with only six per cent of the DUMA sample showing a positive result for cocaine. Of this small group of users:

- almost all (more than 90%) used cocaine in combination with other drugs, and
- 79 per cent also tested positive to opiates.

## SUMMARY

Previous publications have shown that a high proportion of police detainees use drugs. The results described here indicate the extent and complexity of that drug use. This paper shows that police detainees frequently used a number of drugs in combination. At least two drugs were used by 43 per cent of the detainees tested, while more than 20 per cent used three or more drugs in combination. Dangerous combinations of drugs, such as the combination of benzodiazepines and opiates, or benzodiazepines and methadone occurred among a sizeable proportion of the detainees in this sample. Multiple drug use can increase the risk of overdose, and affect users physically and mentally. A significant proportion of police detainees in Bankstown and Parramatta, and the police who deal with these detainees, are therefore exposed to risk from the high level of multiple drug use described in this paper.

It should be noted that these results are not directly generalisable to detainees in other parts of the State. Neither Bankstown nor Parramatta are generally representative of either Sydney or NSW. Both have regionally specific ethnic communities, geographic and transport characteristics and particular crime and drug issues. Further, Bankstown and Parramatta stations were chosen for the DUMA study because they both have a high volume of detainees passing through, which also distinguishes them from other locations.

## ACKNOWLEDGEMENTS

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