drugs and crime

Trends among watch-house detainees

A study using Drug Use Monitoring in Australia (DUMA) data

March 2008

CRIME AND MISCONDUCT COMMISSION
QUEENSLAND

CMC vision: To be a powerful agent for protecting Queenslanders from major crime and promoting a trustworthy public sector.

CMC mission: to combat crime and improve public sector integrity.

Note: The working title of this report while in production was *Drug Use Monitoring in Australia: Queensland trends and state comparisons.*

The Drug Use Monitoring in Australia (DUMA) project is funded by the Commonwealth's National Illicit Drug Strategy. The data used in this publication were made available through the Australian Institute of Criminology (AIC).

Privacy statement:
The data collected for the DUMA project are for the purposes of research only. The *Privacy Act 1998* provides that a person working on a Commonwealth Government project shall collect only that personal information necessary for or directly related to the purposes of that project, and that the person collecting that information shall not use it for any purposes other than those for which the information was collected.

ISBN: 1 876986 43 3

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Foreword

Given the relevance of illicit drug use to law enforcement, operational activities, strategic research and policy development, the Crime and Misconduct Commission undertakes a range of monitoring activities to assess illicit drug use patterns in Queensland. These monitoring activities include surveys of the general population (e.g. the Queensland household survey), surveys of specific subgroups (e.g. emergency departments in hospitals; users of needle and syringe services), individual research projects that gather detailed information about patterns of drug use and market dynamics for specific types of substances, and various ongoing intelligence activities. Collectively, the products arising from these studies provide complementary and ongoing information about patterns of drug use in Queensland.

This report examines the drug use patterns and criminal behaviour of detainees from various watch-houses in Queensland, New South Wales, Western Australia and South Australia through the Drug Use Monitoring in Australia (DUMA) data collected by the Australian Institute of Criminology (AIC), state police services and local researchers.

While much has been published by the AIC using the DUMA data (see AIC website <www.aic.gov.au>), I believe this report to be the first of its kind to make direct state comparisons on illicit drug use in watch-houses and to monitor drug usage in watch-houses in Queensland over time.

I acknowledge that the readers of this report will vary, and that the data presented in it will be used in different ways. For readers seeking statistical information, complex and detailed results are offered in each chapter. For policy makers, health and treatment providers and law enforcement/intelligence agencies seeking data to support the implementation of programs and other activities, summary information is proved at the end of each chapter. The final chapter collates the information provided throughout the report to provide a brief overview of the overall findings.

I trust that this information will be of particular benefit to those who work with offenders in watch-houses and prisons, and even to those who work with – and monitor the impact of – illicit drug use in the general population. The report provides significant insight into a variety of complex relationships between illicit drug use, offending behaviour, demographic factors, market factors, and various geographic and time-sensitive issues.

Anna Sheehan and Julianne Webster undertook the majority of the analyses presented in this report and were largely responsible for writing the report. Dr Margot Legosz assisted with the final production of the report.

The report was prepared for publication by the CMC's Communications Unit.

We are grateful for the feedback we received on the final draft of the report from the DUMA team at the Australian Institute of Criminology.

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Contents

Abbreviations

ABS	Australian Bureau of Statistics
AIC	Australian Institute of Criminology
AIHW	Australian Institute of Health and Welfare
ANOVA	analysis of variance
ASOC	Australian Standard Offence Classification
CMC	Crime and Misconduct Commission
DUMA	Drug Use Monitoring in Australia
IDRS	Illicit Drug Reporting System
MDMA	methylenedioxymethamphetamine (ecstasy)
NDARC	National Drug and Research Council
NDSHS	National Drug Strategy Household Survey
nec	not elsewhere classified
n.s.	not significant
NSW	New South Wales
PADIE	Prevalence of Alcohol and Drug Use in Emergency Departments
QADREC	Queensland Alcohol and Drug Research and Education Centre
Qld	Queensland
SA	South Australia
SD	standard deviation
WA	Western Australia

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Introduction

'Drugs destroy lives and communities, undermine sustainable human development and generate crime. Drugs affect all sectors of society in all countries; in particular, drug abuse affects the freedom and development of young people, the world's most valuable asset.' Political Declaration on Global Drug Control, by the States Members of the United Nations at the 20th special session of the General Assembly, June 1998

IS THERE A LINK BETWEEN ILLICIT DRUG USE AND CRIME?

In 1998 it was estimated that the social and health costs associated with illicit drug use in Australia was about $A6.1 billion (Collins & Lapsey 2002; Oltmanns & Emery 2004); and this does not include unquantifiable costs such as reduced quality of life, damaged personal relationships and disrupted family life.

Apart from the serious psychological, health and economic effects on the user, illicit drug use is also associated with criminal behaviour. It is well established that there is a correlation between criminal activity and drug use (e.g. Brownstein 2002; French et al. 2000). This association has been found in the criminal justice system (Harrison 1992; Innes & Greenfeld 1990), in clinical populations (Hanlon et al. 1990; Hunt, Lipton & Spunt 1984), in adolescent samples (Apospori et al. 1995; Hays & Ellickson 1996), in community samples of adults (Newcomb, Galaif & Vargsa Carmona 2001) and in the general population (Kaplan 1995; Miller, Whitney & Washousky 1986). The association is strongest with the frequent and dependent use of drugs such as heroin and cocaine (Gossop et al. 2005). Indeed, nearly $2 billion of Australia's $32 billion crime bill is estimated to be directly attributable to drug offences (Mayhew 2003). It is therefore of paramount importance, not only from a research perspective but also from an operational and strategic crime control policy perspective, to understand the link between illicit drug use and criminal activity and incarceration (Canela-Cacho, Blumstein & Cohen 1997).

Although the link between drug use and crime seems indisputable, the nature of the relationship continues to elude researchers and practitioners. A number of theoretical propositions have been put forward. According to the 'impaired-functioning' theory, for example, drug abuse leads to criminal activity because drug consumption impairs physical, psychological and emotional functioning (Graham 1980; Vaillant & Milofsky 1982; Zucker & Gomberg 1986). The theory suggests that drug use may reduce inhibitions that would normally prevent a person from acting on criminal impulses. Other researchers, however, suggest that there is a 'bidirectional' relationship between drug use and crime. For example, Newcomb, Galaif and Vargsa Carmona (2001) found that drug problems were both a predictor and an outcome of criminal behaviour.

Suggesting that drug use directly causes criminal behaviour fails to consider other factors that may affect this relationship (Brownstein 2002). The 'third variable' hypothesis proposes that the relationship between drug use and crime can be accounted for by a common third cause rather than by a direct link. According to Casavant and Collin (2001), factors such as poverty, lack of social values, personality disorders, association with drug users and/or delinquents, and loss of contact with agents of socialisation may explain the links between drug use and criminal activity.

Another theory, the sociological drift theory, suggests that engaging in criminal behaviour leads to future drug problems and drug-related crimes (Newcomb, Galaif & Vargsa Carmona 2001); it gives the individual the opportunity and context to use drugs. Evidence in support of this theory comes from a study conducted by Rydelius (1988), who found that antisocial behaviour during adolescence is an important determinant of whether drug use increases this behaviour in adulthood.

It is hard to test these theories. For example, the cross-sectional nature of much of the data from current drugs–crime research makes it impossible to draw causal conclusions; and the uniqueness of the samples under investigation (e.g. adults in the criminal system, or clinical samples) limits the applicability of the findings to the general population. Newcomb, Galaif and Vargsa Carmona (2001) also acknowledge that much of the past research has focused on specific drug types and neglected multiple drug use. They suggest that multiple drug use might be more closely linked to criminal activity because it leads to a more deviant lifestyle.

Although the data collected for this report do not permit direct testing of these theoretical models, the models can be used to assist in the interpretation of the findings. Whatever the theoretical explanation, however, it is clear that there is a link between crime and the use of illicit drugs.

WHAT IS DUMA?

The Drug Use Monitoring in Australia (DUMA) project was implemented in 1999 to monitor the drug use patterns and criminal behaviour of people arrested and detained in various watch-houses around Australia.

The data provide information about changes in drug use patterns and drug market dynamics such as the supply and availability of specific drugs. The data can also be used to contribute to the development and evaluation of drug policies, and are an invaluable source of information for researchers, practitioners, health and law enforcement agencies, and drug treatment providers.[1]

The DUMA program is a partnership between the Australian Institute of Criminology (AIC), state police services and local researchers.[2] Data have been collected from seven sites in four states: Southport (since 1999) and Brisbane (since 2002) in Queensland; Bankstown and Parramatta in New South Wales; Adelaide and Elizabeth in South Australia; and East Perth in Western Australia. In January 2006 DUMA was expanded to include Melbourne and Darwin, increasing the total number of sites to nine.

The DUMA data are collected through interviews with detainees who have been arrested in the previous 48 hours and are being held in police custody. The interview process is carried out quarterly in all of the watch-houses participating in the program. All data recording is anonymous, and participation in the survey and provision of a urine sample to detect the presence of various illicit substances is voluntary. Urine samples are tested by an independent laboratory. This methodology is consistent with other drug research (e.g. Kinlock, O'Grady & Hanlon 2003; Martin & Bryant 2001).

WHAT IS THE SCOPE OF THIS REPORT?

This report provides an accurate depiction of illegal drug use among Queensland watch-house detainees between 1999 and 2005, and comparative information (2004–05) about detainees in watch-houses in other states (NSW, WA and SA). It provides:

- a socio-demographic profile of the detainees:
  - » information about detainees' gender; age; educational, employment and marital status; dependent children; type of accommodation; and offending history

1 For further information see the Australian Institute of Criminology website at: <www.aic.gov.au/research/projects/00015.html>.

2 Data collectors at each site are responsible for data collection. These include: Sellenger Centre at Edith Cowan University, Hauritz and Associates Pty Ltd, Forsythe Consultants Pty Ltd, Walsh and Associates Pty Ltd, and O'Reilly's Consultancy Services. New South Wales, Victoria, Queensland and Northern Territory Police, Western Australia and South Australia Police Service all provide generous 'in-kind' assistance to the project, especially police and auxiliary staff at the local sites. Neither the collectors nor the police services bear any responsibility for the analyses or interpretations presented here.

- information about the prevalence of drug use among detainees, including individual drug types, and single and multiple drug use, assessed by both urinalysis and self-report:
  - » urinalysis results for six drug categories (cannabis, opiates, methadone, cocaine, amphetamines and benzodiazepines)
  - » self-reported drug use in the 30 days and 12 months preceding arrest, and 'ever', for eight drug categories (amphetamines, cannabis, cocaine, heroin, ecstasy, hallucinogens, street methadone and benzodiazepines)[3]
- information about various behavioural characteristics (e.g. age of initiation of drug use) and attitudes of the drug users in the sample (self-report)
- information about various socio-demographic factors associated with specific drug types and single and multiple drug usage
- information about market dynamics, such as the use of cash or other means to obtain various types of drugs; ways of making contact with dealers; and perceived risks of selling or buying various drugs (self-report)
- information about the associations between illicit drug use and criminal behaviour (urinalysis and self-report)
- changes in the drug use patterns of Queensland detainees over time (urinalysis and self-report).

Where possible, the findings have also been compared with data from drugs research that uses sources other than watch-house detainees. Sources include:

- the Australian Institute of Health and Welfare (AIHW), through the 2004 National Drug Strategy Household Survey (NDSHS)
- the CMC and the Queensland Alcohol and Drug Research and Education Centre (QADREC), through the Prevalence of Alcohol and Drug Use in Emergency Departments (PADIE) project
- the National Drug and Research Council (NDARC), through the Illicit Drug Reporting System (IDRS).

Although DUMA data are collected quarterly, the quarters were collapsed into 12-month periods for this report. Each 12-month period included the third and fourth quarters of one year (July–December) and the first and second quarters of the next (January–June). Annual data are provided for:

- 1999–2000
- 2000–01
- 2001–02
- 2002–03
- 2003–04
- 2004–05.

IS THERE CONCORDANCE BETWEEN THE URINALYSIS AND SELF-REPORT RESULTS?

Previous validity studies have established that people in high-risk populations tend to under-report their recent use of illegal drugs. For example, in a sample of 407 juvenile detainees interviewed within 48 hours of detention, Mieczkowski, Newel and Wraight (1998) found that 25.3 per cent of respondents reported having used cannabis and 0.9 per cent reported having used cocaine in the preceding three days; urinalysis results revealed that the actual rate of cannabis use was 34.8 per cent and of cocaine use 7.1 per cent. Similar results were reported by Feucht, Stephens and Walker (1994).

3 DUMA distinguishes between legal and illegal benzodiazepines.

On the other hand, mixed support for under-reporting of drug use was found by Wislar and Fendrich (2000). Their study included 3048 juvenile arrestees and detainees who were asked to provide information on their use of cannabis and cocaine over the preceding three days, and to provide a urine specimen for analysis. Results revealed high concordance between self-reported use of cannabis and urinalysis results (31.0% and 31.4% respectively) but low concordance for cocaine (self-report 2.8%; urinalysis 7.3%). It could be that the level of self-disclosure is a function of drug type. For example, respondents may be more truthful about their use of softer drugs, such as cannabis, than about harder drugs such as cocaine.

To assess the validity of the self-report data in this study, comparisons were made between the objective urinalysis results and the subjective self-reported drug use in the preceding 48 hours — for cannabis, heroin, amphetamines and MDMA (ecstasy). Using a 48-hour window allows the test to detect the presence of drugs in the system, and overcomes the influences of memory decay and memory reconstruction — which are problems often associated with self-reports of behaviour (Whitley 1996). By comparing these two drug data collection techniques, data triangulation is achieved and convergent validity can be sought (Dietze 2003).

We used the kappa statistic to measure the correspondence between self-reported drug use and the urinalysis. The kappa statistic is an adjusted measure of concordance, and is bound by 1 and –1 (1 = perfect agreement between the two measures; 0 = no agreement between the two measures; and a negative kappa means that there is less agreement than would be expected by chance, given the marginal distribution of ratings). According to Landis and Koch (1977), a kappa value of less than 0.40 represents poor agreement, a value between 0.40 and 0.74 represents good agreement, and a value greater than 0.75 represents excellent agreement.

For the DUMA sample, the kappa statistic was 0.41 for cannabis, 0.56 for heroin, 0.50 for amphetamines and 0.47 for MDMA (ecstasy). As this did not demonstrate perfect agreement, it was evident that there were some minor discrepancies between self-reported drug use and the urinalysis results. There are several possible reasons for this:

- False negative urine tests can occur.
- Some detainees may have miscalculated the time since they consumed the drug.
- Some detainees may have a fast metabolism.
- Some detainees may have consumed sufficient fluids to mask the drug.
- The drug consumed may simply not have been what the detainee thought it was. (McGregor & Makkai 2003)

Overall, however, the concordance between self-reported drug use in the preceding 48 hours and the urinalysis results for each drug type was good. This suggests that the self-report data are reliable and provide a reasonably accurate depiction of drug use among Queensland detainees. The acceptable concordance rates are probably due to the methods used by the AIC in its data collection process. Self-reports of criminal activity (including drug use) are generally considered to be reliable when information is collected under non-threatening conditions (Anglin, Hser & Chou 1993; Junger-Tas & Marshall 1999). The AIC ensures a non-threatening environment by guaranteeing confidentiality and anonymity, seeking informed consent and rigorously training the interviewers.

WHAT ARE THE LIMITATIONS OF THE DATA?

The findings in this report should be interpreted in light of the following cautionary notes:

- The total sample size varies slightly between analyses, due to some missing data.
- Self-report measures are susceptible to problems of reliability, as noted above.
  - » Like any survey participants, drug users may provide information that is selectively offered or manipulated for self-serving purposes (Gossop et al. 2005).
  - » There may be problems with self-disclosure of personal information such as illicit drug use at the time of arrest.

  - » There is the risk that participants are unable to accurately recall information, especially if they have consumed drugs.
- Gender differences have been examined on all variables of interest. However, these findings must be interpreted with caution, because gender differences may occur in self-disclosure. For example, a meta-analysis of 205 studies involving 23 702 participants found that women tended to disclose sensitive information slightly more than men (Dindia & Allen 1992).
- The sample under investigation consisted of people detained by police. Given that this sample is not representative of the general population, conclusions relating to criminal activity and illegal drug use cannot be generalised to other populations (e.g. juvenile arrestees). Furthermore, the extent to which observed changes highlighted in this report reflect changes in the drug user population cannot be determined; neither can it be determined whether the changes are linked to changes in police activity (Casavant & Collin 2001).
- The geographic areas in which the sample of detainees was selected were limited, and may not be representative of watch-houses in other communities or geographic areas.
- Due to financial constraints prohibiting 24-hour coverage of the watch-houses, not all detainees were included in DUMA. The sample under investigation may, therefore, not represent a random sample of people detained by police. Makkai (2001) found that the type of offence with which detainees were charged varied with the time of day or night.
- The results presented in this report may under-represent the strength of the relationship between illicit drug use and crime. It could be that those detainees who did not report drug use or did not test positive to the urinalysis were actually in the watch-house because of irritability associated with the withdrawal symptoms of some drugs.
- Comparisons between age groups need to be considered in light of the maturation effect, which suggests that changes in the patterns of drug use and criminal activity can be partly explained as a function of age (see Farrington & Coid 2003; Kandel & Logan 1984).

2

Socio-demographic profile of a sample of watch-house detainees (1999–2000 to 2004–05)

Almost 4000 watch-house detainees in Queensland, New South Wales, Western Australia and South Australia participated in the DUMA research program in 2004–05. Similar numbers around the country have participated in the program each year since 1999–2000.

In addition to the valuable information about drug use among detainees, which is presented in later chapters of this report, the DUMA sample provides an ideal opportunity to (a) profile the social and demographic characteristics of watch-house detainees, (b) determine whether there have been any meaningful changes in these profiles since data collection began in 2000–01, and (c) make interstate comparisons.

Included in the profile presented in this chapter is information about detainees' gender, age, Indigenous status, marital status, number of dependent children, highest level of education, sources of income, employment status and accommodation.

Also included in this chapter is a profile of the detainees' current and prior offence histories and an insight into their gambling activities.

GENDER

Over 1000 Queensland watch-house detainees participated in the DUMA research program in 2004–05 (n = 1191). Similar numbers participated in the earlier data collection periods.[4]

Figure 2.1 (facing page) shows the proportions of males and females in the Queensland sample during the six-year data collection period analysed in this report. About 85 per cent of the detainees were male. This profile is typical of offenders within the criminal justice system (see, for example, the statistics provided by ABS 2005).[5]

There were no statistically significant changes in gender representation through the collection period, although there was a slightly higher percentage of female detainees in 2004–05 than in previous years. Similarly, the over-representation of males was consistent across states (see Figure 2.2, facing page).

AGE

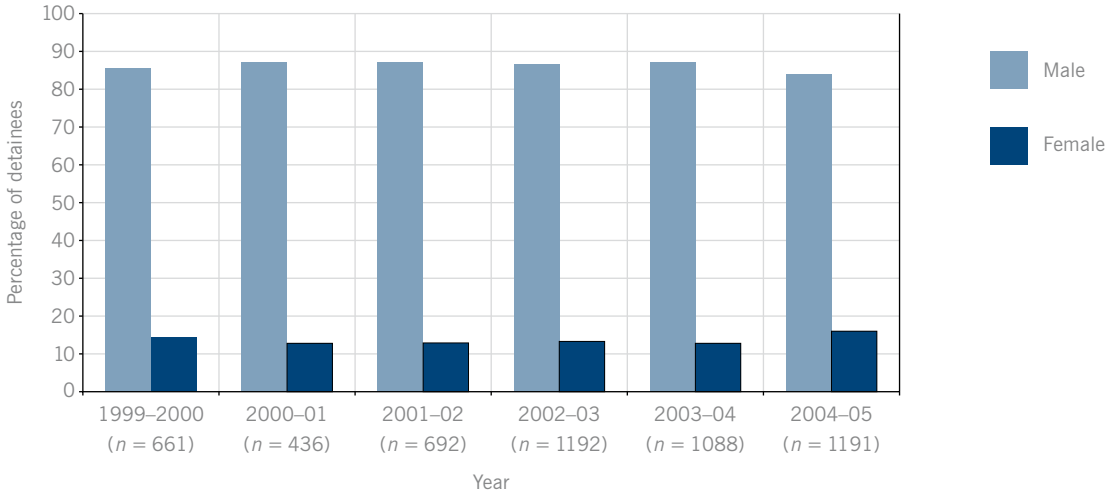
Table 2.1 (facing page) shows the mean age of Queensland detainees in 2004–05.

- The mean age of male and female detainees was almost the same (males, 30.6 years; females, 30.7 years), although the age range for males (17–80 years) was larger than for females (17–64 years).
- Half (51%) of the detainees were aged between 18 and 29 years.
- More than a quarter of detainees were 36 years or older (males, 28.8%; females 26.6%).
- A very small proportion of the detainees were aged 17 years or younger.

4 The following numbers of Queensland detainees participated in the DUMA program each year: 1999–2000, n = 661; 2000–01, n = 436; 2001–02 n = 692; 2002–03 n = 1192; 2002–04 n = 1088; 2004–05 n = 1191.

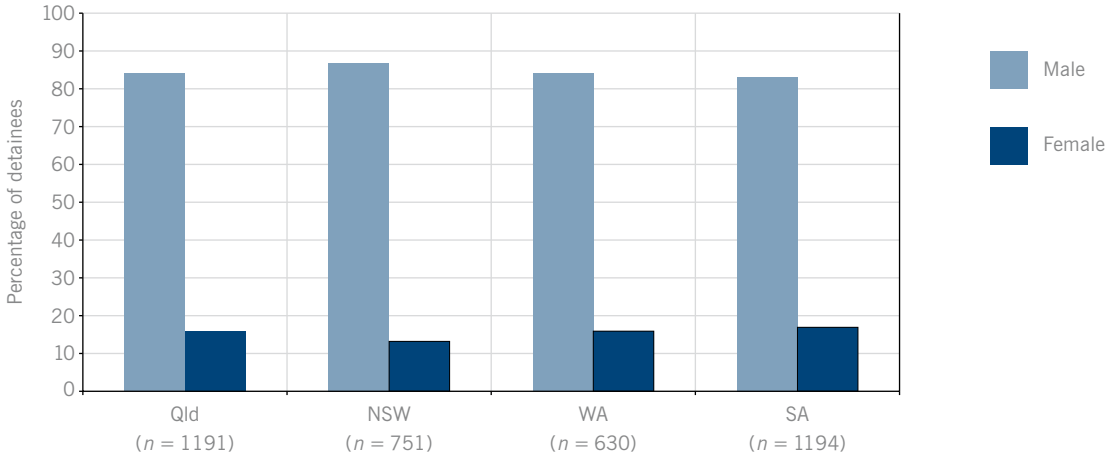
5 Imprisonment rates for males have been shown to be 297 per 100 000 and for females 21 per 100 000 (ABS 2005).

Figure 2.1: Percentage of Queensland detainees by gender, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].
Note: χ^2 = n.s.

Figure 2.2: Percentage of detainees by gender and by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Table 2.1: Age of Queensland detainees, 2004–05

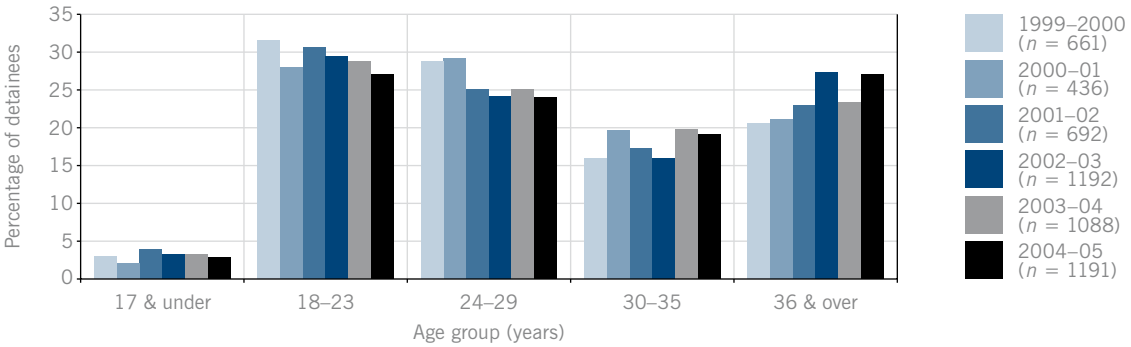
	Percentage (and number) in age group						
	Mean (SD)	17 years and under	18–23 years	24–29 years	30–35 years	36 years and older	Total
Males	30.6 (10.6)	3.1 (31)	27.9 (279)	23.4 (234)	19.0 (190)	26.6 (266)	100 (1000)
Females	30.7 (8.7)	2.1 (4)	22.5 (43)	27.2 (52)	19.4 (37)	28.8 (55)	100 (191)

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].
Note: n = 1191.

Figure 2.3 presents the average or mean age of Queensland detainees across the six-year DUMA data collection period. It shows the following:

- The number of detainees aged 17 years or less has remained fairly steady (at about 3%) since 1999–2000.
- The number of detainees aged 18–23 years declined subtly from 1999–2000 (31.6%) to 2004–05 (27.0%); a similar pattern was observed for detainees aged 24–29 years (1999–2000, 28.7%; 2004–05, 24.0%).
- The number of detainees aged 30–35 years increased from 1999–2000 (16.0%) to 2004–05 (19.1%), as did the number of detainees aged 36 years and older (1999–2000, 20.6%; 2004–05, 27.0%).

Figure 2.3: Age of Queensland detainees by year, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Table 2.2 compares the age of Queensland detainees with those from New South Wales, Western Australia and South Australia. It shows that:

- Queensland (2.9%) and New South Wales (14.4%) were the only states with detainees aged 17 years or less.
- New South Wales (24.9%) had fewer detainees aged 18–35 years than Queensland (27.0%), South Australia (28.7%) and Western Australia (30.8%).
- Queensland had the highest number of detainees aged 36 years and older (27%).

Table 2.2: Age of detainees by state, 2004–05

State	Percentage (and number) in age group						
	Mean (SD)	17 years and under	18–23 years	24–29 years	30–35 years	36 years and older	Total
Qld	30.6 (10.3)	2.9 (35)	27.0 (322)	24.0 (286)	19.1 (227)	27.0 (321)	100 (1191)
NSW	28.5 (10.7)	14.4 (108)	24.9 (187)	20.2 (152)	15.3 (115)	25.2 (189)	100 (751)
WA	29.7 (9.3)	0.0 (0)	30.8 (194)	24.9 (157)	21.1 (133)	23.2 (146)	100 (630)
SA	29.9 (8.7)	0.0 (0)	28.7 (342)	24.8 (296)	21.5 (257)	25.0 (298)	100 (1193)

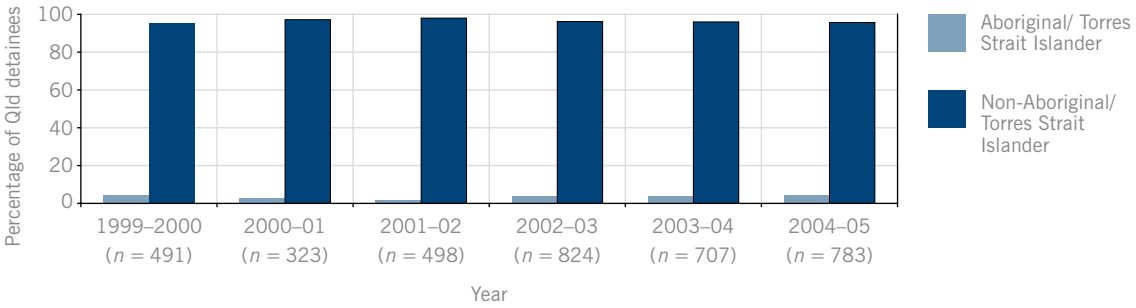
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].
Note: $n = 3765$

INDIGENOUS STATUS

Figure 2.4 shows the number of Queensland detainees from 1999–2000 to 2004–05 who identified as Aboriginal or Torres Strait Islander. This proportion was less than 5 per cent each year.

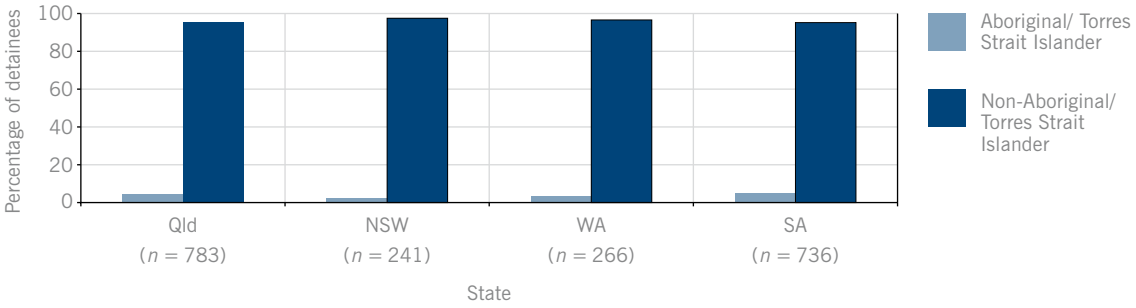
Figure 2.5 compares the Indigenous status of detainees in 2004–05 by state. While Queensland (4.3%) and South Australia (4.8%) appeared to have slightly higher proportions of detainees identifying as Aboriginal or Torres Strait Islander than New South Wales (2.5%) and Western Australia (3.4%), these differences were not statistically significant. According to the Australian Bureau of Statistics (1998), the estimated residential proportion of Aboriginal and Torres Strait Islander peoples in state populations on 30 June 1996 was 1.8 per cent for New South Wales, 3.1 per cent for Queensland, 1.5 per cent for South Australia and 3.2 per cent for Western Australia. This means that the proportions of detainees identifying as Aboriginal or Torres Strait Islander in these watch-houses across all states were marginally above the estimated proportions of the general population, and slightly more so in South Australia.

Figure 2.4: Indigenous status of Queensland detainees by year, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 2.5: Indigenous status of detainees by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: χ^2 = n.s.

MARITAL STATUS

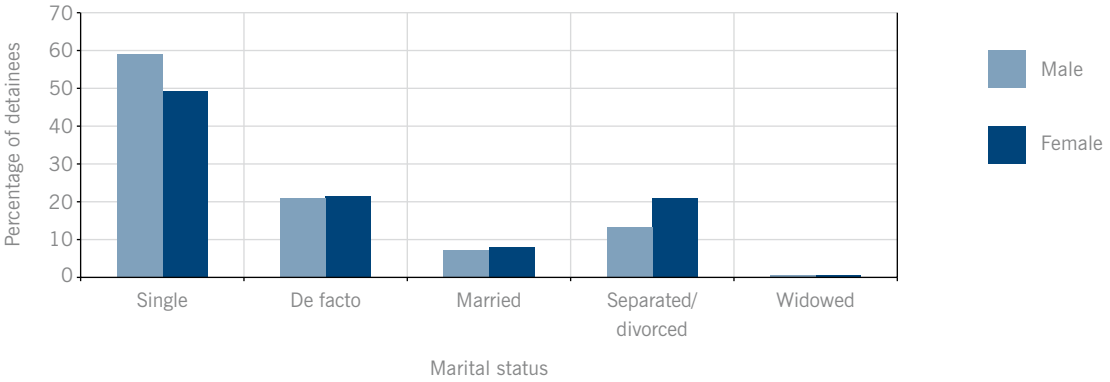
Figure 2.6 shows the marital status of Queensland detainees by gender in 2004–05.

- About half of the female detainees (49.2%) and slightly more than half of the male detainees (58.1%) were single.
- Less than a third (28.4%) of the detainees were either married or in a de facto relationship.
- More females (20.9%) than males (13.2%) were separated or divorced.

Figure 2.7 provides information about the marital status of Queensland detainees from 1999–2000 to 2004–05.

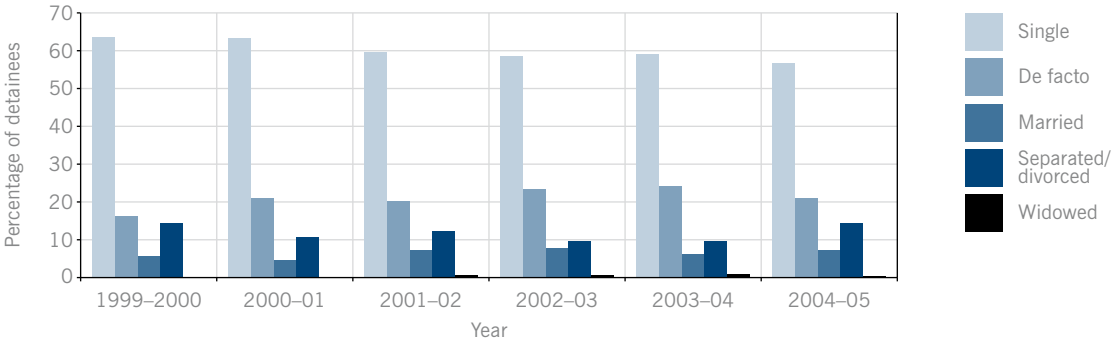
- More than half of the detainees (55%) between 1999–2000 and 2004–05 stated that they were single.
- During this period there was a general decline, albeit subtle, in the number of single detainees (62.5% in 1999–2000; 56.7% in 2004–05).
- The number of detainees who stated that they were in a de facto relationship showed a slight increase between 1999–2000 (16.2%) and 2005 (21.1%).

Figure 2.6: Marital status of Queensland detainees by gender, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].
Note: *n* = 1191

Figure 2.7: Marital status of Queensland detainees by year, 1999–2000 to 2004–05

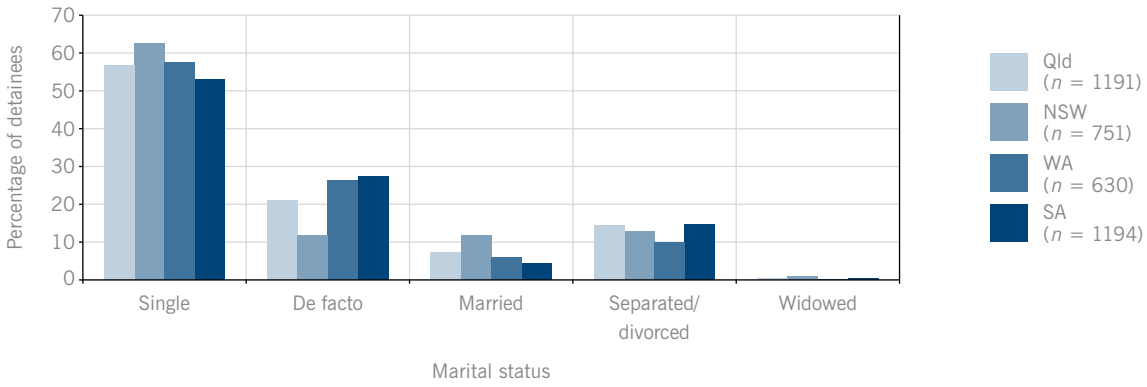


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].
Note: *n* = 5260

Figure 2.8 compares the marital status of detainees across states.

- As in Queensland (56.7%), more than half of detainees from New South Wales (62.6%), Western Australia (57.5%) and South Australia (53.1%) were single.

Figure 2.8: Marital status of detainees by state, 2004–05

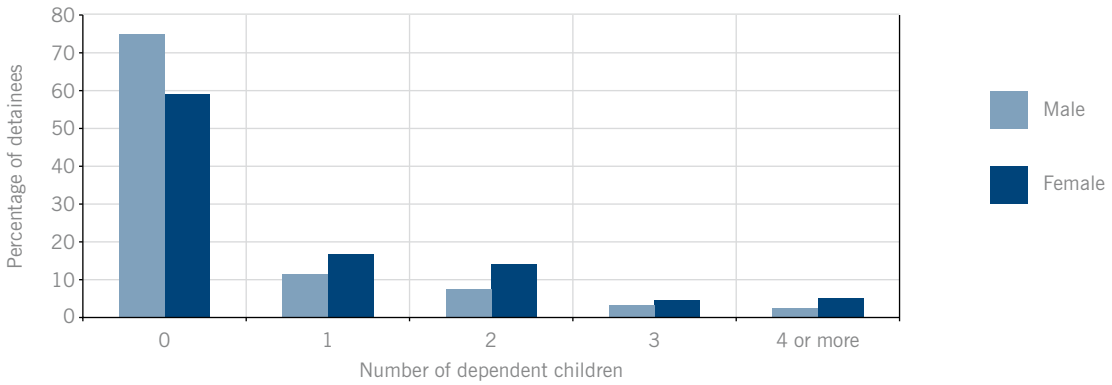


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

DEPENDENT CHILDREN

Queensland detainees were asked if they had any dependent children. In 2004–05, 27.5 per cent reported that they had at least one dependent child. However, as Figure 2.9 shows, significantly more female than male detainees had dependent children.

Figure 2.9: Number of dependent children by gender of detainees, Queensland 2004–05



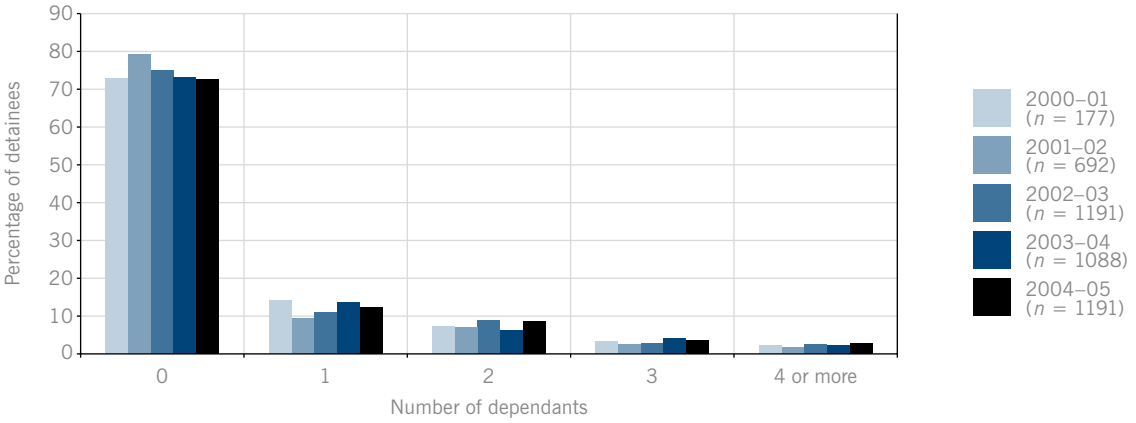
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:
a $n = 1191$
b Gender difference, t-test = $p < 001$.

No changes in this profile were detected across the years (see Figure 2.10, next page).

Figure 2.11 (next page) compares the number of dependent children of detainees by state. There are similarities between Queensland, New South Wales and Western Australia. However, South Australia differed from the other states, with significantly more detainees having dependent children (F test = $p < .001$).

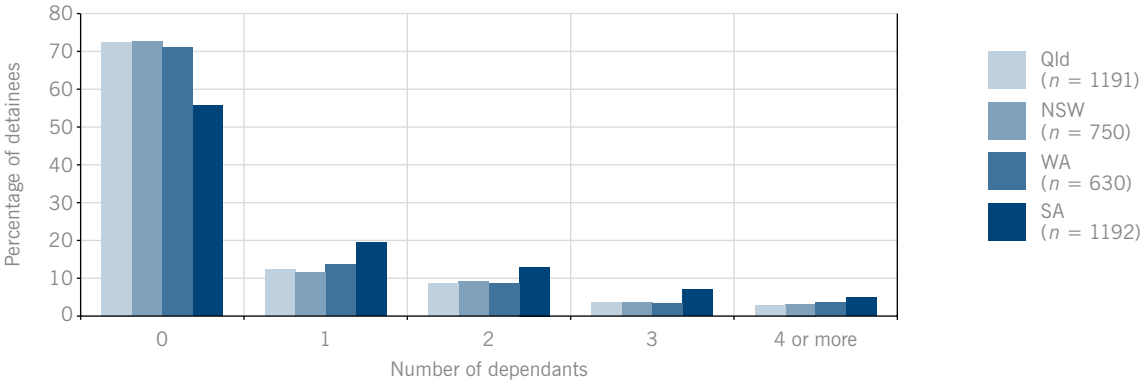
Figure 2.10: Number of dependent children of Queensland detainees, 2000–01 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Note: Data not available for 1999.

Figure 2.11: Number of dependent children of detainees by state, 2004–2005



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

EDUCATIONAL ATTAINMENTS

Table 2.3 and Figure 2.12 (facing page) show that the majority of detainees (46.2% of males; 43.8% of females) were not educated beyond Year 10. Table 2.3 demonstrates this pattern consistently across the years 1999–2000 to 2004–05.

Table 2.4 (facing page) compares the level of education of detainees in Queensland with those in other Australian states.

- Queensland detainees had a slightly higher education level than detainees from New South Wales, Western Australia and South Australia.
- Queensland and South Australia had fewer detainees with low levels of education (i.e. to Year 10 or less [45.8%] or to Year 11 or 12 [17.3%]) than the other states.
- Queensland had the highest proportion of detainees who had completed TAFE or university education (28.2%).

Figure 2.12 (facing page) shows that in 2004–05 there were some gender differences in the educational achievements of detainees:

- More males than females had completed TAFE or university (29.2% of males; 22.7% of females). Conversely, more females than males had begun but not completed TAFE or university studies (14.6% of females; 7.7% of males).
- More males than females attained Year 10 or less (46.2% of males; 43.8% of females).

Table 2.3: Highest level of education of Queensland detainees, 1999–2000 to 2004–05

Highest level of education attained	Percentage (and no.) of detainees, by year					
	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05
Year 10 or less	41.3 (265)	46.0 (200)	60.3 (412)	54.1 (627)	53.2 (565)	45.8 (527)
Year 11 or 12	12.0 (77)	14.5 (62)	27.4 (187)	20.2 (234)	21.4 (227)	17.3 (199)
Incomplete TAFE/ university	9.0 (58)	9.4 (40)	2.6 (18)	6.3 (73)	7.3 (78)	8.8 (101)
Complete TAFE/ university	37.7 (242)	29.6 (127)	9.7 (66)	19.4 (224)	18.1 (192)	28.2 (324)
Total	100 (642)	100 (429)	100 (683)	100 (1158)	100 (1062)	100 (1151)

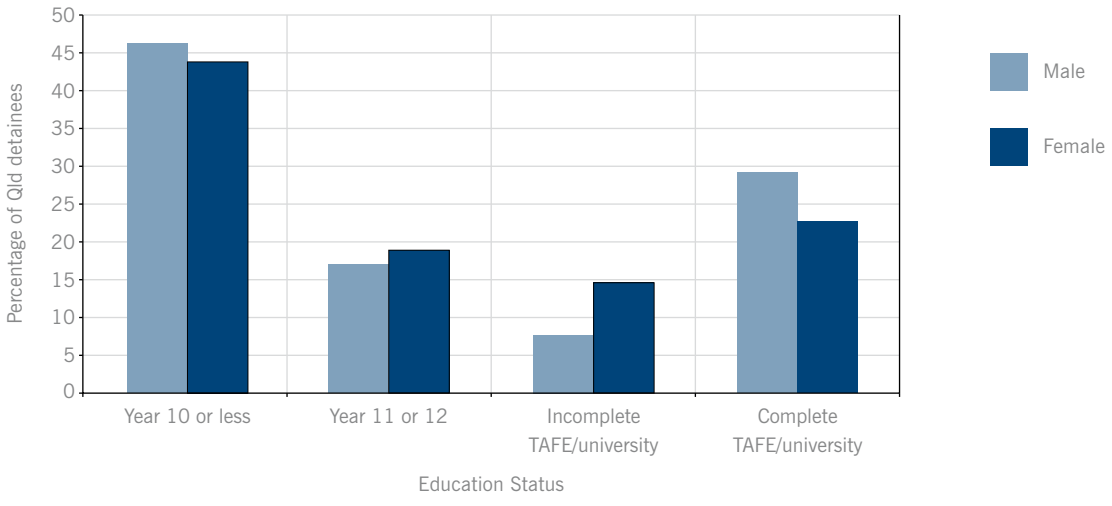
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Table 2.4: Highest level of education of detainees by state, 2004–05

Highest level of education attained	Percentage (and no.) of detainees, by state			
	Qld	NSW	WA	SA
Year 10 or less	45.8 (527)	53.8 (348)	55.3 (336)	45.2 (522)
Year 11 or 12	17.3 (199)	19.5 (126)	19.6 (119)	22.3 (258)
Incomplete TAFE/ university	8.8 (101)	5.9 (38)	9.5 (58)	9.1 (105)
Complete TAFE/ university	28.2 (324)	20.8 (135)	15.6 (95)	23.4 (270)
Total	100 (1151)	100 (647)	100 (608)	100 (1155)

Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].
Note: *n* = 3561

Figure 2.12: Highest level of education of Queensland detainees by gender, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].
Note: *n* = 1151

INCOME

Table 2.5 summarises the Queensland detainees' sources of income for the 30 days preceding arrest, between 1999–2000 and 2004–05.

Bearing in mind that many participants nominated multiple sources of income (and that the sources identified will therefore exceed the total number of participants), the 2004–05 data showed:

- About two-thirds (60.4%) of the detainees were receiving income from welfare benefits from the government.
- About one-third were engaged in full-time work (31.0%) and about a quarter in part-time work (23.7%).
- Less than 10 per cent were receiving income from illegal sources such as shoplifting (7.2%) or illegal drugs (9.9%).
- Few (1.9%) were receiving income from prostitution.

However, there were some significant gender differences:

- More males (34.8%) than females (10.5%) were engaged in full-time work (χ^2 = p = .001). Similarly, more males (25.1%) than females (16%) were engaged in part-time work (χ^2 = p < .003).
- More females (75.1%) than males (57.7%) were receiving welfare benefits (χ^2 = p < 001).
- More females than males were receiving an income from prostitution (females, 8.8%; males, 0.6%; χ^2 = p < .001) and shoplifting (females, 9.4%; males, 6.8%; χ^2 = p < .05).

Table 2.5: Source of income in preceding 30 days for Queensland detainees, 1999–2000 to 2004–05

Year	Source of income — percentage (and number) of detainees							
	Friends/ family	Welfare/ govt	Full-time	Part-time	Prosti- tution	Shop- lifting	Illegal drugs	Other illegal activities
1999–2000	17.3 (113)	65.9 (435)	24.0 (158)	20.2 (133)	2.0 (13)	N/A	5.6 (37)	11.3 (74)
2000–01	22.7 (97)	69.3 (298)	20.9 (90)	35.0 (151)	2.1 (9)	6.3 (11)	7.2 (31)	14.7 (63)
2001–02	30.4 (210)	70.1 (484)	22.6 (156)	23.3 (161)	2.0 (14)	6.2 (43)	12.5 (86)	12.5 (86)
2002–03	28.9 (342)	67.3 (797)	24.3 (288)	19.2 (227)	2.6 (31)	8.6 (102)	14.6 (172)	17.9 (211)
2003–04	29.0 (309)	62.5 (666)	28.0 (298)	22.2 (236)	2.1 (22)	8.5 (90)	12.9 (136)	14.5 (153)
2004–05	28.4 (329)	60.4 (699)	31.0 (359)	23.7 (274)	1.9 (22)	7.2 (83)	13.0 (150)	9.9 (114)
Males:								
	29.1 (284)	57.7 (563)	34.8 (340)	25.1 (245)	0.6 (6)	6.8 (66)	12.8 (125)	10.2 (99)
Females:								
	24.9 (45)	75.1 (136)	10.5 (19)	16 (29)	8.8 (16)	9.4 (17)	13.8 (25)	8.3 (15)

Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:

n = 9063

Participants nominated multiple sources of income, therefore income sources exceed the number of participants and will add up to more than 100%.

Table 2.5 shows the sources of Queensland detainees' income from 1999–2000 to 2004–05:

- Welfare benefits were consistently shown to be the main source of income for most detainees during this period.
- The highest proportion of detainees working full-time work was recorded in 2004–05 (31%).
- The proportion of detainees reporting an income from illegal drugs (14.6%) and other illegal activities (17.9%) was highest in 2002–03. The lowest figure for illegal drugs (5.6%) was recorded in 1999–2000, and the lowest for other illegal activities (9.9%) in 2004–05.

Table 2.6 compares detainees' sources of income in the 30 days preceding arrest, by state, in 2004–05:

- New South Wales had the lowest proportions of detainees receiving an income from welfare benefits (44.1%), prostitution (0.6%), illegal drugs (4.2%) and other illegal activities (3.9%). Conversely, New South Wales recorded the highest rates of detainees working full-time (35.7%) and part-time (26.4%).
- Queensland detainees demonstrated similar levels of income from friends or family, part-time work, prostitution, shoplifting, illegal drugs and other illegal activities as detainees from Western Australia and South Australia.

Table 2.6: Source of income in preceding 30 days by state, 2004–2005

State	Source of income — percentage (and number) of detainees							
	Friends/ family	Welfare/ govt	Full-time	Part-time	Prosti-tution	Shop-lifting	Illegal drugs	Other illegal activities
Qld	28.4 (329)	60.4 (699)	31.0 (359)	23.7 (274)	1.9 (22)	7.2 (83)	13.0 (150)	9.9 (114)
NSW	35.3 (243)	44.1 (303)	35.7 (245)	26.4 (181)	0.6 (4)	6.6 (45)	4.2 (29)	3.9 (27)
WA	29.7 (181)	67.7 (413)	26.6 (162)	23.6 (144)	1.6 (10)	7.1 (43)	12.2 (74)	9.7 (59)
SA	26.2 (297)	73.2 (830)	22.4 (254)	24.1 (273)	1.8 (20)	7.4 (84)	11.7 (132)	10.8 (123)

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

n = 6206

Participants nominated multiple sources of income, therefore income sources exceed the number of participants and will add up to more than 100%.

EMPLOYMENT

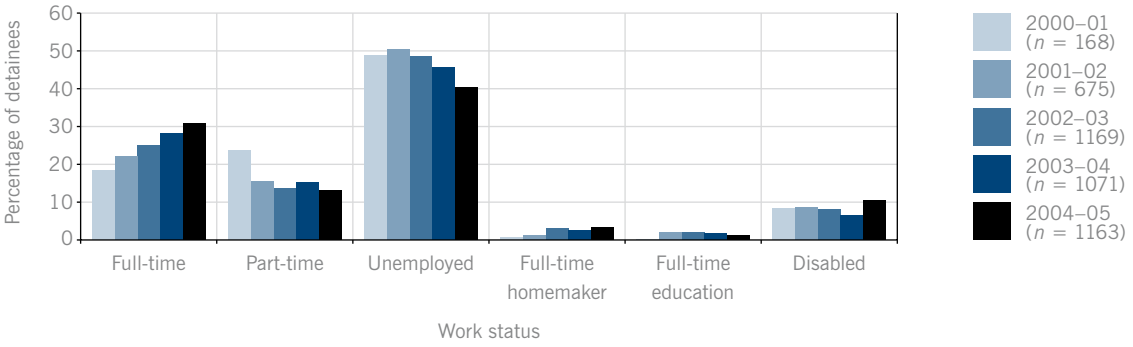
Figure 2.13 shows the employment status of Queensland detainees from 2000–01 to 2004–05:

- The overwhelming majority of detainees were unemployed, but the number of unemployed detainees declined slightly between 2000–01 (46.4%) and 2004–05 (40.2%).
- During this period there was a corresponding increase in the number of detainees engaged in full-time work (18.5% in 2000–01; 30.8% in 2004–05). There was a corresponding downward trend in the number of detainees engaged in part-time work from 2001–02 (23.8%) to 2004–05 (13.1%).

Table 2.7 shows Queensland detainees' work status by gender and age in 2004–05. It reveals:

- More females (50.3%) than males (39.4%) were unemployed.
- About twice as many males (48%) as females (22.5%) were engaged in full-time or part-time work.
- More females (17.1%) than males (0.7%) were full-time homemakers.
- Most male detainees aged 17 years or younger (64.5%) were unemployed.
- Many of the detainees aged 36 years and older had a disability, more so among male (23.6%) than among female detainees (18.9%).

Figure 2.13: Employment status of Queensland detainees, 2000–01 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].
Note: No data were available for 1999.

Table 2.7: Queensland detainees' work status by gender and age, 2004–05

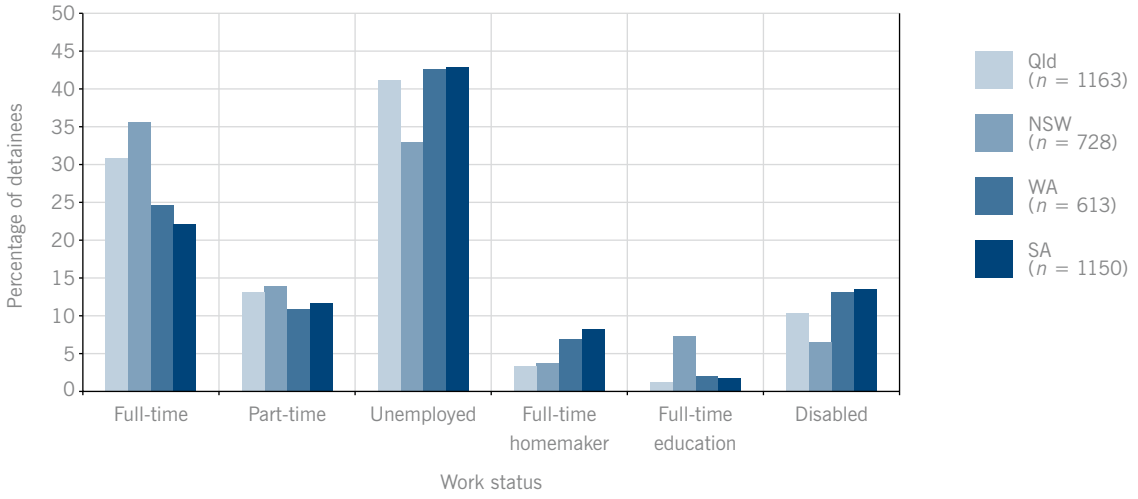
Work status	Percentage reporting work status by gender and age									
	Male					Female				
	<17	18–23	24–29	30–35	36+	<17	18–23	24–29	30–35	36+
	n = 31	*n* = 276	*n* = 231	*n* = 188	*n* = 250	*n* = 4	*n* = 42	*n* = 51	*n* = 37	*n* = 53
Full-time	19.4	35.5	34.6	36.7	34.8	0.0	9.5	5.9	10.8	13.2
Part-time	9.7	15.6	12.1	13.8	11.2	0.0	14.3	17.6	10.8	9.4
Unemployed	64.5	43.1	41.1	40.4	30.0	100.0	59.6	55.0	35.1	45.3
Full-time homemaker	0.0	0.0	2.2	0.5	0.4	0.0	11.9	15.7	35.1	11.3
Full-time education	6.5	1.8	1.3	0.5	0.0	0.0	2.4	0.0	2.7	1.9
Disabled	0.0	4.0	8.7	8.0	23.6	0.0	2.4	5.9	5.4	18.9
Total	100	100	100	100	100	100	100	100	100	100

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].
Note: *n* = 1163

Figure 2.14 compares the employment status of Queensland detainees in 2004–05 with other states.

- New South Wales and Queensland detainees had higher rates of full-time work (NSW, 35.6%; Qld, 30.8%) and part-time work (NSW, 13.9%; Qld, 13.1%) than Western Australia (full-time, 24.6%; part-time, 10.9%) and South Australia (full-time, 22.1%; part-time, 11.7%).
- The rate of unemployment among New South Wales detainees (33.0%) was much lower than in Queensland (41.2%), Western Australia (42.6%) and South Australia (42.9%).
- More detainees in New South Wales (7.3%) were enrolled in full-time education than in Queensland (1.2%), South Australia (1.7%) and Western Australia (2%).

Figure 2.14: Work status of detainees by state, 2004–2005



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

ACCOMMODATION

Table 2.8 (next page) shows where Queensland detainees were residing during the 30 days before their arrest (1999–2000 to 2004–05).

For 2004–05 only:

- About 85 per cent of the detainees reported residing either in a private house or apartment (45%) or in someone else's house or apartment (39.9%).
- No more than 1 per cent were incarcerated (1%), in a treatment facility (0.8%), or in some form of emergency accommodation (0.5%).

From 1999–2000 to 2004–05:

- There was a relatively stable pattern in the number of detainees residing in a shelter, an incarceration facility or a treatment facility.
- There was a very subtle increase in the number of detainees who resided on the street or had no fixed address (4.5% in 1999–2000; 6.8% in 2004–05).

Table 2.9 (next page) compares accommodation type for the 30 days before detainment by state in 2004–05:

- South Australia (51.7%) had the highest proportion of detainees residing at a private house or apartment in the 30 days preceding arrest.
- South Australia (36.5%) and Queensland (39.9%) recorded much lower proportions of detainees residing at someone else's house or apartment than New South Wales (51.8%) and Western Australia (48.2%).
- New South Wales (1.5%) had the lowest proportion of detainees residing on the street or with no fixed address. Queensland (6.8%), closely followed by Western Australia (6.5%), had the highest proportions of detainees residing on the street or with no fixed address.

Table 2.8: Queensland detainees' accommodation type for preceding 30 days, 1999–2000 to 2004–05

Accommodation for preceding 30 days	Percentage (and no.) in accommodation type, by year					
	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05
Private house/apartment	56.9 (376)	49.3 (215)	46.2 (319)	46.0 (548)	44.3 (482)	45.0 (536)
Someone else's house/ apartment	29 (192)	36.2 (158)	38.2 (264)	39.4 (470)	42.3 (460)	39.9 (475)
Shelter	0.5 (3)	0.5 (2)	0.3 (2)	0.8 (10)	0.4 (4)	0.5 (6)
Incarceration facility/ halfway house	0.8 (5)	1.0 (4)	1.0 (7)	0.9 (10)	0.7 (7)	1.0 (12)
Treatment facility	1.1 (7)	1.4 (6)	1.6 (11)	1.5 (18)	0.7 (8)	0.8 (9)
Street/no fixed address	4.5 (30)	6.2 (27)	6.6 (46)	6.3 (75)	6.5 (71)	6.8 (81)
Other	7.3 (48)	5.5 (24)	6.1 (42)	5.0 (60)	5.1 (55)	6.0 (71)
Total	100 (661)	100 (436)	100 (691)	100 (1191)	100 (1087)	100 (1190)

Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Note: $n = 5256$

Table 2.9: Detainees' accommodation type for 30 days preceding arrest by state, 2004–05

Accommodation for preceding 30 days	Percentage (and no.) in accommodation type, by state			
	Qld	NSW	WA	SA
Private house/apartment	45.0 (536)	42.4 (317)	39.6 (249)	51.7 (616)
Someone else's house/ apartment	39.9 (475)	51.8 (387)	48.2 (303)	36.5 (435)
Shelter	0.5 (6)	0.9 (7)	1.0 (6)	1.7 (20)
Incarceration facility/halfway house	1.0 (12)	1.3 (10)	1.3 (8)	1.1 (13)
Treatment facility	0.8 (9)	0.1 (1)	0.0 (0)	0.2 (2)
Street/no fixed address	6.8 (81)	1.5 (11)	6.5 (41)	4.6 (55)
Other	6.0 (71)	1.9 (14)	3.3 (21)	4.2 (50)
Total	100 (1190)	100 (747)	100 (628)	100 (1191)

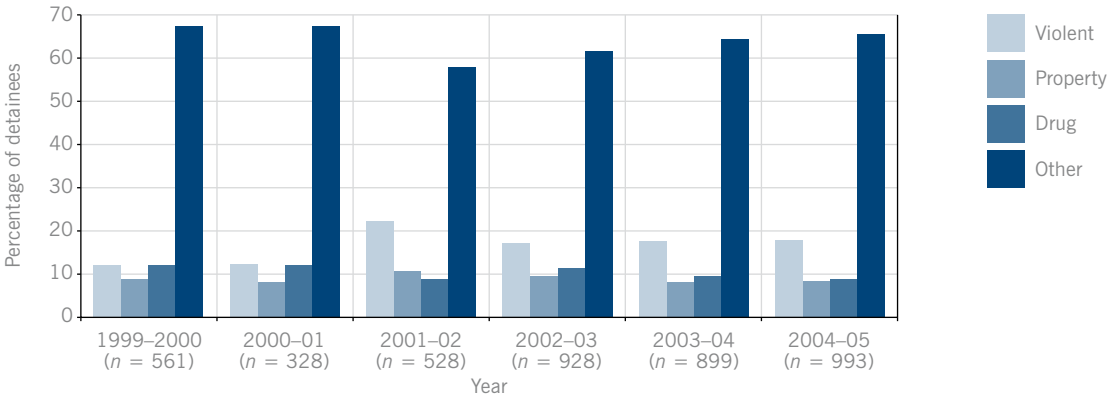
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

CRIMINAL HISTORIES AND OFFENCE PROFILES

Criminal offences were categorised as 'violent', 'property', 'drug' and 'other' (the Appendix provides a list of the offences included within these broad categories). Figure 2.15 shows the offences with which Queensland detainees were charged between 1999–2000 and 2004–05:[6]

- The overwhelming majority of detainees were charged with offences other than violent crimes, property offences or drug offences.
- The number of detainees charged with violent offences peaked in 2001–02 (21.8%).

Figure 2.15: Offences with which Queensland detainees were charged by year, 1999–2000 to 2004–05

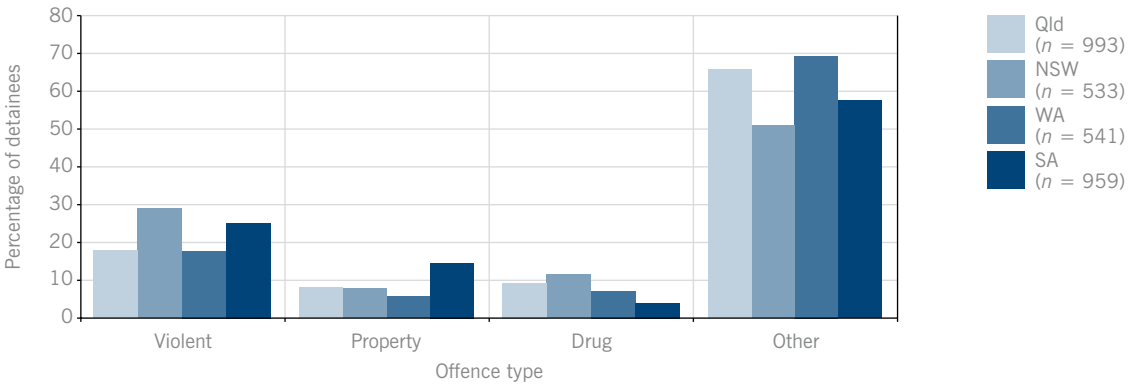


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 2.16 compares detainees' offences by state in 2004–05:

- Queensland detainees had the second-highest proportion of drug (9.3%) and 'other' offences (65.1%).
- New South Wales recorded the highest proportion of violent (29.6%) and drug offences (11.4%) and the lowest number of 'other' offences (50.8%).
- South Australia recorded the highest proportion of property offences (14%).

Figure 2.16: Offences with which detainees were charged by state, 2004–05



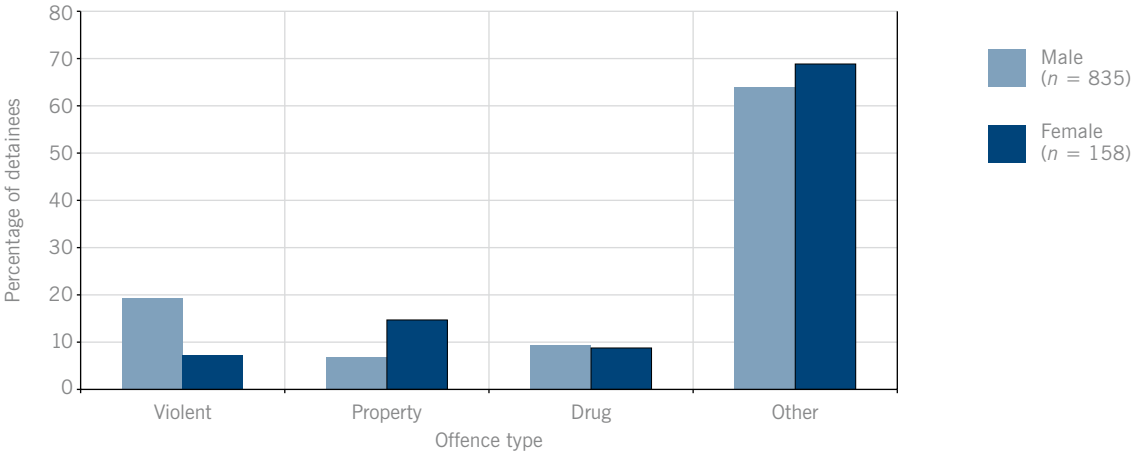
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

6 The Appendix lists the offences coded as violent, property, drug or other offences. In their review of the final draft of this report, AIC/DUMA researchers noted that the proportions of property offences reported in our results appeared to be significantly underestimated when compared with other DUMA studies. Although the data categories have been checked and appear to be correct, they should be interpreted with caution.

Figure 2.17 shows a gender breakdown of the types of offences with which Queensland detainees were charged in 2004–05.

- About one-fifth (19.4%) of male detainees and less than one-tenth (7.6%) of female detainees were charged with violent offences.
- Twice as many females (14.6%) as males (6.9%) were charged with property offences.

Figure 2.17: Offences with which Queensland detainees were charged by gender, 2004–05



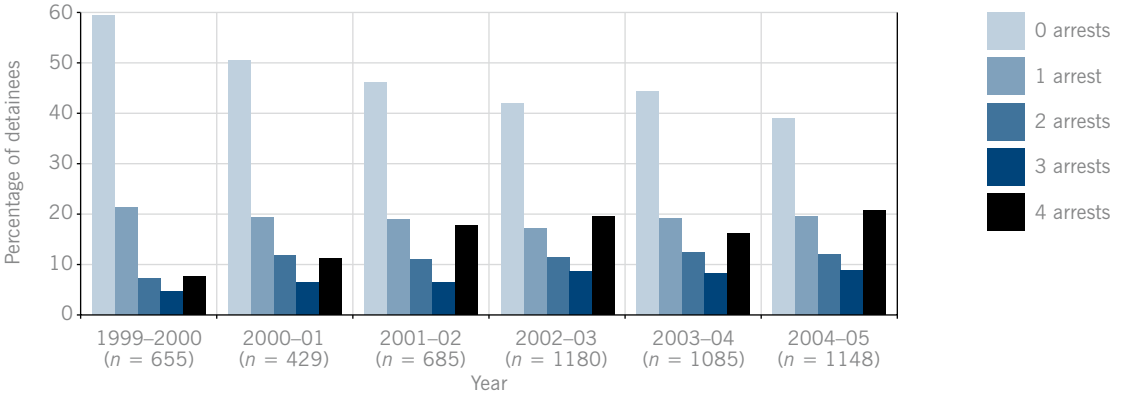
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Frequency of prior arrests

Figure 2.18 examines the frequency of arrests in the preceding 12 months among Queensland detainees from 1999–2000 to 2004–05. It shows:

- Since 1999–2000, there has been a decline in the number of detainees reporting zero prior arrests (1999–2000, 59.5%; 2004–05, 38.9%). This same pattern, albeit much more subtle, was also observed for detainees reporting one arrest (1999–2000, 21.5%, 2004–05, 19.7%). There was a corresponding upward trend in the number of detainees reporting four or more previous arrests (1999–2000, 7.5%; 2004–05, 20.5%).

Figure 2.18: Frequency of arrests in preceding 12 months for Queensland detainees, 1999–2000 to 2004–05



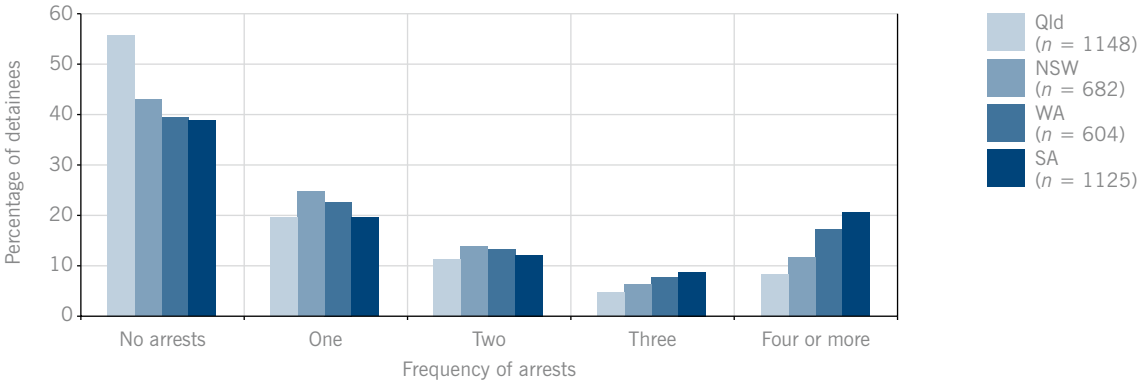
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 2.19 (facing page compares the frequency of arrests in the preceding 12 months by state, 2004–05.

- Queensland recorded the lowest proportion of detainees with no prior arrests (38.9%). Correspondingly, Queensland had the highest number of detainees reporting three prior arrests (8.7%) and, more noticeably, four or more prior arrests (20.5%).

- New South Wales detainees had a significantly lower mean number of prior arrests than Queensland, Western Australia and South Australia (NSW, 1.0; Qld, 2.2; WA, 2.2; SA, 2.0; F test = p < .003).

Figure 2.19: Frequency of arrests in preceding 12 months by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Frequency of prior arrests by various socio-demographic factors

Age and gender

Table 2.10 shows the number of times Queensland detainees reported that they had been arrested in the 12 months preceding their current arrest, by age and gender.

- About 40 per cent of the detainees reported that they had not been arrested at all in the preceding 12 months. For detainees aged 36 years and older, this proportion rose to more than half (males, 54.5%; females, 52.8%).
- The mean number of times detainees reported having been arrested in the preceding 12 months was 2.2 (SD = 3.4). Detainees aged 17 years or less had been arrested significantly more often than all other age groups, with an average of 5.1 times (cf. 18–23 years, 2.7 times; 24–29 years, 2.1 times; 30–35 years, 1.8 times; 36 years and over, 1.1 times; F test = p < .001). This is consistent with the finding of Nagin, Farrington and Moffit (1995) that criminal offending tends to peak in the mid to late teens. However, the data are likely to be skewed because of the small number of offenders in this age group.
- Gender differences were not detected in the average number of times detainees had been arrested in the past year.

Table 2.10: Frequency of arrests of Queensland detainees in preceding 12 months by age and gender, 2004–05

Frequency of arrests	Proportion reporting arrests in the 12 months preceding interview (%)									
	Males					Females				
	<17	18–23	24–29	30–35	36+	<17	18–23	24–29	30–35	36+
	n = 30	*n* = 272	*n* = 228	*n* = 182	*n* = 257	*n* = 4	*n* = 38	*n* = 48	*n* = 36	*n* = 53
0	20.0	30.9	36.0	36.3	54.5	25.0	18.4	39.6	38.9	52.8
1	13.3	17.3	18.9	26.4	20.2	0.0	26.3	14.6	25.0	11.3
2	6.7	13.2	12.3	12.6	10.1	0.0	28.9	10.4	11.1	9.4
3	10.0	10.7	13.2	7.1	4.3	0.0	10.5	8.3	11.1	3.8
4 or more	50.0	27.9	19.6	17.6	10.9	75.0	15.0	27.1	13.9	22.7
Total	100	100	100	100	100	100	100	100	100	100

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file]

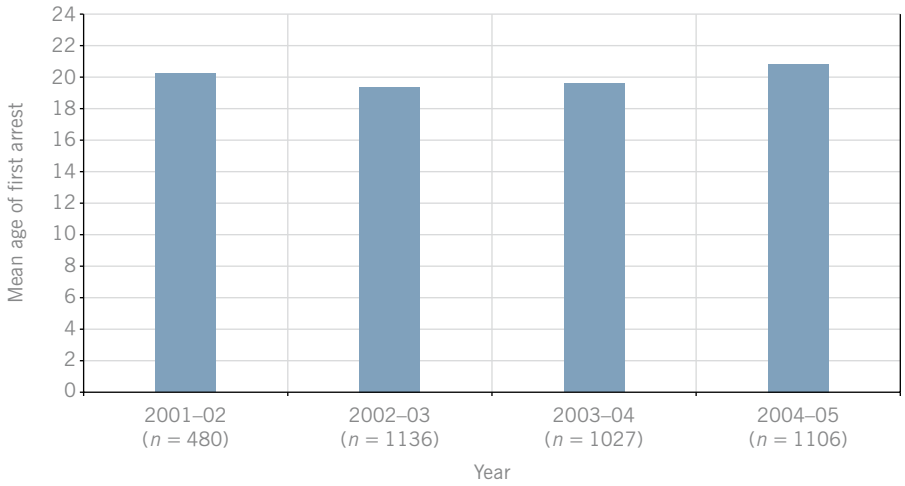
Note: *n* =1148

Age of first arrest

Figure 2.20 compares the mean ages of first arrest among Queensland detainees between 2001–02 and 2004–05:

- The mean age of first arrest among 2004–05 detainees (20.7 years) was significantly higher than in 2002–03 (19.4 years) and 2003–04 (19.6 years) (F test = $p < .005$).
- Compared with other states in this sample, the average age of first arrest of detainees from Queensland (20.7 years) and New South Wales (20.9 years) was significantly older than detainees from Western Australia (17.7 years) or South Australia (18.7 years) (F test = $p < .001$).
- Males were found to be significantly younger than females at the time of their first arrest (males, 20.3 years; females, 23.0 years; t-test = $p < .001$).

Figure 2.20: Queensland detainees' mean age of first arrest by year, 2001–02 to 2004–05



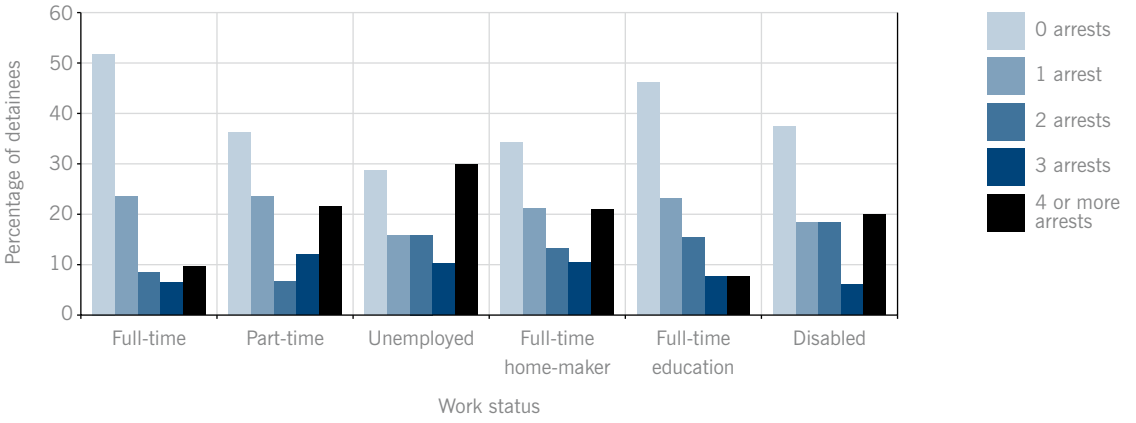
Source: Australian Institute of Criminology, DUMA collection, 2001–02 to 2004–05 [computer file].

Employment status

Figure 2.21 (facing page) examines the frequency of Queensland detainees' arrests in the preceding 12 months by employment status in 2004–05. The results are consistent with research which suggests that there is generally, but not always, an inverse relationship between employment and criminal activity (Brown et al. 2004):

- Overall, unemployed detainees had been arrested more often (an average of 3.0 arrests) than detainees who were working full-time (an average of 1.3 arrests) or part-time (an average of 2.1 arrests; F test = $p < .001$).
- Conversely, detainees engaged in full-time work (51.8%) or full-time education (46.2%) had the fewest number of arrests.

Figure 2.21: Frequency of arrests for Queensland detainees in preceding 12 months by work status, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: *n* = 1120

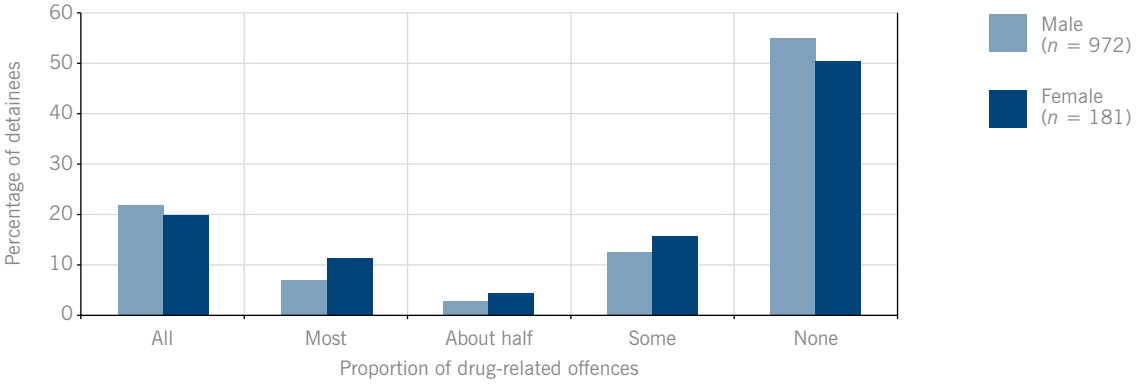
Drug-related offences

Detainees were asked how many of the offences they had committed in the preceding 12 months were drug-related (excluding alcohol).

Figure 2.22 shows:

- Over half of the detainees stated that none of their offending was drug-related, with slightly more males than females reporting this to be the case (55.7% of males; 50.3% of females).
- About 16 per cent stated that some or about half of their offences were drug-related (some offences, 13%; half of offences, 3.2%).
- About 30 per cent reported that all or most of their offences were drug-related (29.0% of males; 30.9% of females).

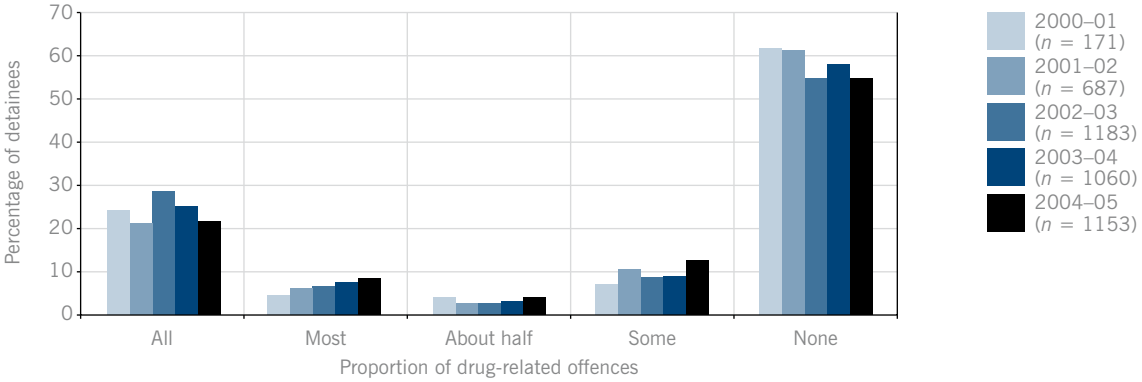
Figure 2.22: Proportion of offences committed in the preceding 12 months by Queensland detainees that were drug-related, by gender, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2005 [computer file].

Figure 2.23 shows the proportion of offences committed in the preceding 12 months that were drug-related, between 2000–01 and 2004–05. There were no significant changes over time.

Figure 2.23: Proportion of offences committed in the preceding 12 months by Queensland detainees that were drug-related, 2000–01 to 2004–05



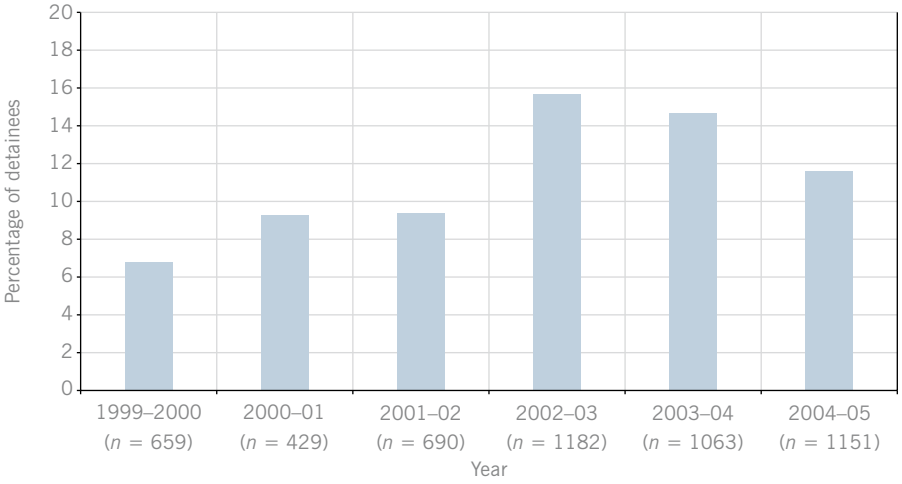
Source: Australian Institute of Criminology, DUMA collection, 2000–01 to 2004–05 [computer file].

DRUG-SEEKING AT TIME OF OFFENCE

Detainees were asked to indicate whether or not they were seeking drugs at the time they committed the offence for which they were currently detained (Figure 2.24). Very few detainees (11.6% in 2004–05) admitted that this was the case.

Figure 2.24 compares the numbers of Queensland detainees seeking drugs at the time of offence across the years; the highest percentage was recorded in 2002–03 (15.7%).

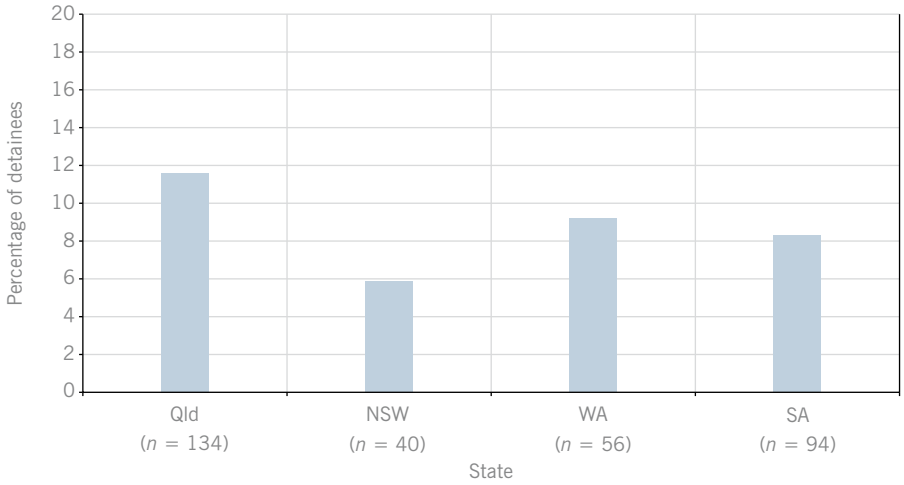
Figure 2.24: Percentage of Queensland detainees seeking drugs at time of offence, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection,1999–2000 to 2004–05 [computer file].

Figure 2.25 (facing page) compares the numbers of detainees seeking drugs at the time of committing the offence by state. It shows that the highest proportion was recorded in Queensland (11.6%) and the lowest in New South Wales (5.9%).

Figure 2.25: Percentage of detainees seeking drugs at time of offence, by state, 2004–05



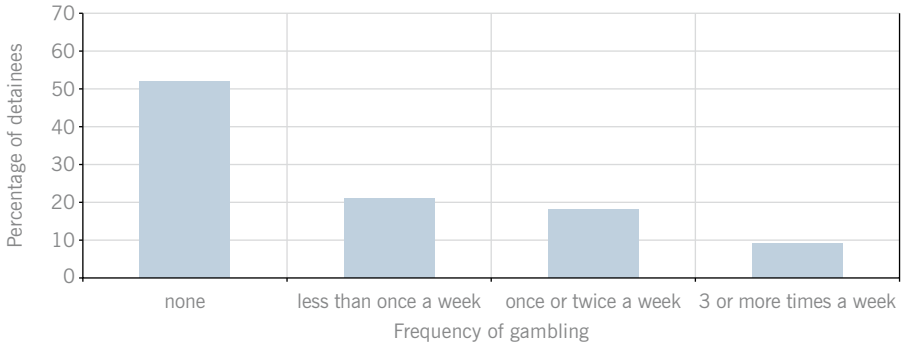
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

GAMBLING BEHAVIOUR

Although gambling is not an illegal activity, detainees were asked about their gambling activities. Figure 2.26 below shows how frequently detainees engaged in gambling.

- About one-fifth (18%) reported gambling once or twice weekly and about 1 in 10 (9%) reported gambling three or more times per week.
- No gender differences in the frequency of gambling were found. This conflicts with research literature, which suggests that gambling rates are highest among males (Cunningham-Williams et al. 2000). The unique nature of the sample compared to the general population, however, may account for these findings and could provide an interesting avenue for further research.
- Detainees who gambled once or twice weekly were older, on average (32.5 years), than detainees who had never gambled (30.5 years) (F test = $p < .05$).
- Educational achievements were not associated with the frequency of gambling.

Figure 2.26: Frequency of gambling among Queensland detainees, 2004–05

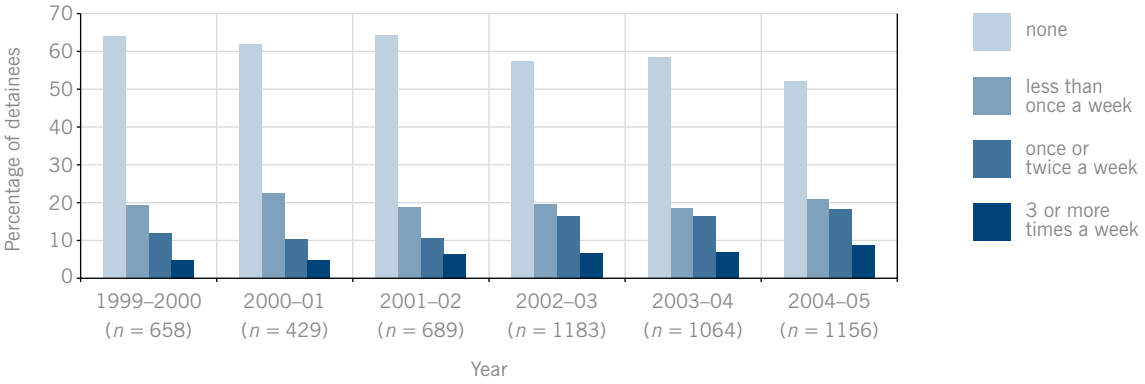


Source: Australian Institute of Criminology, DUMA collection, 2004–2005 [computer file].
Note: *n* = 1156

Figure 2.27 (next page) shows that, between 2000–01 and 2004–05:

- The frequency of gambling once or twice weekly among detainees increased from 11.9 per cent in 1999–2000 to 18.2 per cent in 2004–05.
- The frequency of gambling three or more times a week increased from 4.9 per cent in 1999–2000 to 8.7 per cent in 2004–05.

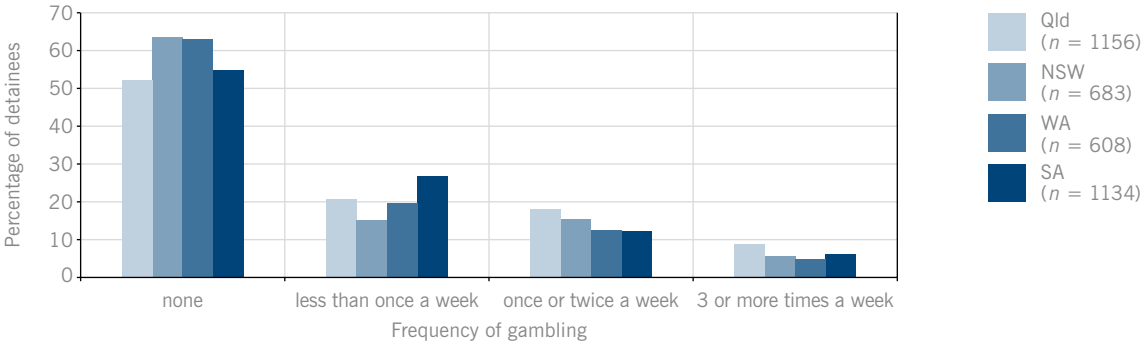
Figure 2.27: Frequency of gambling reported by Queensland detainees, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 2.28 compares detainees' gambling by state in 2004–05. It shows that Queensland had higher proportions of detainees gambling once or twice per week (18.2%) and three or more times per week (8.7%) than any of the other states.

Figure 2.28: Frequency of gambling by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

CHAPTER SUMMARY

The DUMA research program provides a unique opportunity to describe the general socio-demographic characteristics of watch-house detainees in Queensland, and to show whether there have been any changes in these characteristics over time (1999–2000 to 2004–05) or differences between states.

In addition to the information about detainees' drug use, which will be presented in the next few chapters, this socio-demographic information could be useful to police, corrective services, health and other relevant social services for planning and policy purposes, especially in relation to accommodation requirements and potential treatment opportunities for watch-house detainees.

Clearly, a large proportion of detainees are young males with limited educational achievements, who are often unemployed or receiving welfare benefits, and many of whom have a substantial prior arrest history. This information will come as no surprise to officers working in watch-houses; nevertheless it could be very useful for policy and program planning.

The extent to which these socio-demographic characteristics are associated with drug use is examined in the following chapters. It is interesting to note, however, that relatively few detainees stated that their offences were drug-related (about a third) and even fewer (11–15%) stated that they were actively seeking drugs at the time the offences were committed.

3
Urinalysis results

Detainees were invited to participate in a voluntary urinalysis that detected the presence or absence of cannabis, opiates, methadone, cocaine, amphetamines and benzodiazepines, based on an EMIT (enzyme multiplied immunoassay) technique. A drug was classified as positive if it or its metabolites were detected in the detainees' urine at the cut-off levels prescribed by the Australian Standards (AS4308-1995; Standards Australia 1995).

The objectivity of urinalysis combats the inherent weaknesses of self-report measures alone (e.g. inability to recall information accurately or unwillingness to disclose), but cannot provide information about drug-using behaviours or attitudes. That kind of information was collected in this study by self-report and is presented in the following chapters.

CONSENT TO URINALYSIS

Of the 1191 Queensland detainees who were interviewed in 2004–05, 97.7 per cent consented to urinalysis (although 1.3% of those who agreed to do so could not provide a specimen). This high response rate means that the urinalysis data provide a comprehensive and reliable profile of detectable and recent drug use among watch-house detainees participating in the project.

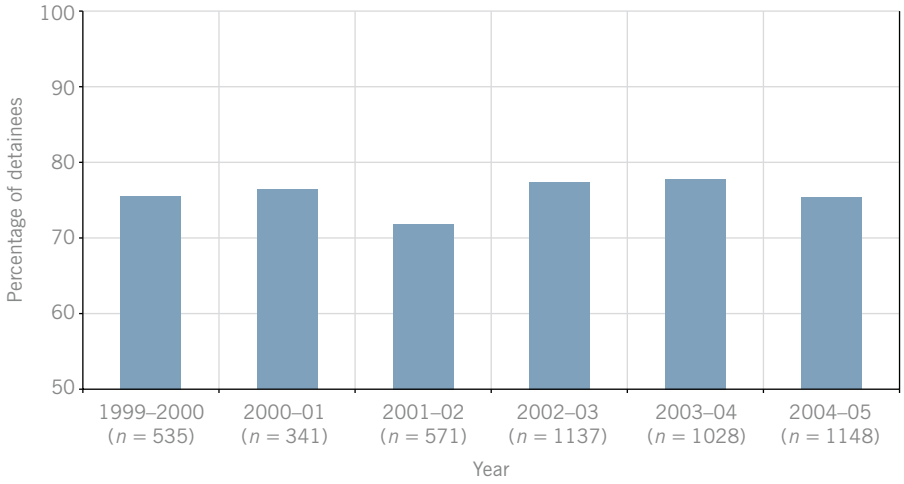
This chapter presents information about the drugs detected in detainees' urine. Some socio-demographic data, trends over time and interstate comparisons are provided about detainees who were detected with any drugs in their system. Information is also provided about the prevalence of individual drug types and single and multiple drug use in this sample, along with trends over time and comparisons by state, gender and age for these categories.

Detainees' criminal histories (number of prior arrests; types of offences; income from illegal activities) are also examined by the presence or absence of various drugs in their systems.

PREVALENCE OF POSITIVE TESTS FOR ANY DRUG

Figure 3.1 shows the proportions of detainees who tested positive for any drug by urinalysis from 1999–2000 to 2004–05. In 2004–05 about three-quarters of the detainees (75.3%) tested positive. There was little variation across the years, although the proportion testing positive fell slightly in 2001–02 (71.6%).

Figure 3.1: Percentage of Queensland detainees who tested positive for any drug by urinalysis by year, 1999–2000 to 2004–05

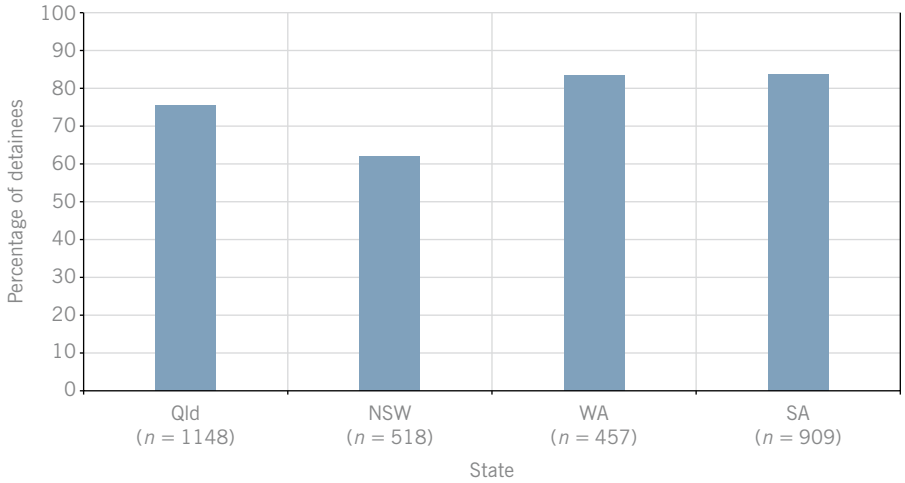


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 3.2 compares urinalysis results by state.

- South Australia (82.9%) and Western Australia (82.5%) recorded the highest proportions of detainees testing positive for any drug by urinalysis.
- New South Wales recorded the lowest proportion of detainees testing positive for any drug by urinalysis (62.4%).

Figure 3.2: Percentage of detainees testing positive for any drug by urinalysis, by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

SOCIO-DEMOGRAPHIC PROFILE OF DETAINEES TESTING POSITIVE TO ANY DRUG

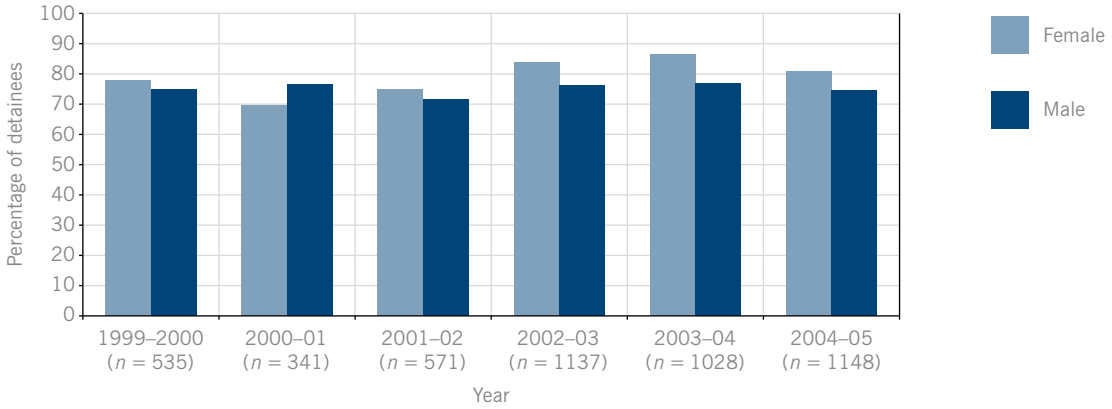
The socio-demographic profile of detainees was described in Chapter 2. The research literature indicates that drug use can vary by socio-demographic factors (e.g. gender, age, marital status etc). This section of the report presents the socio-demographic profile of detainees found to have any of the drug types (cannabis, opiates, methadone, cocaine, amphetamines or benzodiazepines) in their urine when tested.

Gender

In 2004–05, drugs were detected in slightly more Queensland female detainees (80.7%) than males (74.2%) and a similar pattern was demonstrated throughout the entire period from 1999–2000 to 2004–05. Only minor differences were detected over time (see Figure 3.3, facing page):

- The proportion of female detainees testing positive for any drugs by urinalysis decreased slightly in 2000–01 (69.8%), but then increased between 2001–02 (75.0%) and 2002–03 (84.0%).
- Male drug use decreased slightly in 2001–02 (71.1%).

Figure 3.3: Percentage of Queensland detainees testing positive for any drug by urinalysis, by gender and year, 1999–2000 to 2004–05



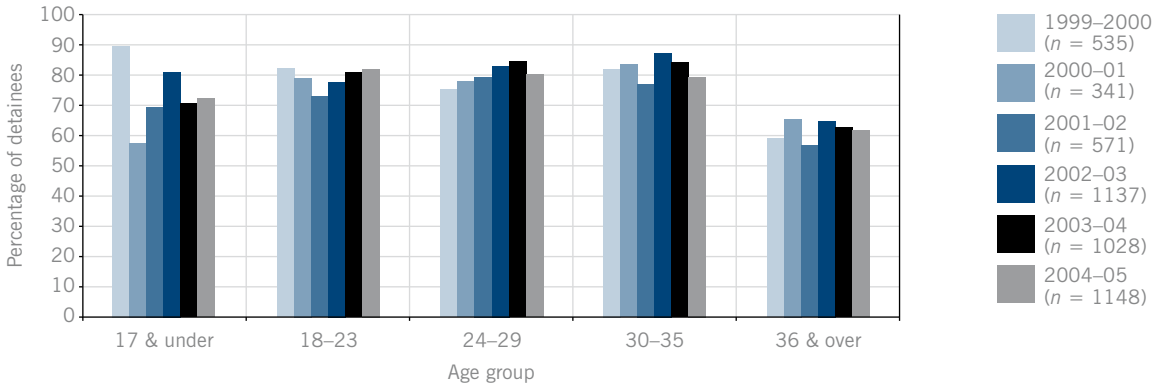
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Age

Figure 3.4 shows the proportion of Queensland detainees testing positive to any drug by age, 1999–2000 to 2004–05. Detainees aged 36 years and over were less likely to have drugs detected by the urinalysis than all younger age groups, and this profile was consistent over time.

Within age groups the only meaningful difference detected was for detainees aged 17 years and under, where there was an unusually high proportion of detainees testing positive in 1999–2000 (88.9%) and an unusually low proportion testing positive in 2000–01 (59.1%). However, these fluctuations were probably due to the small numbers of offenders in this age group rather than any meaningful external influences.

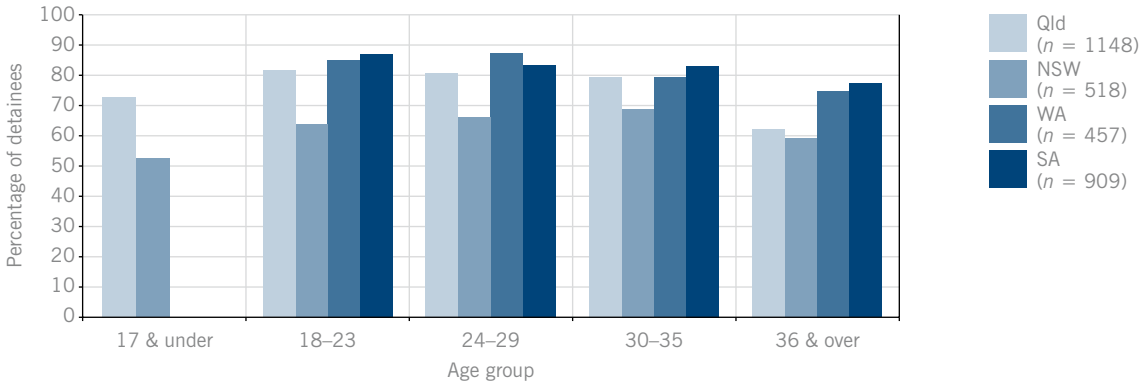
Figure 3.4: Proportion of Queensland detainees testing positive for any drug by urinalysis, by age, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 3.5 (next page) compares the proportions of detainees testing positive for any drug by urinalysis by age and state in 2004–05. As indicated above, New South Wales reported the lowest proportion of detainees testing positive to the urinalysis overall, and this profile was reflected within each age group. Similar to New South Wales (59.3%), detainees in Queensland aged 35 years and over recorded a much lower proportion of detainees testing positive to the urinalysis (62.0%) than those in Western Australia (74.8%) and South Australia (77.5%).

Figure 3.5: Proportion of detainees testing positive for any drug by urinalysis, by age and state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

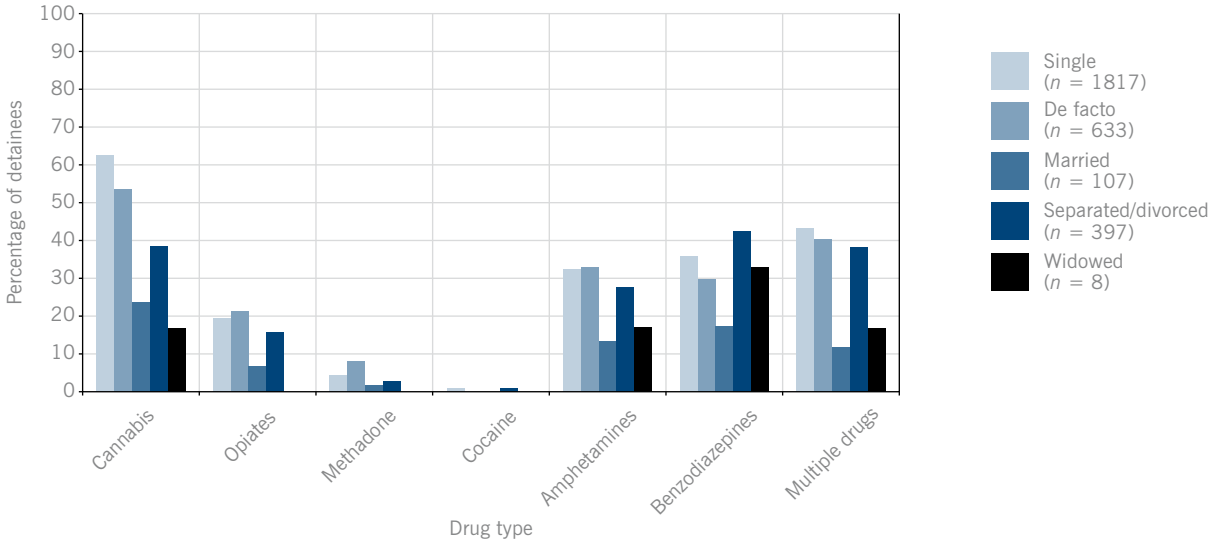
Note: WA and SA did not have any detainees 17 years old or younger.

Marital status

Figure 3.6 presents data on detainees' drug use in 2004–05 by marital status.

- Cannabis use was particularly high among de facto detainees (53.9%) and single detainees (63.5%).
- Opiate use was highest among single (19.4%) and de facto (21.2%) detainees and lowest for widowed detainees (0.0%) and married detainees (6.9%).
- Methadone was used by more detainees in a de facto relationship (7.5%), followed by single detainees (4.2%), separated/divorced detainees (2.9%) and married detainees (2.3%).
- Cocaine use was very low for all detainees – less than 1 per cent of single detainees (0.6%) and separated/divorced detainees (0.6%) tested positive, and there was no evidence of cocaine use in those detainees who were de facto, married or widowed.
- Amphetamines were used by about one-third of single detainees (32.1%) and de facto detainees (32.4%), about one-quarter (27.1%) of separated/divorced detainees, and less than one-fifth of married (13.8%) or widowed (16.7%) detainees.
- Use of benzodiazepines was most prevalent in separated detainees (42.9%), followed by single (35.7%), widowed (33.3%) and de facto detainees (29.9%). Married detainees (17.2%) were least likely to test positive for benzodiazepines.

Figure 3.6: Positive tests for Queensland detainees by drug type and marital status, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

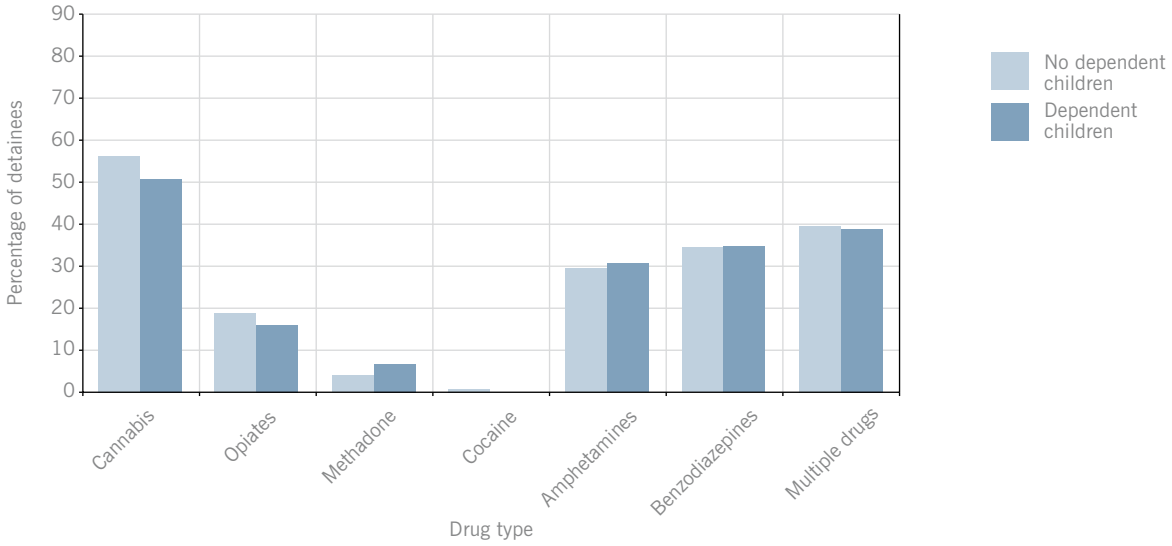
Note: Urinalysis detected multiple drugs in the detainees' systems. Therefore, the total number of detainees testing positive for each type of drug will always exceed the actual number of detainees in the study.

Dependent children

Figure 3.7 shows the proportions of Queensland detainees in 2004–05 who tested positive for drugs, by whether they had dependent children.

- There was little difference in the proportions of those who had dependent children and those who did not among detainees who tested positive for cocaine, amphetamines, benzodiazepines and multiple drugs.
- A slightly higher proportion of detainees with dependent children than without tested positive for methadone (with children, 6.6%; without, 3.7%).
- A slightly higher proportion of detainees without dependent children tested positive for cannabis (56.1%) and opiates (18.9%) than detainees with dependent children (50.2% and 16.3% respectively).

Figure 3.7: Positive tests for specific drug types and multiple drug use by whether Queensland detainees had dependent children, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: *n* = 1148

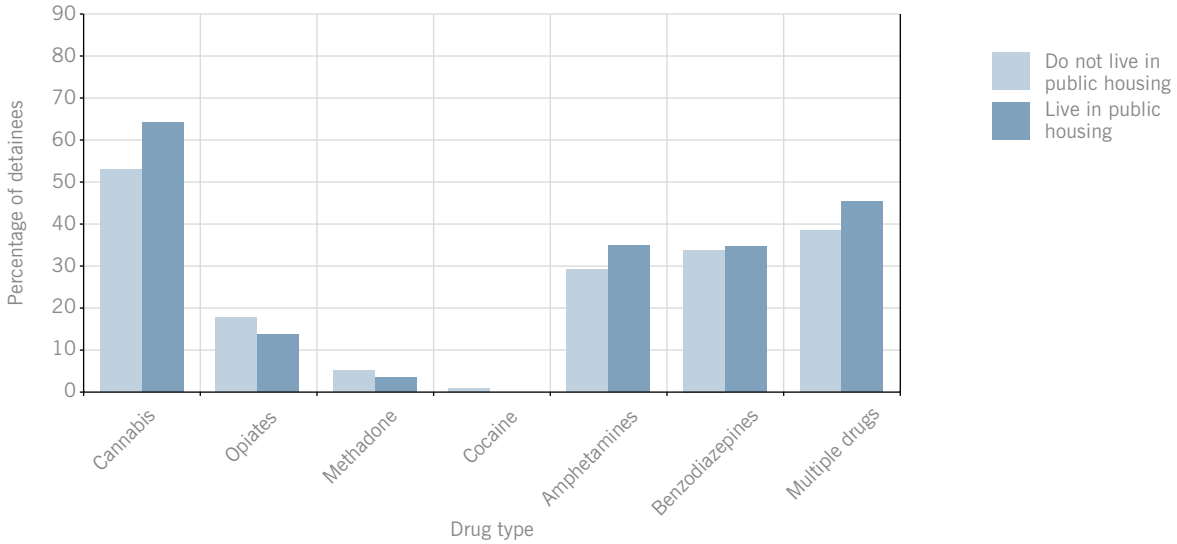
Accommodation

Figure 3.8 (next page) shows the types of drugs for which detainees tested positive by whether they were living in public housing or not, 2004–05.

- Queensland detainees living in public housing were more likely than those who did not to test positive for cannabis (64.2%), amphetamines (35.0%) and multiple drugs (45.6%).
- Detainees not residing in public housing were more likely to test positive for opiates (17.9%) and methadone (4.8%).

The profile of drug use among detainees living in public housing was similar over time (1999–2000 to 2004–05) and between states (figures not shown). Similarly, there were few differences in the profile of drug use and the type of residence detainees reported living in during the month preceding the interview (figures not shown).

Figure 3.8: Positive tests for specific drug types and multiple use by whether Queensland detainees lived in public housing, 2004–2005



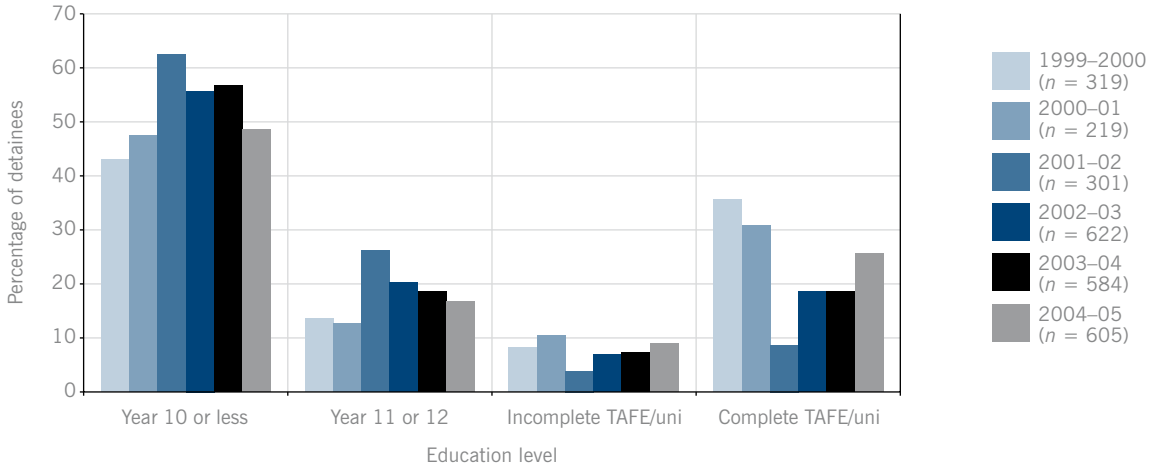
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: *n* = 1041

Education

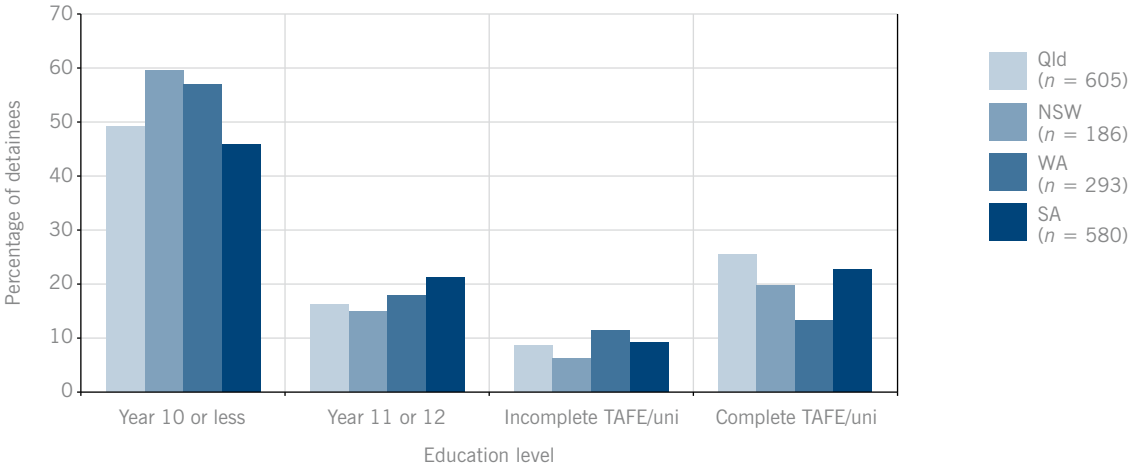
Figure 3.9 shows the proportion of Queensland detainees testing positive for any drugs by urinalysis by education status. Detainees with limited education (Year 10 or less) were much more likely to test positive than detainees with higher secondary school or tertiary qualifications. Compared with other states, however (see Figure 3.10, facing page), Queensland detainees with tertiary qualifications were more likely to test positive and detainees with Year 10 or less were less likely to test positive than their counterparts in the other states.

Figure 3.9: Percentage of detainees testing positive to urinalysis for any drug by education and year, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 3.10: Percentage of Queensland detainees testing positive to urinalysis for any drug by education and state, 2004–05

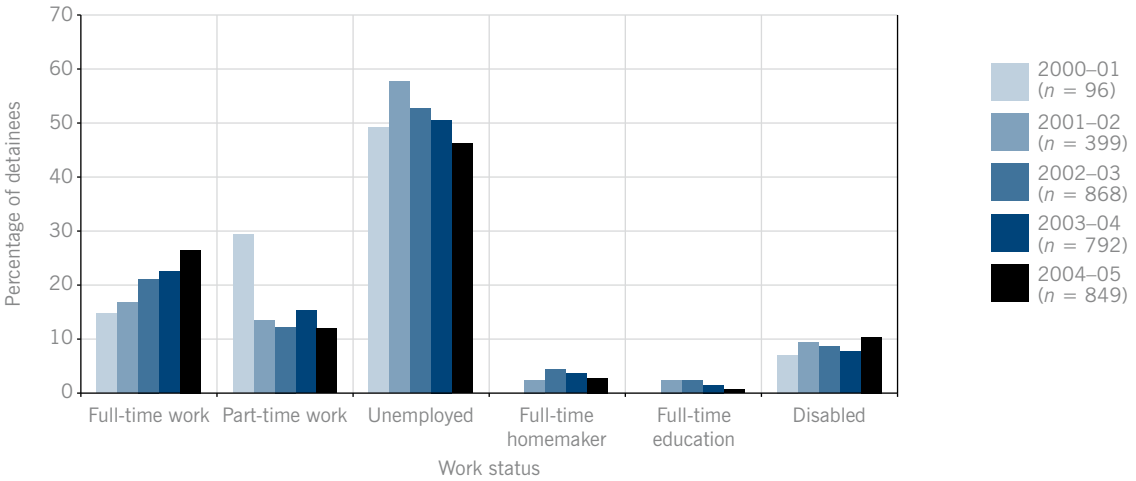


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Work status

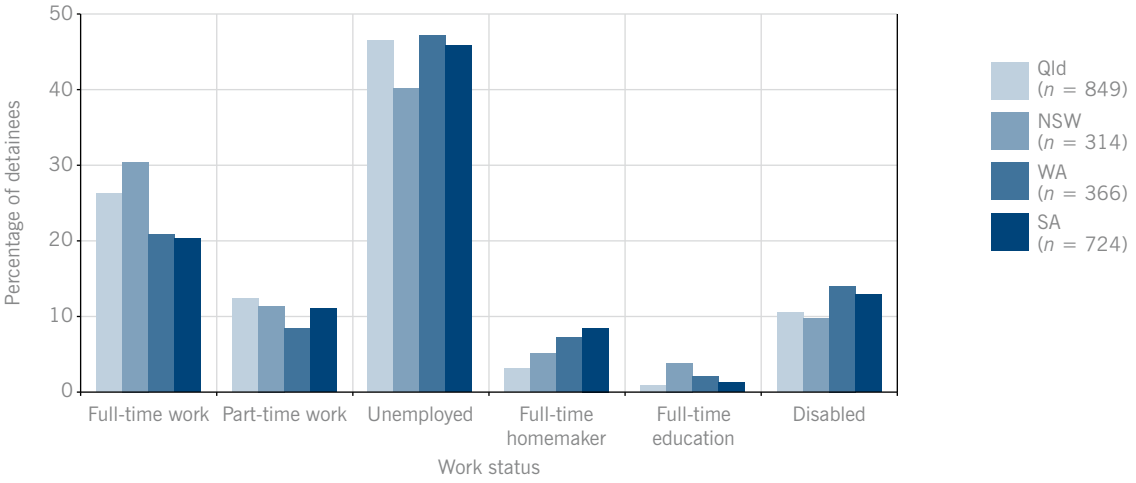
Figure 3.11 shows the relationships between work status and positive urinalysis for any drug for Queensland detainees between 2000–01 and 2004–05. The vast majority of detainees who tested positive by urinalysis were unemployed. However, there was a strong upward trend over the whole period in the proportion who were engaged in full-time work (from 14.6% in 2000–01 to 26.5% in 2004–05). This profile was similar across states in 2004–05 (see Figure 3.12, next page), although New South Wales recorded fewer unemployed detainees testing positive to the urinalysis (40.1%) than the other states.

Figure 3.11: Percentage of Queensland detainees testing positive to urinalysis for any drug by work status and year, 2000–01 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2000–01 to 2004–05 [computer file].
Note: Data not available for 1999

Figure 3.12: Percentage of detainees testing positive to urinalysis for any drug by work status and state, 2004–05



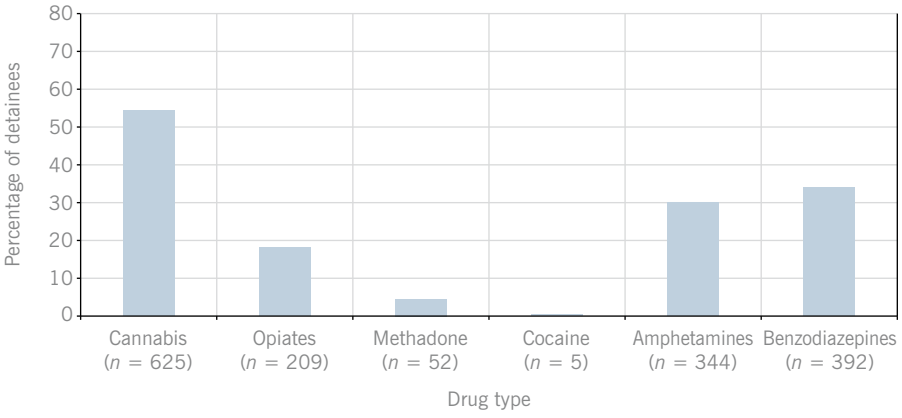
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

PREVALENCE OF INDIVIDUAL DRUG TYPES AND SOME SOCIO-DEMOGRAPHIC COMPARISONS

Figure 3.13 shows the proportions of Queensland detainees who tested positive for each drug in 2004–05.

- Over half of the detainees tested positive for cannabis (54.4%).
- About one-third of the detainees tested positive for amphetamines (30.0%) and/or benzodiazepines (34.1%).
- Very few detainees tested positive for methadone (4.5%) or cocaine (0.4%).

Figure 3.13: Proportion of Queensland detainees testing positive by drug type, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: Detainees could have tested positive to more than one drug type. Therefore, the numbers of detainees in each subgroup will collectively add up to more than the actual number of detainees in the study overall.

Figures 3.14–3.30, following, present gender and age comparisons among Queensland detainees testing positive for each drug over time, 1999–2000 to 2004–05.

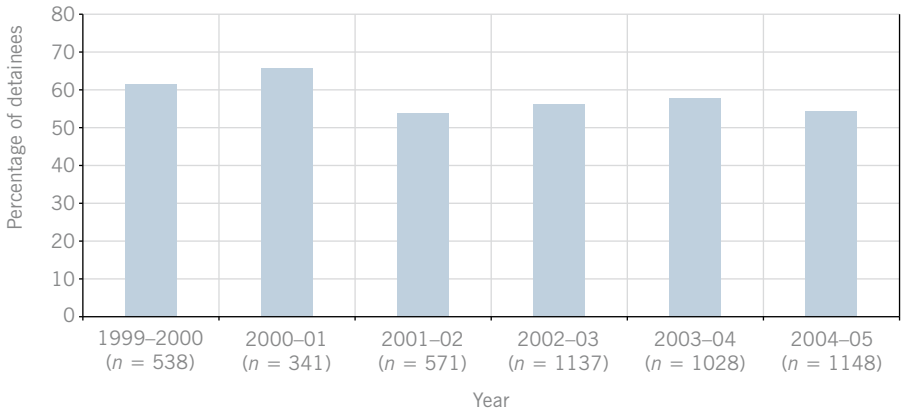
Cannabis

Figure 3.14 shows:

- Each year since 1999–2000, more than half of the detainees tested positive for cannabis.
- The proportion of detainees who tested positive for cannabis peaked in 2000–01 (65.7%). After that, the proportion fell, and remained relatively steady, through to 2004–05 (54.4%).

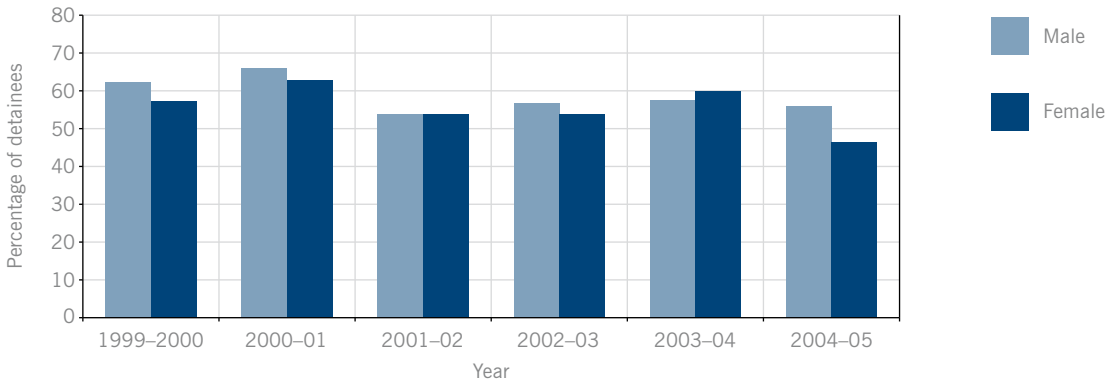
Figure 3.15 shows that, from 1999–2000 to 2004–05, the proportions of males and females testing positive for cannabis were similar. An exception was in 2004–05 when the proportion of females testing positive for cannabis (46.5%) was about 10 percentage points lower than the proportion of males (56%).

Figure 3.14: Proportion of Queensland detainees testing positive for cannabis, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 3.15: Proportion of Queensland detainees testing positive for cannabis by gender, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

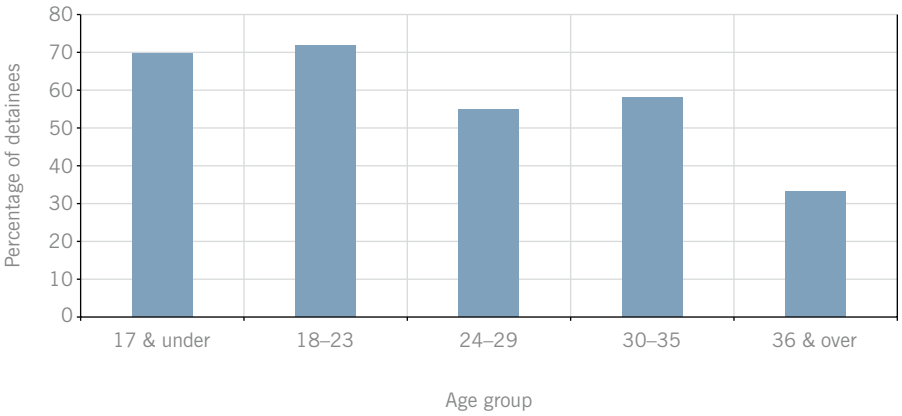
Notes:

Males: 1999–2000, *n* = 284; 2000–01, *n* = 197; 2001–02, *n* = 267; 2002–03, *n* = 555; 2003–04, *n* = 516; 2004–05, *n* = 538

Females: 1999–2000, *n* = 47; 2000–01, *n* = 27; 2001–02, *n* = 41; 2002–03, *n* = 84; 2003–04, *n* = 79; 2004–05, *n* = 87

As Figure 3.16 shows, detainees aged 23 years and under had the highest proportion of positive tests for cannabis. Detainees aged 36 years and over were least likely to test positive for cannabis (33.2%).

Figure 3.16: Proportion of Queensland detainees testing positive for cannabis by age, 2004–05

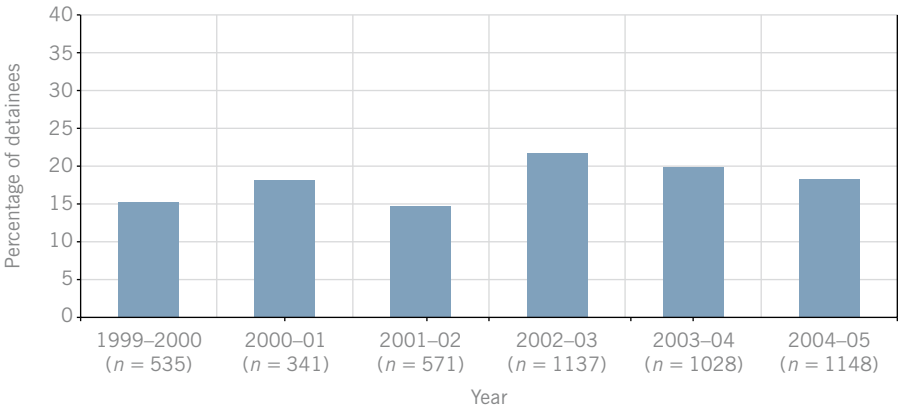


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].
Note: *n* = 625

Opiates

Figure 3.17 shows that, from 1999–2000 to 2004–05, no more than about one-fifth of detainees tested positive for opiates.

Figure 3.17: Proportion of Queensland detainees testing positive for opiates, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

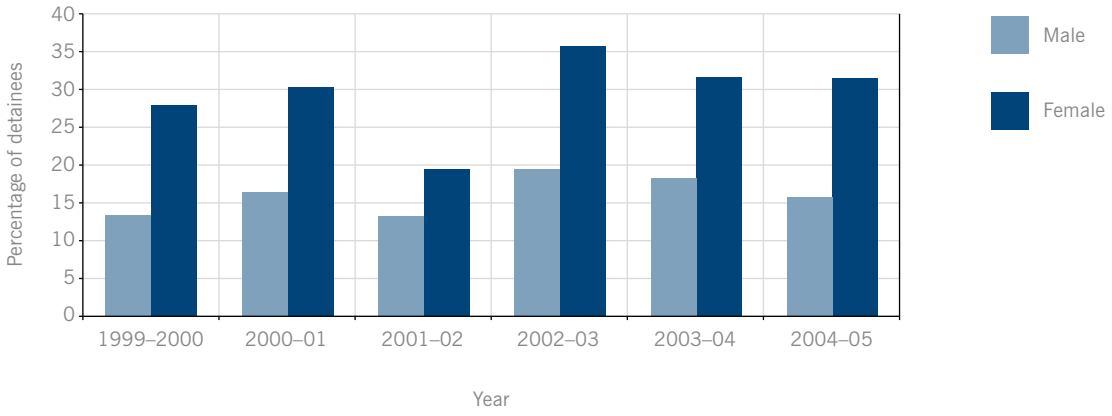
Figure 3.18 makes comparisons by reporting year and gender, from 1999–2000 to 2004–05.

- For all data collection periods, the proportions of female detainees testing positive for opiates were consistently higher than the proportions of males.
- The number of male detainees testing positive for opiates from 1999–2000 to 2004–05 remained fairly consistent. There was much more variability in the number of female detainees testing positive for opiates over the same period, with the lowest proportion recorded in 2001–02 (19.7%) and the highest in 2002–03 (35.9%).

Figure 3.19 makes comparisons by age, 2004–05.

- Detainees aged 24–35 years were more likely than either younger or older detainees to be detected with opiates in their systems.

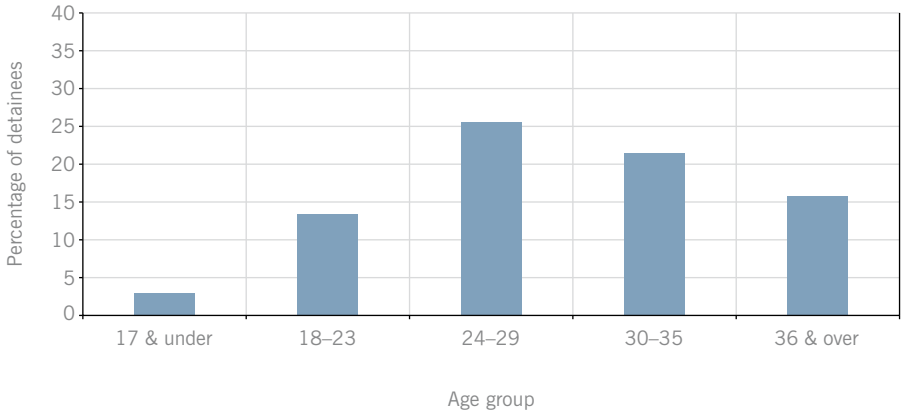
Figure 3.18: Proportion of Queensland detainees testing positive for opiates by gender and year, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:
Males: 1999–2000, *n* = 59; 2000–01, *n* = 49; 2001–02, *n* = 69; 2002–03, *n* = 191; 2003–04, *n* = 163; 2004–05, *n* = 150
Females: 1999–2000, *n* = 23; 2000–01, *n* = 13; 2001–02, *n* = 15; 2002–03, *n* = 56; 2003–04, *n* = 42; 2004–05, *n* = 59

Figure 3.19: Proportion of Queensland detainees testing positive for opiates by age, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

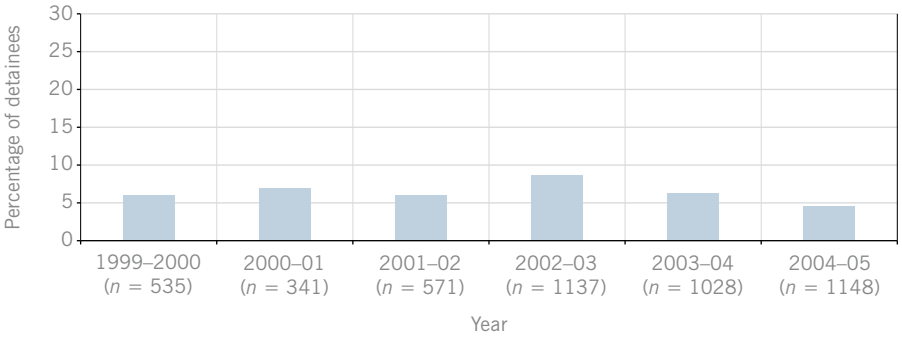
Note: *n* = 209

Methadone

As Figure 3.20 shows, less than 10 per cent of Queensland detainees have tested positive for methadone each year between 1999–2000 and 2004–05.

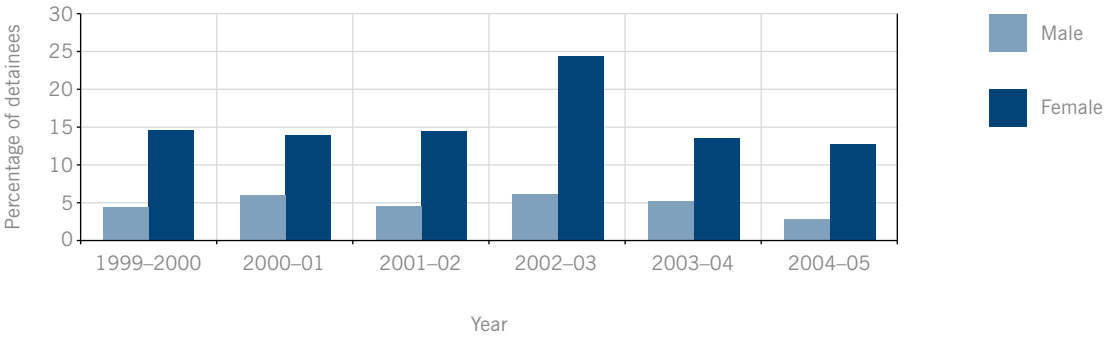
Figure 3.21 shows that, on average, about three times more females than males tested positive for methadone between 1999–2000 and 2004–05. The proportion of male detainees testing positive for methadone remained relatively stable from 1999–2000 to 2004–05. The proportion of female detainees testing positive for methadone also remained consistent across the years, with the exception of 2002–03 where a peak in the number of females testing positive for methadone was observed (24.4%).

Figure 3.20: Proportion of Queensland detainees testing positive for methadone, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 3.21: Proportion of Queensland detainees testing positive for methadone by gender, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

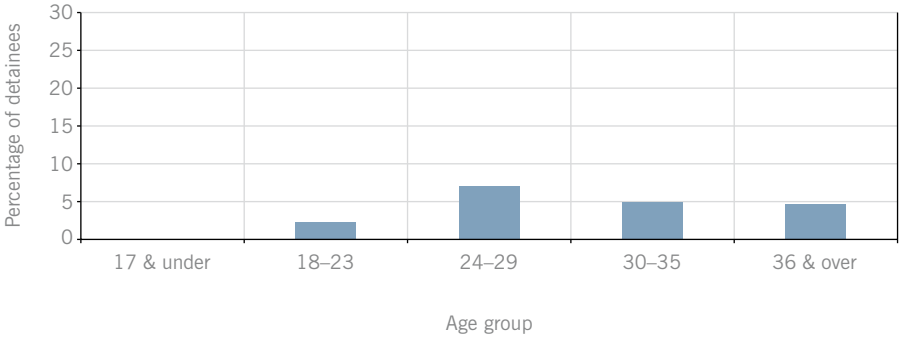
Notes:

Males: 1999–2000, *n* = 20; 2000–01, *n* = 18; 2001–02, *n* = 23; 2002–03, *n* = 61; 2003–04, *n* = 47; 2004–05, *n* = 28

Females: 1999–2000, *n* = 12; 2000–01, *n* = 6; 2001–02, *n* = 11; 2002–03, *n* = 38; 2003–04, *n* = 18; 2004–05, *n* = 24

Figure 3.22 shows that detainees aged 24–29 years were most likely (7.0%) and those aged 23 years and under were least likely (2.3%) to test positive for methadone in 2004–05. Overall, the proportion of detainees testing positive to methadone in each age group was very small.

Figure 3.22: Proportion of Queensland detainees testing positive for methadone by age, 2004–05



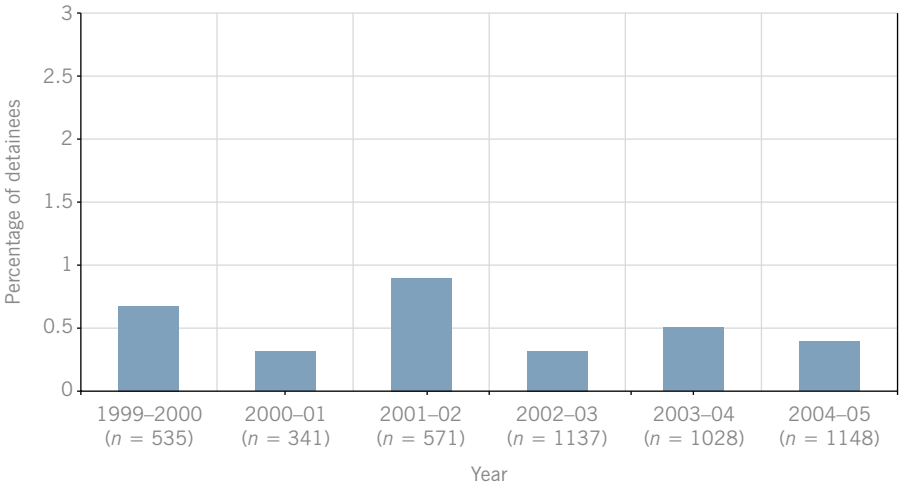
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: *n* = 52

Cocaine

As Figure 3.23 shows, less than 1 per cent of detainees tested positive for cocaine in each data collection year. Due to the very small proportion of detainees testing positive for cocaine, gender and age differences were not examined.

Figure 3.23: Proportion of Queensland detainees testing positive for cocaine, 1999–2000 to 2004–05



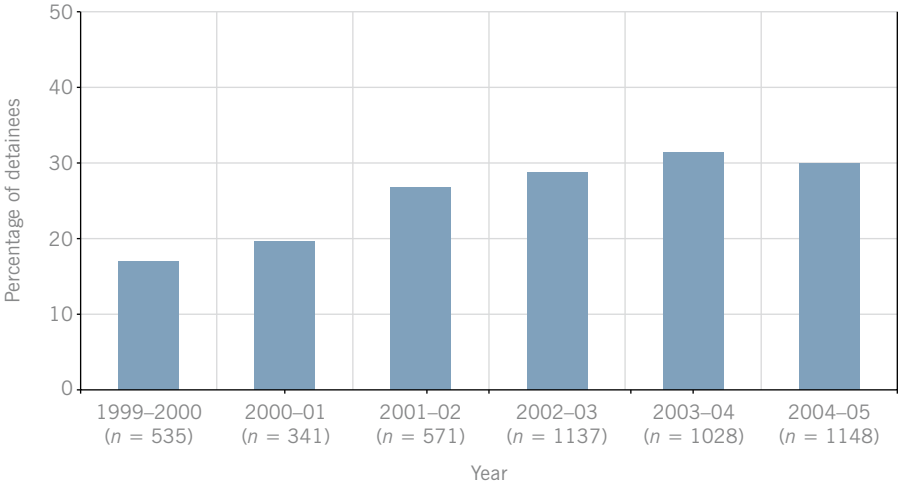
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes: 1999–2000, *n* = 4; 2000–01, *n* = 1; 2001–02, *n* = 5; 2002–03, *n* = 3; 2003–04, *n* = 5; 2004–05, *n* = 5

Amphetamines

Figure 3.24 shows that, from 1999–2000 (17.0%) to 2004–05 (30.0%), the number of detainees testing positive for amphetamines almost doubled.

Figure 3.24: Proportion of Queensland detainees testing positive for amphetamines, 1999–2000 to 2004–05



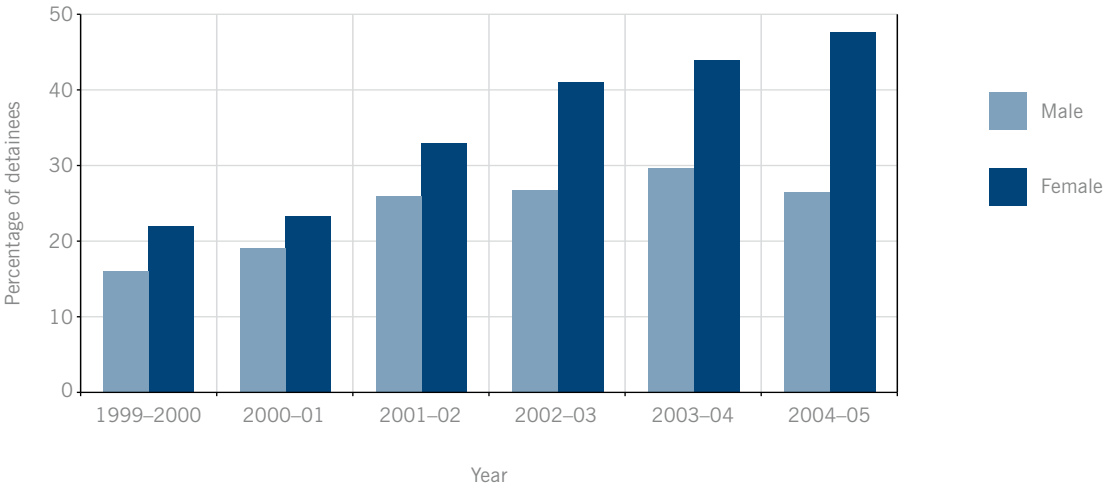
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes: 1999–2000, *n* = 91; 2000–01, *n* = 67; 2001–02, *n* = 153; 2002–03, *n* = 326; 2003–04, *n* = 323; 2004–05, *n* = 344

Figure 3.25 shows that, across the years, consistently more females than males tested positive for amphetamines. This gender difference became most pronounced from 2002–03 (26.7% of males; 41.0% of females) onwards.

For males, there was a steady increase in the proportion of detainees testing positive for amphetamines from 1999–2000 (16.1%) to 2001–02 (25.9%). For females, there was a much more pronounced and steady increase in the proportion of detainees testing positive for amphetamine use (from 22% in 1999–2000 to 47.6% in 2004–05).

Figure 3.25: Proportion of Queensland detainees testing positive for amphetamines by gender, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:

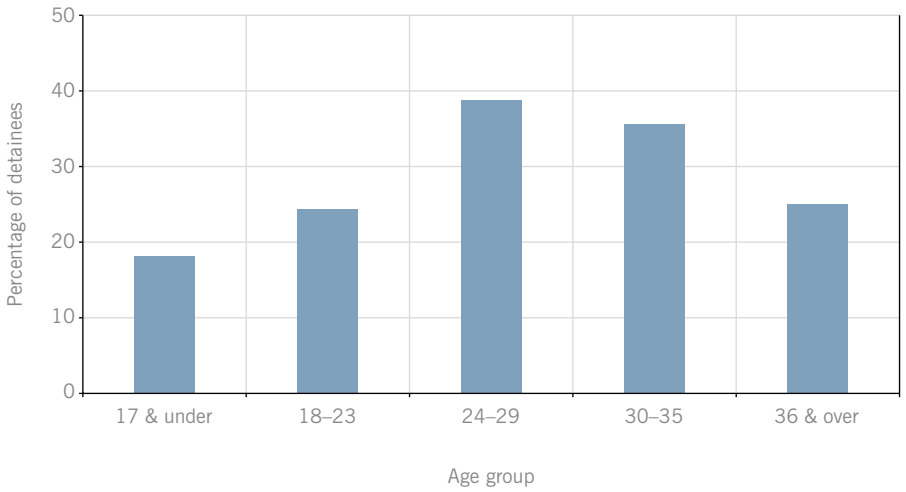
Males: 1999–2000, *n* = 73; 2000–01, *n* = 57; 2001–02, *n* = 128; 2002–03, *n* = 262; 2003–04, *n* = 265; 2004–05, *n* = 255

Females: 1999–2000, *n* = 18; 2000–01, *n* = 10; 2001–02, *n* = 25; 2002–03, *n* = 64; 2003–04, *n* = 58; 2004–05, *n* = 89

Figure 3.26 examines age differences in the proportions of detainees testing positive for amphetamines in 2004–05.

- Over one-third of detainees aged 24–29 years (38.8%) and 30–35 years (35.6%) tested positive for amphetamines.
- Approximately one-quarter of detainees aged 18–23 years (24.4%) and 36 years and older (25.0%) tested positive for amphetamines.
- Fewer than one fifth (18.2%) of detainees aged 17 years or less tested positive for amphetamines.

Figure 3.26: Percentage of Queensland detainees testing positive for amphetamines by age, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

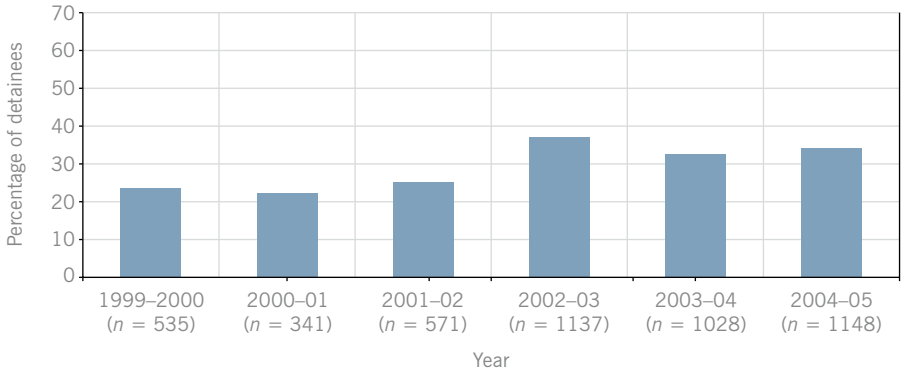
Note: *n* = 344

Benzodiazepines

Figure 3.27 shows proportions of detainees testing positive for benzodiazepines over time.

- Between 1999–2000 (23.6%) and 2001–02 (25.2%), the proportions of detainees testing positive for benzodiazepines remained fairly steady.
- In 2002–03 the proportion increased to 37.0 per cent, and this increase remained relatively stable through to 2004–05 (34.1%).

Figure 3.27: Proportions of Queensland detainees testing positive for benzodiazepines, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

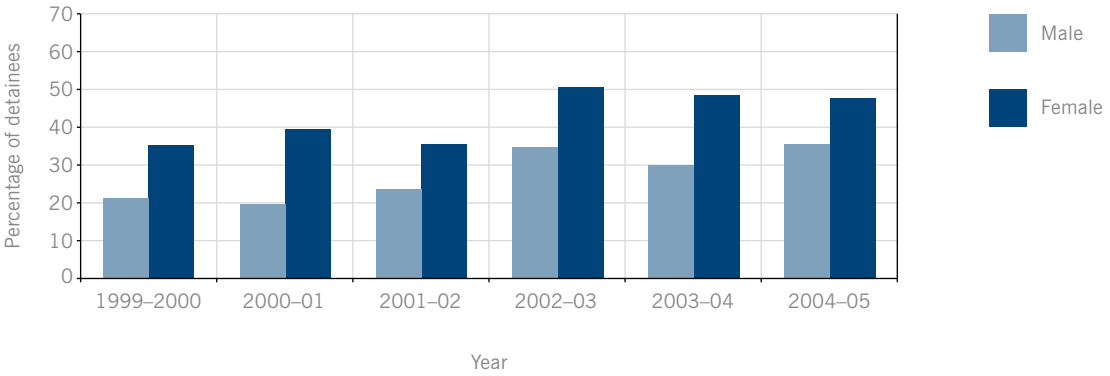
Notes: 1999–2000, *n* = 126; 2000–01, *n* = 76; 2001–02, *n* = 144; 2002–03, *n* = 421; 2003–04, *n* = 334; 2004–05, *n* = 392

Figure 3.28 shows that, from 1999–2000 to 2004–05, the proportions of female detainees testing positive for benzodiazepines remained consistently higher than the equivalent proportions of male detainees. Across the years, fluctuations ran parallel for males and females.

Age comparisons (Figure 3.29) revealed that:

- detainees aged 24–29 years were most likely to test positive for benzodiazepines (41.0%)
- approximately one-third of detainees aged 17 years or less, and aged 30 years and over, tested positive for benzodiazepines
- about one-quarter of detainees aged 18–23 years tested positive for benzodiazepines.

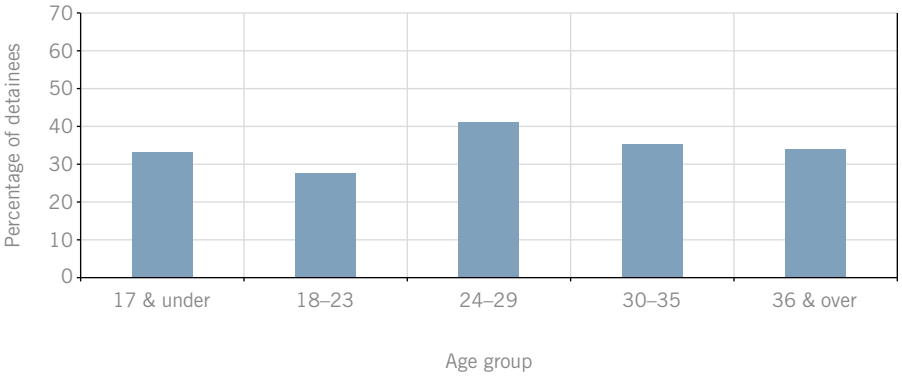
Figure 3.28: Proportion of Queensland detainees testing positive for benzodiazepines by gender and year, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:
Males: 1999–2000, *n* = 97; 2000–01, *n* = 59; 2001–02, *n* = 117; 2002–03, *n* = 342; 2003–04, *n* = 270; 2004–05, *n* = 303
Females: 1999–2000, *n* = 29; 2000–01, *n* = 17; 2001–02, *n* = 27; 2002–03, *n* = 79; 2003–04, *n* = 64; 2004–05, *n* = 89

Figure 3.29: Percentage of Queensland detainees testing positive for benzodiazepines by age, 2004–05



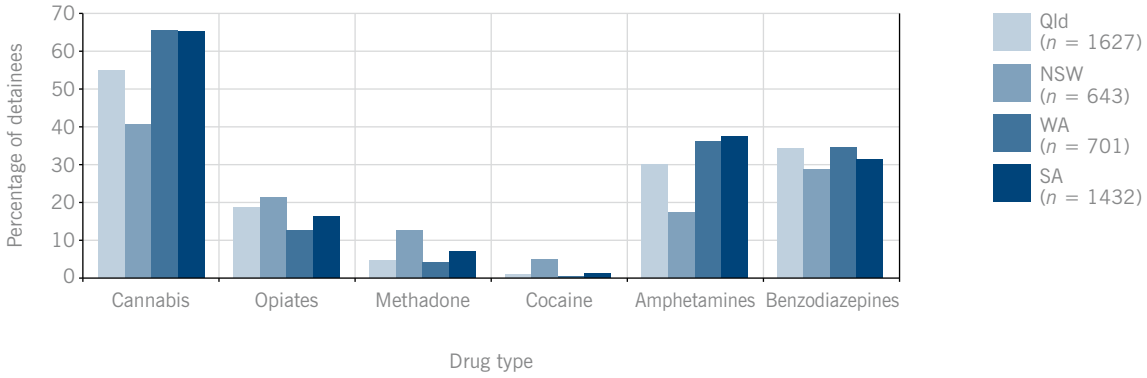
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: *n* = 392

When state comparisons were made on the proportion of detainees testing positive for different types of drugs in 2004–05 (Figure 3.30), it was found that:

- Western Australia (65.7%) and South Australia (65.6%) recorded the highest proportions of detainees testing positive for cannabis
- New South Wales recorded the highest proportions of detainees testing positive for opiates (21.2%) and/or cocaine (4.1%), but the lowest proportion of detainees testing positive for benzodiazepines (38.8%)
- the proportion of those detainees testing positive for methadone in New South Wales (12.7%) was nearly three times that recorded in Queensland (4.5%) and in Western Australia (4.2%), and nearly double that recorded in South Australia (6.6%)
- about twice as many detainees tested positive for amphetamines in Western Australia (36.3%) and South Australia (37.7%) as in New South Wales (17.2%).

Figure 3.30: Proportion of detainees testing positive by state and drug, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

SINGLE AND MULTIPLE DRUG USE

The data presented earlier in this chapter indicated that some detainees tested positive only to single drugs while others tested positive for multiple drugs.

In 2004–05, 864 Queensland detainees tested positive for illicit substances: just under half tested positive to a single drug only (n = 393; 45.5%). More than half (n = 471; 54.5%) tested positive to multiple drugs.

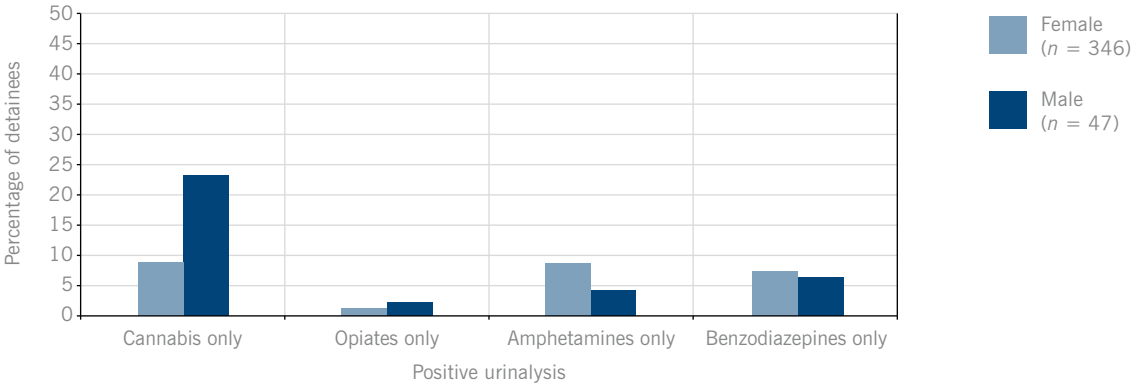
This section of the report describes the prevalence, time trends, interstate comparisons and gender profiles of single and multiple drug users in this sample.

Single drug use

Figure 3.31 (next page) illustrates the frequency of single drug use by detainees.

- Among detainees who tested positive for a single drug only (n = 393), most (88%) were females.
- Nearly one-quarter (23.3%) of male detainees who tested positive to only one drug tested positive for cannabis, compared with less than one-tenth (8.6%) of female detainees.
- Nearly twice as many female (8.6%) as male (4.4%) detainees who tested positive for only one drug tested positive for amphetamines, although the numbers were relatively small overall.

Figure 3.31: Percentage of Queensland detainees testing positive to single drug use by urinalysis, by drug type and gender, 2004–05

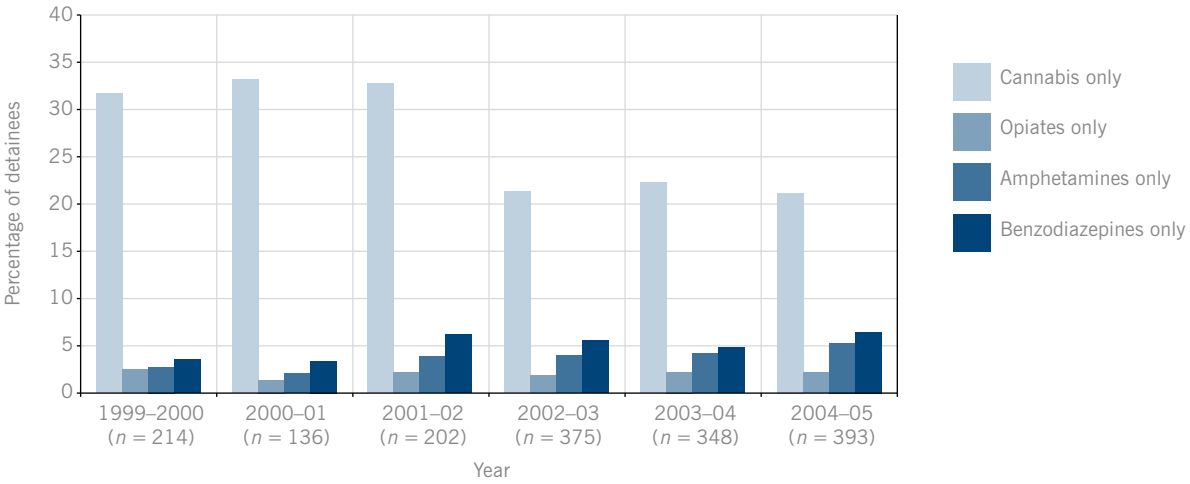


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 3.32 shows the proportion of detainees who tested positive to single drug use by drug type (cannabis, opiates, amphetamines or benzodiazepines) over time, 1999–2000 to 2004–05.

- As indicated above, cannabis accounted for most of the single drugs detected among detainees, and this profile remained unchanged throughout the period under observation. However, in 2002–03, there was a considerable decline in the number of detainees testing positive for cannabis only (from more than 30.0% to 23.1%) and this reduced rate continued through to 2004–05.
- In this same period, the proportion of detainees testing positive for benzodiazepines only doubled (from 2.9% in 2000–01 to 6.3% in 2001–02) and then remained relatively stable through to 2004–05 (6.4%).
- From 2000–01 (23.1%) onwards, the number of detainees testing positive for amphetamines only increased slightly.

Figure 3.32: Percentage of Queensland detainees testing positive to single drug use by urinalysis, by drug type, 1999–2000 to 2004–05

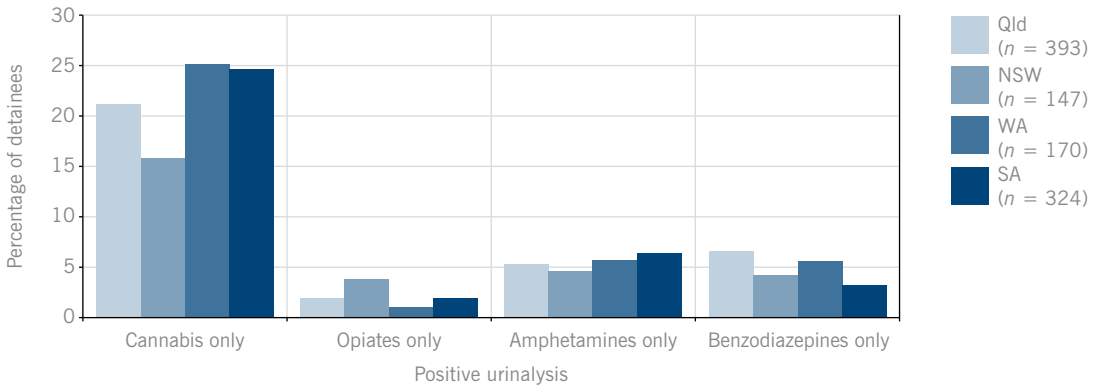


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 3.33 presents the state comparisons for the proportion of detainees testing positive for single drug use (cannabis, opiates, amphetamines or benzodiazepines only), 2004–05.

- Higher proportions of detainees from Western Australia (25.1%) and South Australia (24.6%) than of detainees from Queensland (20.9%) and New South Wales (15.8%) tested positive for cannabis only. Only small proportions of detainees tested positive for single use of all other drugs, and the profiles of use were very similar across states.

Figure 3.33: Percentage of detainees testing positive for single drug use by urinalysis, by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Multiple drug use

Table 3.1 illustrates the prevalence of multiple drugs detected by urinalysis in 2004–05 in Queensland male and female detainees. The most frequent drug combination detected was cannabis and amphetamines (8.4%), closely followed by the combination of cannabis and benzodiazepines (8.2%). While there was little difference between males and females in their use of the cannabis and amphetamine combination (males, 8.4%; females, 8.0%), males were nearly three times as likely as females to combine cannabis and benzodiazepines (males, 9.2%; females, 3.2%).

Table 3.1: Prevalence of multiple drug use by Queensland detainees, identified by urinalysis, 2004–05

Drug category	Males		Females		Total	
	n	%	*n*	%	*n*	%
Cannabis and opiates	14	1.5	1	0.5	15	1.3
Cannabis and methadone	0	0.0	0	0.0	0	0.0
Cannabis and amphetamine	81	8.4	15	8.0	96	8.4
Cannabis and benzodiazepine	88	9.2	6	3.2	94	8.2
Opiates and methadone	1	0.1	2	1.1	3	0.3
Opiates and amphetamine	6	0.6	1	0.5	7	0.6
Opiates and benzodiazepine	12	1.2	7	3.7	19	1.7
Amphetamines and benzodiazepines	10	1.0	6	3.2	16	1.4
Total number tested	212		38		250	

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

a Only 8 combinations are presented, hence the percentages will not total 100.

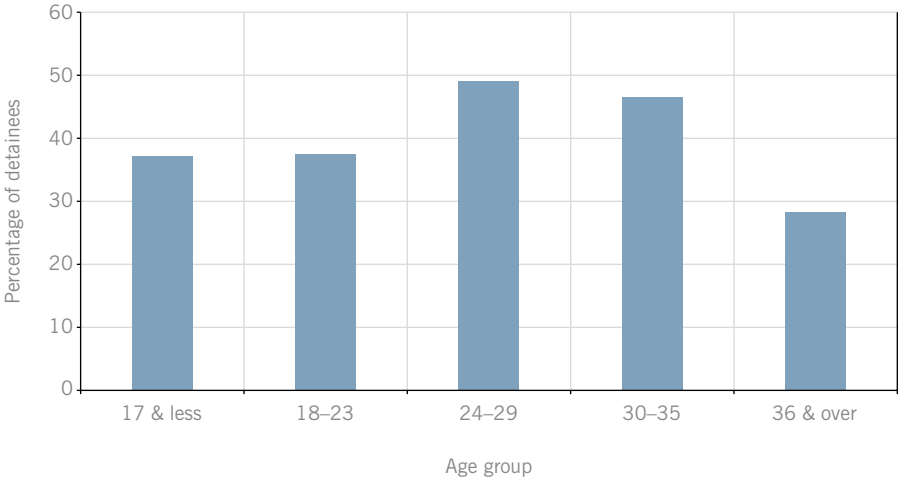
b In view of the small number of females in the sample, caution should be taken in interpreting results based on gender comparisons.

Figure 3.34 shows that Queensland DUMA participants aged 24–29 years in 2004–05 were most likely to be multiple drug users (49.3%), closely followed by detainees aged 30–35 years (46.7%). Detainees aged 36 years and older were least likely to be multiple drug users (28.3%).

Figure 3.35 shows the extent of various drug combinations used by Queensland detainees from 1999–2000 to 2004–05:

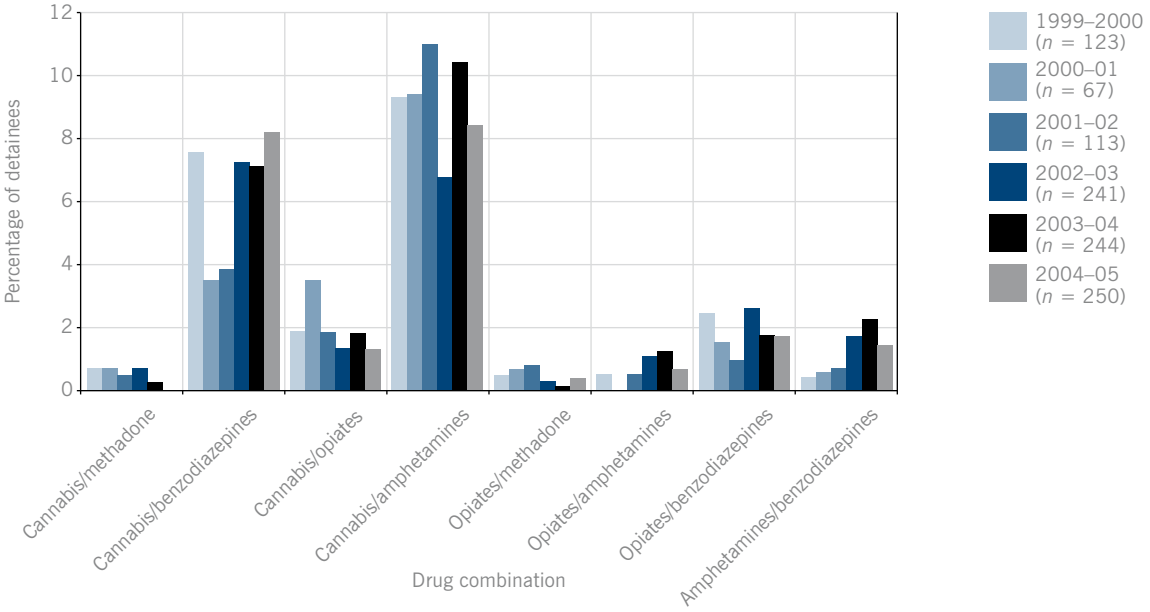
- The combination of cannabis and amphetamine was the most common multiple drug combination used by detainees in each year of data collection, except for 2002–03. Cannabis and benzodiazepine was the second most commonly detected combination.
- There was little variability across the years in the proportions of detainees combining cannabis with methadone, opiates with methadone, opiates with amphetamines and opiates with benzodiazepines.

Figure 3.34: Percentage of Queensland detainees testing positive by urinalysis to multiple drugs by age, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].
Note: *n* = 471

Figure 3.35: Types of multiple drug combinations used by Queensland detainees, identified by urinalysis, 1999–2000 to 2004–05

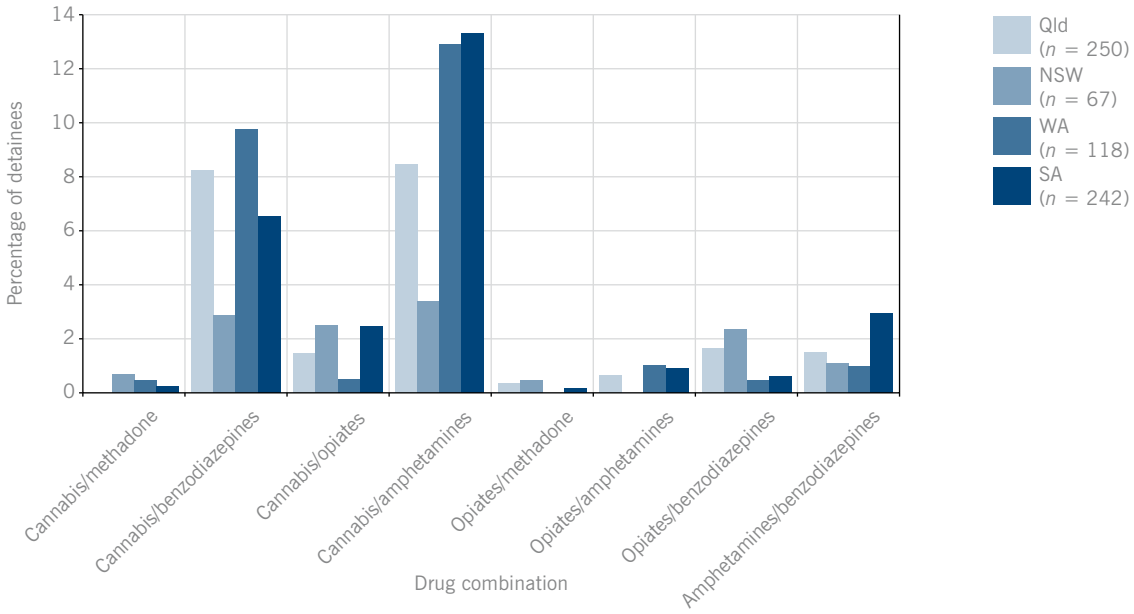


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 3.36 compares multiple drug use across states:

- The profile of multiple drug combinations around the country was similar to those for Queensland. The exception was the combination of cannabis and amphetamines, where New South Wales (3.3%) recorded a substantially lower proportion of detainees testing positive to this combination than the other states (Qld 8.4%; WA 12.9%; SA 13.2%).

Figure 3.36: Multiple drug use identified by urinalysis by state, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

CRIMINAL HISTORIES

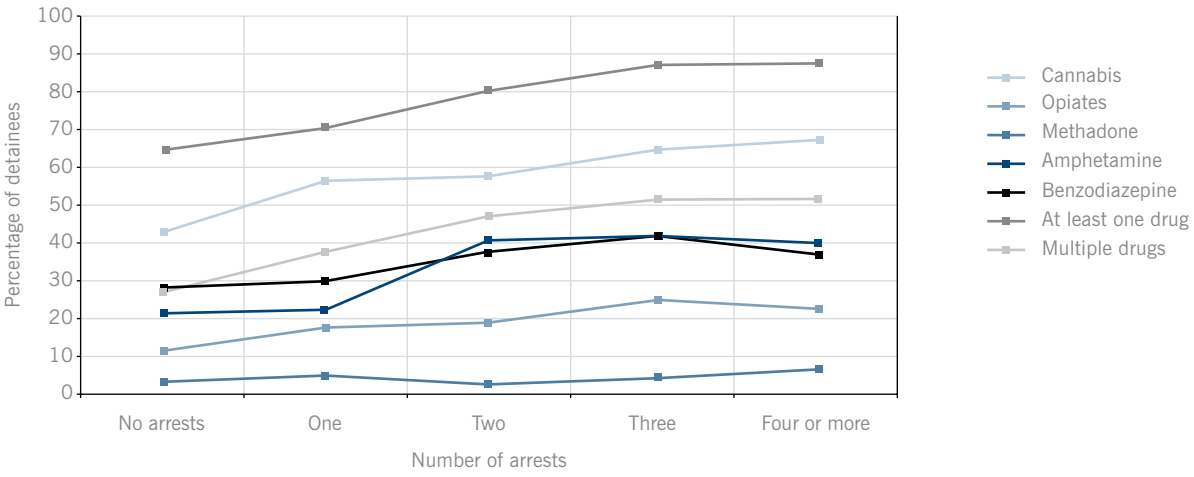
Various analyses were conducted to determine whether there were any links between the urinalysis results and the criminal histories of the detainees. The number of prior arrests, types of offences, drug-related crimes in the preceding 12 months and income from illegal activities were examined and are described below.

Arrests

Figure 3.37 (next page) shows the number of times detainees had been arrested in the previous 12 months by the proportion who tested positive for specific, single and multiple drug use. For each measure of drug use, there was a clear increase in the proportion of detainees testing positive as the number of times they had been arrested in the previous 12 months increased. For example:

- Over two-thirds of the detainees who were arrested either three (64.6%) or four or more (66.5%) times in the previous 12 months tested positive for cannabis, compared to less than half (43.0%) who reported no arrests in the same period.
- Although the prevalence was very low overall, a significantly higher proportion of detainees testing positive for methadone (6.6%) had been arrested four or more times in the previous 12 months than those who reported zero arrests in that time (3.0%).

Figure 3.37: Positive drug tests by type of drug and number of times detainees had been arrested in the preceding 12 months, 2004–05 (Queensland only)



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

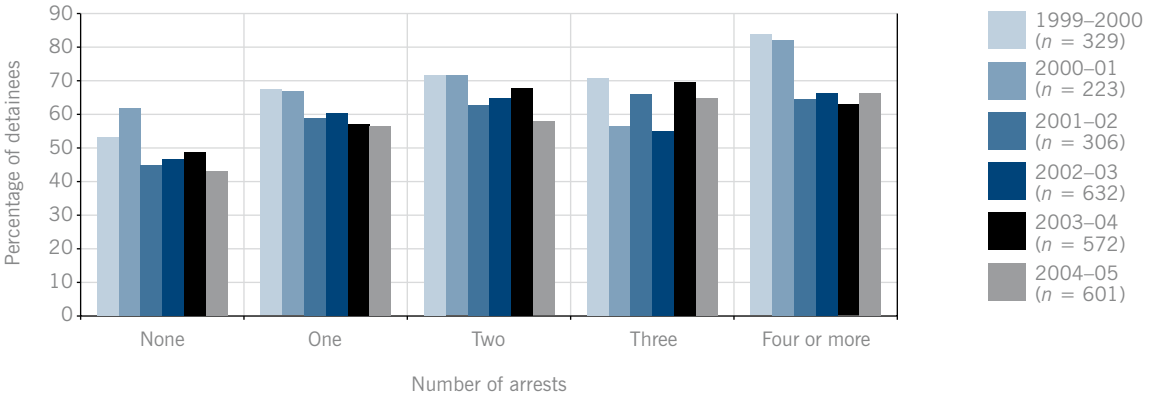
Note: Analyses not performed for cocaine due to the small sample size (n = 5).

Figures 3.38–3.49, following, show the number of times detainees were arrested in the preceding 12 months by the proportions testing positive to various drug measures over time, 1999–2000 to 2004–05. State comparisons for each drug type are also shown for 2004–05.

Cannabis

Figure 3.38 replicates the results shown in Figure 3.37 over time (1999–2000 to 2004–05). Each year higher proportions of detainees were detected with cannabis in their systems as the number of arrests in the previous 12 months increased. It also shows that, among detainees using cannabis, slightly more had been charged with one, two, and four or more arrests in 1999–2000 and 2000–01 than in later years.

Figure 3.38: Positive tests for cannabis by the number of times Queensland detainees had been arrested in the preceding 12 months, 1999–2000 to 2004–05

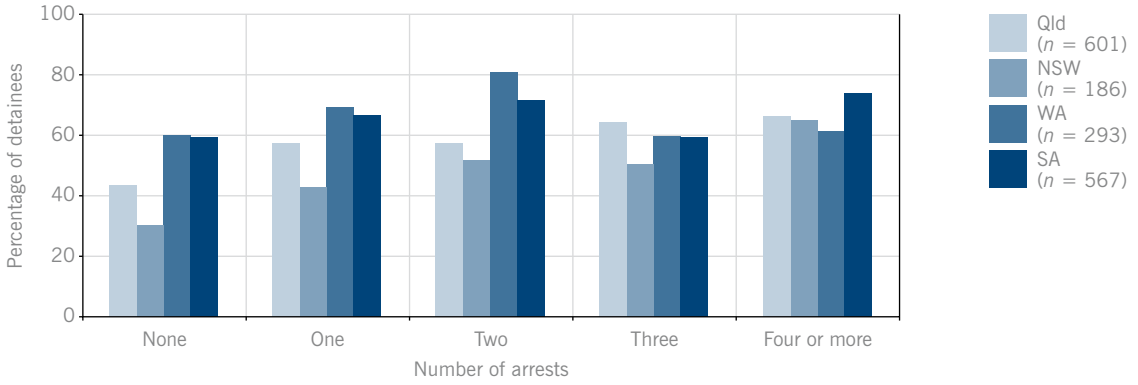


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

State comparisons for 2004–05 (see Figure 3.39) revealed that:

- New South Wales recorded the lowest number of detainees testing positive for cannabis who were never arrested (30.0%), arrested once (42.9%), twice (51.8%) and three times (50.0%).
- Queensland recorded the highest number of detainees testing positive for cannabis who were arrested three times (64.6%).
- South Australia recorded the highest number of detainees testing positive for cannabis who were arrested four or more times (74.0%).

Figure 3.39: Positive test for cannabis by the number of times detainees had been arrested in the preceding 12 months by state, 2004–05



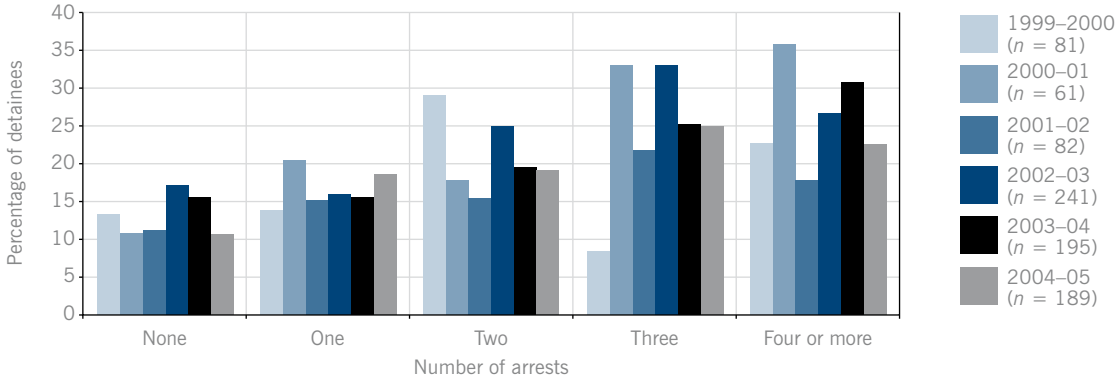
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Opiates

Figure 3.40 shows the number of times Queensland detainees reported being arrested in the preceding 12 months for those testing positive for opiates between 1999–2000 and 2004–05. Again, the results reflect the general trends shown above, except for the following outliers:

- A disproportionately high percentage of detainees testing positive for opiates in 1999–2000 had been arrested twice (28.9%).
- A particularly low proportion of detainees testing positive for opiates in 1999–2000 had been arrested three or more times (8.3%).
- Among opiate users, a particularly low proportion of detainees who had been arrested four or more times was observed in 2001–02 (17.8%), and a particularly high proportion who had been arrested four or more times was observed in 2000–01 (35.0%).

Figure 3.40: Positive test for opiates by the number of times Queensland detainees had been arrested in the preceding 12 months, 1999–2000 to 2004–05

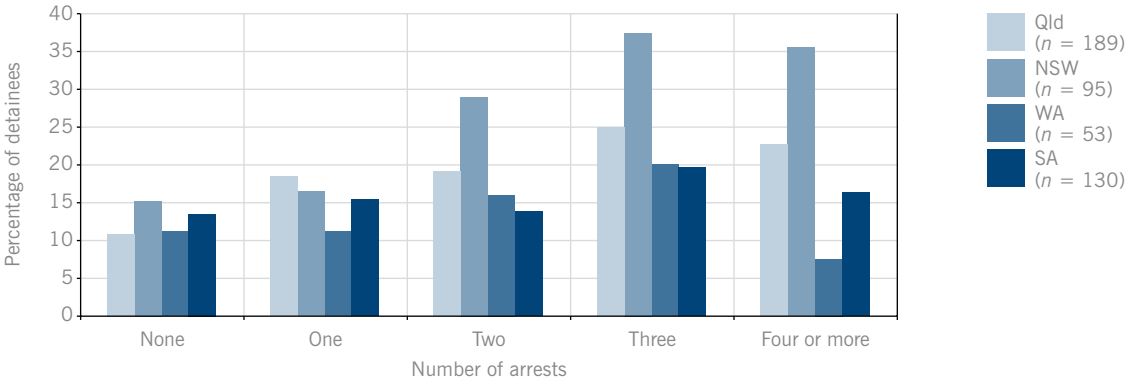


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

State comparisons revealed (Figure 3.41) that:

- New South Wales demonstrated the strongest upward trend between opiate use and high arrest rates in the previous 12 months.
- Western Australian opiate users demonstrated an unusual downward trend in the proportion who had been arrested four or more times in the previous 12 months (7.4%).

Figure 3.41: Positive test for opiates by the number of times detainees had been arrested in the preceding 12 months and by state, 2004–05



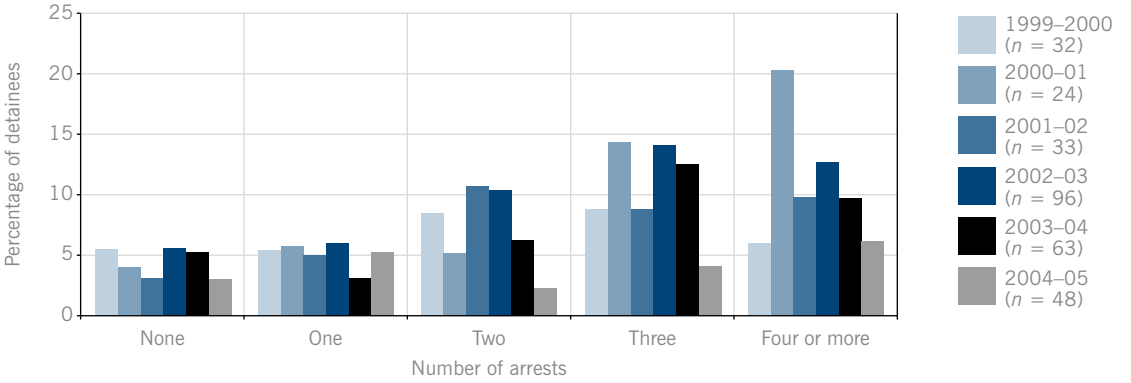
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Methadone

In addition to the trends identified above, Figure 3.42 shows:

- The highest percentages of detainees testing positive for methadone being arrested three (14.3%) or four or more times (20.5%) in 2000–01.
- Particularly low percentages of detainees testing positive for methadone being arrested two (2.9%), three (4.2%) or four or more times (6.6%) in 2004–05.

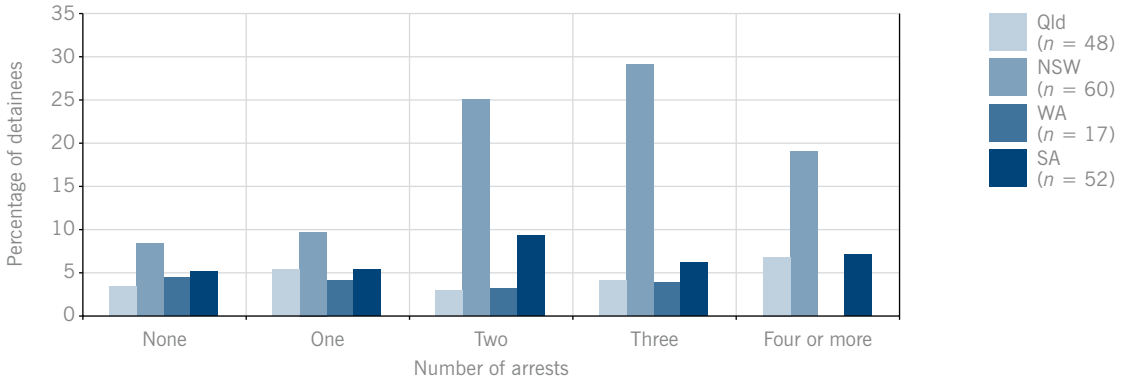
Figure 3.42: Positive test for methadone by the number of times Queensland detainees had been arrested in the preceding 12 months, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–05 [computer file].

State comparisons (Figure 3.43) revealed that New South Wales recorded, by far, the highest proportion of detainees testing positive for methadone being arrested one (9.9%), two (25.0%), three (29.2%) and four or more times (19.0%) and that, as with the other drugs, the upward trend generally applies to methadone, except for detainees reporting four or more arrests.

Figure 3.43: Positive test for methadone by the number of times detainees had been arrested in the preceding 12 months and by state, 2004–05



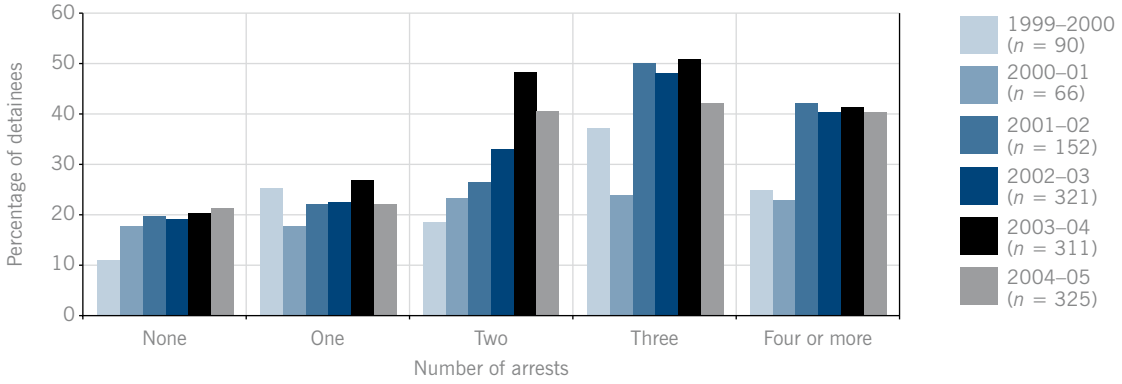
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Amphetamines

In addition to the trends identified above, Figure 3.44 shows:

- From 1999–2000 (18.4%) to 2003–04 (40.4%) there was quite an increase in the proportion of detainees testing positive for amphetamines who had been arrested twice in the preceding 12 months.
- In 2001–02 there was a sharp increase among detainees testing positive for amphetamines in the proportions who had been arrested three (50.0%) or four or more times (41.6%) in the preceding 12 months.

Figure 3.44: Positive test for amphetamines by the number of times Queensland detainees had been arrested in the preceding 12 months, 1999–2000 to 2004–05

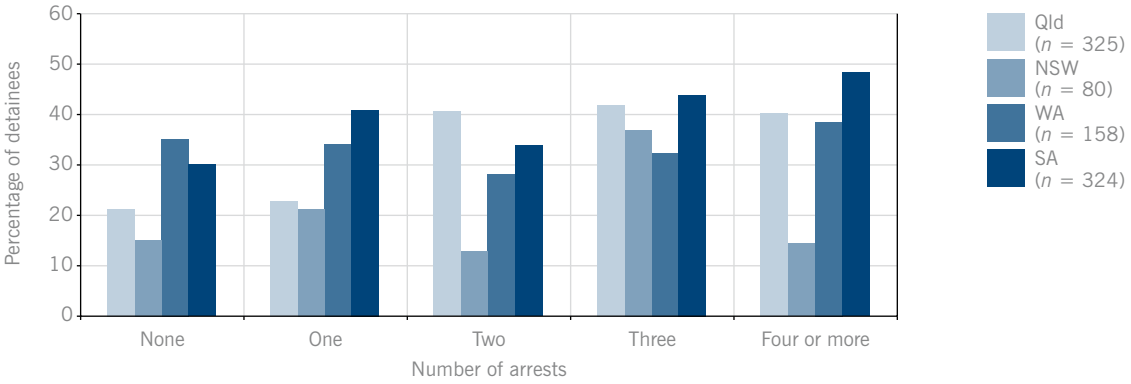


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

State comparisons (Figure 3.45) revealed that:

- Compared to the other states, New South Wales had the fewest detainees testing positive for amphetamines who had been arrested one (20.9%), two (12.5%) and four or more times (14.3%).
- South Australia recorded the highest percentages of detainees testing positive for amphetamines who had been arrested three (43.9%) and four or more times (48.7%).

Figure 3.45: Positive test for amphetamines by the number of times detainees had been arrested in the preceding 12 months and by state, 2004–05

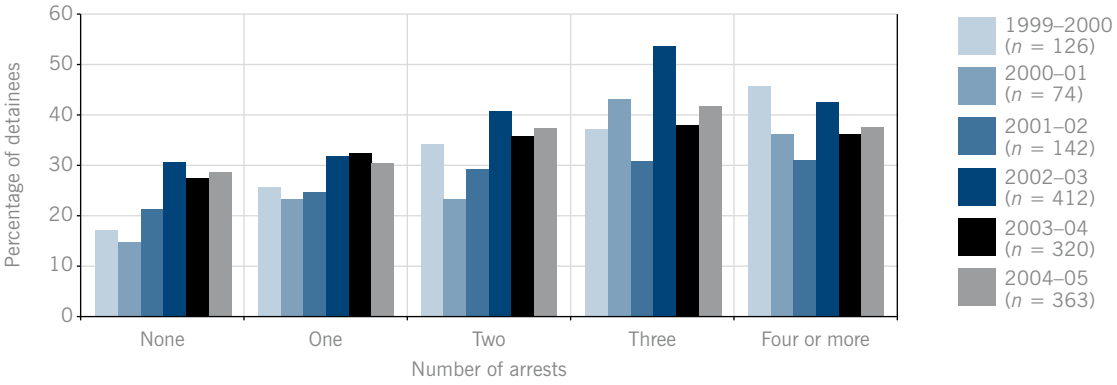


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Benzodiazepines

Figure 3.46 again supports the trends demonstrated above. There was also a clear spike in three or more arrests among benzodiazepine users (53.5%) in 2002–03.

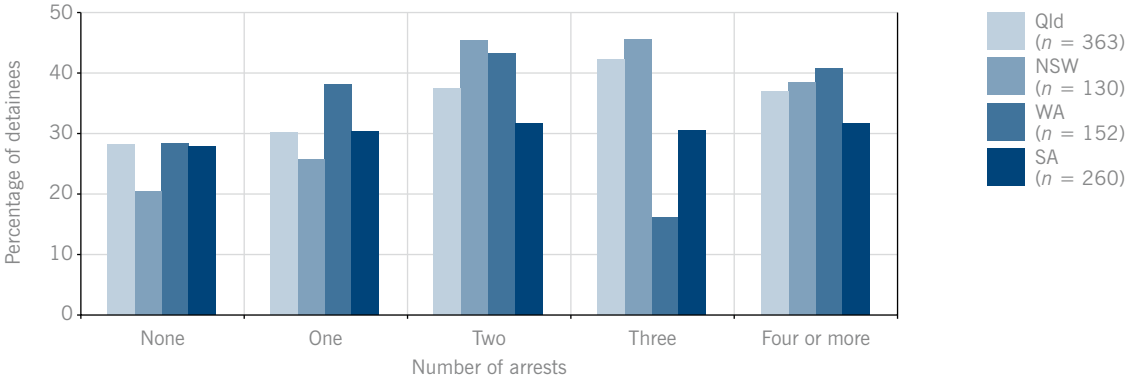
Figure 3.46: Positive test for benzodiazepines by the number of times Queensland detainees had been arrested in the preceding 12 months, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–05 [computer file].

State comparisons (Figure 3.47) revealed that New South Wales had the fewest detainees testing positive for benzodiazepines with zero (20.2%) or one (26.4%) arrests, and the most who had been arrested twice (46.4%) or three times (45.8%) in the preceding 12 months.

Figure 3.47: Positive test for benzodiazepines by the number of times detainees had been arrested in the preceding 12 months and by state, 2004–05



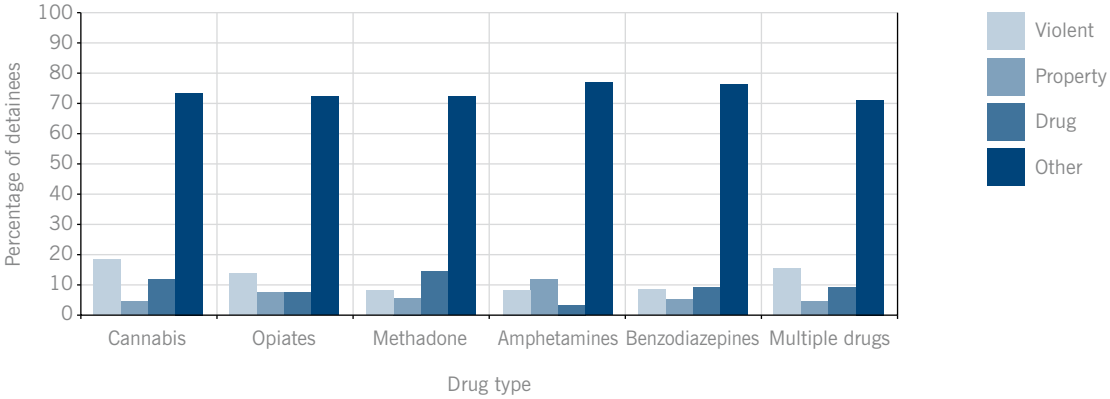
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Offence profile

Figure 3.48 shows the proportions of Queensland detainees testing positive by drug type and the main offence with which they had been charged (ASOC classification) in 2004–05:[7]

- Most detainees who tested positive for any type of drug or for multiple drugs were charged with 'other' offences.
- There were relatively more arrests for violent offences among detainees who tested positive for cannabis (15.3%) and multiple drug use (11.3%) than other drug types. On the other hand, relatively more detainees who tested positive for amphetamines (11.4%) were charged with property offences.

Figure 3.48: Positive tests by drug type and major charge (ASOC) among Queensland detainees, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: Due to small numbers, cocaine was excluded from these analyses.

7 The Appendix lists the offences coded as violent, property, drug or other offences. In their review of the final draft of this report, AIC/DUMA researchers noted that the proportions of property offences reported in our results appeared to be significantly underestimated when compared with other DUMA studies. Although the data categories have been checked and appear to be correct, they should be interpreted with caution.

Trends over time in Queensland: offences by drug type

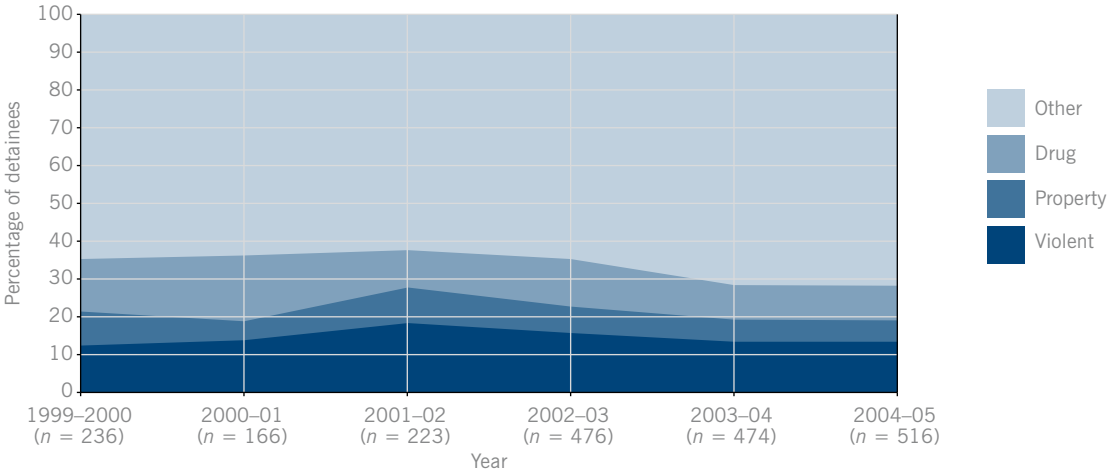
Figures 3.49–3.53, following, examine the proportions of Queensland detainees testing positive to each drug by the main offence (ASOC) with which they had been charged between 1999–2000 and 2004–05.

Cannabis

As Figure 3.49 shows, among Queensland detainees who tested positive for cannabis:

- a relatively high percentage were charged with a drug offence in 2000–01 (17.5%)
- a relatively high proportion were charged with a violent offence in 2001–02 (19.3%).

Figure 3.49: Positive cannabis test by major charge (ASOC) for Queensland detainees, 1999–2000 to 2004–05



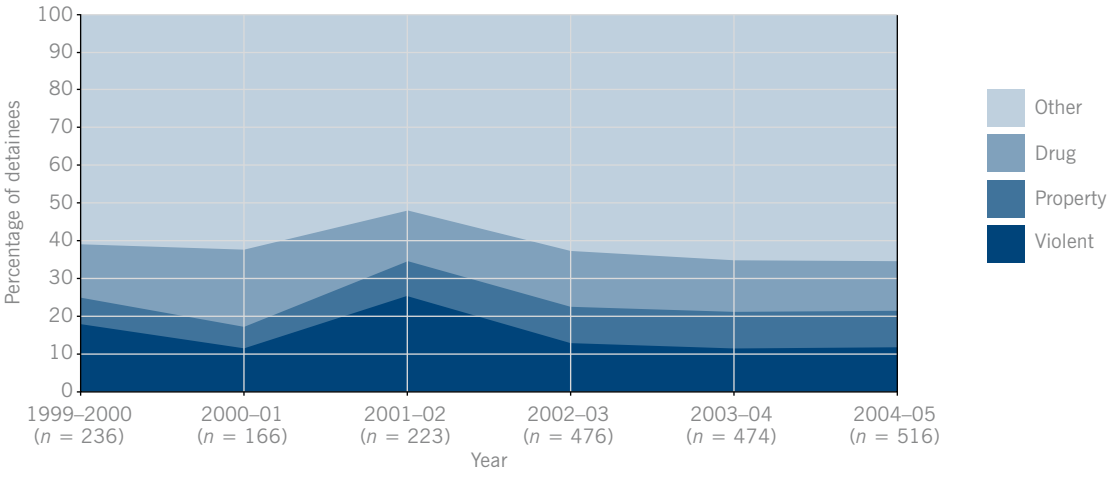
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Opiates

Figure 3.50 shows that, among Queensland detainees testing positive to opiates:

- about a quarter (25.9%) were charged with a violent offence in 2001–02
- about one-fifth (20.6%) were charged with a drug offence in 2000–01.

Figure 3.50: Positive opiate test by major charge (ASOC) for Queensland detainees, 1999–2000 to 2004–05



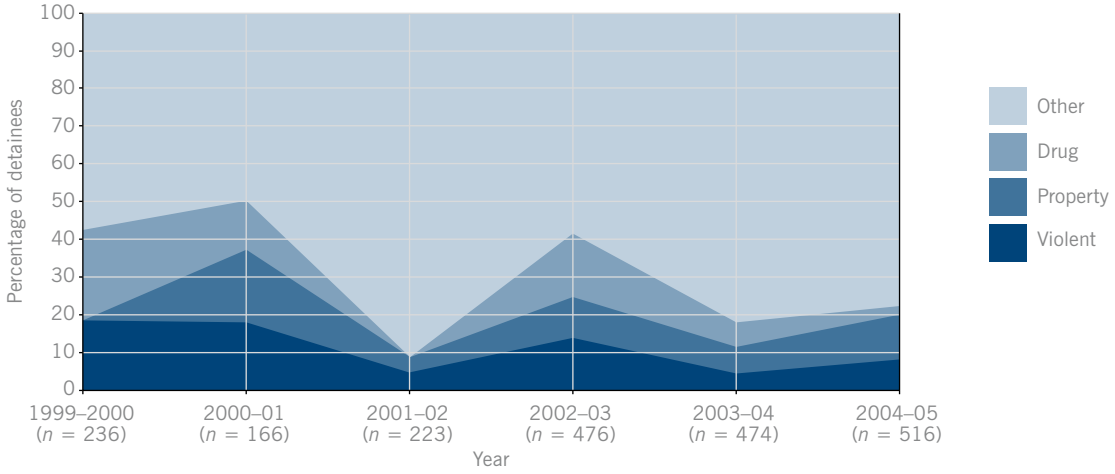
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Methadone

Figure 3.51 shows that, among Queensland detainees who tested positive for methadone:

- the highest proportion charged with a drug offence was recorded in 1999–2000 (23.8%)
- the highest proportion charged with a property offence was recorded in 2000–01 (18.8%)
- the proportions charged with violent (18.8%) and property offences (18.8%) in 2000–01 were at their highest; though the proportion charged with a violent crime was slightly higher in 1999–2000 (19.0%).

Figure 3.51: Positive methadone test by major charge (ASOC) for Queensland detainees, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Cocaine

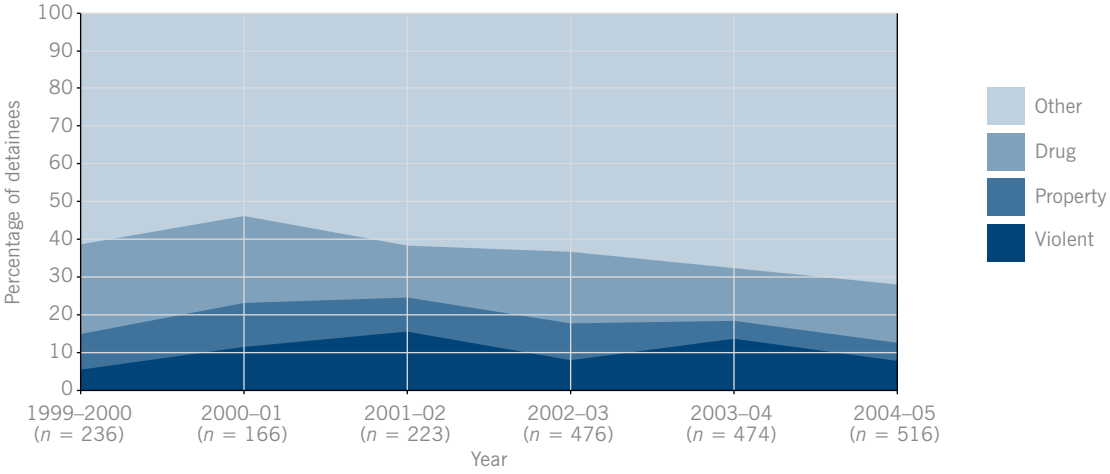
Between 1999–2000 and 2004–05, less than 5 per cent of Queensland detainees who tested positive for cocaine were charged with an offence in the previous 12 months (1999–2000, n = 4; 2000–01, n = 1; 2001–02, n = 5; 2002–03, n =2; 2003–04, n =5; 2004–05, n = 3). Due to these very small sample sizes, the relationships between testing positive for cocaine and ASOC charges were not analysed.

Amphetamines

Figure 3.52 shows that, among Queensland detainees who tested positive for amphetamines:

- about one-quarter were charged with a drug offence in 1999–2000 (24.3%) and in 2000–01 (23.3%)
- violent offences were at their highest in 2001–02 (15.8%).
- the lowest percentage of detainees charged with a property offence was recorded in 2004–05 (5.0%).

Figure 3.52: Positive amphetamines test by major charge (ASOC) for Queensland detainees, 1999–2000 to 2004–05



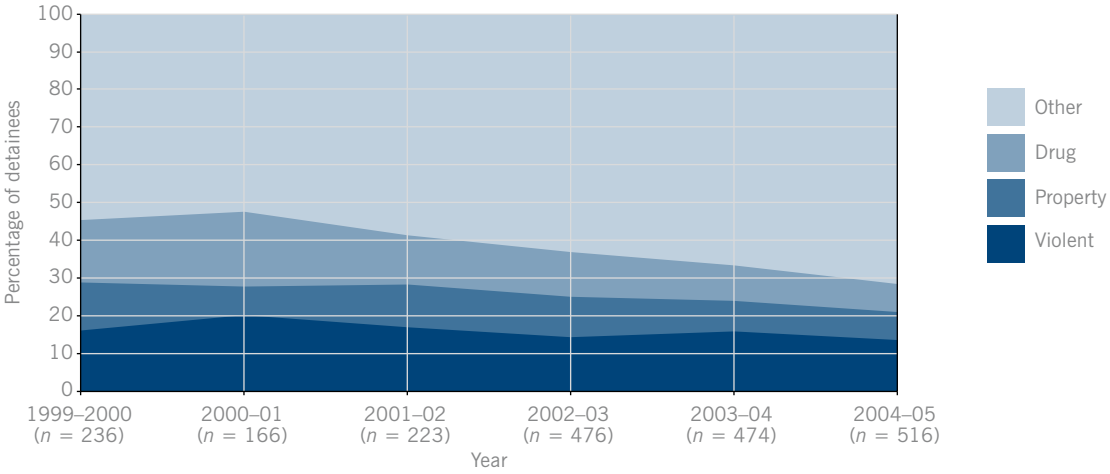
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Benzodiazepines

Figure 3.53 shows that, for Queensland detainees who tested positive for benzodiazepines:

- the highest proportion of charges for a violent or drug offence (20.0%) was in 2000–01
- across the years, the least likely charges were for property offences.

Figure 3.53: Positive benzodiazepine test by major charge (ASOC) for Queensland detainees, 1999–2000 to 2004–05



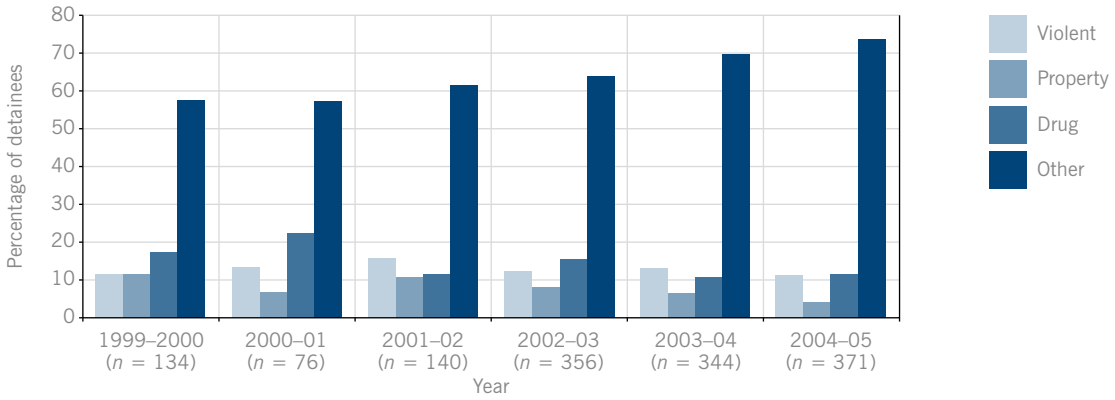
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Multiple drug use

Figure 3.54 shows that, for Queensland detainees who tested positive for multiple drugs:

- the highest percentage charged with a violent offence was recorded in 2001–02 (16.4%)
- the highest percentage charged with a property offence was recorded in 1999–2000 (11.9%)
- the highest percentage charged with a drug offence was recorded in 2000–01 (22.4%).

Figure 3.54: Positive test for multiple drugs by major charge (ASOC) for Queensland detainees, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

State trends: offences by drug type

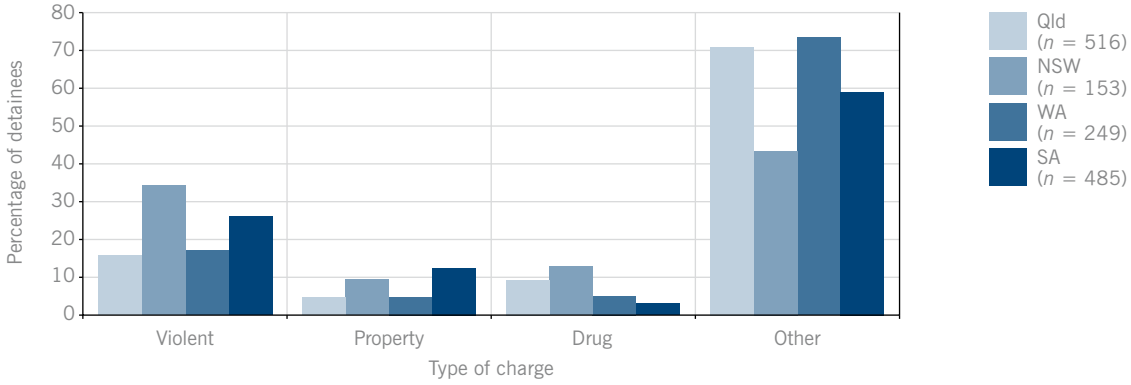
Figures 3.55–3.61, following, examine the proportions of detainees from each state who tested positive in 2004–05 for each drug by the main offence (ASOC) with which they had been charged.

Cannabis

Figure 3.55 shows that, among detainees who tested positive for cannabis:

- New South Wales recorded a substantially higher proportion of detainees charged with a violent offence (34.6%) than South Australia (26.2%), Western Australia (17.7%) and Queensland (15.3%)
- Queensland (4.3%) and Western Australia (4.4%) recorded the smallest percentages of detainees charged with a property offence
- New South Wales recorded a larger percentage of detainees charged with a drug offence (12.4%) than Queensland (9.7%), Western Australia (4.4%) and South Australia (2.7%).

Figure 3.55: Positive tests for cannabis by major charge (ASOC) and state, 2004–05



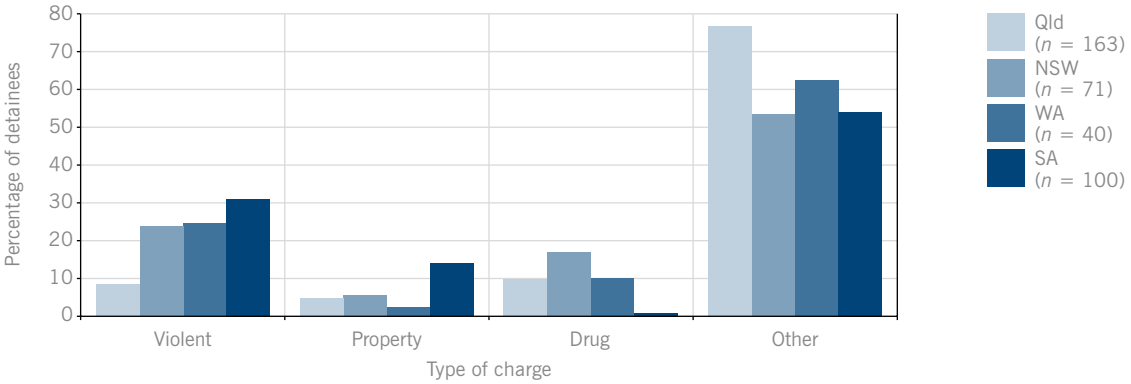
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Opiates

Figure 3.56 shows that, among detainees who tested positive for opiates:

- Queensland (8.6%) recorded substantially fewer detainees charged with a violent offence than New South Wales (23.9%), Western Australia (25.0%) and South Australia (31.0%)
- South Australia (14.0%) recorded substantially more detainees charged with a property offence than New South Wales (5.6%), Queensland (4.9%) and Western Australia (2.5%)
- New South Wales recorded the most detainees charged with a drug offence (16.9%), while South Australia recorded the fewest detainees charged with a drug offence (1.0%).

Figure 3.56: Positive tests for opiates by major charge (ASOC) and state, 2004–05



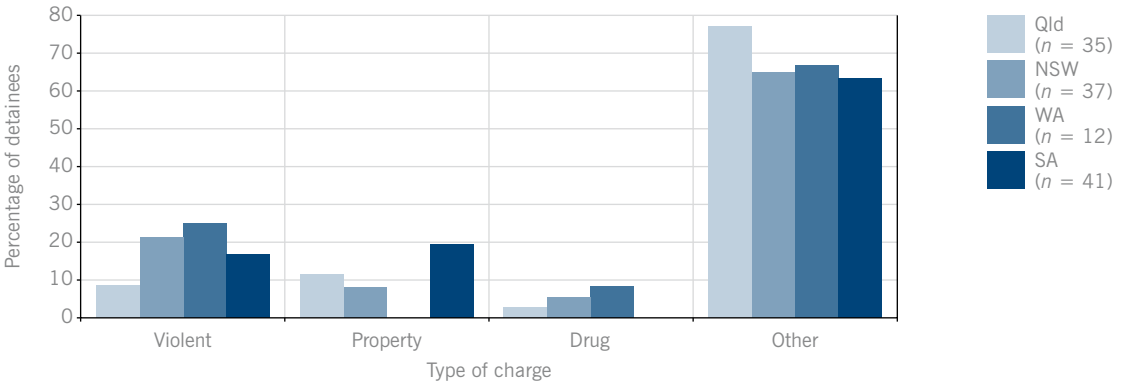
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Methadone

Figure 3.57 shows that, among detainees who tested positive for methadone:

- Queensland recorded the lowest proportion of detainees charged with a violent offence (8.6%)
- South Australia (19.5%) recorded a much higher percentage of detainees charged with a property offence than Queensland (11.4%) and New South Wales (8.1%); no detainees from Western Australia were charged with a property offence
- few detainees from Queensland (2.9%), New South Wales (5.4%) and Western Australia (8.3%), and none from South Australia, were charged with a drug offence.

Figure 3.57: Positive tests for methadone by major charge (ASOC) and state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Cocaine

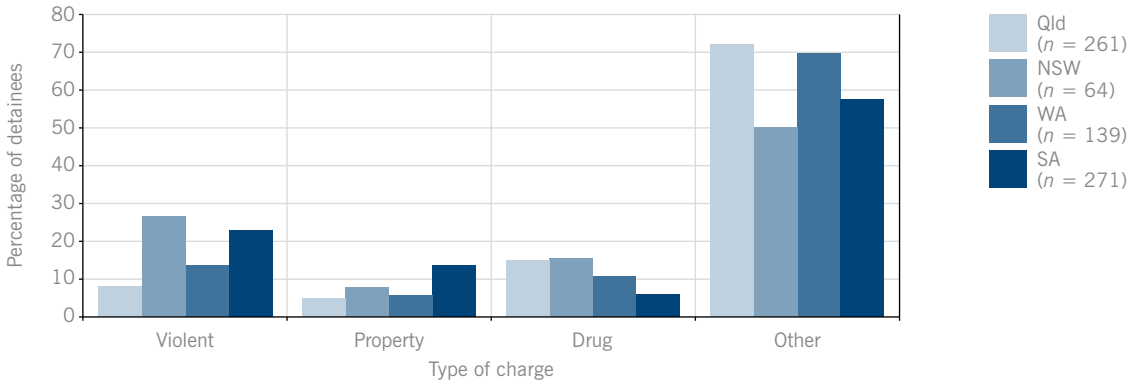
The sample sizes of detainees testing positive for cocaine who were charged with an offence were small (Queensland n = 3; New South Wales n = 14; Western Australia n = 1; South Australia n = 5). State comparisons by major charge were, therefore, not performed.

Amphetamines

Figure 3.58 shows that, among detainees who tested positive for amphetamines:

- New South Wales recorded the highest proportion of detainees charged with a violent offence (26.6%); the proportion of Queensland detainees (8.0%) charged with a violent offence was less than one-third of that proportion
- South Australia recorded the highest number of detainees charged with a property offence (13.7%)
- the number of detainees charged with a drug offence was substantially higher in New South Wales (15.6%) and Queensland (14.9%) than in Western Australia (10.8%) and South Australia (5.9%).

Figure 3.58: Positive tests for amphetamines by major charge (ASOC) and state, 2004–05



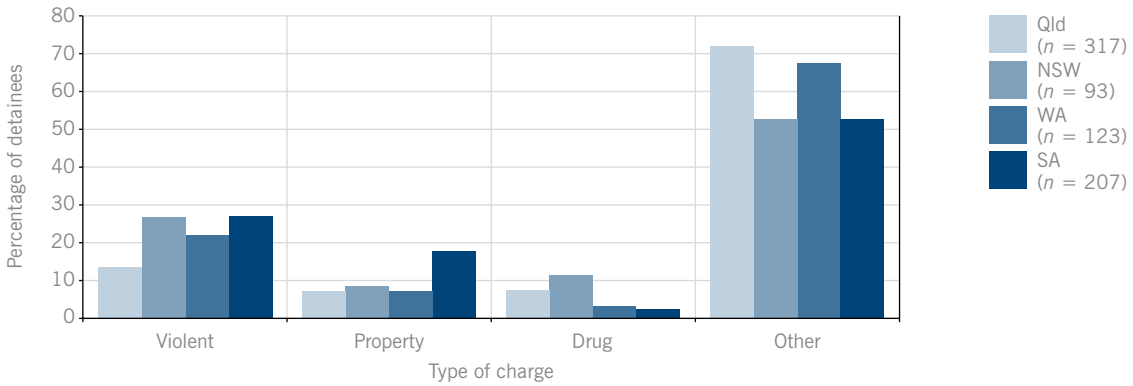
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Benzodiazepines

Figure 3.59 shows that, among detainees who tested positive for benzodiazepines:

- far fewer in Queensland (13.6%) were charged with a violent offence than in South Australia (27.1%), New South Wales (26.9%) and Western Australia (22.0%)
- substantially more were charged with a property offence in South Australia (17.9%) than in New South Wales (8.6%), Queensland (7.3%) and Western Australia (7.3%)
- more detainees were charged with a drug offence in New South Wales (11.8%) than Queensland (7.3%), Western Australia (3.3%) and South Australia (2.4%).

Figure 3.59: Positive tests for benzodiazepines by major charge (ASOC) and state, 2004–05



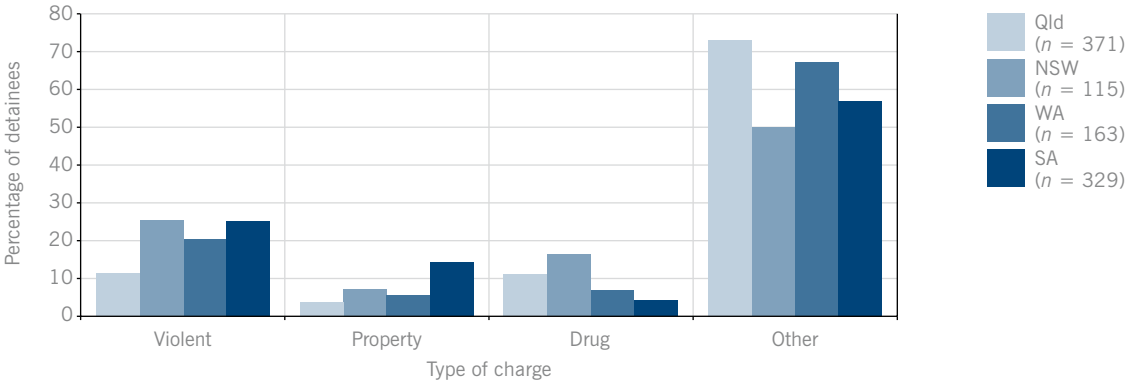
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Multiple drugs

Figure 3.60 shows that, among detainees who tested positive for multiple drugs:

- far fewer in Queensland (11.3%) were charged with a violent offence than in New South Wales (26.1%), South Australia (25.2%) and Western Australia (20.2%)
- substantially more in South Australia (14.3%) were charged with a property offence than in New South Wales (7.0%), Western Australia (5.5%) and Queensland (4.3%)
- more were charged with a drug offence in New South Wales (16.5%) and Queensland (11.3%) than in Western Australia (6.7%) and South Australia (3.6%).

Figure 3.60: Positive tests for multiple drugs by major charge (ASOC) and state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

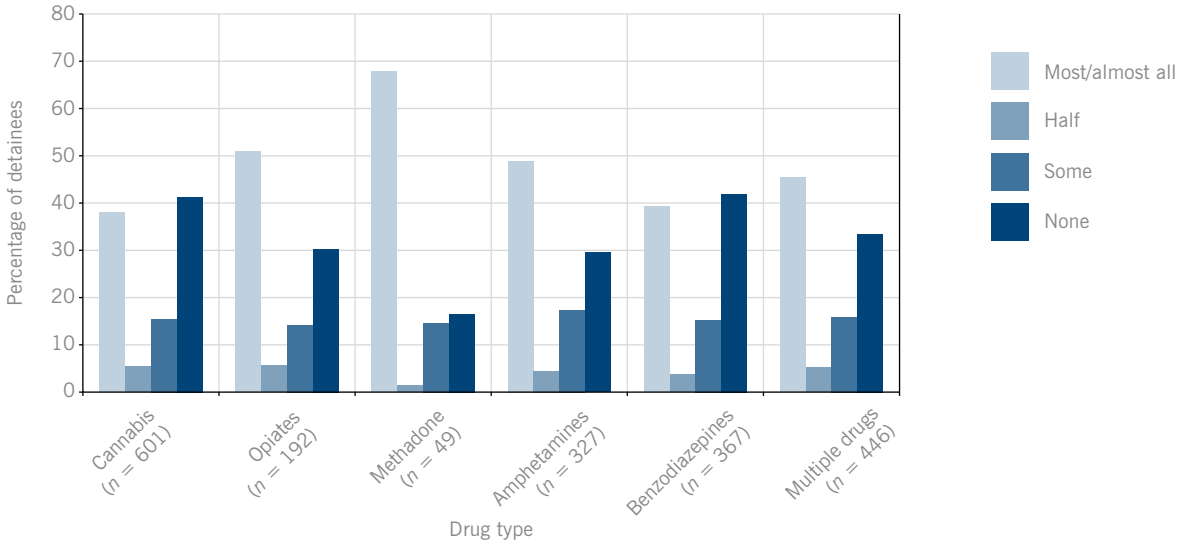
Drug-related crime in Queensland

Figure 3.61 (facing page) shows the amount of drug-related crime committed by Queensland detainees in the previous 12 months within the categories of drugs for which detainees tested positive to the urinalysis (2004–05 only).

The figure shows that, among drug users there appears to be an interesting dichotomy between those who do (most/almost all) and do not (none) commit drug-related crimes. Few reported that 'half' or 'some' of the crimes they committed were drug-related. For example:

- approximately two-thirds (67.3%) of the detainees who tested positive for methadone reported that most or almost all of their criminal behaviour in the preceding 12 months was drug-related
- approximately half of the detainees who tested positive for opiates (51.0%) or amphetamines (48.9%) reported that most or almost all of their criminal behaviour in the preceding 12 months was drug-related
- about four in ten detainees who tested positive for cannabis (37.6%) or benzodiazepines (39.0%) reported that most or almost all of their criminal behaviour in the preceding 12 months was drug-related
- detainees who tested positive for multiple drugs (45.7%) were more likely to report that most or almost all of their criminal behaviour in the preceding 12 months was drug-related than were detainees who tested positive for one drug only (37.3%: information not graphed).

Figure 3.61: Positive tests for various drug types and multiple use, by the amount of drug-related crime committed by Queensland detainees in the preceding 12 months, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: Cocaine not included in analyses due to small sample size ($n = 5$).

Trends over time

Table 3.2 (next page) shows the trends over time (1999–2000 to 2004–05) in the proportions of Queensland detainees reporting that the crimes they committed in the preceding 12 months had been drug-related, among those who tested positive for various drug types. Generally the results reflect those shown above for 2004–05:

- The highest proportion of detainees whose offences committed in the preceding 12 months were mostly or almost all drug-related were by those with methadone in their system; more than two-thirds throughout the entire data collection period (1999–2000 to 2004–05) reported that this was the case, except for 1999–2000 when almost all (90.0%) reported that this had been the case.
- More than half, and at times two-thirds, of the detainees testing positive for opiates reported consistently over time that most or all of the crime they committed in the preceding 12 months had been drug-related.
- Among detainees testing positive for amphetamines, there was a sharp increase in 2001–02 (52.6%) in the proportion who reported that most or almost all of their criminal behaviour in the preceding 12 months had been drug-related, but this proportion remained stable throughout the remaining data collection period.
- Across time, about three-to-four in ten detainees who tested positive for cannabis and benzodiazepines consistently reported that most or almost all of their criminal behaviour in the preceding 12 months had been drug-related.
- About half of the detainees testing positive for multiple drugs consistently reported across time that most or almost all of their offences in the preceding 12 months had been drug-related.

Table 3.2: The amount of crime committed by Queensland detainees in the preceding 12 months reported to be drug-related by detainees who tested positive to urinalysis, 2000–01 to 2004–05

Proportion of crime drug-related	Percentage of detainees testing positive by drug category				
	2000–01	2001–02	2002–03	2003–04	2004–05
			Cannabis		
Most/almost all	30.8	36.5	41.6	37.2	37.6
Half	7.7	2.6	2.7	3.1	4.7
Some	7.7	16.3	11.8	12.4	15.6
None	53.8	44.6	43.8	47.3	42.1
Total	100	100	100	100	100
			Opiates		
Most/almost all	68	55.4	63.5	62.5	51.0
Half	0.0	0.0	2.5	3.6	4.7
Some	12.0	9.6	9.5	5.2	14.1
None	20.0	34.9	24.5	28.6	30.2
Total	100	100	100	100	100
			Methadone		
Most/almost all	90	63.6	69.8	60.3	67.3
Half	0.0	0.0	0.0	6.3	2.0
Some	0.0	9.1	7.3	6.3	14.3
None	10.0	27.3	22.9	27.0	16.3
Total	100	100	100	100	100
			Amphetamines		
Most/almost all	33.3	52.6	53.9	56.8	48.9
Half	11.1	2.0	3.7	2.6	4.3
Some	0.0	17.8	11.5	7.8	17.1
None	55.6	27.6	30.8	32.8	29.7
Total	100	100	100	100	100
			Benzodiazepines		
Most/almost all	43.3	41.3	48.8	46.1	39
Half	10.0	2.1	1.4	1.9	3.3
Some	3.3	11.9	8.7	7.5	15.0
None	43.3	44.8	41.1	44.5	42.8
Total	100	100	100	100	100
			Multiple drugs		
Most/almost all	47.8	48.8	53.7	50.9	45.7
Half	6.5	2.0	2.4	2.6	4.5
Some	4.3	19.2	10.7	8.6	16.1
None	41.3	30.0	33.2	37.9	33.6
Total	100	100	100	100	100

Source: Australian Institute of Criminology, DUMA collection, 2000–01 to 2004–05 [computer file].

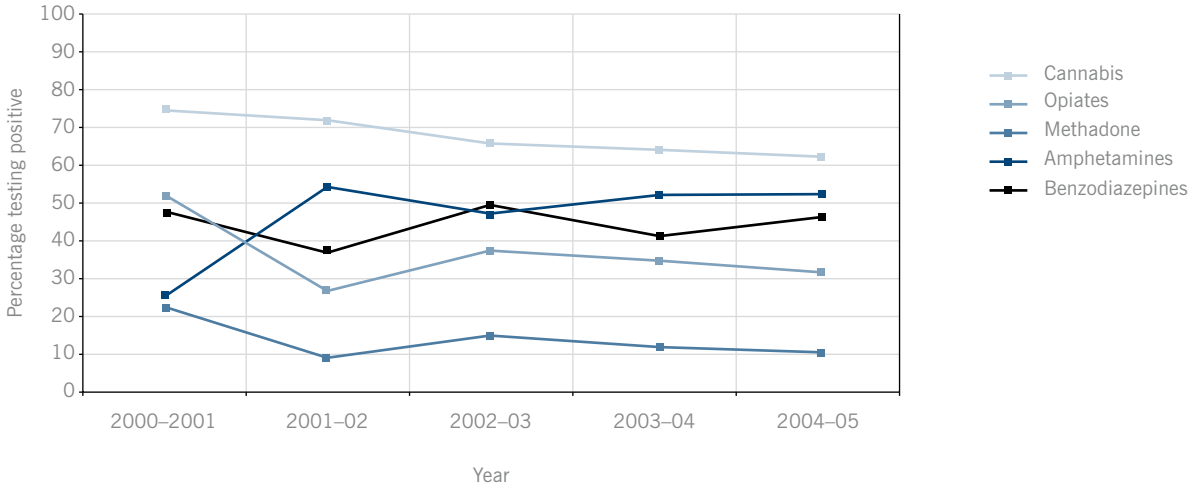
Receiving an income from illegal activities

Queensland figures for 2004–05, trends over time and state comparisons are shown below in the proportions of detainees who reported that they had received an income from illegal activities and tested positive to various drugs.

Figure 3.62 shows the proportion of Queensland detainees who reported that they 'had' or 'had not' derived an income from illegal activities, by positive tests to various drug types between 2000–01 and 2004–05.

- There was a steady decline over time among detainees who stated that they derived some of their income from illegal activities in the proportion who tested positive to cannabis (from 74.1% in 2000–01 to 62.9% in 2004–05), opiates (from 38.1% and 31.7% respectively) and methadone (15.7 and 10.4% respectively).
- In 2001–02, there was a marked increase in the proportion of detainees deriving income from illegal activities who tested positive for amphetamines, but this rate remained relatively constant in the ensuing years.

Figure 3.62: Queensland detainees who stated that they had derived an income from illegal activities by the proportion with positive drug tests, 2000–01 to 2004–05



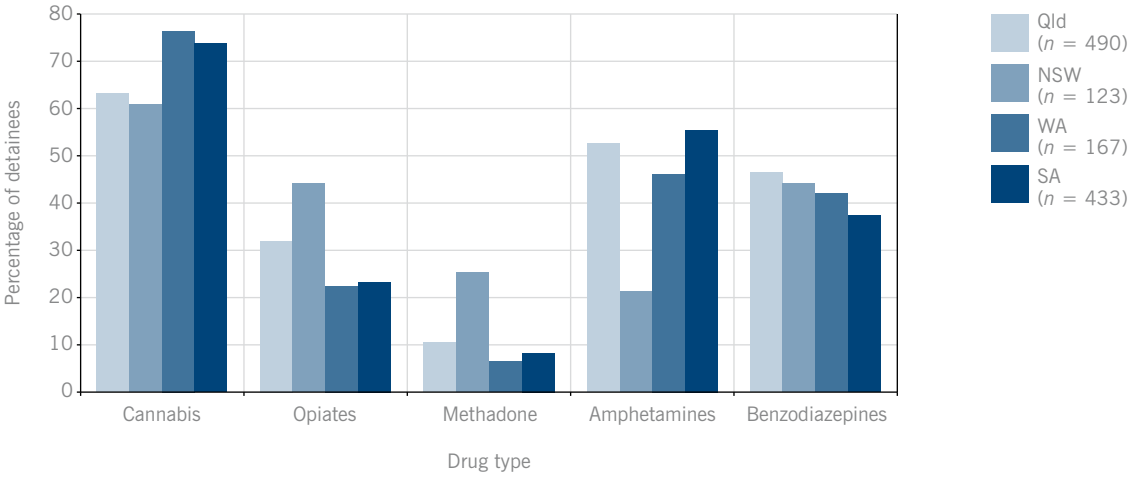
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:
a Data not available for 1999.
b Analyses not performed for cocaine due to the small sample size (n = 5).

State comparisons for positive tests among detainees earning an activity for illegal activities in 2004–05 are shown in Figure 3.63 (next page):

- More detainees earning an income from illegal activities in Western Australia (76.7%) and South Australia (74.3%) tested positive for cannabis than in Queensland (62.9%) and New South Wales (60.3%).
- More detainees earning an income from illegal activities in New South Wales (44.4%) than in all the other states tested positive for opiates.
- Substantially more detainees earning an income from illegal activities in New South Wales (25.4%) tested positive for methadone than in Queensland (10.4%), Western Australia (7.0%) and South Australia (8.7%).
- About half of the South Australian (55.0%), Queensland (52.5%) and Western Australian (46.5%) detainees deriving an income from illegal activities tested positive for amphetamines. Substantially fewer did so from New South Wales (20.6%).
- Queensland (46.7%) recorded the highest percentage of detainees earning an income from illegal activities testing positive for benzodiazepines.

Figure 3.63: Percentage of detainees testing positive to drugs by urinalysis by proportion of income derived from illegal activities, by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: Analyses not performed for cocaine due to the small sample size (n = 5).

CHAPTER SUMMARY

All detainees interviewed for DUMA were invited to participate in a voluntary urinalysis that detected the presence or absence of cannabis, opiates, methadone, cocaine, amphetamines and benzodiazepines. A remarkably high proportion of detainees provided urine samples, so the results reported here can be considered representative of the sample of watch-house detainees participating in the project.

This chapter presented the basic prevalence of each drug, and of various drug combinations, detected in the urine of detainees at the time of their interview for the study. It also presented some socio-demographic profiles associated with positive tests (especially gender and age), Queensland trends over time and some interstate comparisons.

About three-quarters of the Queensland detainees consistently tested positive for any drug: South Australia and Western Australia recorded slightly higher proportions of detainees testing positive for any drug and New South Wales recorded lower proportions of detainees testing positive for any drug.

Cannabis was found to be the most prevalent drug detected (in about half of the detainees tested overall), closely followed by amphetamines and benzodiazepines (about one-third of the detainees were found to be positive for each of these drugs). Fewer detainees tested positive for opiates (about 1 in 5) and methadone (about 1 in 10) and only a tiny proportion (about 1%) tested positive for cocaine.

Single and multiple drug use was found. In 2004–05, for example, just under half of the Queensland detainees tested positive to a single drug only, but more than half tested positive to multiple drugs. Cannabis was the most likely 'single' drug to be detected; cannabis with amphetamines was the most commonly detected multiple drug combination, closely followed by a combination of cannabis and benzodiazepines.

Generally, the main socio-demographic factors associated with drug tests were:

- **More females than males tested positive.**
- **More younger than older detainees tested positive.**
- **Detainees with fewer educational achievements were more likely to test positive than those with higher educational achievements.**
- **Unemployed detainees were more likely to test positive than employed or otherwise occupied detainees.**

- **Of the detainees who tested positive, more were single or living in a de facto relationship than were married.**
- **More of those living in public housing than living elsewhere tested positive for cannabis, amphetamines and multiple drugs; detainees not residing in public housing were more likely to test positive for opiates and methadone.**

An examination of the links between the drugs detected by urinalysis and the detainees' self-reported criminal activities and offence profiles showed persistent associations between various measures of drug use (individual drug types, single and multiple use) and the number of prior arrests, types of offences, drug-related crimes in the preceding 12 months and income from illegal activities. For example:

- **There was a clear increase in the proportion of detainees testing positive to various drugs and drug combinations as the number of arrests in the previous 12 months increased.**
- **The highest proportion of detainees whose offences committed in the preceding 12 months were mostly or almost all drug-related (about two-thirds) were by those testing positive to methadone.**
- **More than half, and sometimes two-thirds, of the detainees testing positive for opiates reported consistently over time that most or all of the crime they had committed in the preceding 12 months had been drug-related.**
- **About 4 in 10 of detainees who tested positive for cannabis or benzodiazepines reported that most or almost all of their criminal behaviour in the preceding 12 months had been drug-related.**
- **Detainees testing positive for multiple drugs were more likely to report that most or almost all of their criminal behaviour in the preceding 12 months had been drug-related than were detainees who tested positive for one drug only.**

Detainees receiving an income from illegal activities were also substantially more likely to test positive for all drug types than were those who did not receive an income from illegal activities, although there was a steady decline over time in the proportions of detainees testing positive to cannabis, opiates and methadone who stated that they had received an income from illegal activities.

This chapter has indicated the extent to which detainees in watch-houses are using illicit substances around the time they are arrested for alleged criminal activity, and the likely association of illicit drug use with persistent and varied types of criminal activity. The information derived from self-reports, provided in the following chapters, endorses these findings and expands our understanding of the risk factors associated with drug use.

4

Self-reported drug use

This chapter presents an analysis of the self-reported drug use data. It provides a different perspective of drug use from that provided by urinalysis, because it captures information about various drug-using behaviours (such as age of initiation and injecting). The information may make a useful contribution to the development of future early intervention and prevention strategies, and of appropriate response and treatment options.

It should be noted that the self-report drug categories differ from those presented in the urinalysis section in that they include 'heroin' and 'street methadone' instead of the general 'opiates' category.

PREVALENCE OF DRUG USE

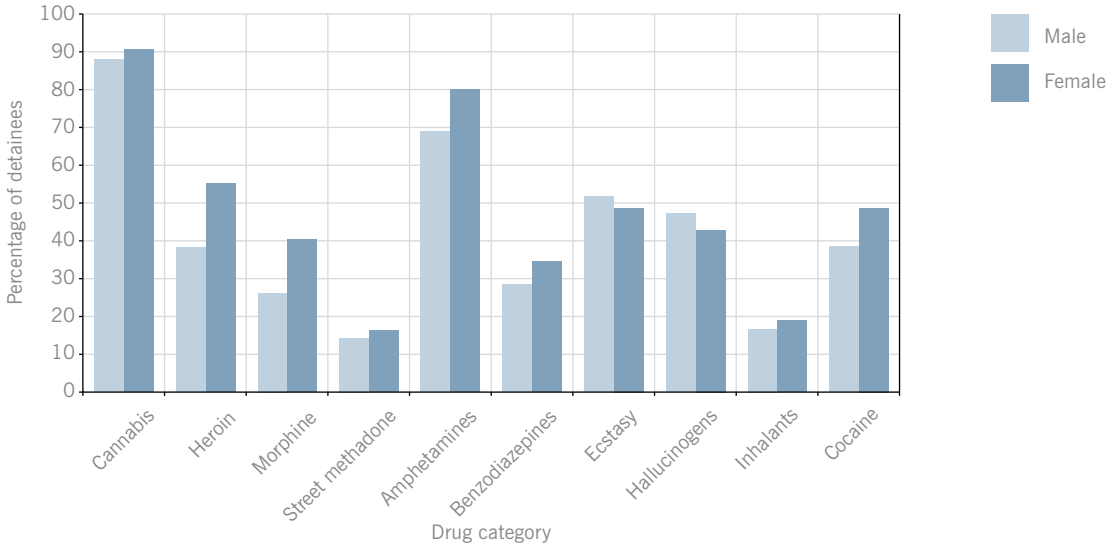
In assessing the extent to which detainees reported ever having used various drugs, the results showed:

- Cannabis was the most common drug used by detainees at some stage in their lives (88.4%), followed by amphetamines (70.7%) and ecstasy (51.3%). These results are consistent with the findings of the Prevalence of Alcohol and Drug Use in Emergency Departments (PADIE) study (Krenske et al. 2004), in which 53.4 per cent of the sample reported using cannabis, 21.0 per cent amphetamines and 16.9 per cent ecstasy; but the figures are significantly higher than the actual prevalence of use in that sample. Cannabis and ecstasy use has been reported by researchers as almost 'normal' among young people (Carlson et al. 2004; Parker, Williams & Aldridge 2002).
- Street methadone (14.6%) and inhalants (17.4%) were the least common drugs ever used by detainees.

Examining self-reported drug use by gender, the most marked differences, shown in Figure 4.1 (facing page), were:

- A considerably higher proportion of females (55.5%) than males (38.1%) stated that they had used heroin at some stage in their lives. This is inconsistent with the findings of the NDSHS conducted by the AIHW, which reported that in the general population males are more likely than females to use heroin – with the exception of teenagers. The overall proportion of detainees who had tried heroin (40.9%) was also significantly higher than in the general population, where the proportion reported by AIHW (2005b) was 1.4%.
- Considerably more females than males reported using morphine at some stage in their lives (40.3% of females; 26.2% of males) and amphetamines (80.1% of females; 68.9% of males). This finding differs to the NDSHS findings, where males were more likely than females to have used amphetamines at some stage in their lives (excluding teenagers) (AIHW 2005).
- More females (48.7%) than males (38.5%) reported using cocaine. Again, this is inconsistent with findings from the general population, where males have been shown to be more likely to use cocaine (with the exception of those aged 14–19 years) than females. The overall proportion of detainees who reported having used cocaine (40.1%) was also much higher than that reported by general population samples. According to the NDSHS, for example, only a small proportion (4.7%) of the Australian population has used cocaine (AIHW 2005).
- There was little difference in the extent to which male and female detainees reported using cannabis, ecstasy, hallucinogens and inhalants. This is inconsistent with the NDSHS results for cannabis, which found that males were generally more likely to have used it. Furthermore, the proportion of detainees who had ever used cannabis (88.4%) was much higher than that shown by the AIHW (2005a) for the general population (33.6%).

Figure 4.1: Drugs reported to have been used by Queensland detainees at some stage in their lives, by type and gender, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

Males: cannabis, *n* = 880; cocaine, *n* = 385; heroin, *n* = 381; morphine, *n* = 262; street methadone, *n* = 143; amphetamines, *n* = 689; benzodiazepines, *n* = 279; ecstasy, *n* = 518; hallucinogens, *n* = 472; inhalants, *n* = 170.

Females: cannabis, *n* = 171; cocaine, *n* = 93; heroin, *n* = 106; morphine, *n* = 77; street methadone, *n* = 31; amphetamines, *n* = 153; benzodiazepines, *n* = 66; ecstasy, *n* = 93; hallucinogens, *n* = 82; inhalants, *n* = 37.

Drug use was examined by both age and gender (see Table 4.1, next page):

- For detainees aged 30–35 years, about twice as many males (60.5%) as females (32.4%) had tried hallucinogens.
- Approximately 25 percentage points more male than female detainees aged 18–23 years reported having tried ecstasy (64.2% of males; 37.2% of females). Conversely, approximately 30 percentage points more female than male detainees in this same age group reported having used heroin (32.3% of males; 60.5% of females).
- Approximately 15 percentage points more females than males aged 36 years and older reported having used heroin (males, 28.9%; females, 43.6%).
- Approximately 10 percentage points more females than males aged 18–23 years and 24–29 years reported using amphetamines (females, 86.0% and 90.4%; males, 73.8% and 78.2%).
- Nearly 20 percentage points more females than males aged 24–29 years reported using morphine (males, 32.5%; females, 51.9%).
- Regardless of age and gender, most detainees reported that they had at some time used more than one drug.

Figure 4.2 (next page) shows the proportion of Queensland detainees, between 1999–2000 and 2004–05, who reported having tried various drugs at least once in their lives.

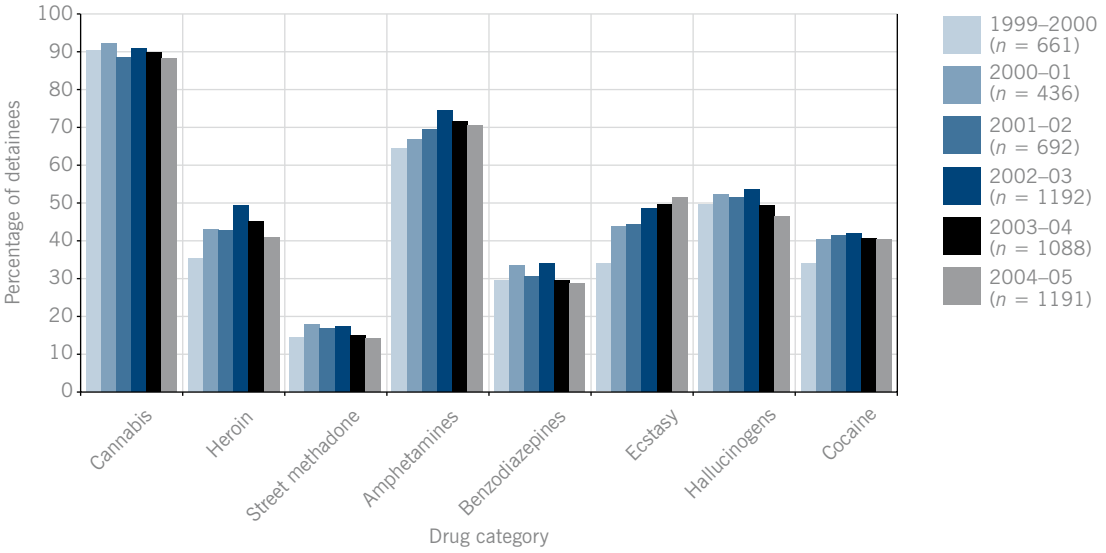
- The proportion who had used heroin slightly peaked in 2002–03 (49.4%) and steadily declined in subsequent years (45.2% in 2003–04; 40.9% in 2004–05).
- The proportion who had used amphetamines steadily increased from 1999–2000 (64.0%) to 2002–03 (74.2%) and decreased marginally in subsequent years (71.5% in 2003–04; 70.7% in 2004–05).
- The proportion of detainees who had used ecstasy steadily increased between 1999–2000 (33.6%) and 2004–05 (51.3%).
- The lowest proportion of detainees reporting having ever tried cocaine was observed in 1999–2000 (33.9%).

Table 4.1: Proportion of Queensland detainees reporting having ever used various types of drugs by age and gender, 2004–05

Type of drug	Percentage (and number) reporting ever having used drugs									
	Male					Female				
	<17	18–23	24–29	30–35	36+	<17	18–23	24–29	30–35	36+
	n = 31	*n* = 279	*n* = 234	*n* = 190	*n* = 266	*n* = 4	*n* = 43	*n* = 52	*n* = 37	*n* = 55
Benzo-diazepines	29.0 (9)	28.7 (80)	32.9 (77)	35.3 (67)	17.3 (46)	75.0 (3)	37.2 (16)	36.5 (19)	40.5 (15)	23.6 (13)
Street methadone	3.2 (1)	10.4 (29)	17.5 (41)	21.1 (40)	12.0 (32)	25.0 (1)	16.3 (7)	23.1 (12)	18.9 (7)	7.3 (4)
Hallucino-gens	19.4 (6)	43.7 (122)	56.4 (132)	60.5 (115)	36.5 (97)	75.0 (3)	37.2 (16)	53.8 (28)	32.4 (12)	41.8 (23)
Ecstasy	51.6 (16)	64.2 (179)	59.8 (140)	58.9 (112)	26.7 (71)	100.0 (4)	37.2 (16)	65.4 (34)	51.4 (19)	36.4 (20)
Heroin	9.7 (3)	32.3 (90)	50.9 (119)	48.4 (92)	28.9 (77)	100.0 (4)	60.5 (26)	61.5 (32)	54.1 (20)	43.6 (24)
Cocaine	3.2 (1)	34.1 (95)	46.2 (108)	50.5 (96)	32.0 (85)	50.0 (2)	46.5 (20)	57.7 (30)	51.4 (19)	40.0 (22)
Cannabis	93.5 (29)	94.6 (264)	94.9 (222)	91.6 (174)	71.8 (191)	100.0 (4)	97.7 (42)	98.1 (51)	94.6 (35)	74.5 (41)
Amphet-amines	71.0 (22)	73.8 (206)	78.2 (183)	82.6 (157)	45.5 (121)	100.0 (4)	86.0 (37)	90.4 (47)	81.1 (30)	63.6 (35)
Inhalants	29.0 (9)	17.9 (50)	17.1 (40)	21.6 (41)	11.3 (30)	75.0 (3)	20.9 (9)	21.2 (11)	13.5 (5)	16.4 (9)
Morphine	9.7 (3)	23.7 (66)	32.5 (76)	33.7 (64)	19.9 (53)	25.0 (1)	39.5 (17)	51.9 (27)	40.5 (15)	30.9 (17)

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 4.2: Proportion of Queensland detainees reporting having ever used various drugs, 1999–2000 to 2004–05



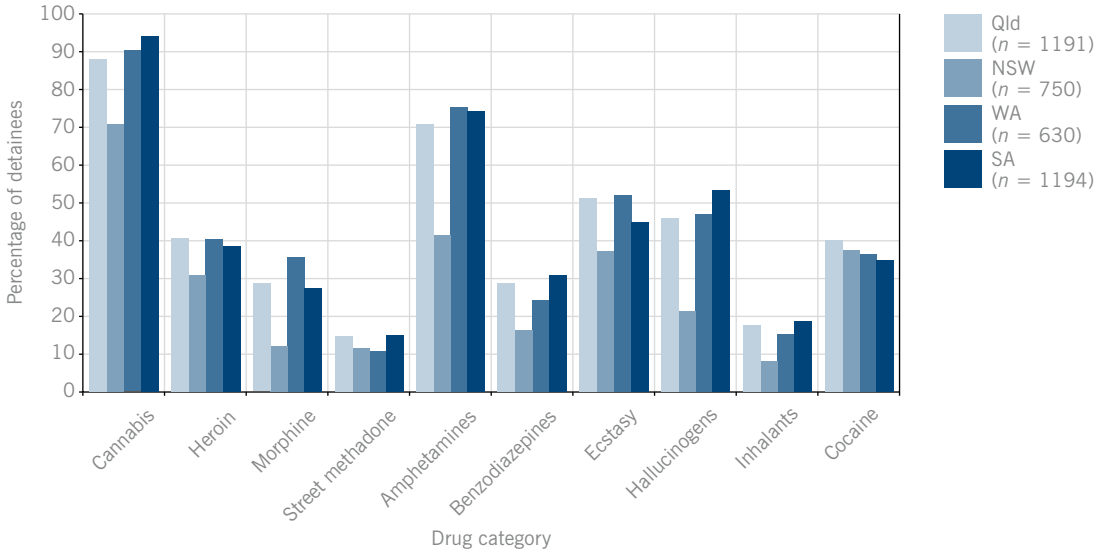
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Note: Data were not available across all years for morphine and inhalants.

Figure 4.3 compares the figures for Queensland, New South Wales, Western Australia and South Australia. Compared to the other states:

- New South Wales detainees consistently recorded the lowest levels of having used cannabis (70.8%), heroin (30.9%), morphine (12.5%), amphetamines (41.6%), benzodiazepines (16.8%), ecstasy (37.3%), hallucinogens (21.5%) and inhalants (8.1%).
- Western Australia recorded an unusually high proportion of detainees who had used morphine (40.6%).
- South Australia recorded a particularly high proportion of detainees who had used hallucinogens (53.6%).

Figure 4.3: Detainees reporting having ever used various drugs, by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Age at first use

Early involvement with illicit drugs has been linked to adverse outcomes such as substance-related problems (Lo 2000) and delinquent behaviour (Zhang, Wieczorek & Welte 1997). Therefore, knowledge about age of onset may be an important tool for predicting behaviour and early intervention. Figure 4.4 (next page) displays the mean age of first use of each of the illicit drugs examined by this study, by gender:

- The youngest mean age of first use was shown for cannabis (14.9 years), closely followed by inhalants (15.5 years). This is consistent with the PADIE findings (Krenske et al. 2004), where the youngest mean age of initiation was also shown for cannabis (17.7 years).
- The oldest mean age of first use was shown for street methadone (23 years), closely followed by morphine (22.9 years). Again, these results are consistent with the PADIE findings (Krenske et al. 2004), where the oldest mean age of initiation was shown for methadone (28 years).

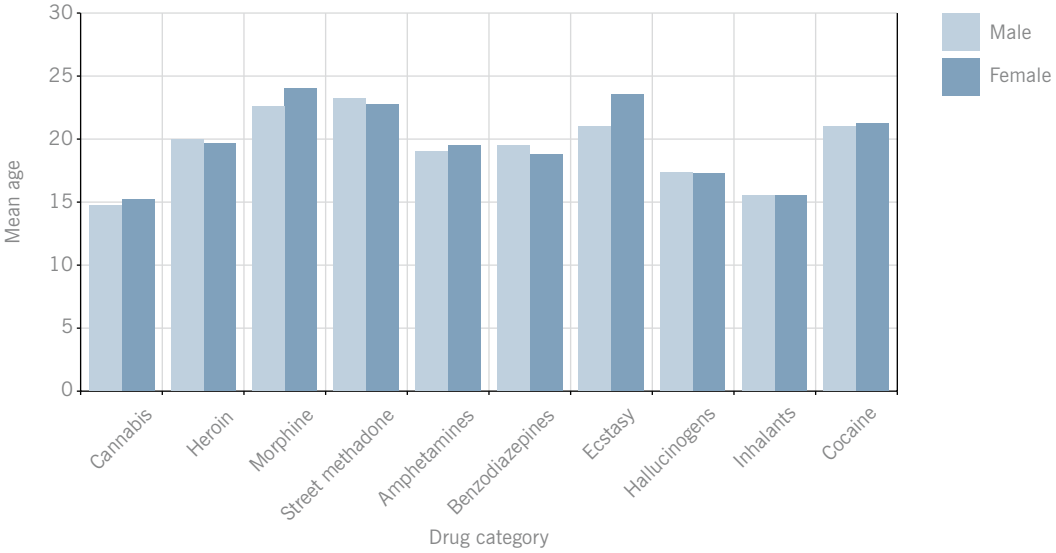
According to Krenske et al. (2004), this pattern can be explained by the facts that (a) cannabis is cheaper and perceived as less harmful than other drugs, such as cocaine; and (b) methadone is typically accessed as a pharmacological substitute for heroin at opioid dependence treatment services. However, while the DUMA and PADIE findings are congruent regarding the youngest and oldest mean ages of first use for certain drug types, DUMA detainees had a much younger mean age of first use overall for cannabis and methadone than did the PADIE participants. The nature of the two study samples probably explains these differences – PADIE participants were emergency room attendees from the general population, whereas DUMA participants had been arrested for allegedly committing a crime. This suggests a

potential link between early initiation to drug use and illegal activity, which could be examined by future research.

A series of statistical tests were performed to determine whether there were any differences in the mean age of first use for each drug by gender. The following statistically significant differences were found:

- Females (23.5 years) were significantly older than males (21.9 years) when they first used ecstasy (t test = p < .04). This is inconsistent with the 2004 PADIE findings, where females reported significantly earlier initiation to ecstasy (19.9 years) than males (21.9 years). However, it is consistent with the finding that males initiate substance use approximately two years earlier than females (Gordon, Kinlock & Battjes 2004).
- Females (24.2 years) were significantly older than males (22.5 years) when they first used morphine (t test = p < .05).

Figure 4.4: Queensland detainees' mean age of first use by drug and gender, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:
Males: cannabis, *n* = 879; cocaine, *n* = 385; heroin, *n* = 380; morphine, *n* = 262; street methadone, *n* = 142; amphetamines, *n* = 688; benzodiazepines, *n* = 278; ecstasy, *n* = 517; hallucinogens, *n* = 471; inhalants, *n* = 169.
Females: cannabis, *n* = 173; cocaine, *n* = 93; heroin, *n* = 106; morphine, *n* = 77; street methadone, *n* = 31; amphetamines, *n* = 153; benzodiazepines, *n* = 66; ecstasy, *n* = 93; hallucinogens, *n* = 82; inhalants, *n* = 37.

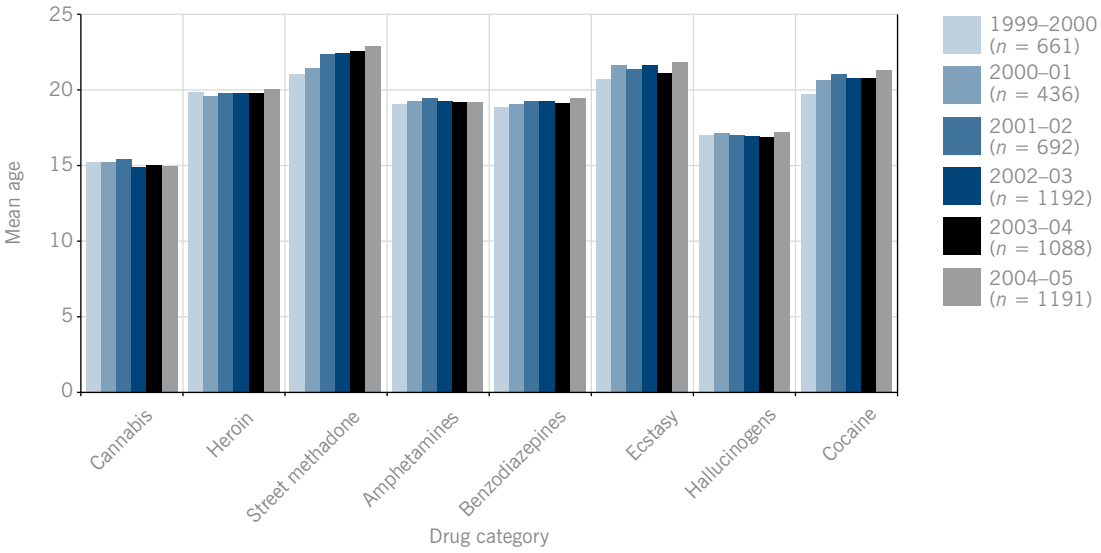
Figure 4.5 (facing page) shows Queensland detainees' mean age of first use for each of the eight drug categories by year. The only statistically significant difference across the years was for cocaine. The mean age at which detainees first tried cocaine was lower in 1999–2000 (19.8 years) than in 2004–05 (21.3 years; F test = p < .03). There was no meaningful change in the mean age of first use for any of the other drugs.

Figure 4.6 (facing page) compares the mean age of first use in 2004–05 for each drug type by state. There were no significant state differences for cocaine, heroin, street methadone, amphetamines and hallucinogens. However, the following statistically significant differences were found:

- New South Wales detainees recorded a higher mean age of first use of cannabis (15.5 years) than those in Queensland (14.9 years), Western Australia (14.6 years) and South Australia (14.5 years; F test = p < .001).
- West Australian detainees recorded a lower mean age of first use of morphine (21.1 years) than those in Queensland (22.9 years) and South Australia (23.4 years; F test = p < .001).

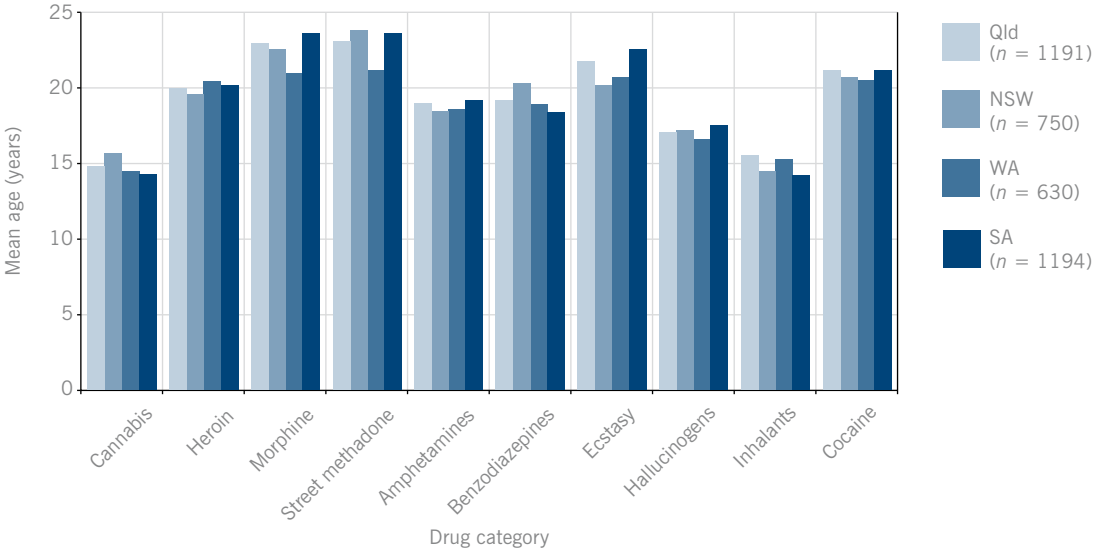
- New South Wales (20.3 years) detainees recorded a higher mean age of first use of benzodiazepines than those in South Australia (18.4 years; F test = p < .008).
- Queensland (22.1 years) and South Australian (22.4 years) detainees recorded a higher mean age of first use of ecstasy than those in New South Wales (20.2 years) and Western Australia (20.7 years; F test = p < .001).
- Queensland detainees recorded a higher mean age of first use of inhalants (15.5 years) than South Australia (14.3 years; F test = p < .03).

Figure 4.5: Queensland detainees' mean age of first use, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–055 [computer file].

Figure 4.6: Mean age of first use of various illicit drugs by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Table 4.2 shows the relationship between age of first use of each of the drug types and age of first arrest, among detainees in Queensland and in the other states.

- For Queensland detainees, significant positive relationships were observed between detainees' age of first arrest and age of first use of each of the drug types except inhalants. The strongest relationship was observed for age of first use of cannabis and age of first arrest (r = .48) followed by age of first use of amphetamines and age of first arrest (r = .41).
- For New South Wales detainees, there were significant positive relationships between age of first arrest and all drug types except for morphine (r = –.05, p = n.s.).
- For Western Australia and South Australia, there were significant positive relationships between age of first arrest and all drug types.

The finding that detainees who use drugs at an earlier age also tend to be arrested for criminal activity at an earlier age is consistent with other studies of youth drawn from the general population, from incarcerated populations and from seriously delinquent 'street' youth (Gordon, Kinlock & Battjes 2004).

Table 4.2: Correlations between detainees' age of first arrest and age of first use of drugs by drug type and state, 2004–05

State	Correlation between age of first arrest and age of first use of drugs, by drug type									
	Cannabis	Cocaine	Heroin	Morphine	Street methadone	Amphet-amines	Benzo-diazepine	Ecstasy	Hallucin-ogens	Inhalants
Qld	.48‡ (n = 975)	.34‡ (n = 434)	.33‡ (n = 431)	.26‡ (n = 305)	.34‡ (n = 158)	.41‡ (n = 777)	.24‡ (n = 310)	.39‡ (n = 572)	.31‡ (n = 513)	.10 (n = 184)
NSW	.50‡ (n = 455)	.16* (n = 227)	.53‡ (n = 191)	-.05 (n = 73)	.35† (n = 158)	.45‡ (n = 262)	.35‡ (n = 102)	.13* (n = 572)	.21* (n = 128)	.30* (n = 44)
WA	.46‡ (n = 490)	.40‡ (n = 197)	.34‡ (n = 215)	.32‡ (n = 191)	.38† (n = 56)	.40‡ (n = 404)	.49‡ (n = 130)	.37‡ (n = 289)	.36‡ (n = 247)	.22* (n = 79)
SA	.37‡ (n = 1002)	.27‡ (n = 355)	.34‡ (n = 404)	.21‡ (n = 285)	.27† (n = 147)	.28‡ (n = 793)	.29‡ (n = 323)	.21‡ (n = 479)	.26‡ (n = 573)	.11* (n = 193)

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

*p < .05
†p < .01
‡p < .00

RECENT DRUG USE

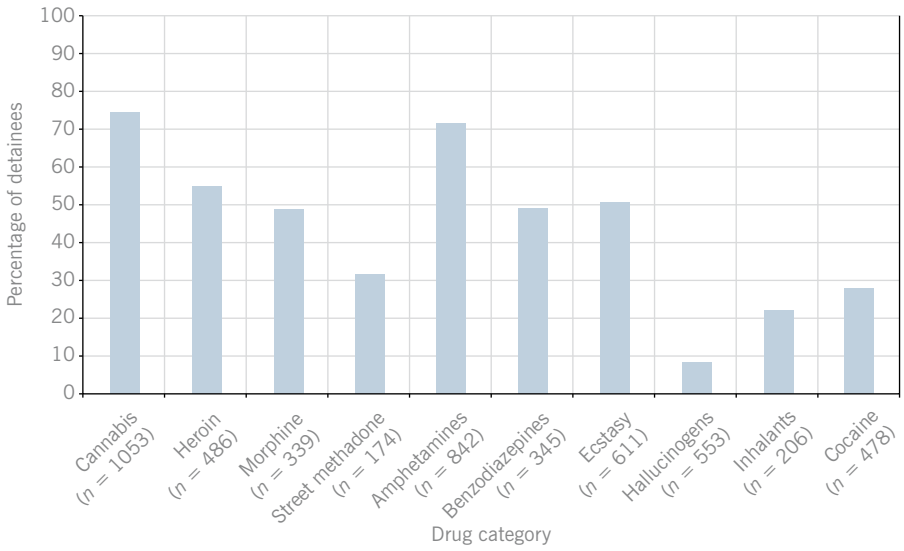
Drug use in the 12 months preceding interview

Those participants who reported that they had ever used any illicit drugs were asked to indicate whether they had used them in the 12 months preceding their interview. Figure 4.7 shows the proportions of detainees who reported using each drug during that time:

- Over 70 per cent of the detainees who had ever used cannabis (73.8%) and amphetamine (71%) had used in the past 12 months. These figures are much higher than shown by general population surveys. According to the NDSHS (AIHW 2005), for example, only 11.3 per cent of the Australian population had used cannabis in the preceding 12 months, 1 per cent had used cocaine and 3.2 per cent had used amphetamines.
- Approximately half of the detainees who had ever used these substances reported having used heroin (54.3%), morphine (49.0%), benzodiazepines (49.6%) and/or ecstasy (50.1%) in the preceding 12 months. Again, these rates are much higher than those reported from surveys of the general Australian population. The NDSHS (AIHW 2005), for example, found that 0.2 per cent of the population had used heroin and 3.4 per cent had used ecstasy in the preceding 12 months.

However, the profile of recent drug use is consistent with the findings of the PADIE study (Krenske et al. 2004), which identified cannabis, amphetamines and cocaine as three of the top five most common illicit drugs used in the preceding 12 months.

Figure 4.7: Proportion of Queensland detainees who had used illicit drugs and reported using in the preceding 12 months, 2004–05

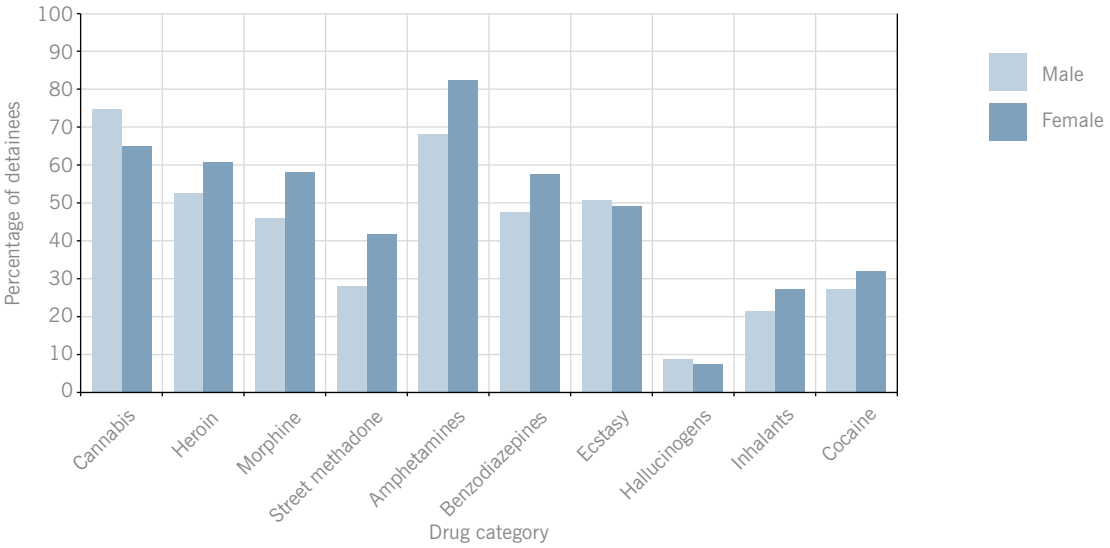


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 4.8 shows some gender differences in drug use in the preceding 12 months:

- More males (75.6%) than females (64.7%) reported using cannabis in the preceding 12 months (χ^2 = p < .003).
- More females (82.4%) than males (68.5%) reported using amphetamines in the preceding 12 months (χ^2 = p < .001). This is inconsistent with the 2004 PADIE findings, where males (12.2%) were more than twice as likely as females (6.7%) to report using amphetamines in the preceding 12 months (Krenske et al. 2004).
- There were no gender differences in the use of cocaine, heroin, street methadone, benzodiazepines, ecstasy, hallucinogens, morphine and inhalants in the preceding 12 months. This is not consistent with the 2004 PADIE findings (Krenske et al. 2004), which showed males as more likely than females to report having used cocaine, heroin and methadone in the preceding 12 months. However, it is unclear whether the gender differences in the PADIE findings reached statistical significance. Furthermore, as discussed earlier, characteristics unique to the DUMA (watch-house detainees) and PADIE (emergency department patients) samples may explain these inconsistencies.

Figure 4.8: Percentage of Queensland detainees reporting having used different types of drugs in the preceding 12 months, by gender, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

Males: cannabis, *n* = 665; cocaine, *n* = 107; heroin, *n* = 200; morphine, *n* = 121; street methadone, *n* = 41; amphetamines, *n* = 472; benzodiazepines, *n* = 133; ecstasy, *n* = 260; hallucinogens, *n* = 42; inhalants, *n* = 36.

Females: cannabis, *n* = 112; cocaine, *n* = 30; heroin, *n* = 64; morphine, *n* = 45; street methadone, *n* = 13; amphetamines, *n* = 126; benzodiazepines, *n* = 38; ecstasy, *n* = 46; hallucinogens, *n* = 6; inhalants, *n* = 10

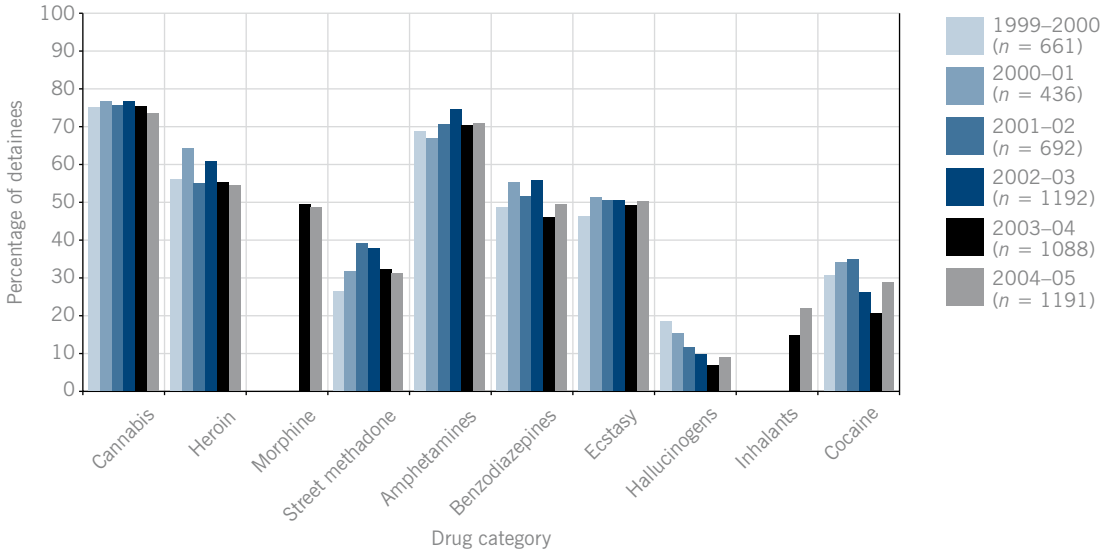
Analysis of reported drug use by Queensland detainees in the 12 months preceding the interview over time from 1999–2000 to 2004–05 (see Figure 4.9, facing page) revealed that:

- The proportion of detainees using heroin in the preceding 12 months steadily increased between 1999–2000 (30.4%) and 2001–02 (35.1%). There was a subsequent decline to 2003–04 (20.6%), followed by an increase in 2004–05 (28.7%), both of which may be associated with the availability of heroin. According to the Illicit Drug Reporting System (IDRS), more intravenous drug users reported availability as 'very easy' (61.0%) or 'easy' (32.0%) in 2004 than in 2003 (42.0% and 43.0% respectively). The increase in the proportion of detainees using heroin in 2004 may also be linked to the finding by Stafford et al. (2005) that heroin purity increased from 25 per cent in 2002–03 to 28 per cent in 2003–04.

- From 1999–2000 (18.5%) to 2004–05 (8.7%), there was a relatively steady decrease in the proportion of detainees using hallucinogens in the preceding 12 months.
- From 1999–2000 (26.6%) to 2001–02 (38.8%), the proportion of detainees using street methadone in the preceding 12 months steadily increased. Subsequently there was a steady decline to 2004–05 (31.0%).

No meaningful changes were found across the years in the numbers of detainees using cannabis, heroin, morphine, amphetamines, benzodiazepines or ecstasy.

Figure 4.9: Percentage of Queensland detainees reporting drug use in the preceding 12 months by drug type and by year, 1999–2000 to 2004–05

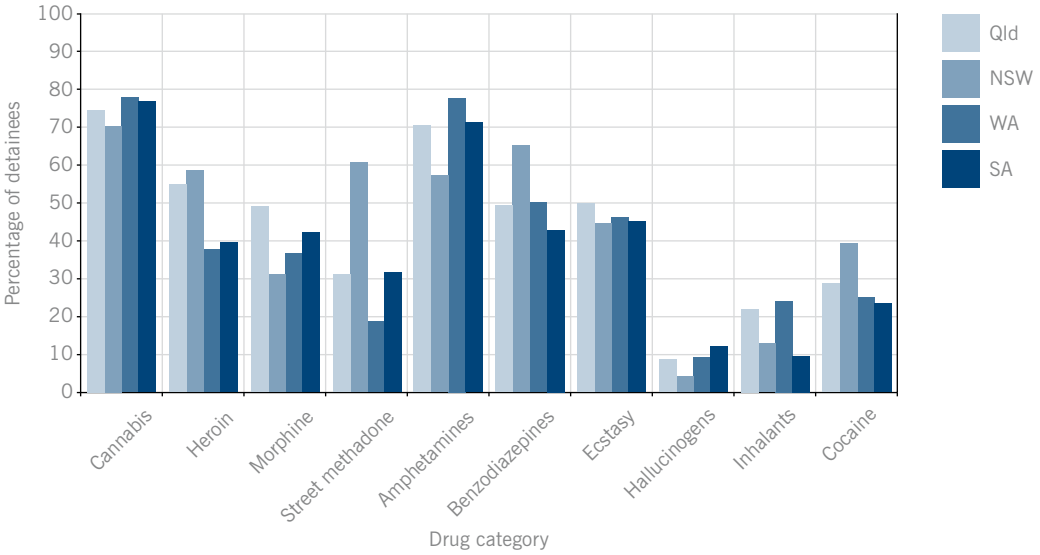


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].
Note: Data for inhalants and morphine available only for 2003–04 and 2004–05.

Figure 4.10 (next page) makes statewide comparisons of detainees' drug use in the preceding 12 months.

- Detainees in Western Australia (78.4%) and South Australia (77.7%) recorded slightly higher cannabis use in the preceding 12 months than Queensland (73.8%) and New South Wales (70.2%).
- Compared to the other states, New South Wales detainees showed particularly high rates of cocaine (39.5%), street methadone (60.9%), and benzodiazepine use (65.3%) in the preceding 12 months. However, New South Wales detainees showed particularly low rates of hallucinogen (4.4%), amphetamine (56.9%) and morphine use (31.2%).
- Queensland detainees recorded the highest use of morphine (49.0%) and inhalants (22.3%) in the preceding 12 months.
- Heroin use in the preceding 12 months was much higher among detainees in Queensland (54.3%) and New South Wales (58.6%) than in Western Australia (37.5%) and South Australia (39.5%).

Figure 4.10: Percentage of detainees reporting drug use in the preceding 12 months by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

Cannabis: Qld, *n* = 777; NSW, *n* = 373; WA, *n* = 446; SA, *n* = 867
Cocaine: Qld, *n* = 137; NSW, *n* = 111; WA, *n* = 57; SA, *n* = 99
Heroin: Qld, *n* = 264; NSW, *n* = 136; WA, *n* = 96; SA, *n* = 183
Morphine: Qld, *n* = 166; NSW, *n* = 29; WA, *n* = 84; SA, *n* = 139
Street methadone: Qld, *n* = 54; NSW, *n* = 53; WA, *n* = 13; SA, *n* = 55
Amphetamines: Qld, *n* = 598; NSW, *n* = 177; WA, *n* = 370; SA, *n* = 629
Benzodiazepines: Qld, *n* = 171; NSW, *n* = 81; WA, *n* = 76; SA, *n* = 159
Ecstasy: Qld, *n* = 306; NSW, *n* = 124; WA, *n* = 151; SA, *n* = 240
Hallucinogens: Qld, *n* = 48; NSW, *n* = 7; WA, *n* = 29; SA, *n* = 79
Inhalants: Qld, *n* = 46; NSW, *n* = 8; WA, *n* = 22; SA, *n* = 22

Drug use in the 30 days preceding interview

Detainees who indicated that they had used drugs in the preceding 12 months were asked to indicate whether they had used various drugs in the 30 days preceding their interview. Figure 4.11 (facing page) shows the 30-day statistics.

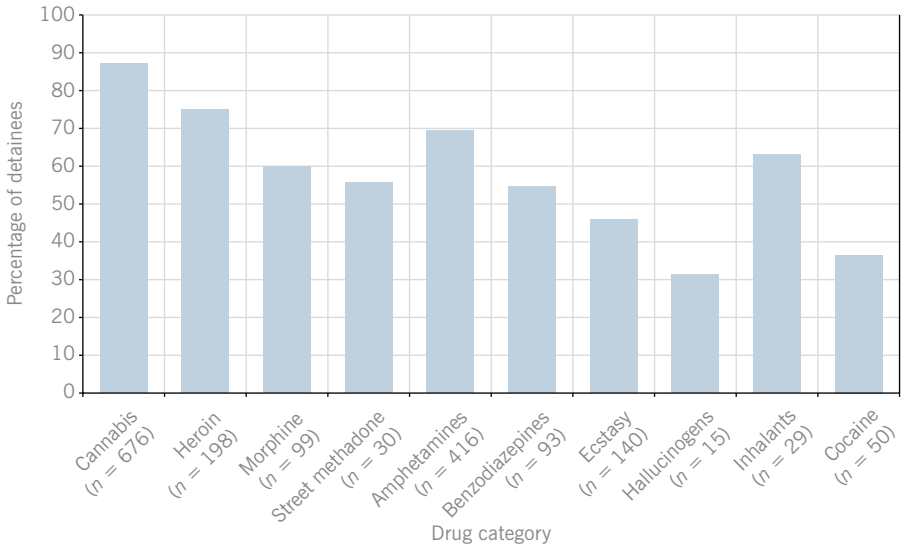
- By far, cannabis was the drug most frequently consumed in the preceding 30 days (87.1%) followed by heroin (75.0%) and amphetamines (69.7%).
- About two-thirds of the detainees reported using inhalants (63.0%) and/or morphine (60.0%) in the preceding 30 days.
- Approximately half of the detainees reported using benzodiazepines (54.7%), street methadone (55.6%) and/or ecstasy (45.9%) in the preceding 30 days.

Figure 4.12 (facing page) compares drug use in the preceding 30 days and in the preceding 12 months. Of those detainees who had used the various drugs in the preceding 12 months:

- most had used cannabis (87.1%), heroin (75.0%) and/or amphetamines (69.7%) in the preceding 30 days
- more than half had used morphine (60.0%), street methadone (55.6%), benzodiazepines (54.7%) and/or inhalants (63.0%) in the preceding 30 days
- just under half had used ecstasy (45.9%) in the preceding 30 days
- about one-third had used cocaine (36.5%) and/or hallucinogens (31.3%) in the preceding 30 days.

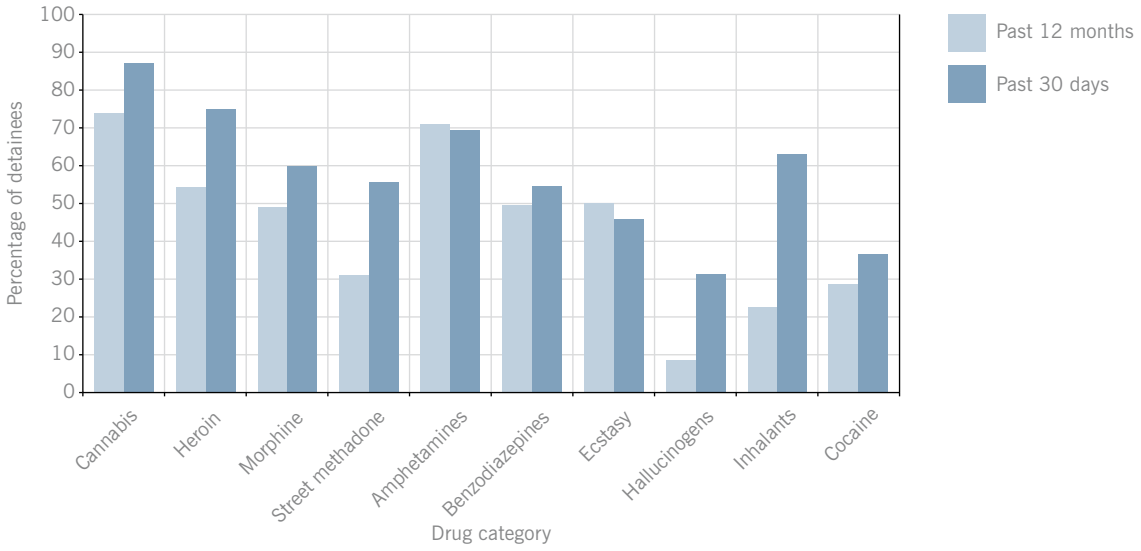
These findings suggest that, of those detainees who had consumed various drugs in the preceding 12 months, most had consumed morphine, street methadone, benzodiazepines, inhalants, cannabis, heroin and/or amphetamines in the month before their detainment. Less than half of the detainees had consumed ecstasy, cocaine and/or hallucinogens.

Figure 4.11: Proportion of Queensland detainees who had used drugs in the preceding 12 months, who also reported drug use in the preceding 30 days, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 4.12: Proportion of Queensland detainees who had ever used drugs, who reported drug use in the preceding 30 days and preceding 12 months, 2004–05

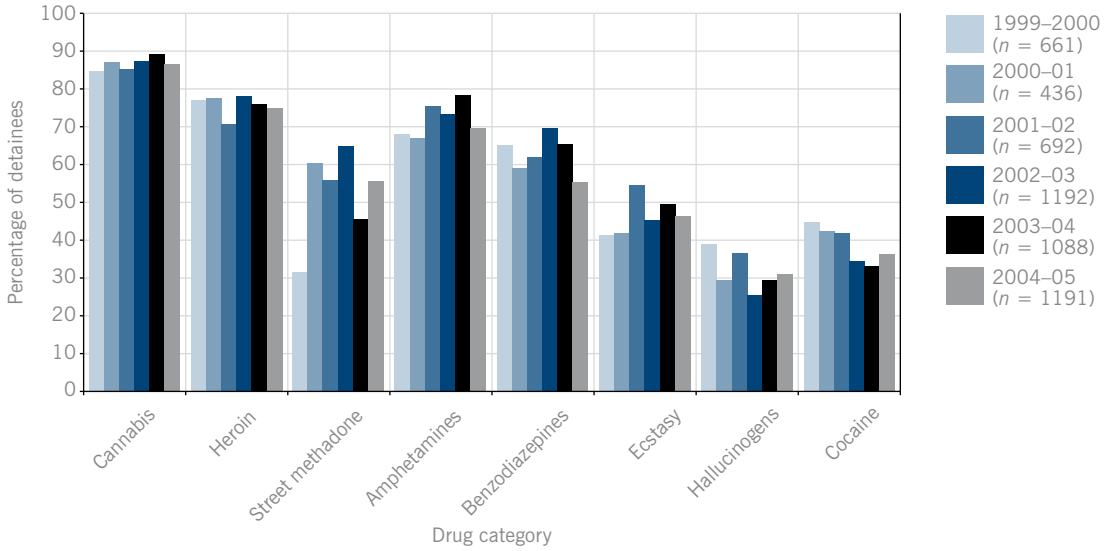


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 4.13 shows detainees' drug use in the 30 days preceding detainment over time (1999–2000 to 2004–05). It reveals:

- Cocaine use in the 30 days preceding interview declined from 2002–03.
- In 2000–01, the proportion of detainees reporting street methadone use in the preceding 30 days almost doubled (60.0%) compared to the previous year. This may be related to the reduction of heroin supply in Australia that occurred at the end of 2000, which may have caused some users to turn to street methadone as a substitute.
- The lowest proportion of detainees using benzodiazepines in the 30 days preceding interview (54.7%) was recorded in 2004–05.
- While the lowest proportion of detainees using hallucinogens in the preceding 30 days was recorded in 2002–03, this proportion has since increased (31.3% in 2004–05).

Figure 4.13: Proportion of Queensland detainees who had used drugs in the preceding 12 months, who had also used various drugs in preceding 30 days, 1999–2000 to 2004–05



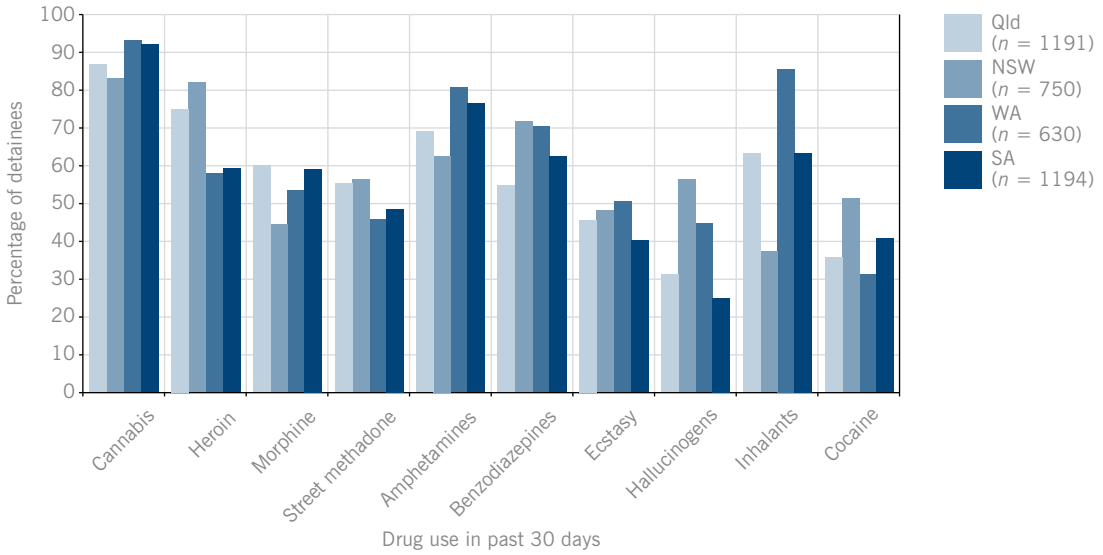
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 4.14 (facing page) compares Queensland detainees' use of drugs in the 30 days preceding interview in 2004–05 with the same information from other Australian states. It shows:

- Queensland and New South Wales detainees recorded much lower rates of cannabis use (87.1% and 83.1% respectively) than those in Western Australia (93.0%) and South Australia (92.5%). This same pattern also held true for use of amphetamines (69.7% in Qld; 62.7% in NSW; 80.7% in WA; 76.9% in SA).
- Queensland and New South Wales detainees recorded much higher rates of heroin use (75.0% and 82.4% respectively) and street methadone use (55.6% and 56.6% respectively) than those in Western Australia (heroin 58.3%; street methadone 46.2%) and South Australia (heroin 59.6%; street methadone 49.1%).
- New South Wales displayed an unusually high proportion of detainees using cocaine (51.4%) and hallucinogens (57.1%) in the preceding 30 days but an unusually low proportion of detainees using morphine (44.8%) and inhalants (37.5%). The high use of cocaine is consistent with findings from IDRS in 2004 (Stafford et al. 2005), where New South Wales (47.0%) recorded considerably more participants using cocaine than Queensland (10.0%), Western Australia (15.0%) and South Australia (6.0%). Furthermore, cocaine was evidently easier to obtain in New South Wales: only 29 per cent of IDRS participants from New South Wales reported that availability of cocaine was difficult or very difficult, whereas 76 per cent from Queensland, 43 per cent from Western Australia and 20 per cent from South Australia reported that it was difficult or very difficult to obtain cocaine at that time.

- Queensland recorded a substantially lower proportion of detainees using benzodiazepines in the preceding 30 days (54.7%) than New South Wales (71.3%), Western Australia (70.3%) and South Australia (62.9%).
- South Australia recorded a substantially lower proportion of detainees using ecstasy in the preceding 30 days (40.0%) than Queensland (45.9%), New South Wales (48.4%) and Western Australia (50.3%).

Figure 4.14: Proportion of detainees who had used drugs in the preceding 12 months, who reported drug use in the preceding 30 days, by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Table 4.3 shows the mean number of days in the 30 days preceding interview in 2004–05 on which each drug was consumed by Queensland detainees, by gender.

- Females reported a significantly higher mean use of amphetamines (9.2 times) than males (6.9 times; t test = $p < .04$).
- Females reported a significantly higher mean use of inhalants (19.4 times) than males (8.3 times; t test = $p < .02$).

Table 4.3: Mean number of days on which drugs were used in the preceding 30 days by Queensland detainees by gender, 2004–05

	Type of drug									
	Canna-bis	Cocaine	Heroin	Mor-phine	Street methadone	Amphet-amines	Benzodi-azepines	Ecstasy	Hallucin-ogen	Inhalants
Males:										
Mean	14.5	1.5	10.3	5.2	2.2	6.9*	4.1	1.4	1.3	8.3
Standard deviation	(12.2)	(3.5)	(11.8)	(8.6)	(4.4)	(9.7)	(7.8)	(3.4)	(4.6)	(11.5)*
Females:										
Mean	12.5	0.8	12.6	5.6	3.3	9.2*	6.6	0.8	1.3	19.4
Standard deviation	(11.1)	(2.1)	(12.5)	(9.9)	(5.9)	(10.9)	(10.1)	(1.1)	(2.8)	(11.4)*
n	776	137	264	165	54	597	170	305	48	46

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:
a Data pertain only to those Queensland detainees who reported consumption in the preceding 30 days.
b $n = 1191$
* $p < .05$

Males and females did not significantly differ on mean use in the preceding 30 days for cannabis, cocaine, heroin, morphine, street methadone, benzodiazepines, ecstasy or hallucinogens. A possible reason why gender differences were not detected for street methadone and hallucinogens could be the small sample sizes (street methadone: male n = 41, female n = 13; hallucinogens: male n = 42, female n = 6). The larger the sample size, the more likely it is that a significant difference, if it exists, will be found.

Table 4.4 shows the relationship between detainees' age and frequency of drug use in the 30 days preceding interview. The following significant relationships were found:

- Age was negatively associated with frequency of cannabis use (r = –.10), ecstasy use (r = –.12) and inhalant use (r = –.50) in the preceding 30 days. As detainees' age increased, the frequency of cannabis use, ecstasy use and inhalant use decreased.
- Age was positively associated with frequency of amphetamine use in the preceding 30 days (r = +.10). As detainee age increased, so too did the frequency of amphetamine use.

A possible explanation for the lack of relationship between detainees' age and frequency of hallucinogen and inhalant use in the preceding 30 days could be that the sample sizes were too small to be able to detect a relationship (hallucinogens, n = 48; inhalants, n = 46). The general rule of thumb is that no correlation is possible for fewer than 50 participants.

Table 4.4: Correlation (r) between Queensland detainees' age and frequency of drug use in the preceding 30 days, 2004–05

	Correlation (r) between age and frequency of drug use									
	Cannabis	Cocaine	Heroin	Morphine	Street metha-done	Amphet-amine	Benzo-diazepine	Ecstasy	Hallucin-ogen	Inhalants
Age	–.10*	.14	.02	.02	–.05	.14*	.12	–.12*	–.02	–.50
n	776	137	264	165	54	597	170	305	48	46

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

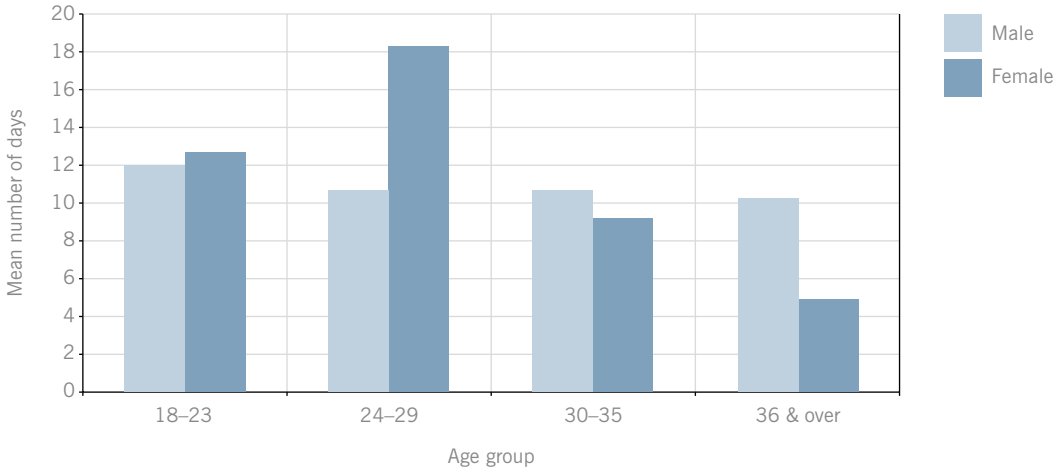
*p < .05

One-way ANOVAs were performed to determine whether there were any differences in the frequency of drug use of Queensland detainees in the preceding 30 days by age. The following significant differences were observed:

- The mean number of times cannabis was used in the 30 days before interview was higher for detainees aged 18–23 years (16.5 times) than for those aged 24–29 years (13.2 times) and 36 years and over (11.7 times; F test = p < .001).
- The mean number of times inhalants were used in the 30 days before interview was higher for detainees aged 17 years and under (18.3 times) than for those aged 24–29 years (2.3 times; F test = p < .004).
- The mean number of times amphetamines were used in the 30 days before interview was lower for detainees aged 18–23 years (5.4 times) than for those aged 30–35 years (8.6 times) or 36 years and over (9.1 times; F test = p < .006).

A series of two (gender) by four (age group) analyses of variance was conducted to determine whether use of drugs in the preceding 30 days illustrated an interactive effect between age and gender. The only statistically significant interaction found was for the use of heroin in the preceding 30 days. There was little difference between males and females aged 18–23 years in the number of times heroin was used in the 30 days before interview. However, for detainees aged 24–29 years, females (18.4 times) showed a much higher use of heroin in the past 30 days than males (12.0 times). This pattern was reversed for detainees aged 36 years and over, with males (10.8 times) displaying a much higher rate of heroin use in the preceding 30 days than females (4.9 times). (See Figure 4.15, facing page.)

Figure 4.15: Mean number of days on which Queensland detainees had used heroin in the preceding 30 days, by gender and age, 2004–05



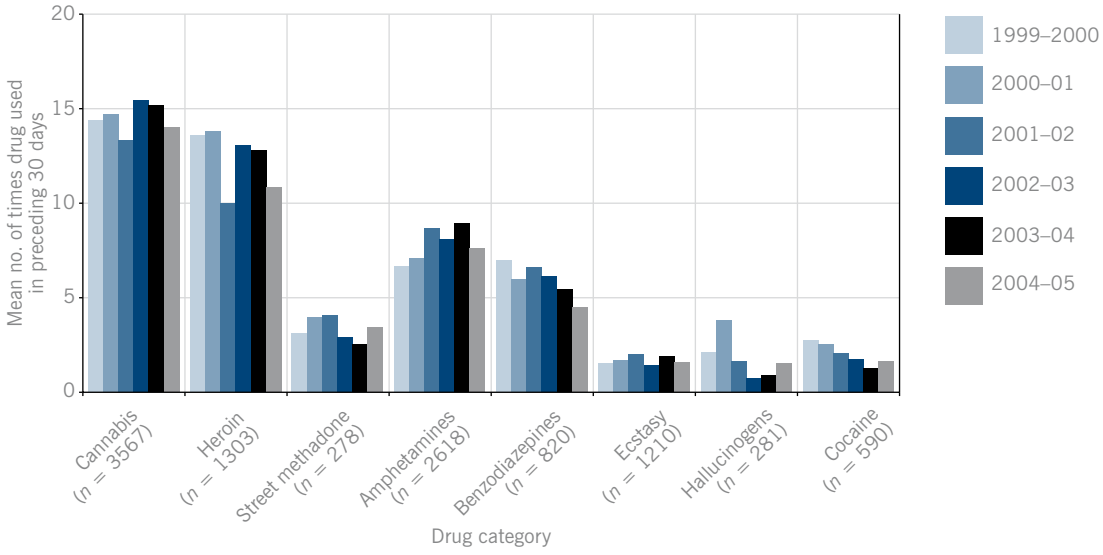
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: *n* = 264

Figure 4.16 shows the pattern of drug use in Queensland from 1999–2000 to 2004–05 in the 30 days preceding interview. The analysis revealed the following significant changes:

- The mean number of days on which amphetamines were used by detainees in the 30 days preceding the interview was significantly higher in 2003–04 (8.9 times) than in 1999–2000 (6.5 times).
- Differences also existed in the mean number of times heroin was used in the preceding 30 days (F test = p < .009]. In 2001–02, a lower proportion of detainees than in any of the other years reported consuming heroin in the 30 days preceding interview. This is likely to be associated with the rapid and dramatic reduction in the heroin supply in Australia in early 2001 (Degenhardt et al. 2005). As a result of this shortage the price of heroin rose, while the purity, consumption and expenditure on it declined (Weatherburn et al. 2003).

Figure 4.16: Mean use of drugs in preceding 30 days for Queensland detainees reporting consumption in the preceding 12 months by drug type, 1999–2000 to 2004–05



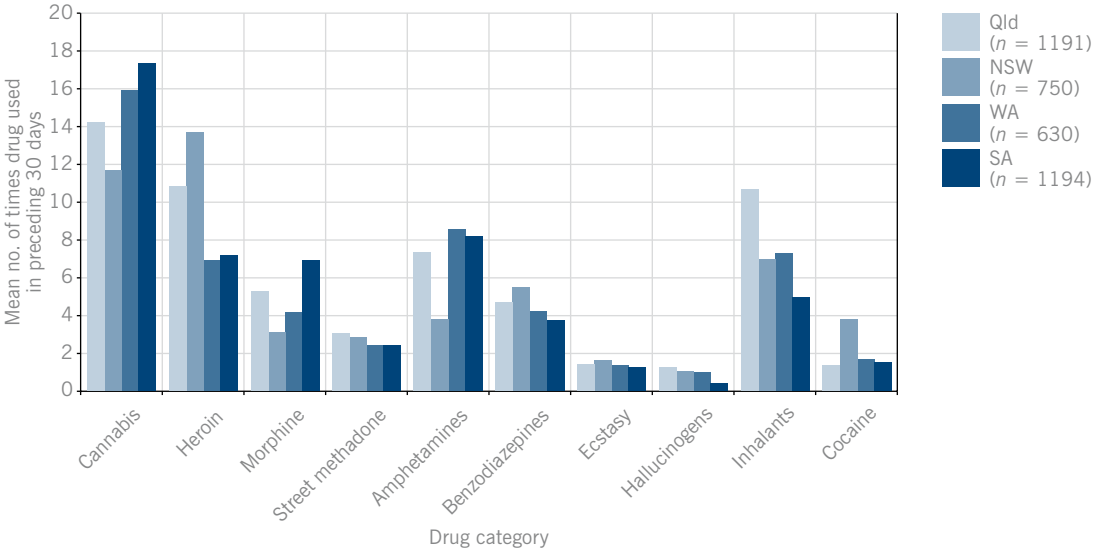
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Note: Data not available from 1999 to 2005 for morphine and inhalants.

Figure 4.17 shows comparisons between states on the mean number of times each drug was used in the 30 days before interview. Significant state differences were observed for detainees' mean use of cocaine, cannabis, heroin and amphetamines:

- New South Wales detainees recorded a higher mean rate of cocaine use in the preceding 30 days (3.9 times) than those in Queensland (1.4 times) and South Australia (F test = $p < .001$).
- Queensland (10.8 times) and New South Wales (13.8 times) detainees recorded higher mean rates of heroin use in the preceding 30 days than those in Western Australia (6.8 times) and South Australia (7.1 times; F test = $p < .001$).
- New South Wales detainees recorded a lower mean rate of amphetamine use in the preceding 30 days (3.9 times) than those in Queensland (7.4 times), Western Australia (8.5 times) and South Australia (8.2 times; F test = $p < .001$).
- New South Wales detainees recorded a lower mean rate of cannabis use in the preceding 30 days (11.8 times) than those in Queensland (14.2 times), Western Australia (16.0 times) and South Australia (17.4 times). South Australia's mean frequency of cannabis use was higher than Queensland's (F test = $p < .001$).

Figure 4.17: Mean use of drugs in the preceding 30 days by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].
Note: Data only pertain to detainees reporting consumption in the preceding 30 days.

Table 4.5 (facing page) shows the correlations between the number of days on which detainees consumed different drugs in the 30 days preceding interview and the different drug types (cannabis, cocaine, heroin, morphine, street methadone, amphetamines, benzodiazepines, ecstasy, hallucinogens and inhalants). The following significant relationships were found:

- There was a strong positive relationship between heroin and cocaine use (r = .62). The more times a detainee had consumed cocaine in the preceding 30 days, the more times they had also consumed heroin (and vice versa).
- There was a strong positive relationship between cocaine and hallucinogen use (r = .63). The more times a detainee had consumed cocaine in the preceding 30 days, the more times they had also consumed hallucinogens (and vice versa).
- There was a strong positive relationship between amphetamine and benzodiazepine use (r = .64) and between amphetamine and ecstasy use (r = .62). The more times a detainee had consumed amphetamines in the preceding 30 days, the more times they had also consumed benzodiazepines or ecstasy (and vice versa).

These findings describe multiple drug use. It may be that multiple drug use more powerfully explains the nexus between drug use and crime than specific types of drugs and specific types of offences. Multiple drug use may have a direct interactive or additive effect on judgment or behaviour, and an amplifying effect of involvement in drug use on offending or vice versa (Bennett & Holloway 2005).

Table 4.5: Correlations between the numbers of days Queensland detainees used different types of drugs in the preceding 30 days, 2004–05

	Cocaine	Heroin	Amphetamines	Benzodiazepines	Ecstasy	Hallucinogens
Cocaine	1					
Heroin	.62*	1				
Amphetamines	.59	.37	1			
Benzodiazepines	.22	.23	.64*	1		
Ecstasy	.04	–.16	.62*	.58	1	
Hallucinogens	.63*	.26	.57	.29	.26	1

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

*p < .05

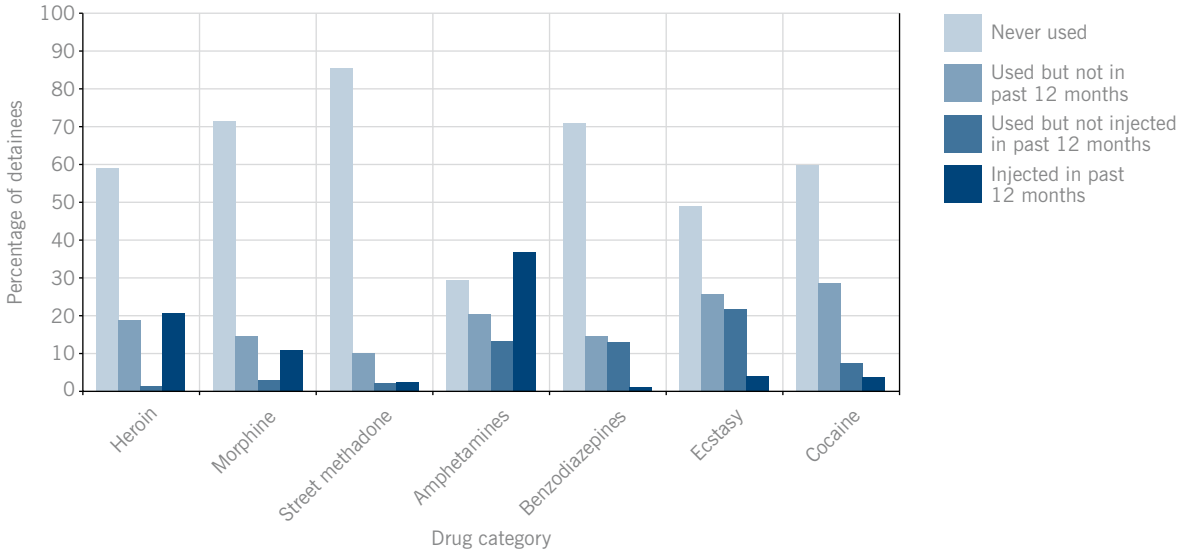
INJECTING DRUG USE

Injecting drug use in the 12 months preceding interview

Figure 4.18 shows, among the entire sample of detainees, the proportions of users of each drug who had injected those drugs in the 12 months preceding their arrest.

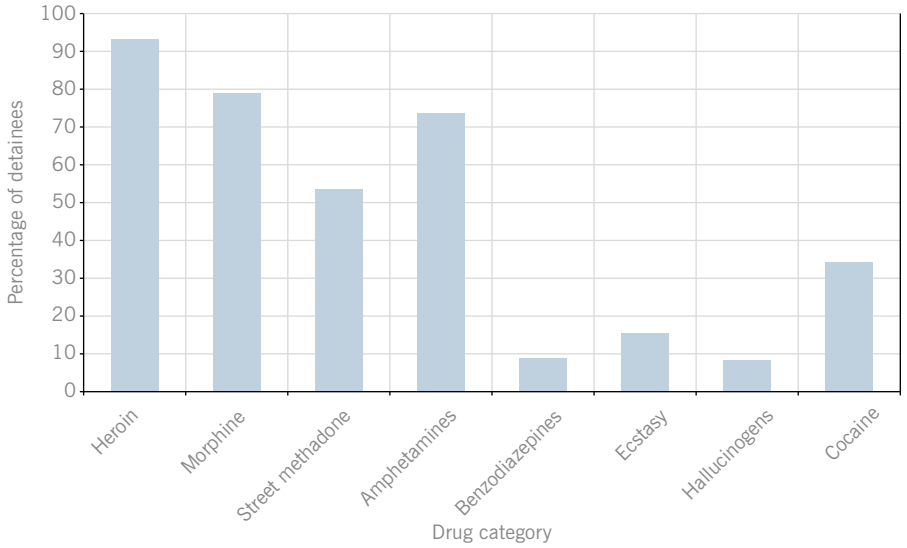
It is important to note that injecting drug users form only a relatively small proportion, overall, of the detainees participating in the study. Nevertheless, the injecting behaviour of some detainees, especially among amphetamine (36.9% of all detainees) and heroin (20.7% of all detainees) users, may create substantial problems for watch-house staff.

Figure 4.18: Profile of Queensland detainees' illicit drug use in the 12 months preceding interview, 2004–05



Looking more closely at the prevalence of injection among users of each drug type, it is clear that most heroin (93.2%) users had injected in the preceding 12 months. Similarly, high proportions of morphine (78.9%) and amphetamine (73.6%) users had injected in the preceding 12 months. On the other hand, only about one-third (34.3%) of cocaine users and very few users of benzodiazepines, ecstasy or hallucinogens had injected in the preceding 12 months (see Figure 4.19).

Figure 4.19: Proportion of Queensland detainees who had used illicit substances, who had injected in the 12 months preceding their arrest, 2004–05

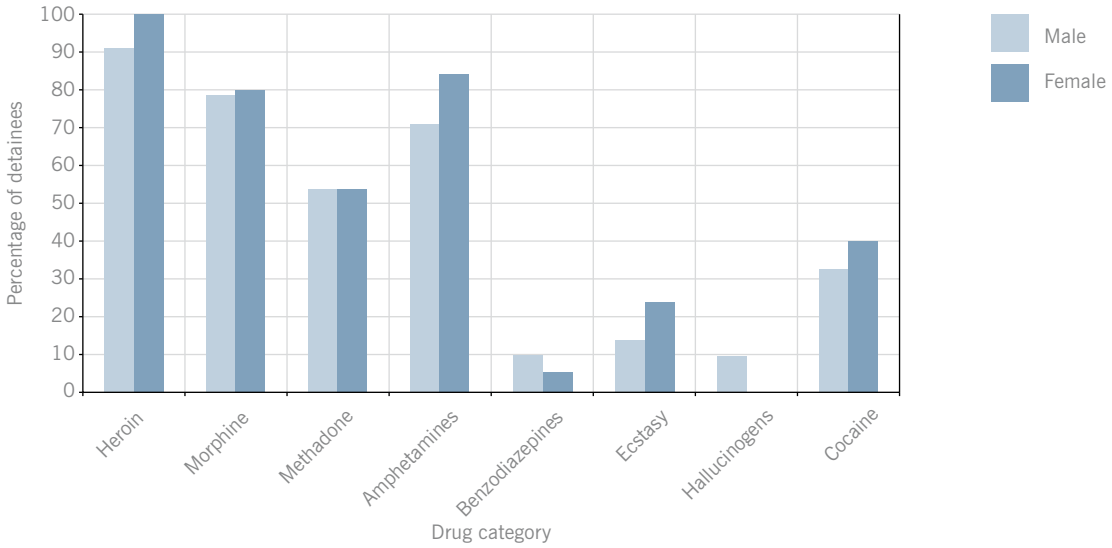


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].
Note: *n* = 959

Figure 4.20 (facing page) shows the percentage of Queensland detainees who had used illicit substances who had injected in the preceding 12 months by drug type and gender.

- More males than females who had used benzodiazepines (males 9.8%; females 5.3%) and hallucinogens (males 9.5%; females 0.0%) reported injecting in the preceding 12 months.
- Substantially more females than males who had used cocaine reported injecting (females 40%; males 32.7%) in the preceding 12 months, as did users of heroin (females 100%; males 91%), amphetamine (females 84.1%; males 70.8%) and ecstasy (females 23.9%; males 13.8%). These findings are inconsistent with the NDSHS findings (AIHW 2005) where males were found to be more likely than females to have injected these drugs in the preceding 12 months. The possible links between injecting drug behaviour and criminal behaviour in females, in particular, may therefore be worthy of further investigation.

Figure 4.20: Proportion of Queensland detainees who had used illicit substances, who had injected in the 12 months preceding their arrest, by drug type and gender, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

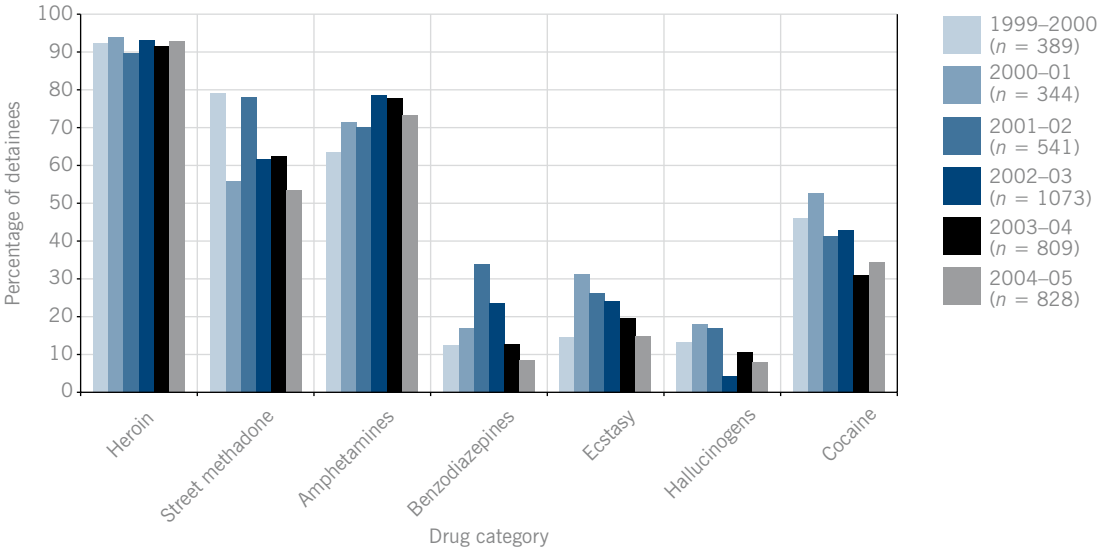
a Caution needs to be taken in interpreting methadone, hallucinogens and benzodiazepines, due to the small sample sizes for female detainees.

b Males: cocaine, *n* = 35; heroin, *n* = 182; morphine, *n* = 95; street methadone, *n* = 22; amphetamines, *n* = 334, benzodiazepine, *n* = 13
Females: cocaine, *n* = 12; heroin, *n* = 64; morphine, *n* = 36; street methadone, *n* = 7; amphetamines, *n* = 106; benzodiazepines, *n* = 2

Figure 4.21 (next page) shows, among Queensland drug using detainees, the proportions who had injected illicit substances in the 12 months preceding interview between 1999–2000 and 2004–05:

- Approximately three-quarters of the detainees who had used methadone had injected in the preceding 12 months in 1999–2000 (79.2%) and in 2001–02 (77.8%). Significantly fewer had done so by 2004–05 (53.7%).
- The proportion of detainees who had used benzodiazepines who had injected in the preceding 12 months steadily increased from 1999–2000 (12.8%) to 2001–02 (33.3%) and subsequently declined to less than 10 per cent (8.8%) in 2004–05.
- From 1999–2000 (14.6%) to 2000–01 (31.6%), the proportion of detainees who had used ecstasy who had injected in the preceding 12 months more than doubled. After 2001–02 (when the proportion was 26.5%), there was a steady decline in the proportion of detainees who had used ecstasy who had injected in the preceding 12 months.
- A particularly low proportion of detainees who had used hallucinogens had injected in the preceding 12 months in 2002–03 (3.3%).
- A particularly high proportion of detainees who had used cocaine had injected in the preceding 12 months (52.5%) in 2000–01.

Figure 4.21: Proportion of Queensland detainees who had used illicit substances, who had injected in the 12 months preceding their arrest, by drug type, 1999–2000 to 2004–05

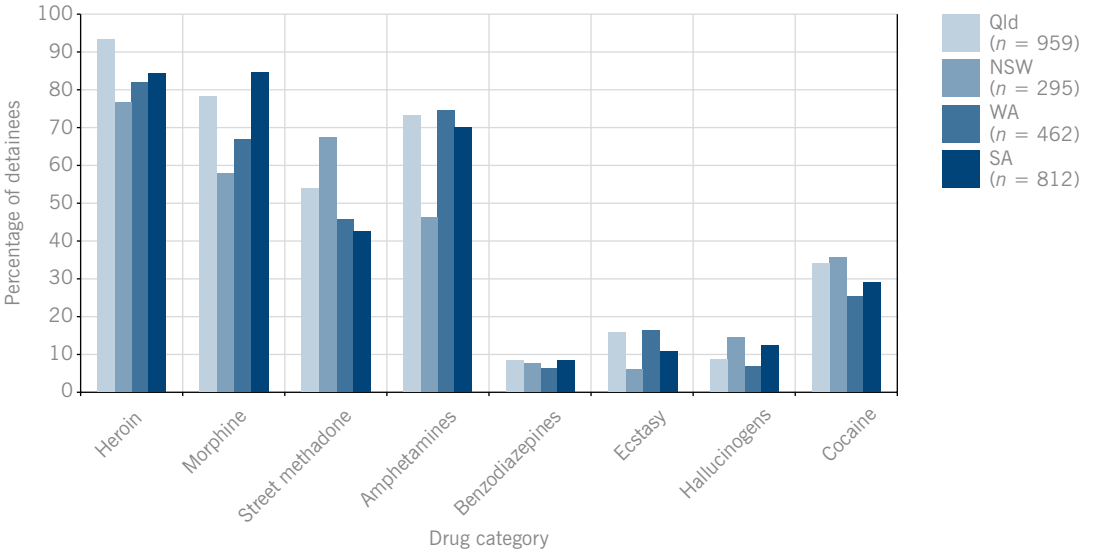


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 4.22 makes state comparisons in the injecting behaviour of detainees who had used illicit substances:

- Among the users of each substance, New South Wales recorded considerably lower rates of detainees injecting ecstasy (5.6%), amphetamine (47.2%), morphine (58.6%) and heroin (76.5%) in the preceding 12 months than the other states, but a particularly high rate of detainees injecting methadone (67.9%).
- Queensland and New South Wales recorded much higher rates of cocaine users who had injected (34.3% and 36.4% respectively) in the previous 12 months than South Australia (29.3%) and Western Australia (24.6%).
- New South Wales (14.3%) and South Australia (12.7%) recorded much higher rates of injecting behaviour in the previous 12 months among hallucinogen users than Queensland (8.3%) and Western Australia (6.9%).

Figure 4.22: Proportion of detainees who had used illicit substances who had injected in the 12 months preceding their arrest, by drug type and state, 2004–05

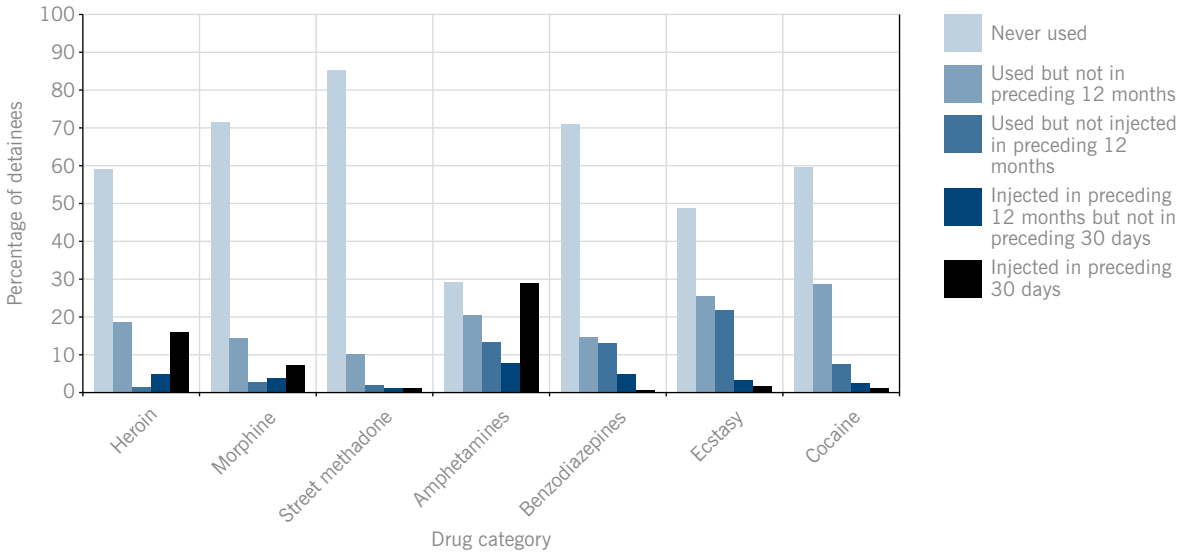


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Injecting drug use in the 30 days preceding interview

Detainees who had (a) reported using various illicit substances and (b) had injected them in the preceding 12 months were asked whether or not they had injected them in the 30 days preceding interview. Figure 4.23 shows the proportions who had done so in 2004–05, again in the context of all of the detainees participating in the study. Overall, amphetamine (29%) and heroin (16%) were again the substances most likely to have been injected during that period.

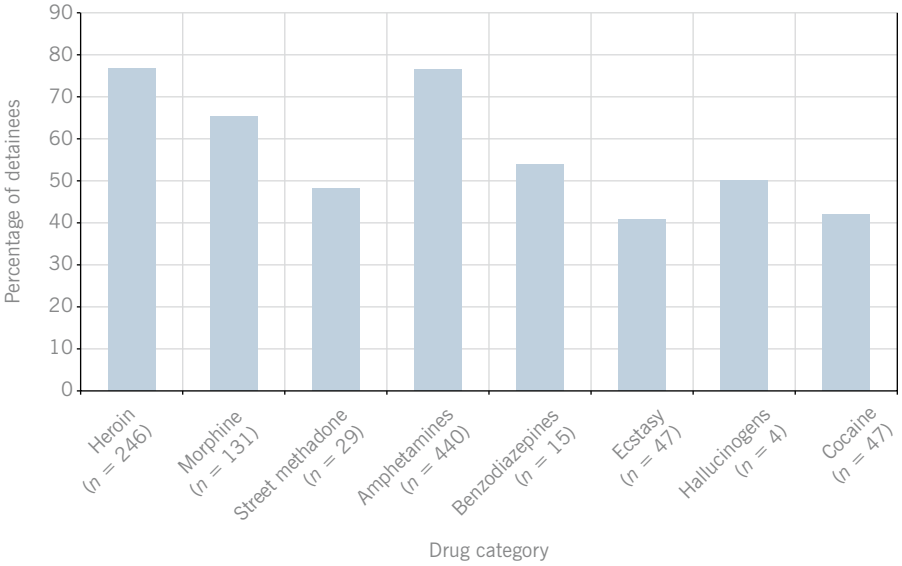
Figure 4.23: Proportion of all Queensland detainees who had injected illicit substances in the 30 days preceding arrest, 2004–05



Looking more closely at the recent injecting behaviour of detainees who had injected in the past 12 months by specific drug types, Figure 4.24 (next page) shows:

- Compared to other injecting drug users, amphetamine (77%) and heroin (76.8%) users were the most likely to have injected in the 30 days preceding their arrest. These results possibly reflect the findings of other studies. For example, according to the 2004 NDSHS, amphetamine was the most common drug first injected by injecting drug users (AIHW 2005). And, according to the IDRS, heroin was the drug most often injected in the preceding month by injecting drug users in Queensland (43%), closely followed by methamphetamine (38%) (Stafford et al. 2005).
- About two-thirds (65.6%) of injecting morphine users had injected in the preceding 30 days.
- There were relatively high proportions of injecting cocaine (41.3%) and street methadone (48.3%) who had injected in the preceding 30 days.

Figure 4.24: Proportion of Queensland detainees who had injected illicit substances in the 12 months preceding their arrest who had also injected in the preceding 30 days, 2004–05



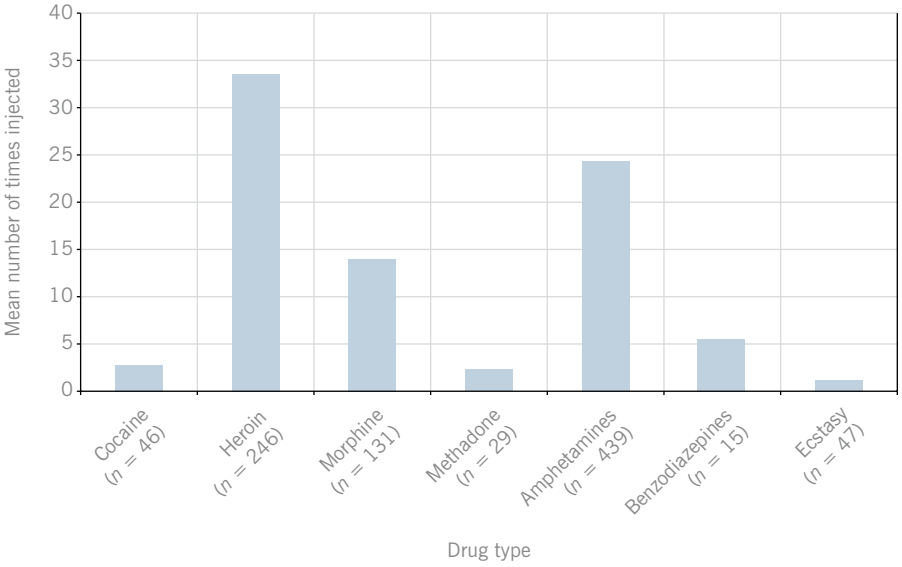
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Frequency of injecting drug use

Figure 4.25 shows how often, on average, Queensland detainees who reported injecting drugs in the preceding 12 months had injected those drugs in the preceding 30 days:

- Compared with other drugs, heroin (34 times, on average) and amphetamine (25 times, on average) had been injected most often in the preceding 30 days.
- No gender or age differences were found among the frequencies with which various drugs had been injected in the preceding 30 days.

Figure 4.25: Frequency of injection in the 30 days preceding interview among Queensland detainees who had injected in the preceding 12 months by drug type, 2004–05

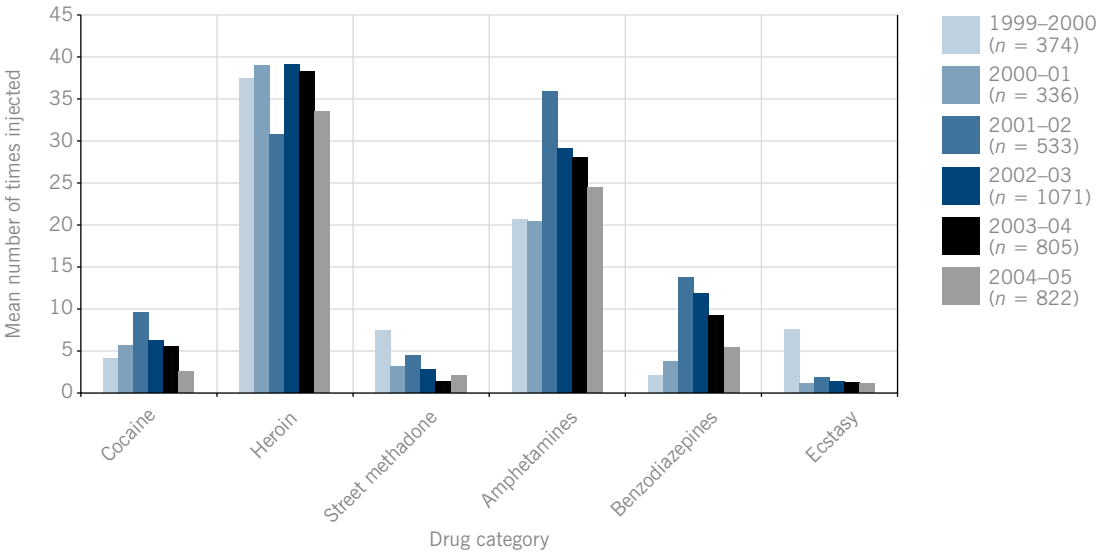


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 4.26 shows the mean number of times Queensland detainees who reported injecting drugs in the preceding 12 months had injected those drugs in the preceding 30 days by drug type over time (1999–2000 to 2004–05). The following significant differences were found:

- In 2001–02, there was a significant peak in the mean number of times (35.8) detainees had injected amphetamine in the preceding 30 days compared to 1999–2000 (20.4 times), 2000–01 (20.2 times) and 2004–05 (24.7 times; F test = $p < .006$].
- There was a significant peak in the mean number of times detainees had injected ecstasy in the preceding 30 days in 1999–2000 (7.5 times) compared to all other years (F test = $p < .02$).

Figure 4.26: Frequency of injecting in the 30 days preceding interview among Queensland detainees who had injected in the preceding 12 months by year, 1999–2000 to 2004–05



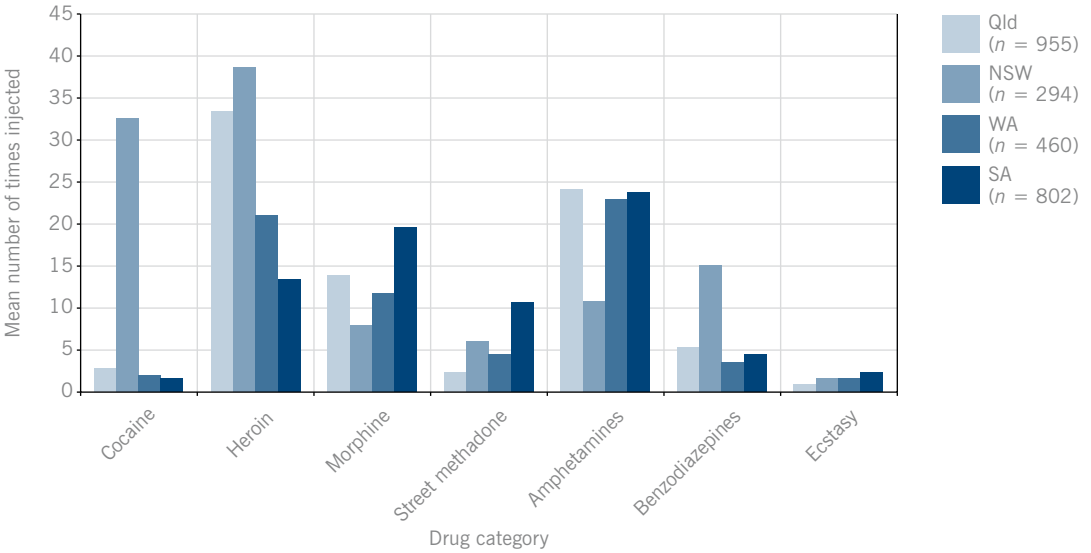
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: It was not possible to perform a similar comparison for hallucinogens because of the small sample size ($n = 31$); neither could changes be assessed for morphine, because data were not available for all years.

Figure 4.27 (next page) compares the frequency of injecting behaviour across states. For each drug, it shows the mean number of times that detainees who reported injecting the drug in the preceding 12 months had injected in the preceding 30 days. The following significant differences were found:

- For cocaine, New South Wales detainees recorded much higher use (32.4 times, on average) in the past 30 days than detainees from Queensland (2.4 times, on average), Western Australia (1.5 times, on average) and South Australia (1.2 times on average; F test = $p < .001$).
- For heroin, there were no differences between the means for Queensland (33.9 times) and New South Wales (38.8 times) detainees. Western Australian (20.7 times) and South Australian (13.7 times) detainees recorded much lower means of heroin injection. This may partly be explained by the fact that the median price of heroin per gram in South Australia ($320) and Western Australia ($500) at that time was higher than the median price in New South Wales ($300) (Stafford et al. 2005). Furthermore, the median purity of heroin was lower in South Australia (25%) and Western Australia (25%) than in New South Wales (30.5%) and Queensland (28%) (Stafford et al. 2005).
- The mean use of amphetamine in the preceding 30 days was lower for New South Wales detainees (10.7 times) than for Queensland (24.7 times) and South Australian detainees (24.1 times; F test = $p < .03$).

Figure 4.27: Frequency of injection in the 30 days preceding interview among detainees who had injected in the previous 12 months: state comparisons, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

a Sample size too small for analyses of hallucinogens (Qld, *n* = 4; NSW, *n* = 1, WA, *n* = 2; SA, *n* = 10)

b One-way ANOVA not performed for benzodiazepines due to very small sample sizes for NSW (*n* = 7) and WA (*n* = 4).

USE OF PRESCRIPTION MEDICATIONS

In addition to being asked about their use of illicit substances, detainees were asked about their use of prescription medications in the fortnight before their interview. Figure 4.28 (facing page) shows Queensland detainees' use of prescription medications in 2004–05.

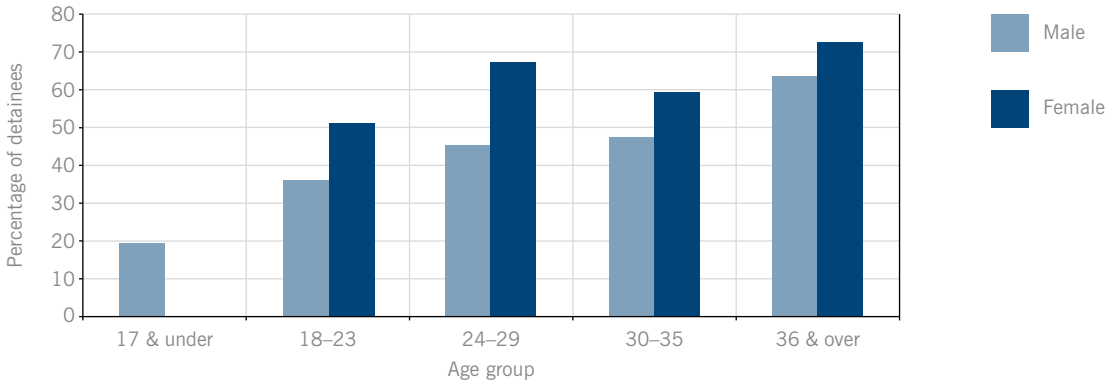
- More than half of the female detainees (58.2%) reported using prescription medications during the preceding fortnight, compared with less than half of male detainees (44.3%). This gender difference was statistically significant (χ^2 = p < .001), and was most pronounced for detainees 24–29 years old (45.3% of males; 67.3% of females).
- There were significant age differences in medication use (χ^2 = p < .001], with medication use increasing as age increased.

Both findings are consistent with numerous research studies that have identified that females and older people use more prescribed medicines than males or younger people (Bernstein, Folkman & Lazarus 1989; Callaghan & Cunningham 2002; Simoni-Wastila, Ritter & Strickler 2004; Wilcox, Himmelstein & Woolhandler 1994).

Figure 4.29 (facing page) shows reported medication use by Queensland detainees over time (2000–01 to 2004–05) and Figure 4.30 (facing page) shows prescription medication use by state (2004–05):

- Medication use in Queensland did not differ significantly over time (χ^2 = n.s.).
- Medication use did not differ by state (χ^2 = n.s.).
- Over time, Queensland female detainees were consistently more likely than males to report having taken medication(s) in the preceding fortnight.
- Over time, Queensland male detainees' use of medication in the fortnight preceding interview has remained relatively stable since 2000–01 (less than 4.0 % difference across the years). Female detainees' use of prescription medication(s), on the other hand, increased by 23.5 percentage points between 2000–01 (45.0%) and 2001–02 (68.5%), then remained relatively steady up to and including 2004–05 (64.4%); nevertheless, the change was not significant overall.

Figure 4.28: Proportion of Queensland detainees who had taken prescription medications during the preceding fortnight by age and gender, 2004–05



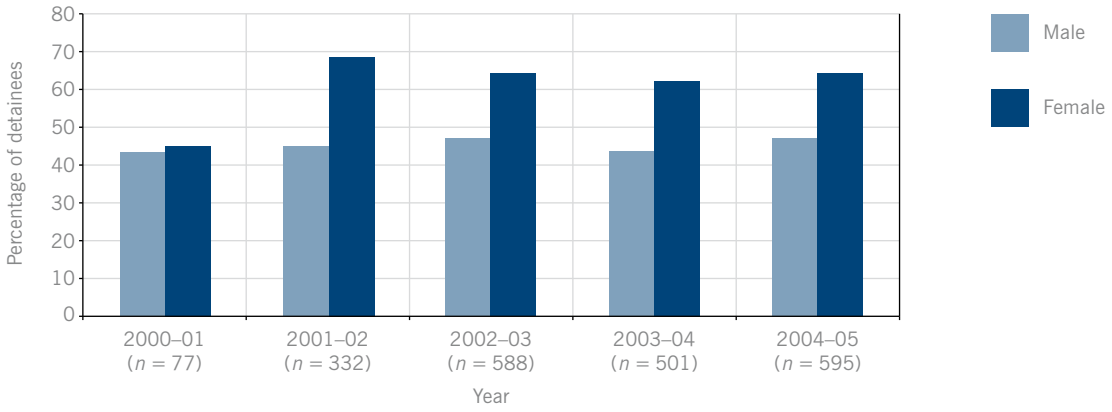
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

a $n = 1156$

b The sample size for females aged 17 years and under was too small for analysis ($n = 4$).

Figure 4.29: Proportion of Queensland detainees who had taken prescription medications during the preceding fortnight by gender and year, 2000–01 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2000–05 [computer file].

Note: No data available for 1999.

Figure 4.30: Proportions of detainees who had taken prescription medications during the preceding fortnight by state, 2004–05

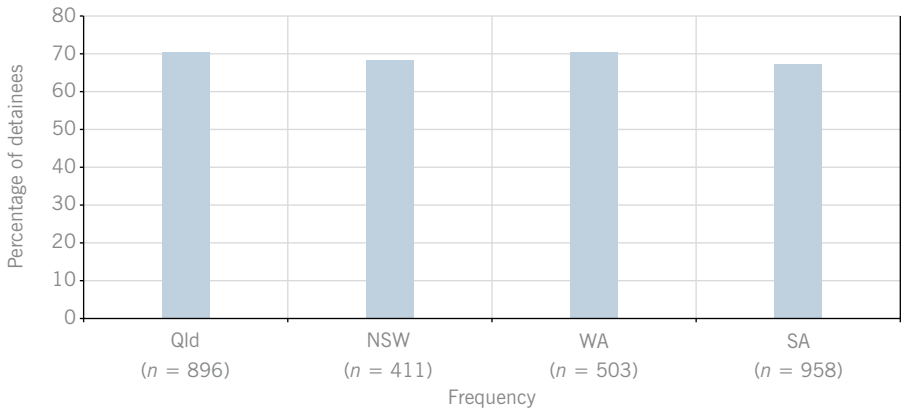
Source: Australian Institute of Criminology, DUMA collection, 2000–05 [computer file].

MOTIVATIONS FOR USING, AND DEPENDENCE ON, ILLICIT SUBSTANCES

Detainees who admitted using drugs in the preceding 12 months were asked to indicate whether they used illegal drugs to relieve feelings of unhappiness, anger and/or boredom (Figure 4.31). Across all of the four states participating, approximately 70 per cent of detainees admitted to consuming illegal drugs for the purpose of ameliorating feelings of unhappiness, anger and/or boredom. This finding supports Wills and Shiffman's (1985) stress coping model and Khantzian's (1997) self-medication model of substance abuse, where drugs are considered to serve a coping function through mood control. This is also consistent with the fact that nicotine smokers constantly report that they smoke more when they are stressed, angry, anxious or sad, and they anticipate that smoking will improve these negative moods (Kassel, Stroud & Paronis 2003).

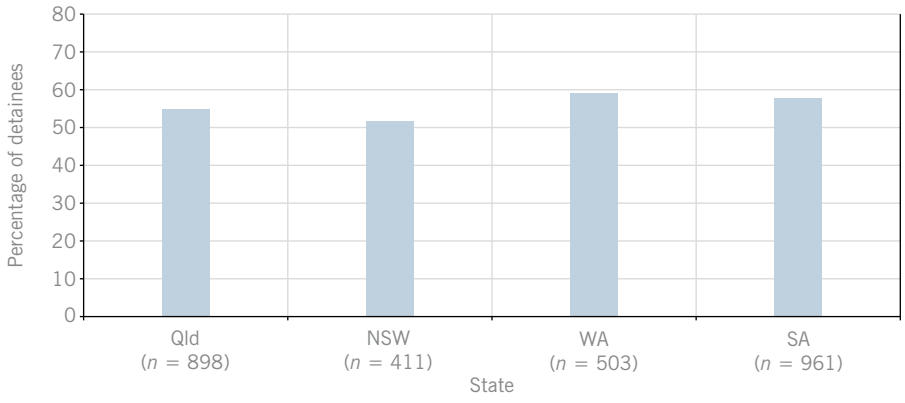
Detainees were also asked to indicate whether they felt that they had spent more time than they intended using illegal drugs (Figure 4.32). Over half (55.0%) of the Queensland detainees felt that they were spending more time using illegal drugs than they had initially intended. This finding was fairly consistent across the states.

Figure 4.31: Proportion of detainees using illegal drugs to alleviate negative feelings, by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 4.32: Proportion of detainees spending more time than intended using illegal drugs, by state, 2004–05

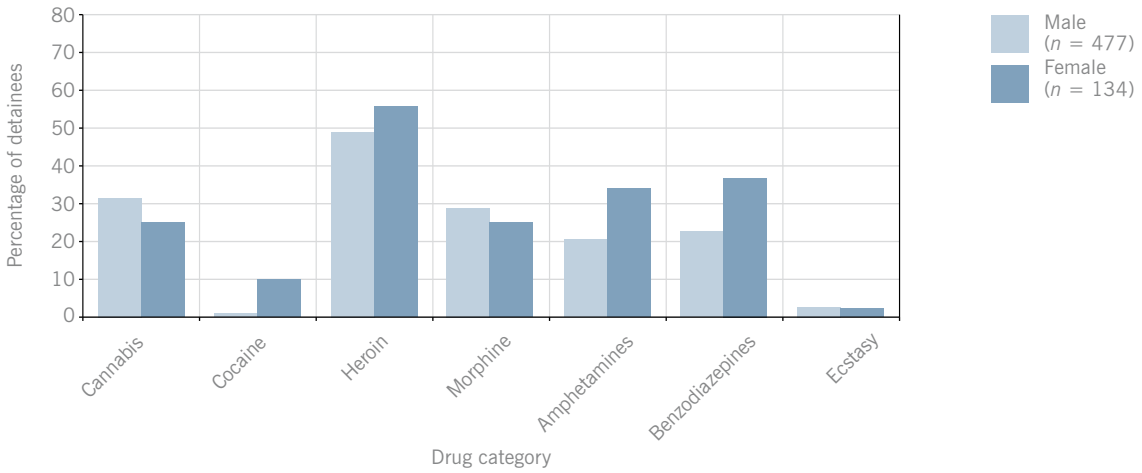


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Detainees were asked whether they considered themselves dependent on various drugs. As can be seen in Figure 4.33:

- about half of the detainees (50.4%) classified themselves as dependent on heroin, and about a third (30.5%) classified themselves as dependent on cannabis
- about a quarter of the detainees classified themselves as dependent on morphine (27.9%), amphetamines (23.4%) and/or benzodiazepines (25.7%)
- very few detainees classified themselves as dependent on cocaine (2.9%) or ecstasy (2.6%)
- females reported higher levels of dependence on cocaine (10.0%), heroin (54.7%), amphetamines (34.1%) and benzodiazepines (36.8%) than males (0.9%, 49.0%, 20.6% and 22.6% respectively).

Figure 4.33: Proportion of Queensland detainees self-identifying as dependent by drug, 2004–05



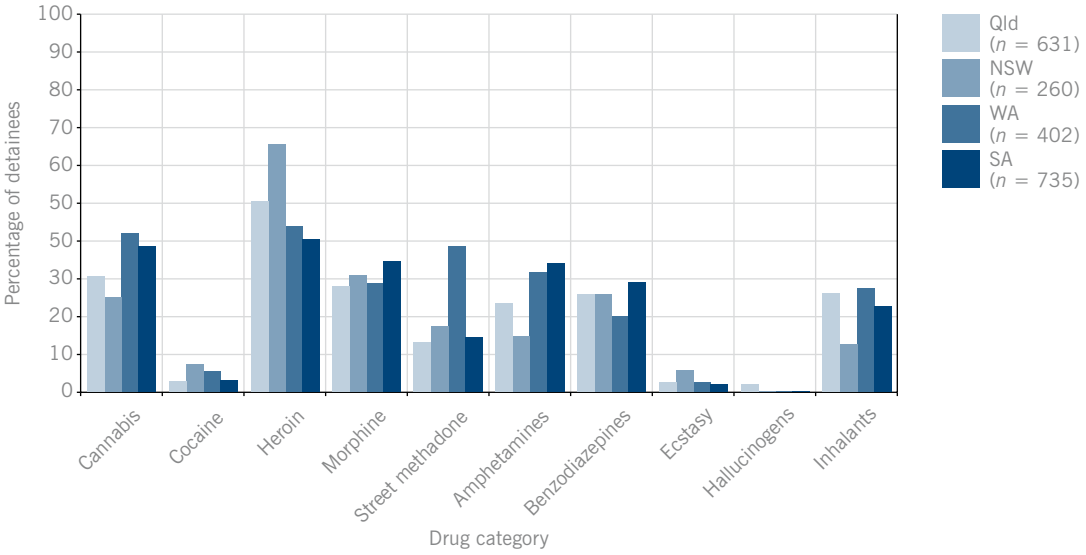
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: Due to small total sample sizes for females for street methadone (n = 13), hallucinogens (n = 6) and inhalants (n = 6), gender comparisons were not performed for these drugs.

When state comparisons were made on the number of detainees dependent on the various drug types (Figure 4.34, next page), the following conclusions were drawn:

- Self-classified dependence on cannabis was highest in Western Australia (41.9%) and lowest in New South Wales (30.5%).
- Self-classified dependence on heroin was highest in New South Wales (65.4%). This is consistent with the finding that New South Wales has the largest heroin market in Australia — it is estimated that about half of all dependent opioid users in Australia reside in New South Wales (Degenhardt et al. 2005). South Australia recorded the lowest proportion of heroin-dependent detainees (40.4%); this is consistent with the fact that the South Australian heroin market is smaller than that of New South Wales and depends for its supplies on the Sydney and Melbourne markets (Degenhardt et al. 2005).
- Self-classified amphetamine dependency was highest in South Australia (33.9%) — which is not surprising, given that South Australia is known to have a well-established amphetamine market (Degenhardt et al. 2005). Self-classified amphetamine dependence was lowest in New South Wales (14.7%).

Figure 4.34: Proportion of dependent detainees by drug and state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Table 4.6 shows the proportions of detainees who self-classified as dependent on particular drugs by the nature of the offence for which they were detained. Nearly one-fifth of detainees who self-classified as dependent on cannabis (17.5%) or morphine (17.6%) were charged with a violent offence. Just over one-fifth (22.1%) of detainees who self-classified as dependent on amphetamines were charged with a drug offence. It was also found that:

- detainees who self-classified as dependent on cannabis (17.5%) or morphine (17.6%) were approximately twice as likely to be charged with a violent offence as detainees dependent on amphetamines (8.0%) or benzodiazepines (8.8%)
- detainees who self-classified as dependent on morphine (8.8%) or benzodiazepines (8.8%) were twice as likely to be charged with a property offence as detainees dependent on amphetamines (4.4%)
- detainees who self-classified as dependent on amphetamines (22.1%) were twice as likely to be charged with a drug offence as detainees dependent on cannabis (11.6%) or morphine (11.8%), and 2.5 times more likely than detainees dependent on heroin (8.8%).

Table 4.6: Proportion of detainees self-identifying as dependent on drugs by type of offence, 2004–05

Drug type	Type of offence (%)				
	Violent	Property	Drug	Other	Total
Cannabis	17.5	4.8	11.6	66.1	100
Heroin	12.1	6.6	8.8	72.5	100
Amphetamine	8.0	4.4	22.1	65.5	100
Morphine	17.6	8.8	11.8	61.8	100
Benzodiazepine	8.8	8.8	17.6	64.7	100

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

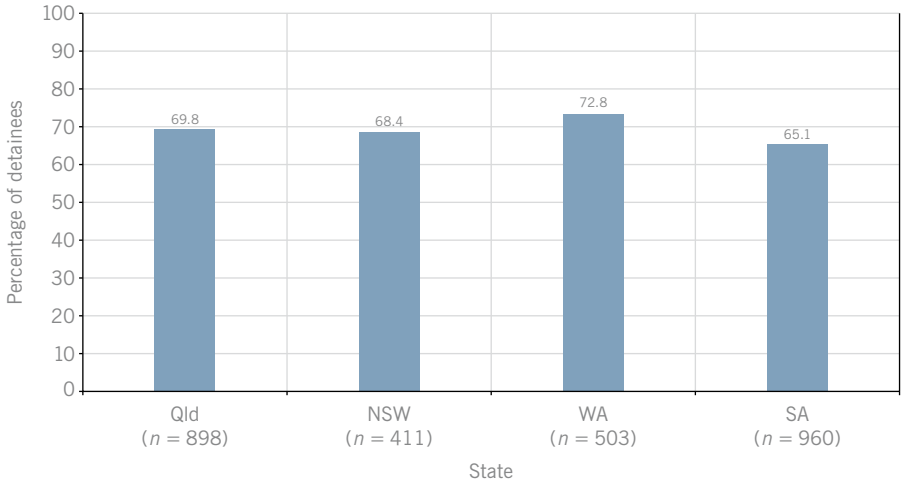
a Cannabis, *n* = 189; heroin, *n* = 91; amphetamines, *n* = 74; morphine, *n* = 34; benzodiazepines, *n* = 34.

b Sample sizes were too small for cocaine (*n* = 3), street methadone (*n* = 6), ecstasy (*n* = 8), hallucinogens (*n* = 1) or inhalants (*n* = 11) to be included in the analysis.

In 2003–04 and 2004–05, detainees were asked whether they wanted to reduce their consumption of illegal drugs. Figure 4.35 shows that detainees' desire to reduce their use of illicit drugs was consistent across the states, with over 65 per cent wanting to do so.

Between 2003–04 and 2004–05 there was an increase of about 5 percentage points (from 65.2% in 2003–04, on average, to 69.8% in 2004–05, on average) in the proportion of detainees stating that they would like to reduce their consumption of illegal drugs. A desire to reduce consumption may be a useful first step for seeking treatment. Detainees' participation in various treatment programs is described in Chapter 6.

Figure 4.35: Proportion of drug-using detainees who wanted to reduce consumption of illegal drugs, by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

CHAPTER SUMMARY

This chapter has revealed a number of interesting findings about the past and current drug use of a sample of watch-house detainees. This information may be useful for watch-house managers, law enforcement agencies and health service providers, as well as for policy development and potential treatment opportunities. For example:

- **The prevalence of illicit drug use among watch-house detainees appears to be much higher than in other samples studied — and this is the case for both recent use and having ever tried illicit substances. Indeed, the prevalence of drug use in this sample was consistently shown to be higher (between 5-fold and 8-fold) than in general population samples. The prevalence was higher, even, than in study samples where high prevalence rates would be expected, such as hospital emergency departments (e.g. the PADIE study), where it is well known that drug use can lead to accidents and injuries, thereby enhancing eligibility for inclusion in hospital research studies that assess levels of drug use.**
- **Some of the gender findings are particularly interesting, especially regarding female detainees. For example, females were more likely than the males in this sample to report that they had used heroin, morphine and cocaine at some stage in their lives, as well as to report more recent use of amphetamines and inhalants and the injection of cocaine and amphetamines. These findings are generally inconsistent with general population findings (e.g. AIHW 2005). The possible links between illicit drug use and criminal behaviour in females, in particular, may therefore warrant further investigation.**

- **While the overall prevalence of illicit drug use in this sample reinforced the typical age profile of drug users (i.e. generally, greater prevalence among younger people), some interesting interactions between gender and age were shown, which again demonstrated the predominance of drug use among females of certain ages in this sample.**
- **While the youngest average age for initiation for any drug was demonstrated for cannabis (which is consistent with prior research), early initiation to inhalants appears to be a growing problem.**
- **Some interesting changes in drug use over time were shown, as well as clear differences between states in the availability of various drugs. Some of these can be related to anecdotal or law enforcement information about changing drug markets (e.g. the heroin drought in 2001) and differing drug markets in different places (e.g. the relative availability of cocaine in NSW compared to other states). The predominance of the use of morphine, street methadone, benzodiazepines, inhalants, cannabis, heroin and/or amphetamines (rather than ecstasy, cocaine and/or hallucinogens) in the 30 days preceding interview illustrates some of the possible current links between specific illicit drugs and criminal activity. However, the reader needs to be mindful of the various state differences (such as the high level of cocaine use in NSW).**
- **Some interesting relationships were observed between detainees' age of first use of drugs such as cannabis, inhalants and amphetamines and age of first arrest. These findings point the way to potential early intervention opportunities.**
- **Strong positive relationships with the simultaneous use of various drugs such as heroin and cocaine, cocaine and hallucinogens, amphetamines and benzodiazepines, and amphetamines and ecstasy suggest that multiple drug use may contribute considerably to the nexus between drug use and crime, amplifying the effects of drug use on offending, or vice versa.**
- **Heroin was shown to be the most prevalent drug, by far, to have been injected in the preceding 12 months, although morphine and amphetamines were also prevalent. Heroin (followed by amphetamines) had also been injected more frequently in the preceding 30 days among this sample than had many of the other illicit substances.**
- **Most of the detainees (70.0%) admitted to consuming illegal drugs to ameliorate feelings of unhappiness, anger and/or boredom, almost half felt they had used drugs too frequently, and many thought they were dependent on various drugs. Some links between specific drug dependencies and different offences were also noted. Again, this information may be useful for early intervention purposes.**

5

Self-reported drug use: methods used to obtain illicit substances

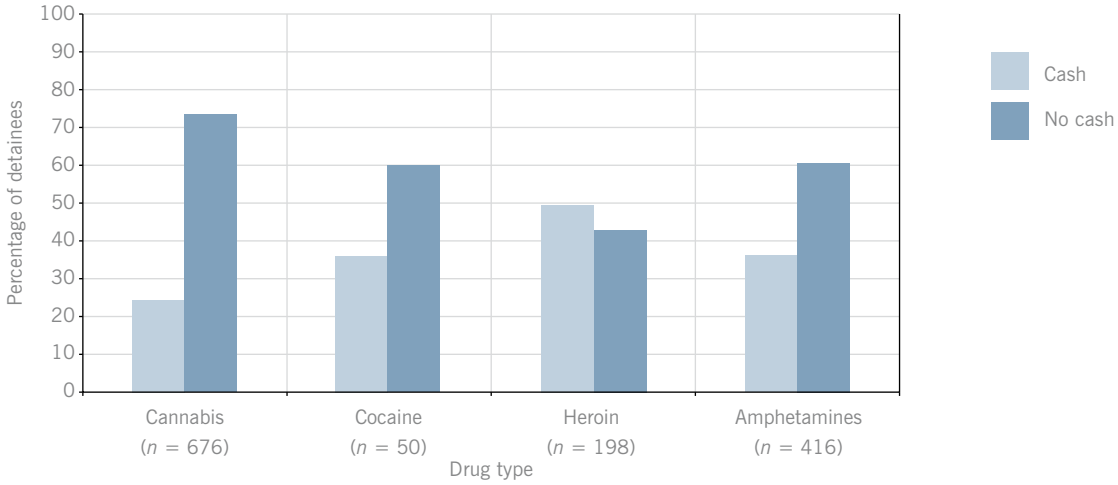
Detainees who reported that they had used illegal drugs in either the 30 days or the 12 months preceding their interview were asked several questions about how they had paid for the drugs, how they had made contact with the dealers, where the drugs had been obtained and whether they had purchased the drugs in their own suburb. Various methods of payment for illicit drugs were identified. These included: cash; producing or transporting drugs; buying drugs on credit; trading drugs for other drugs; property; merchandise or sex; stealing drugs; receiving drugs as a gift; or by some 'other' means.

They were also asked about the risks they perceived to be associated with purchasing and selling illicit substances in their own suburb. This chapter documents the detainees' responses to these questions.

PURCHASING DRUGS WITH CASH

On average, just over one-third of detainees paid cash for their drugs: in 2004–05, for example, 36.5 per cent of detainees who bought drugs in the 30 days preceding their interview, paid cash. However, there were some differences between the types of drugs purchased and over time (1999–2000 to 2004–05) in the way payments were made. For example, Figure 5.1 shows the proportions of detainees who reported buying drugs in 2004–05 with or without cash in the preceding 30 days, by drug type. Heroin users were more likely to pay cash for their drugs than the users of any of the other drug types.

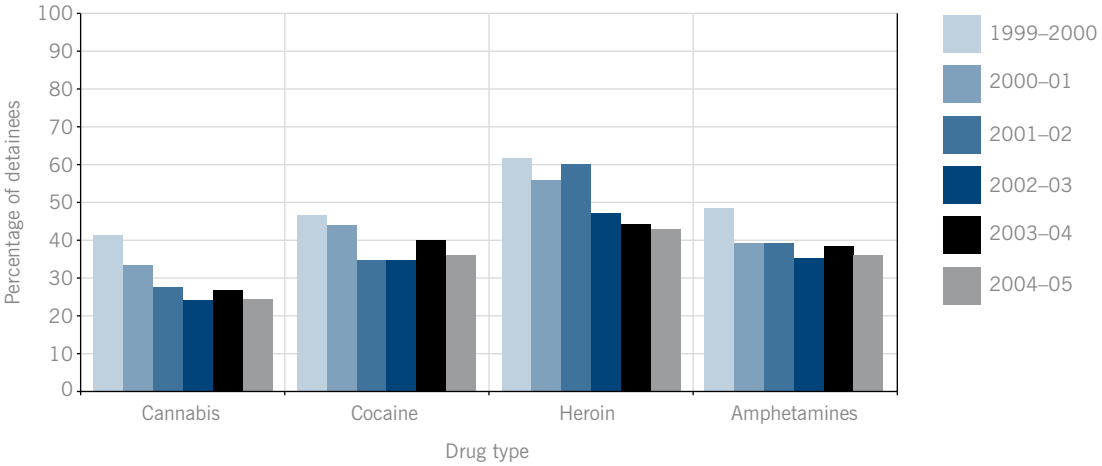
Figure 5.1: Proportion of Queensland detainees who obtained drugs in the preceding 30 days by method of payment (cash vs. other) and drug type, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

When comparisons were made of drug-purchasing behaviour in the 30 days preceding interview over the period 1999–2000 to 2004–05 (Figure 5.2), the profiles identified above for each drug type remained the same, but across time fewer users in 2004–05 of all drug types paid cash than in 1999–2000. Payment methods, other than by cash, are discussed in detail later in this chapter.

Figure 5.2: Proportion of Queensland detainees buying drugs with cash in the preceding 30 days by year, 1999–2000 to 2004–05

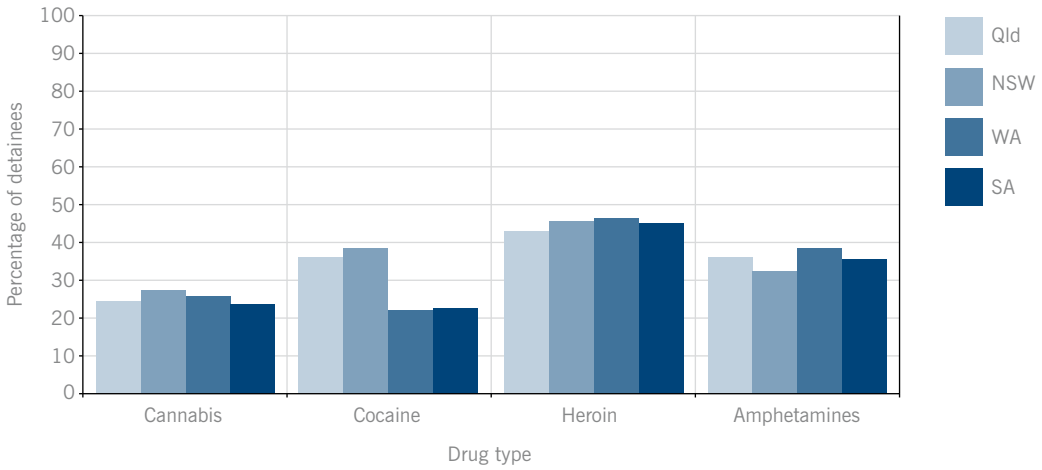


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:
1999–2000: cannabis, *n* = 376; cocaine, *n* = 30; heroin, *n* = 102; amphetamines, *n* = 194
2000–01: cannabis, *n* = 269; cocaine, *n* = 25; heroin, *n* = 91; amphetamines, *n* = 130
2001–02: cannabis, *n* = 395; cocaine, *n* = 43; heroin, *n* = 113; amphetamines, *n* = 257
2002–03: cannabis, *n* = 729; cocaine, *n* = 46; heroin, *n* = 81; amphetamines, *n* = 481
2003–04: cannabis, *n* = 657; cocaine, *n* = 30; heroin, *n* = 208; amphetamines, *n* = 427
2004–05: cannabis, *n* = 676; cocaine, *n* = 50; heroin, *n* = 198; amphetamines, *n* = 416.

When state comparisons were made on the proportion of detainees who reported buying drugs with or without cash in the preceding 30 days (Figure 5.3, facing page), the profile for purchasing cannabis, heroin and amphetamines was largely the same around the country. However, some differences were noted for cocaine, with users in Western Australia and South Australia less likely to pay cash than those in Queensland and New South Wales.

Figure 5.3: Proportion of detainees buying drugs with cash in the preceding 30 days by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

Qld: cannabis, *n* = 676; cocaine, *n* = 50; heroin, *n* = 198; amphetamines, *n* = 416
NSW: cannabis, *n* = 309; cocaine, *n* = 57; heroin, *n* = 112; amphetamines, *n* = 111
WA: cannabis, *n* = 412; cocaine, *n* = 18; heroin, *n* = 56; amphetamines, *n* = 296
SA: cannabis, *n* = 801; cocaine, *n* = 40; heroin, *n* = 109; amphetamines, *n* = 482.

Methods of contacting dealers

Figures 5.4–5.7, following, show the method of contact with dealers the last time that Queensland detainees purchased cannabis, cocaine, heroin and amphetamines with cash in the preceding 30 days by year. Telephone appears to have been the primary mode of contact for obtaining all drugs, but the extent to which this occurred varied by drug type. For example, telephone contact accounted for about 75 per cent of the cash purchases for heroin but much less (about 40.0%) for cash purchases of cannabis and cocaine. The relevant data for each drug are discussed below.

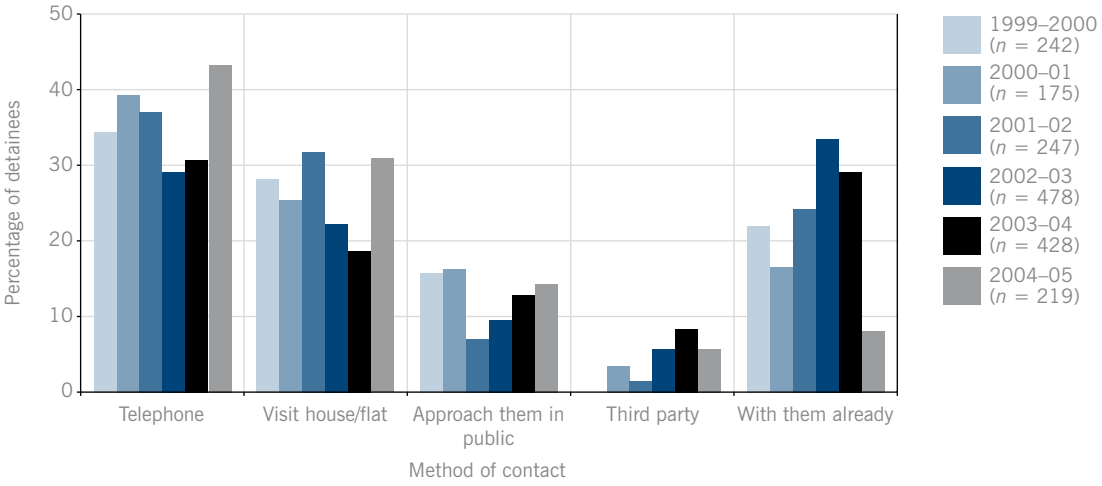
According to May and Hough (2001), until the mid-1990s, open street-based markets tended to operate in specific well-defined places. Increasingly, contact is now made by the buyer ringing the seller's mobile telephone and making an appointment to meet at an arranged place. Mobile telephones have facilitated the shift from open markets to closed markets.

Cannabis

Figure 5.4 (next page) shows:

- In 2004–05, the highest proportion of detainees (42.9%) reported having contacted the seller by telephone and the lowest proportion (7.3%) reported having been with the seller already. The latter is quite different to previous years, however, where 20–30 per cent of detainees, on average, reported being with the seller already.
- Detainees reporting that they had approached the seller in public to buy drugs for cash were more likely to do so in 1999–2000 (15.7%) and 2000–01 (16.0%); in 2001–02 the proportion dropped to less than half this amount (6.9%), but then increased again steadily to 2004–05 (13.7%). Overall, however, approaching sellers in public was not popular with detainees as a way of purchasing cannabis.

Figure 5.4: Method of contact the last time Queensland detainees had purchased cannabis with cash, 1999–2000 to 2004–05



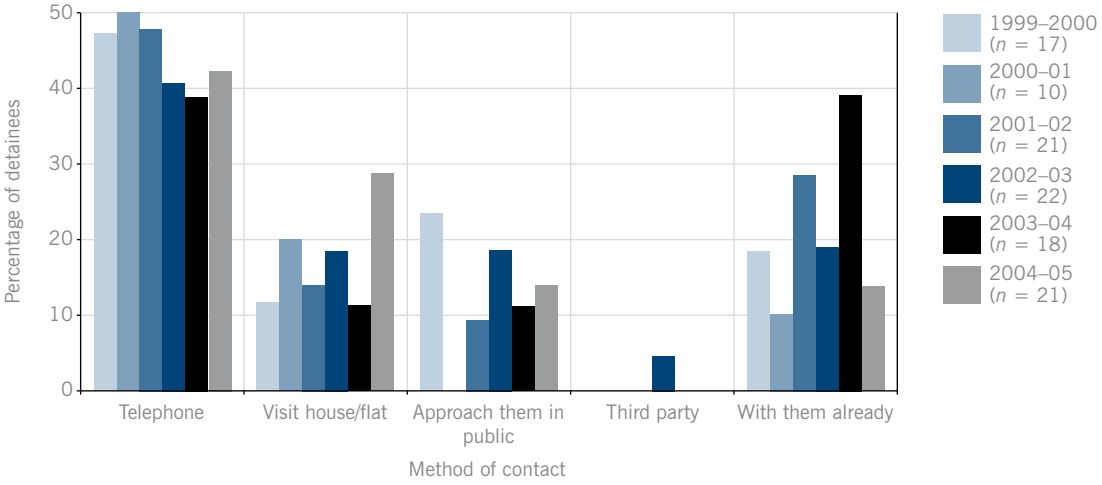
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Cocaine

Figure 5.5 shows:

- Cocaine was mostly sourced through contacting a supplier by telephone.
- The proportion of detainees who reported having already been with the seller peaked in 2003–04 (38.9%).
- The proportion who reported visiting the seller's house or flat peaked in 2004–05 (28.6%).

Figure 5.5: Method of contact the last time Queensland detainees purchased cocaine with cash, 1999–2000 to 2004–05



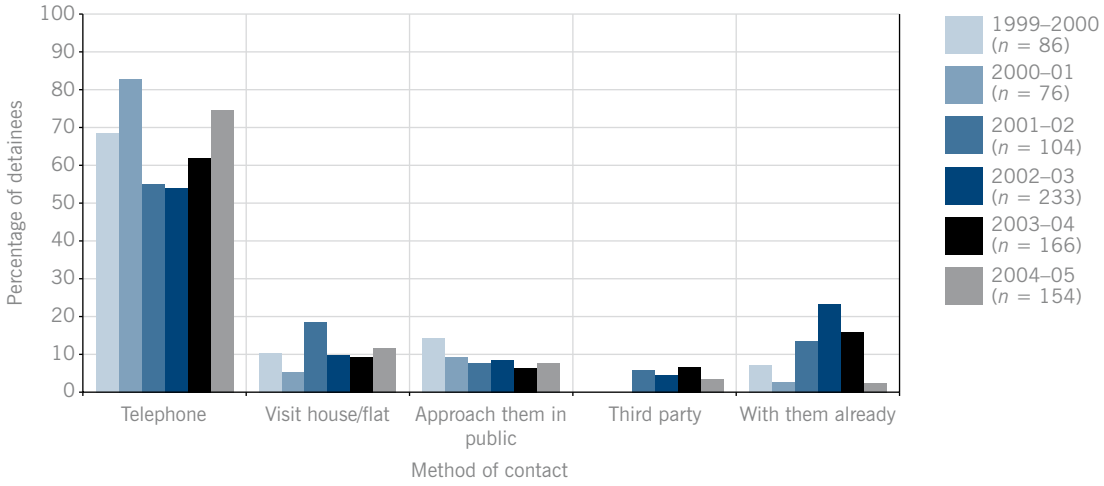
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Heroin

Figure 5.6 shows:

- Heroin was mostly sourced through contacting a supplier by telephone. This is consistent with the findings from the IDRS sample (Stafford et al. 2005), that most intravenous drug users reported scoring from a mobile dealer by calling the dealer and arranging to meet.
- There was a slight increase in 2001–02 in the number of detainees who reported sourcing heroin by visiting a house or flat (to 18.3%).
- There was a slight increase in 2002–03 in the number of detainees who reported sourcing heroin by already being with the seller.

Figure 5.6: Method of contact the last time Queensland detainees purchased heroin with cash, 1999–2000 to 2004–05



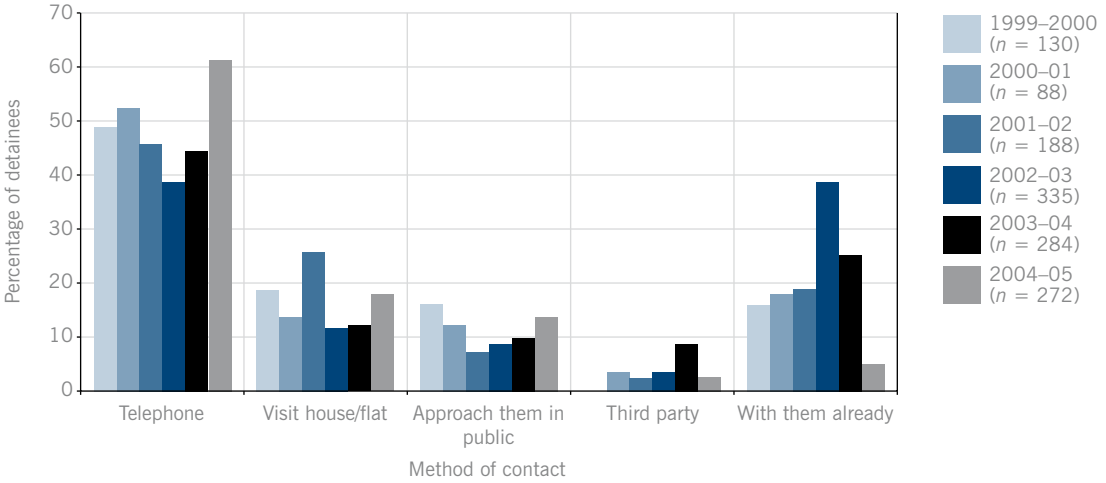
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Amphetamines

Figure 5.7 shows:

- As for cannabis, cocaine and heroin, amphetamines were mostly sourced through contacting a supplier by telephone.
- As for cannabis, in 2004–05 the highest proportion of detainees (60.8%) reported having contacted the seller by telephone and the lowest proportion reported having already been with the drug supplier (4.8%).
- In 2002–03, there was a peak in the proportion of detainees purchasing amphetamines who had already been with the seller (38.2%).

Figure 5.7: Method of contact the last time Queensland detainees purchased amphetamines with cash, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

State comparisons

Table 5.1 (facing page) compares methods of contact by state for 2004–05:

- For cannabis, considerably more detainees in Queensland (42.9%) and New South Wales (45.8%) than in Western Australia (29.5%) and South Australia (29.8%) had contacted the seller by telephone. Conversely, more detainees in Western Australia (48.5%) and South Australia (41.8%) than in Queensland (30.6%) and New South Wales (27.1%) had contacted the seller by visiting a house or flat.
- For amphetamines, Queensland recorded the highest percentage of detainees who had contacted the seller by telephone (61.1%), and the lowest percentage who had contacted the seller through a third party (2.6%) or had already been with them (4.8%).
- For cocaine, considerably fewer detainees in South Australia than in the other states had contacted the seller by telephone (9.1%); and considerably more in South Australia had contacted the seller through a third party (27.3%) or were already with them (27.3%). Queensland recorded the highest percentage of detainees visiting a house/flat to purchase cocaine (28.6%) and the only state to report no detainees who were already with the seller.
- For heroin, Queensland recorded the highest percentage of detainees who had contacted the seller by telephone (74.7%). Substantially more detainees in Western Australia had visited a house or flat as the method of contact (42.1%).

Table 5.1: Method of contact the last time detainees purchased drugs with cash in the preceding 30 days by state, 2004–05

Method of contact	Type of drug							
	Cannabis				Amphetamine			
	Qld	NSW	WA	SA	Qld	NSW	WA	SA
	n = 219	*n* = 177	*n* = 268	*n* = 443	*n* = 272	*n* = 65	*n* = 226	*n* = 296
Telephone	42.9	45.8	29.5	29.8	61.0	50.8	50.9	43.9
Visited house or flat	30.6	27.1	48.5	41.8	17.6	16.9	33.2	30.7
Approach in public	13.7	11.9	6.0	12.0	14.0	10.8	4.4	11.5
With them already	7.3	5.1	9.0	6.8	4.8	9.2	6.2	7.4
Through a third party	5.5	10.2	7.1	9.7	2.6	12.3	5.3	6.4
Total	100	100	100	100	100	100	100	100
	Cocaine				Heroin			
	Qld	NSW	WA	SA	Qld	NSW	WA	SA
	n = 21	*n* = 30	*n* = 10	*n* = 11	*n* = 154	*n* = 90	*n* = 38	*n* = 77
Telephone	42.8	66.7	60.0	9.1	74.7	72.2	55.3	62.3
Visited house or flat	28.6	16.7	10.0	18.2	11.7	10.0	42.1	26.0
Approach in public	14.3	10.0	0.0	18.2	7.8	14.4	0.0	6.5
With them already	14.3	3.3	20.0	27.3	2.6	0.0	0.0	1.3
Through a third party	0.0	3.3	10.0	27.3	3.2	3.3	2.6	3.9
Total	100	100	100	100	100	100	100	100

Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:
a Caution needs to be taken in interpreting results pertaining to method of contact for cocaine, due to small sample size.
b Qld: cannabis *n* = 219; amphetamines *n* = 272; cocaine *n* = 154; heroin *n* = 154.
NSW: cannabis *n* =177; amphetamines *n* = 65; cocaine *n* =30; heroin *n* = 90.
WA: cannabis *n* =268; amphetamines *n* = 226; cocaine *n* =10; heroin *n* = 38.
SA: cannabis *n* = 443; amphetamines *n* = 296; cocaine *n* = 11; heroin *n* = 77.

Places where drugs were bought with cash

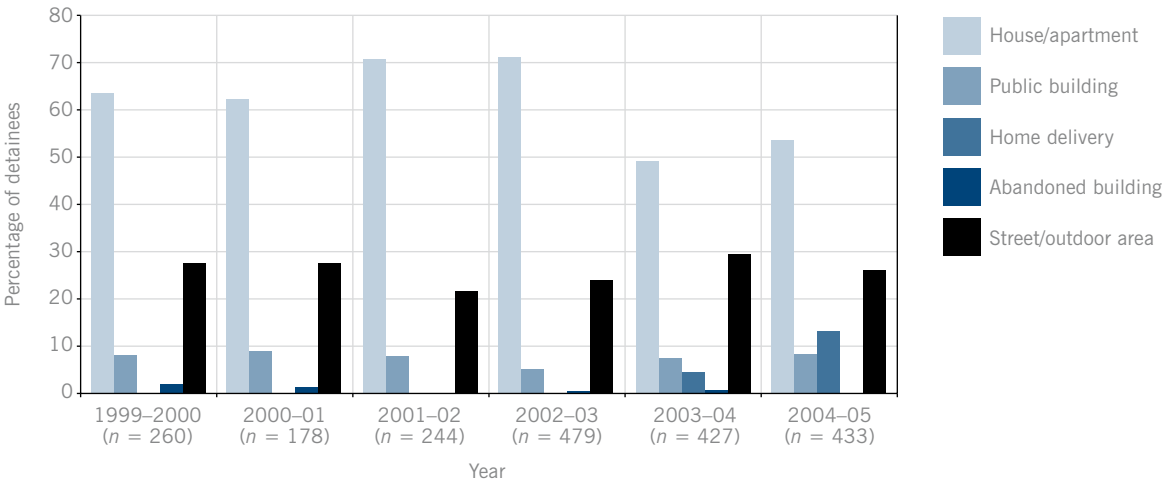
Figures 5.8–5.11, following, show the types of places where Queensland detainees reported last buying drugs (with cash) between 1999–2000 and 2004–05. There was considerable consistency in the places where most drugs (cannabis, cocaine and amphetamines) were bought – in a house or apartment – except for heroin, which was consistently more likely to be bought on the streets.

Cannabis

Figure 5.8 shows:

- Across the years, detainees were most likely to report that they had last purchased cannabis at a house or apartment.
- Purchasing cannabis as a home delivery was first recorded in 2003–04 (3.7%). By the following year this proportion had more than tripled (to 12.9%).

Figure 5.8: Type of place where Queensland detainees last purchased cannabis, 1999–2000 to 2004–05



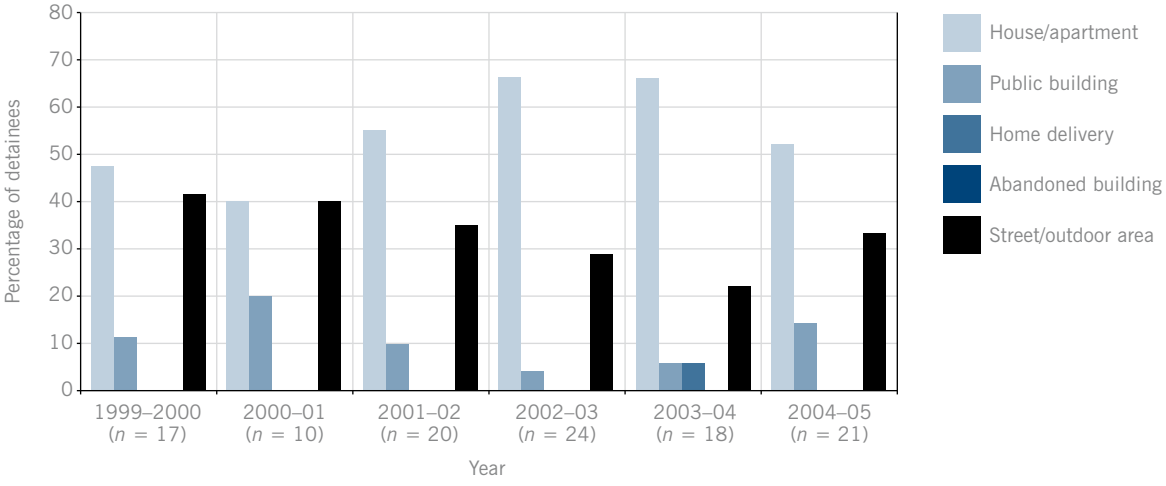
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Cocaine

Figure 5.9 shows:

- Over the entire period, most detainees last purchased cocaine in a house or apartment; but in 2000–01 there was an equal likelihood (40%) that they had purchased it in the street or in another outdoor area.
- The proportion of detainees who had purchased cocaine in the street or another outdoor area steadily decreased from 1999–2000 (41.2%) to 2003–04 (22.2%), but then rose again in 2004–05 (33.3%).

Figure 5.9: Type of place where Queensland detainees last purchased cocaine, 1999–2000 to 2004–05



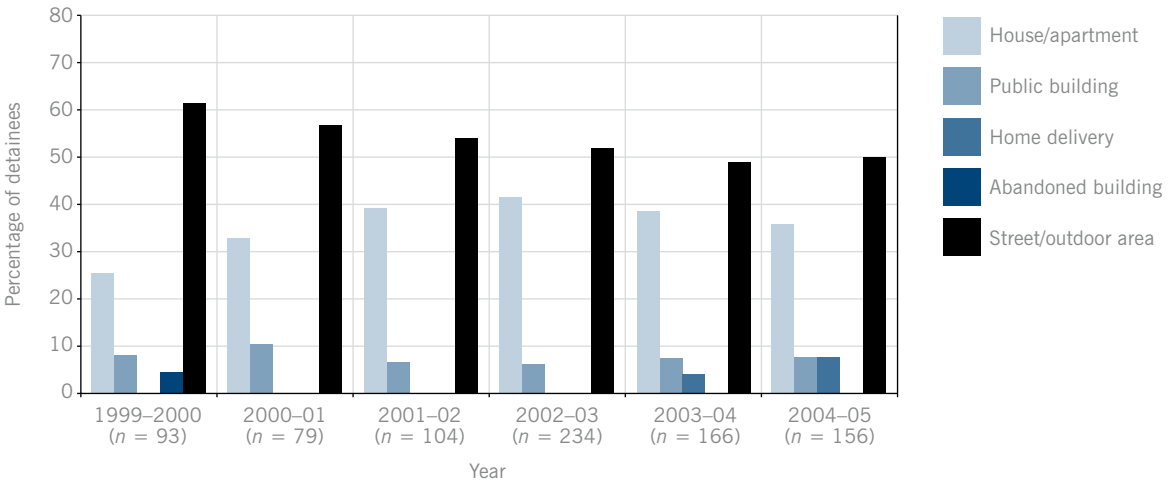
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Heroin

Figure 5.10 shows:

- Over the whole period, detainees were most likely to have last purchased heroin in the street or another outdoor area; the next most likely location was in a house or apartment.
- Purchasing heroin as a home delivery was first recorded in 2003–04 (4.8%), and this occurred at a somewhat higher rate the following year (7.1%).

Figure 5.10: Type of place where Queensland detainees last purchased heroin, 1999–2000 to 2004–05



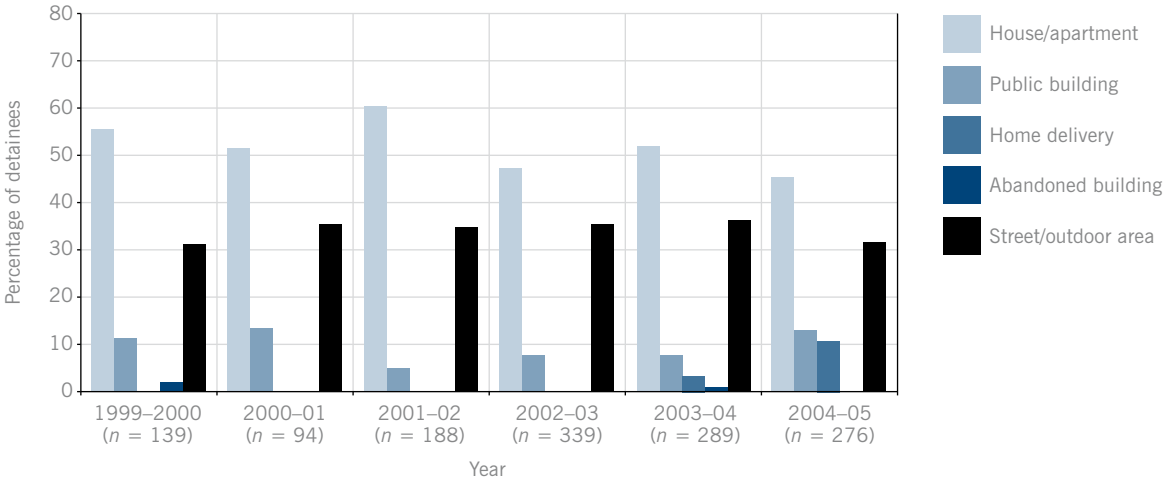
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Amphetamines

Figure 5.11 shows:

- Over the whole period, detainees were most likely to have last purchased amphetamines in a house or apartment, followed by the street or another outdoor area.
- Purchasing amphetamines as a home delivery was first recorded in 2003–04 (3.5%), and had tripled by the following year (10.5%).

Figure 5.11: Type of place where Queensland detainees last purchased amphetamines, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

State comparisons

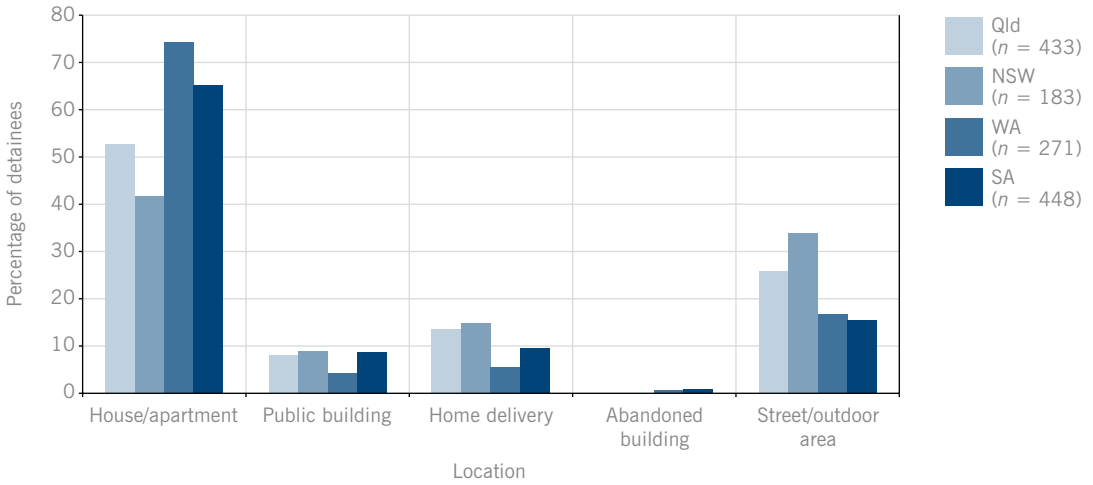
State comparisons were made on the type of place most detainees last purchased each drug (Figures 5.12–5.15, following).

Cannabis

Figure 5.12 shows:

- Considerably more detainees in Western Australia (73.8%) and South Australia (65.6%) than in Queensland (53.1%) and New South Wales (42.1%) last purchased cannabis from a house or apartment.
- More detainees in Queensland (25.9%) and New South Wales (33.9%) than Western Australia (16.6%) and South Australia (15.8%) last purchased cannabis on the street or from another outdoor area.

Figure 5.12: Type of place where detainees last purchased cannabis by state, 2004–05



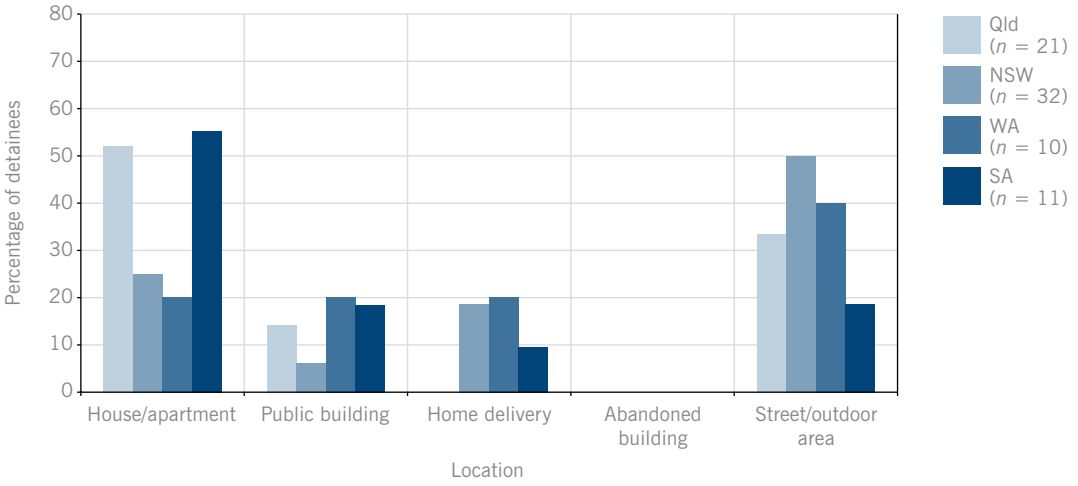
Source: Australian Institute of Criminology, DUMA collection 2004–05 [computer file].

Cocaine

Figure 5.13 (facing page) shows:

- Over half of the Queensland (52.4%) and South Australian (54.5%) detainees reported purchasing cocaine from a house or apartment, compared with only a quarter of those in New South Wales (25.0%) and a fifth of those in Western Australia (20.0%).
- No detainees in Queensland had purchased cocaine through home delivery, whereas approximately a fifth of detainees in New South Wales (18.8%) and Western Australia (20%), and about a tenth of detainees in South Australia (9.1%) had done so.
- Half of the New South Wales detainees had purchased cocaine on the street or in another outdoor area, compared with 40 per cent of detainees in Western Australia, a third of Queensland detainees (33.3%) and less than a fifth (18.2%) of detainees in South Australia.

Figure 5.13: Type of place where detainees last purchased cocaine by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

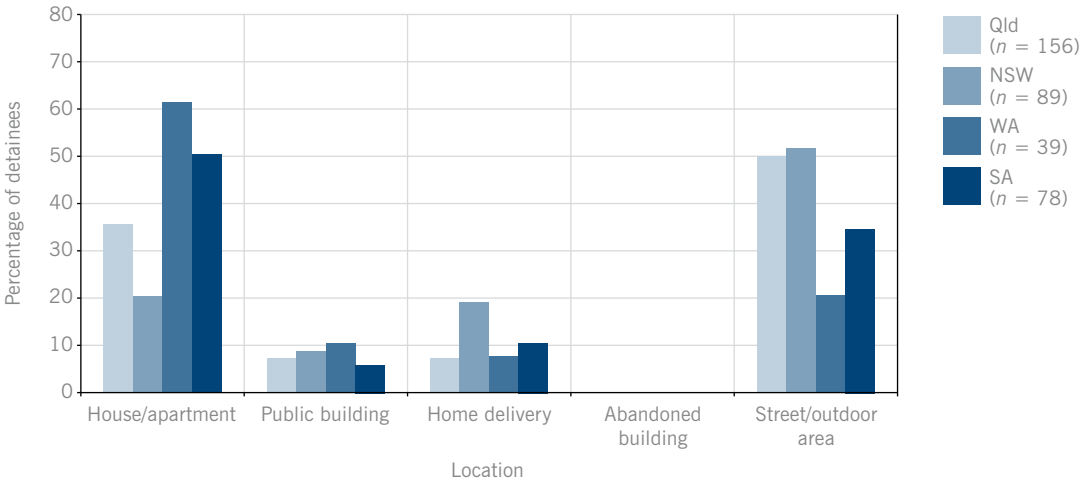
Note: Caution needs to be taken in interpreting these findings, given the small sample size.

Heroin

Figure 5.14 shows:

- Substantially more detainees in Western Australia (61.5%) and South Australia (50%) than in Queensland (35.9%) and New South Wales (20.2%) purchased heroin in a house or apartment.
- More detainees in Queensland (51.7%) and New South Wales (51.7%) than in South Australia (34.6%) and Western Australia (20.5%) purchased heroin on the street or in another outdoor area.

Figure 5.14: Type of place where detainees last purchased heroin by state, 2004–05



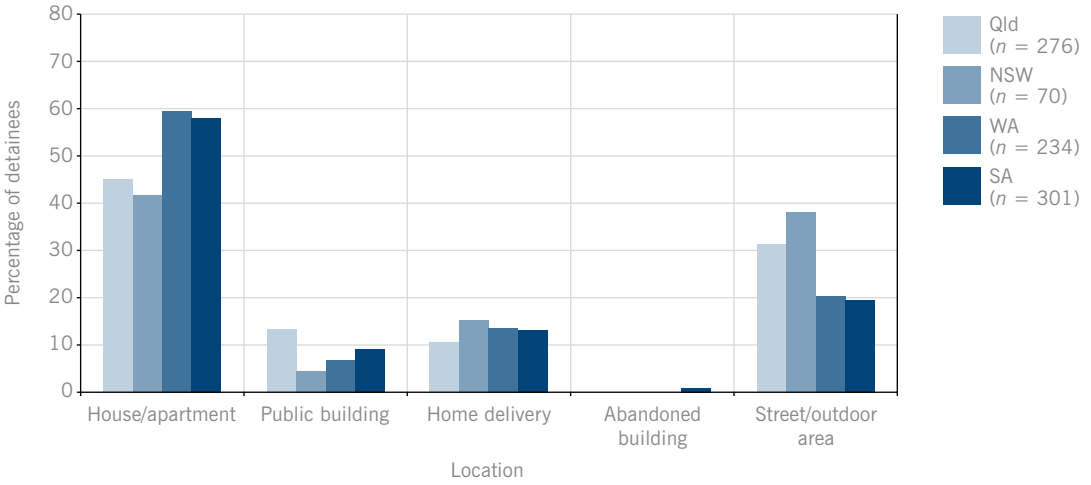
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Amphetamines

Figure 5.15 shows:

- Western Australia (59.4%) and South Australia (57.8%) recorded more detainees purchasing amphetamines in a house or apartment than Queensland (44.9%) and New South Wales (41.4%).
- Queensland (31.5%) and New South Wales (38.6%) recorded more detainees purchasing amphetamines on the street or in another outdoor area than Western Australia (20.1%) and South Australia (19.3%).
- Queensland recorded the highest percentage of detainees purchasing amphetamines in a public place (13.0%), but this was still a relatively small proportion of purchases overall.

Figure 5.15: Type of place where detainees last purchased amphetamines by state, 2004–05



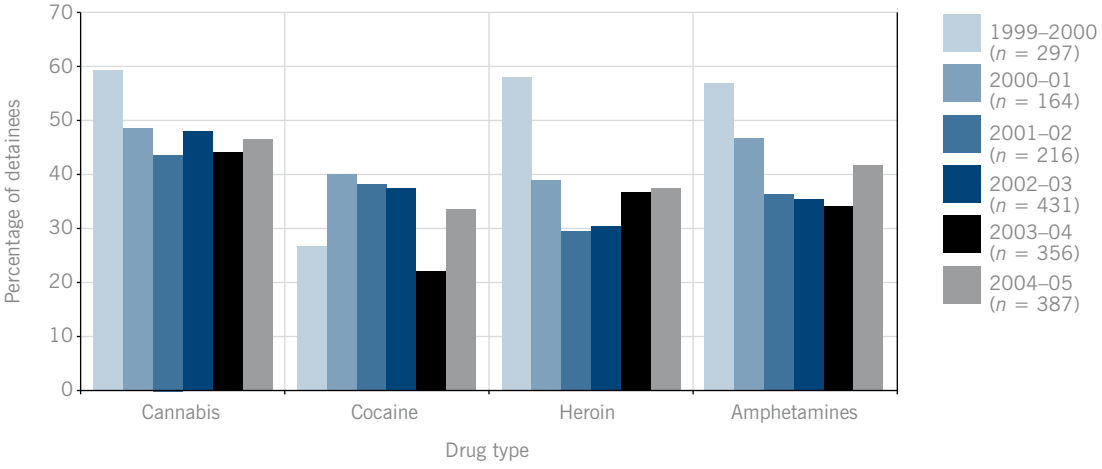
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Purchasing drugs in detainees' own suburb

Figure 5.16 shows the percentages of detainees who purchased drugs with cash in their own suburb in the preceding 30 days:

- Since 1999–2000, there has been a decline in the proportion of detainees purchasing cannabis, heroin and/or amphetamines in their own suburb.
- Since 1999–2000 there has been an increase in the number of detainees purchasing cocaine in their own suburb (with the exception of 2003–04).

Figure 5.16: Proportion of Queensland detainees who purchased drugs with cash in their own suburb in the past 30 days, 1999–2000 to 2004–05

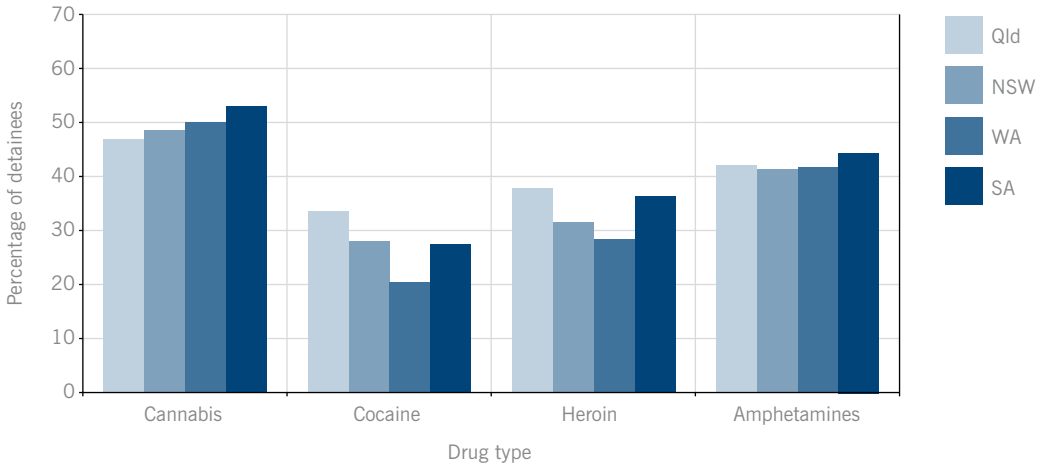


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Figure 5.17 shows the state comparisons for the percentage of detainees who purchased drugs with cash in their own suburb:

- Queensland recorded more detainees purchasing cocaine (33.3%) and heroin (37%) in their own suburb than the other states.
- South Australia recorded more detainees than in the other states purchasing cannabis (53.1%) in their own suburb.

Figure 5.17: Proportion of detainees who purchased drugs in the past 30 days in their own suburb by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:
Caution should be taken in interpreting these findings, due to small sample sizes.
Qld: cannabis, *n* = 204, cocaine, *n* = 7, heroin, *n* = 59, amphetamines, *n* = 117
NSW: cannabis, n =89, cocaine, *n* = 9, heroin, *n* = 28, amphetamines, *n* = 29
WA: cannabis, *n* = 135, cocaine, *n* = 2, heroin, *n* = 11, amphetamines, *n* = 97
SA: cannabis, n =237, cocaine, *n* = 3, heroin, *n* = 28, amphetamines, *n* = 131.

PURCHASING OR OBTAINING DRUGS WITHOUT CASH

As discussed at the beginning of this chapter, few detainees used cash to buy drugs; other means were far more prevalent. Table 5.2 (next page) shows the ways in which Queensland detainees who had used drugs in the preceding 30 days acquired cannabis, cocaine, heroin and amphetamines without cash between 1999–2000 and 2004–05.

Averaging the percentages across the years, the most commonly reported method of obtaining cannabis, cocaine, heroin and amphetamines without paying cash was receiving it as a gift (cannabis 42.1%; cocaine 58.5%; heroin 44.6%; amphetamines 51.3%). The second most common means of obtaining these drugs without cash was through sharing them with someone (cannabis 37.9%; cocaine 27.4%; heroin 22.8%; amphetamines 26.9%). This finding is consistent with the notion of the gift economy, in which there is a norm of reciprocity for sharing drugs (Day, Woolcock & Weatherall 2003).

Table 5.2: Means by which Queensland detainees reported obtaining drugs without cash, by drug type, 1999–2000 to 2004–05 (percentages of those who had used drugs during the preceding 30 days)

Method of payment	Cannabis (%)					
	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05
	n = 206	*n* = 175	*n* = 292	*n* = 560	*n* = 472	*n* = 498
Produced drug	7.8	8.6	6.5	3.0	3.4	2.4
On credit	6.8	8.0	3.1	5.5	6.4	9.8
Traded other drugs	3.9	1.1	1.4	2.7	2.3	1.0
Traded property/merchandise	4.4	3.4	2.4	2.7	2.5	1.6
Transported drugs	0.5	0.0	0.3	0.2	0.0	0.0
Stole drug	2.4	1.7	0.7	1.1	1.1	1.0
Was shared	34.0	38.9	39.4	35.9	36.4	42.8
Traded sex	0.5	1.1	0.0	0.7	0.6	0.2
Received as a gift	38.8	36.6	44.2	47.1	46.0	39.6
Other	1.0	0.6	2.1	1.1	1.3	1.6
Total	100	100	100	100	100	100

Method of payment	Cocaine (%)					
	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05
	n = 17	*n* = 13	*n* = 29	*n* = 28	*n* = 18	*n* = 30
Produced drug	0.0	0.0	0.0	0.0	0.0	0.0
On credit	0.0	0.0	0.0	3.6	5.6	3.3
Traded other drugs	5.9	0.0	0.0	7.1	11.1	6.7
Traded property/merchandise	0.0	0.0	3.4	3.6	0.0	3.3
Transported drugs	0.0	0.0	0.0	0.0	0.0	0.0
Stole drug	5.9	0.0	0.0	0.0	0.0	0.0
Was shared	11.8	53.8	24.1	21.4	33.3	30.0
Traded sex	0.0	0.0	0.0	0.0	0.0	0.0
Received as a gift	58.8	46.2	69.0	60.7	50.0	56.7
Other	17.6	0.0	3.4	3.6	0.0	0.0
Total	100	100	100	100	100	100

Method of payment	Heroin (%)					
	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05
	n = 39	*n* = 39	*n* = 45	*n* = 146	*n* = 106	*n* = 85
Produced drug	5.1	0.0	0.0	0.0	0.0	0.0
On credit	5.1	12.8	4.4	13.7	15.1	10.6
Traded other drugs	5.1	0.0	6.7	4.8	6.6	5.9
Traded property/merchandise	17.9	20.5	2.2	3.4	8.5	8.2
Transported drugs	0.0	0.0	0.0	2.1	0.9	0.0
Stole drug	0.0	2.6	2.2	0.7	3.8	1.2
Was shared	35.9	25.6	35.6	17.8	17.0	24.7
Traded sex	2.6	0.0	0.0	1.4	3.8	1.2
Received as a gift	25.6	35.9	42.2	52.7	42.5	47.1
Other	2.6	2.6	6.7	3.4	1.9	1.2
Total	100	100	100	100	100	100

Method of payment	Amphetamines (%)					
	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05
	n = 98	*n* = 77	*n* = 154	*n* = 312	*n* = 253	*n* = 248
Produced drug	1.0	0.0	1.9	1.6	2.8	2.8
On credit	8.2	9.1	6.5	6.4	4.7	7.3
Traded other drugs	2.0	1.3	2.6	6.1	2.8	2.4
Traded property/merchandise	10.2	7.8	3.2	5.1	9.1	6.5
Transported drugs	1.0	0.0	0.0	0.0	0.8	0.0
Stole drug	2.0	1.3	1.3	1.6	1.6	0.8
Was shared	28.6	31.2	29.9	26.9	20.9	25.8
Traded sex	0.0	1.3	0.0	1.6	0.4	1.2
Received as a gift	45.9	45.5	53.2	49.0	54.2	48
Other	1.0	2.6	1.3	1.6	2.8	5.2
Total	100	100	100	100	100	100

Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:

1 Caution should be taken in interpreting findings, due to small sample sizes.

2 All figures in this table exclude cash purchases. (These are discussed at the beginning of the chapter.) Overall, cash purchases accounted for about one-third of all payments for illicit drugs by detainees in the 30 days preceding their interview (although this method varied by drug type). Without reference to cash purchases, this table does not include all ways in which drugs were purchased or obtained in that time, therefore the percentages quoted above will significantly inflate their overall importance.

Gender comparisons

Table 5.3 makes gender comparisons on how detainees acquired cannabis, heroin and amphetamines in the preceding 30 days without cash.

Table 5.3: Means by which Queensland detainees obtained drugs without cash, by gender, 2004–05

Method of payment	Cannabis (%)		Heroin (%)		Amphetamines (%)	
	Female	Male	Female	Male	Female	Male
	(*n* = 78)	(*n* = 420)	(*n* = 23)	(*n* = 62)	(*n* = 59)	(*n* = 189)
Produced drug	0.0	2.9	0.0	0.0	1.7	3.2
On credit	6.4	10.5	13.0	9.7	0.0	9.5
Traded other drugs	0.0	1.2	8.7	4.8	3.4	2.1
Traded property/merchandise	0.0	1.9	4.3	9.7	6.8	6.3
Stole drug	0.0	1.2	0.0	1.6	1.7	0.5
Was shared	50.0	41.4	26.1	24.2	30.5	24.3
Traded sex	0.0	0.2	4.3	0.0	3.4	0.5
Received as gift	43.6	38.8	43.5	48.4	45.8	48.7
Other	0.0	1.9	0.0	1.6	6.8	4.8
Total	100	100	100	100	100	100

Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:

1 Caution should be taken in interpreting findings, due to small sample sizes.

2 Sample size for cocaine was too small for females to allow gender comparisons (*n* = 4).

3 All figures in this table exclude cash purchases. (These are discussed at the beginning of the chapter.)

Cannabis

- Somewhat more males (10.5%) than females (6.4%) obtained cannabis on credit.
- More females than males obtained cannabis through sharing with someone else (females 50%; males 41.4%) or receiving cannabis as a gift (females 43.6%; males 38.8%).

Heroin

- More females obtained heroin on credit (13.0%), through trading other drugs (8.7%), sharing it with someone else (26.1%) or trading it for sex (4.3%), than did males.
- More males obtained heroin by trading property or merchandise (9.7%) and receiving it as a gift (48.8%) than did females.

Amphetamines

- More males obtained amphetamines by producing it (3.2%), receiving it on credit (9.5%) and receiving it as a gift (48.7%) than did females.
- More females obtained amphetamines by sharing it with someone else (30.5%) or trading it for sex (3.4%) than did males.

PERCEIVED RISKS OF BUYING AND SELLING ILLICIT DRUGS

Research indicates that perceived risk associated with law enforcement can be a key factor affecting which market drug users go to and how they use it (Edmunds, Hough & Urquia 1996). Detainees were asked to indicate how risky they perceived drug dealing to be in the area in which they usually resided, regardless of whether they had actually used or sold drugs in this area in the past. Risk was defined as risk associated with being detected for these acts through police activities.

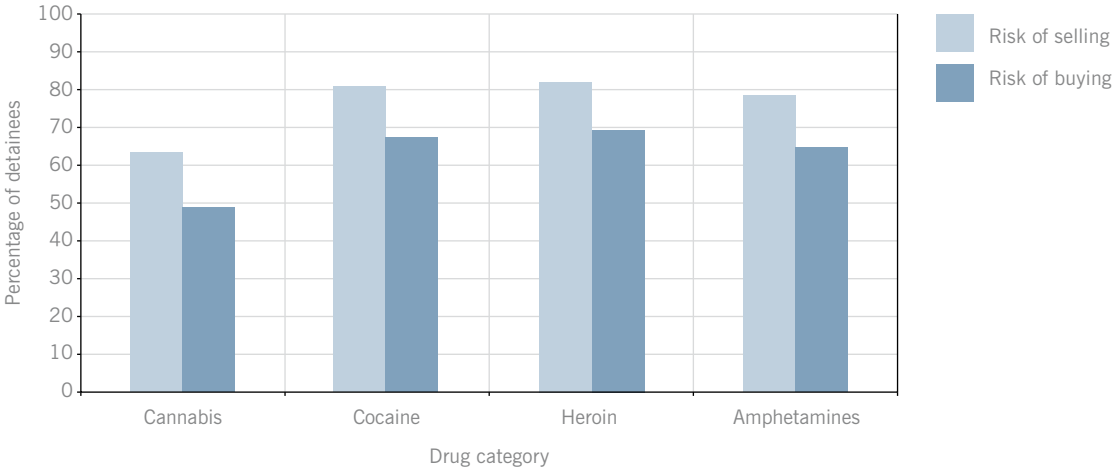
Figure 5.18 (facing page) shows the percentages of detainees who had used various drugs in the 12 months preceding their interview in 2004–05 and who reported that it was 'very' or 'somewhat' risky to buy and/or sell various drugs in the area where they lived.

- Detainees felt that heroin was the most risky drug to sell (82.0%) or buy (69.3%) in the area in which they lived. This was closely followed by cocaine, which 80.9 per cent of the detainees felt was risky to sell and 67.4 per cent felt was risky to buy in the area in which they lived.
- Amphetamines came next, with just over three-quarters (78.5%) of the detainees feeling that it was risky to sell it in the area where they lived, and just under two-thirds (64.6%) feeling that it was risky to buy in the area where they lived.
- While about two-thirds (63.3%) of the detainees perceived it to be risky to sell cannabis in the area where they lived, under half (48.8%) thought it was risky to buy.

Figure 5.19 (facing page) shows the proportions of detainees, between 1999–2000 and 2004–05, who had used drugs in the preceding 12 months and perceived it as risky to buy drugs in the area where they lived.

- Substantially higher proportions of detainees perceived it to be risky to buy heroin in 2003–04 (85.4%) and 2004–05 (86.6%) than in other years, and the perceived risk in those years was far higher for heroin than for any other drug.
- The lowest proportions of detainees perceived it to be risky to buy cocaine in 1999–2000 (57%) and in 2001–02 (62.1%).
- In all years, only about half of the detainees perceived cannabis as risky to buy, with fluctuations between a minimum of 41.8 per cent (2003–04) and a maximum of 52.8 per cent (1999–2000).

Figure 5.18: Proportions of Queensland detainees who had used drugs in the 12 months preceding interview reporting it to be risky to buy and/or sell drugs in the area where they lived, 2004–05

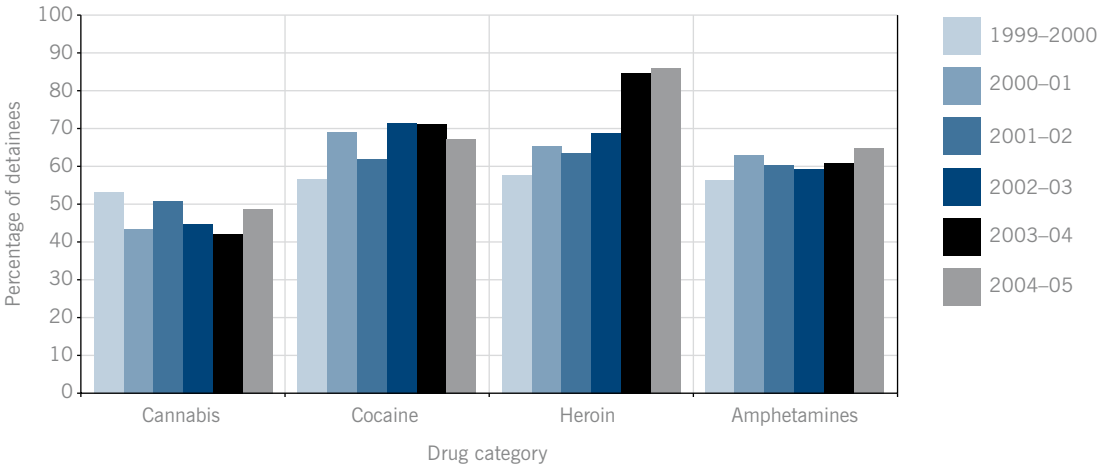


Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:

Risk of selling: cannabis, *n* = 617; cocaine, *n* = 708; heroin, *n* = 738; amphetamines, *n* = 736.
Risk of buying: cannabis, *n* = 485; cocaine, *n* = 584; heroin, *n* = 615; amphetamines, *n* = 605.

Figure 5.19: Proportions of Queensland detainees who had used drugs in the 12 months preceding interview reporting it to be risky to buy drugs in the area where they lived, by drug type, 1999–2000 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

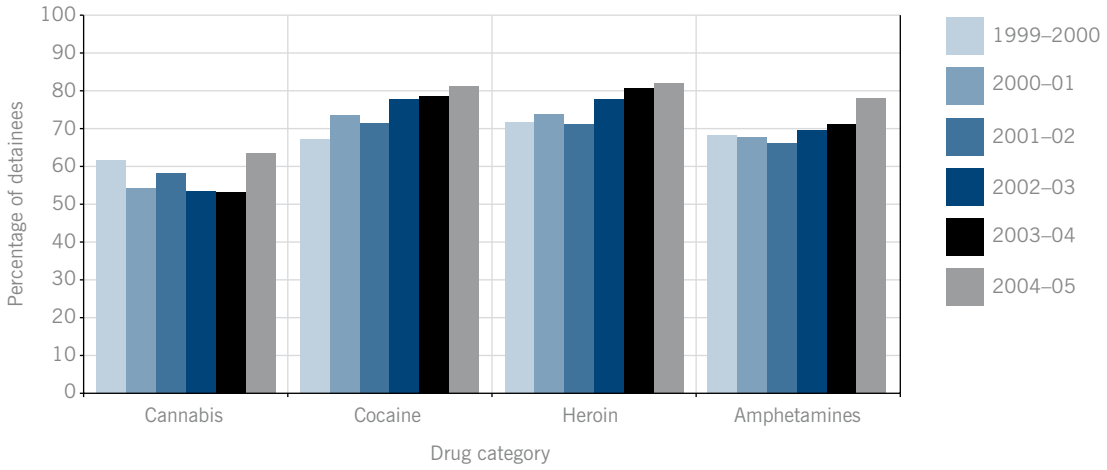
Notes:

1999–2000: cannabis, *n* = 162; cocaine, n= 166; heroin, *n* = 170; amphetamines, *n* = 168
2000–01: cannabis, *n* = 142; cocaine, *n* = 124; heroin, *n* = 145; amphetamines, *n* = 155
2001–02: cannabis, *n* = 154; cocaine, *n* = 162; heroin, *n* = 192; amphetamines, *n* = 256
2002–03: cannabis, *n* = 471; cocaine, *n* = 592; heroin, *n* = 634; amphetamines, *n* = 594
2003–04: cannabis, *n* = 392; cocaine, *n* = 557; heroin, *n* = 599; amphetamines, *n* = 547
2004–05: cannabis, *n* = 485; cocaine, *n* = 584; heroin, *n* = 615; amphetamines, *n* = 605.

Figure 5.20 shows the proportions of detainees who had consumed drugs during the preceding 12 months and perceived it as risky to sell drugs in the area where they lived, between 1999–2000 and 2004–05.

- In 2004–05 it was perceived by a slightly higher proportion of detainees than in other years (63.3%) to be risky to sell cannabis in the area where they lived.
- From 1999–2000 (67.6%) to 2004–05 (80.9%), there was an upward trend in the proportion of detainees who perceived it to be risky to sell cocaine in the area where they lived.
- In 2002–03 there was an increase in the proportion of detainees who perceived it to be risky to sell heroin (78.3%) or cocaine (78.6%) in the area where they lived, and these increases remained relatively stable to 2004–05 (heroin, 82%; cocaine, 80.9%). The patterns in perceived risk of selling heroin and cocaine were very similar throughout the period.
- A higher proportion of detainees perceived it to be risky to sell amphetamines in the area in which they lived in 2004–05 (78.5%) than in the other years.

Figure 5.20: Proportions of Queensland detainees who had used drugs in the 12 months preceding the interview reporting it to be risky to sell drugs in the area where they lived, by drug type, 1999–2000 to 2004–05



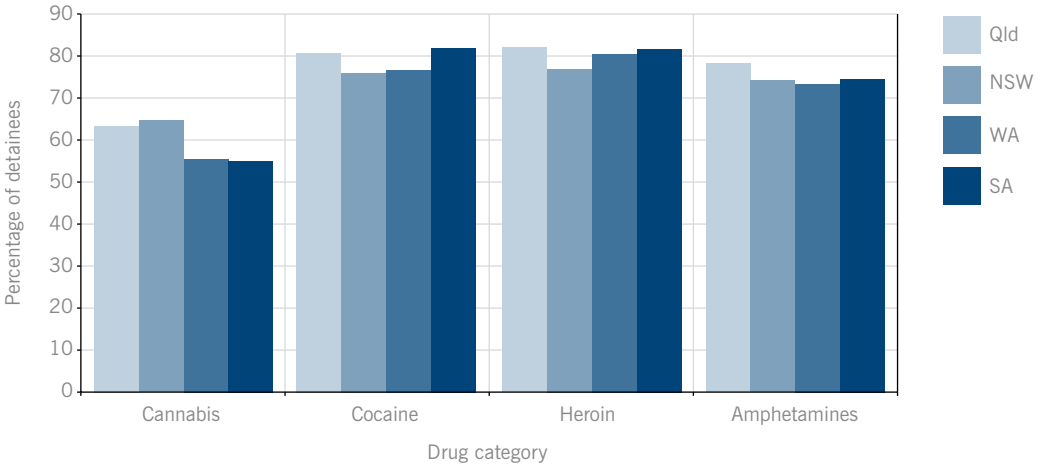
Source: Australian Institute of Criminology, DUMA collection, 1999–2000 to 2004–05 [computer file].

Notes:
1999–2000: cannabis, *n* = 289; cocaine, *n* = 296; heroin, *n* = 316; amphetamines, *n* = 312
2000–01: cannabis, *n* = 176; cocaine, *n* = 131; heroin, *n* = 162; amphetamines, *n* = 165
2001–02: cannabis, *n* = 188; cocaine, *n* = 190; heroin, *n* = 219; amphetamines, *n* = 179
2002–03: cannabis, *n* = 546; cocaine, *n* = 654; heroin, *n* = 716; amphetamines, *n* = 692
2003–04: cannabis, *n* = 494; cocaine, *n* = 634; heroin, *n* = 668; amphetamines, *n* = 638
2004–05: cannabis, *n* = 617; cocaine, *n* = 708; heroin, *n* = 738; amphetamines, *n* = 736.

Figure 5.21 (facing page) shows the state comparisons for the perceived risks of selling drugs in detainees own suburb. Overall, the risks were perceived to be high. However:

- More detainees in Queensland (63.3%) and New South Wales (64.2%) than in South Australia (55%) and Western Australia (54.9%) perceived selling cannabis in the area where they lived to be risky.
- More detainees in Queensland (80.9%) and South Australia (82.1%) than in New South Wales (76.4%) and Western Australia (77.5%) perceived selling cocaine in the area where they lived to be risky.
- Slightly fewer detainees in New South Wales (77.9%) than in the other states felt it was risky to sell heroin in the area where they lived.
- A higher proportion of Queensland detainees (78.5%) perceived it to be risky to sell amphetamines in the area where they lived.

Figure 5.21: Proportions of detainees who had used drugs in the preceding 12 months reporting it to be risky to sell drugs in the area where they lived, by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

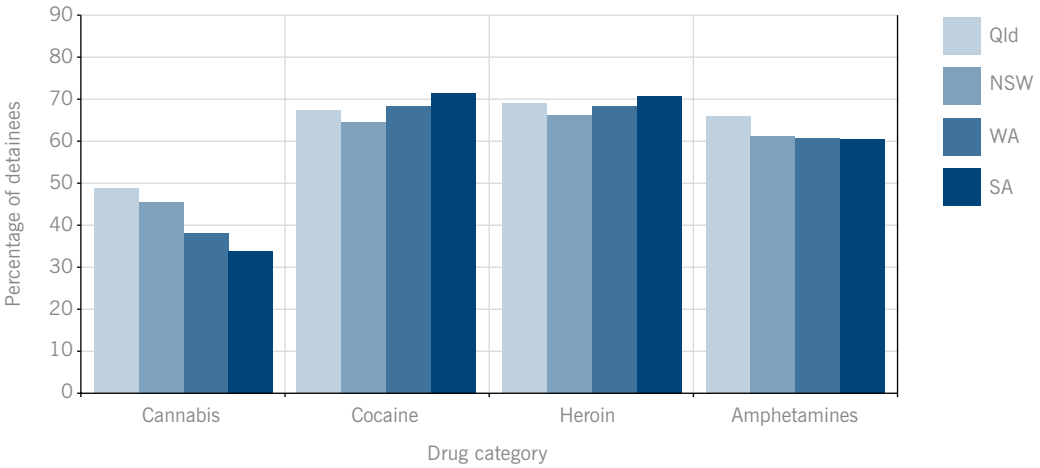
Notes:

Qld: cannabis, *n* = 617; cocaine, *n* = 708; heroin, *n* = 738; amphetamines, *n* = 736
NSW: cannabis, *n* = 364; cocaine, *n* = 391; heroin, *n* = 401; amphetamines, *n* = 382
WA: cannabis, *n* = 290; cocaine, *n* = 306; heroin, *n* = 341; amphetamines, *n* = 358
SA: cannabis, *n* = 556; cocaine, *n* = 595; heroin, *n* = 629; amphetamines, *n* = 678.

Figure 5.22 shows the state comparisons for the perceived risks of buying drugs in detainees' own suburb. Overall, the risks were not perceived to be as high as selling. Nevertheless:

- More detainees in Queensland (48.8%) and New South Wales (45.5%) than in Western Australia (38.3%) and South Australia (32.9%) perceived buying cannabis in the area where they lived as risky.
- South Australia recorded the highest (71.7%) and New South Wales (63.4%) the lowest proportion of detainees who perceived it as risky to buy cocaine in the area where they lived.
- Slightly more detainees in Queensland (64.6%) than elsewhere perceived it to be risky to buy amphetamines in the area where they lived.

Figure 5.22: Proportion of detainees who had used drugs in the preceding 12 months reporting it to be risky to buy drugs in the area where they lived, by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

Qld: cannabis, *n* = 485; cocaine, *n* = 584; heroin, *n* = 615; amphetamines, *n* = 605
NSW: cannabis, *n* = 251; cocaine, *n* = 312; heroin, *n* = 330; amphetamines, *n* = 297
WA: cannabis, *n* = 204; cocaine, *n* = 259; heroin, *n* = 280; amphetamines, *n* = 290
SA: cannabis, *n* = 326; cocaine, *n* = 485; heroin, *n* = 511; amphetamines, *n* = 535.

CHAPTER SUMMARY

This chapter has provided some insights into how detainees using drugs in either the 30 days or the 12 months preceding their detention went about obtaining their various drugs of choice. A range of payment methods, modes of contact with dealers, places where drugs were received and perceptions of risk were noted. Importantly, many of these processes and perceptions differed by drug type, and some changed over time; interstate comparisons also revealed some interesting differences.

Cash was used, on average, for only about one-third of the drug purchases. Other means of payment included producing or transporting drugs, buying drugs on credit, trading drugs for other drugs or property or merchandise or sex, stealing drugs, receiving drugs as a gift, or by some 'other' means. The most commonly reported method of obtaining cannabis, cocaine, heroin and amphetamines without paying cash was receiving it as a gift. The second most common means of obtaining these drugs without cash was through sharing them with someone else. However, purchasing methods varied significantly by the type of drug, the timeframe of purchase (1999–2000 to 2004–05) and between states. For example, in Queensland in 2004–05 about half of the detainees (49.5%) paid cash for heroin; considerably fewer purchased cannabis (24.4%), cocaine (36.0%) or amphetamines (36.1%) with cash.

Telephone contact appears to be the primary mode of contact between detainees and dealers; but, again, the extent to which this occurs varies by drug type. For example, telephone contact accounted for about 75 per cent of the cash purchases for heroin but much less (about 40%) for cash purchases of cannabis and cocaine. Similarly, considerable consistency was shown in the places that most drugs (e.g. cannabis, cocaine and amphetamines) were bought — predominantly in houses or apartments — but heroin stood out as an exception because it was far more likely than any other drugs to be bought on the streets.

Regarding drug dealing in their own suburbs, detainees' responses over time suggest that since 1999–2000 there has been a general decline in the proportion of detainees purchasing cannabis, heroin and/or amphetamines in their own suburb, but an increase in the proportion purchasing cocaine in this way. However, state differences emerged, with Queensland detainees more likely to purchase cocaine (33.3%) and heroin (37%) in their own suburb and South Australian detainees more likely to purchase cannabis (53.1%) in their own suburb than those from the other states.

Regarding their perceptions of risk associated with selling and buying drugs in their own suburb, detainees overwhelmingly reported heroin to be the riskiest drug to both buy and sell. While it was thought that cannabis was risky to sell, it was not considered particularly risky to buy. Again, though, some state differences emerged. More detainees in Queensland and New South Wales than in South Australia and Western Australia, for example, perceived selling cannabis in the area where they lived to be risky. More detainees in Queensland and South Australia than in New South Wales and Western Australia, on the other hand, perceived selling cocaine in the area where they lived to be risky, while a higher proportion of Queensland detainees perceived it to be risky to sell amphetamines in the area where they lived.

These findings indicate some of the complexities and unique differences associated with different drug types, as well as the different markets acting across states and over time. It is likely that many law enforcement officials and health service providers will, in retrospect, recognise some positive links between these results and various activities at the time. More importantly, however, some of this information may be useful for future interventions.

6

Detainees' participation in drug treatment programs

The previous chapters of this report have demonstrated extensive drug use by the watch-house detainees participating in the DUMA project, measured by both self-report and objective urinalysis. Indeed, the prevalence of drug use in this sample far exceeds that of any other population groups or targeted samples (such as hospital attendees) identified by comparable research, except for prisoner samples.

Research has shown that social support, such as advice, resources and emotional encouragement, provided by treatment programs may reduce drug use. Subsequently, treatment may remove the need to commit crimes that support drug habits (Newcomb, Galaif & Vargsa Carmona 2001).

This chapter examines the extent to which the detainees interviewed for DUMA reported that they had participated in various drug treatment programs over time and across states. It also shows the number of detainees who reported that they had been denied access to treatment.

Self-reported treatment participation is examined in the first instance by the detainees' urinalysis results and then by their self-reported drug use.

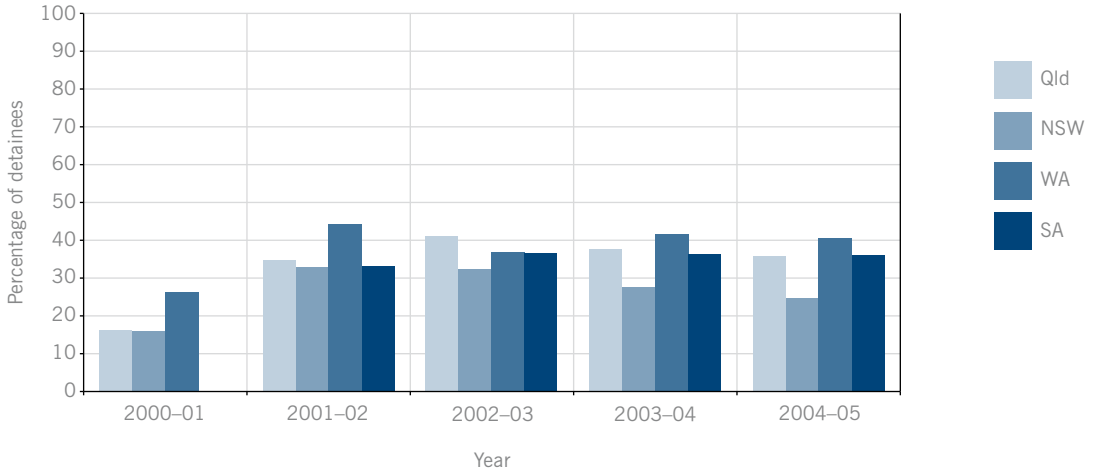
PARTICIPATION IN DRUG OR ALCOHOL TREATMENT PROGRAMS

Each year from 2001–02 onwards, about one in three of all Queensland detainees reported that they had participated in a drug or alcohol treatment program at some stage of their lives before their current arrest, regardless of whether they admitted to drug use or had illicit substances detected in their urine. Similarly, about one in ten Queensland detainees consistently reported from 2001–02 onwards that they were participating in a drug or alcohol treatment program at the time of their arrest (again, regardless of whether they admitted to drug use or had illicit substances detected in their urine). There seems to have been a slight peak in both current and prior treatment participation in 2002–03.

A similar profile was shown for all states, although a slightly higher proportion of the WA detainees than those from the other states reported prior participation (see Figure 6.1, next page), and a slightly higher proportion of detainees from NSW than other states reported current participation, in drug or alcohol treatment programs (see Figure 6.2, next page).

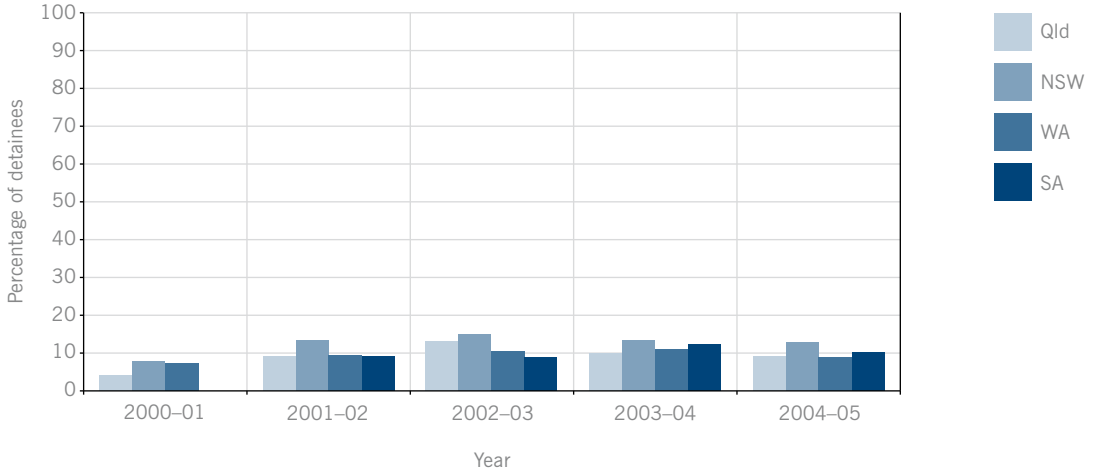
Prior and current drug or alcohol treatment participation by detainees is analysed in the following sections of this chapter by the (a) urinalysis results and (b) self-reported data. Some gender and age comparisons are made and levels of treatment participation are discussed within the context of the specific drugs used by detainees. Some detainees reported that they had been denied access to treatment programs. This issue is examined among detainees who had reported that they had used illicit drugs in the previous 12 months.

Figure 6.1: Proportion of all detainees who had participated in a drug or alcohol treatment program at some stage in their lives, 2000–01 to 2004–05, by state



Source: Australian Institute of Criminology, DUMA collection, 2000–01 to 2004–05 [computer file].

Figure 6.2: Proportion of all detainees who were participating in a drug or alcohol treatment program at the time of their arrest, 2000–01 to 2004–05, by state



Source: Australian Institute of Criminology, DUMA collection, 2000–01 to 2004–05 [computer file].

TREATMENT PARTICIPATION BY URINALYSIS RESULTS

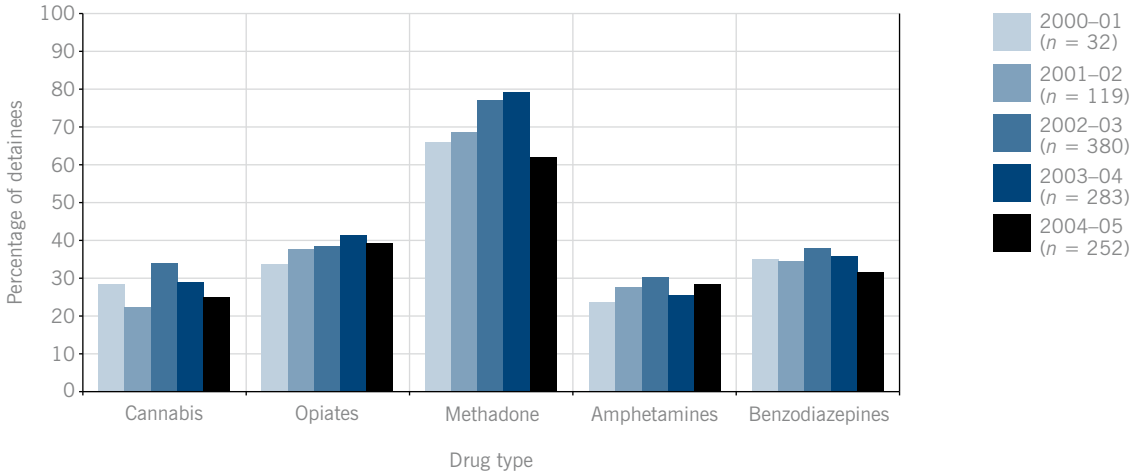
Figure 6.3 (facing page) shows the proportions of Queensland detainees testing positive for various types of drugs over time (2000–01 to 2004–05) who reported that they were in a treatment program at the time of their arrest.

- Overall, between 60 and 80 per cent of detainees testing positive for methadone reported that they were undertaking treatment. From 2000–01 (66.7%) to 2003–04 (79.6%) there was a steady increase in the proportion of detainees testing positive for methadone who were undertaking treatment. This was followed by a decline to 62.2 per cent in 2004–05.
- In 2004–05 about one-quarter of the detainees who tested positive for cannabis (24.9%) and amphetamines (28.1%) and about one-third who tested positive for benzodiazepines (31.7%) and opiates (39.7%) were undertaking treatment. There were no meaningful changes in treatment participation among the users of these drugs over time.

Figure 6.4 (facing page) shows, statewide, the proportions of detainees testing positive to drugs in 2004–05 who were participating in treatment programs at the time of their arrest.

- About twice as many New South Wales detainees who tested positive for cannabis were undertaking a treatment program (53.2%) than any other state (WA 20.6%; Qld 24.9%; SA 26.7%).
- Among detainees who tested positive for opiates, about half of those in New South Wales (51.4%) and Western Australia (53.1%) were undertaking a treatment program. This was the case for substantially fewer detainees in Queensland (39.7%) and South Australia (38.4%).
- Substantially fewer detainees in Queensland who tested positive for methadone were undertaking treatment than in Western Australia, New South Wales and South Australia (Qld 62.2%; WA 81.3%; NSW 82.5%; SA 84.4%).
- Substantially more detainees in New South Wales who tested positive for amphetamines were undertaking treatment than in any other state (NSW 73.5%; Qld 28.1%; WA 35.4%; SA 38.8%).
- Considerably more detainees in New South Wales than in any other state who tested positive for benzodiazepines were undertaking treatment (NSW 63.3%; Qld 31.7%; WA 35.4%; SA 38.8%).

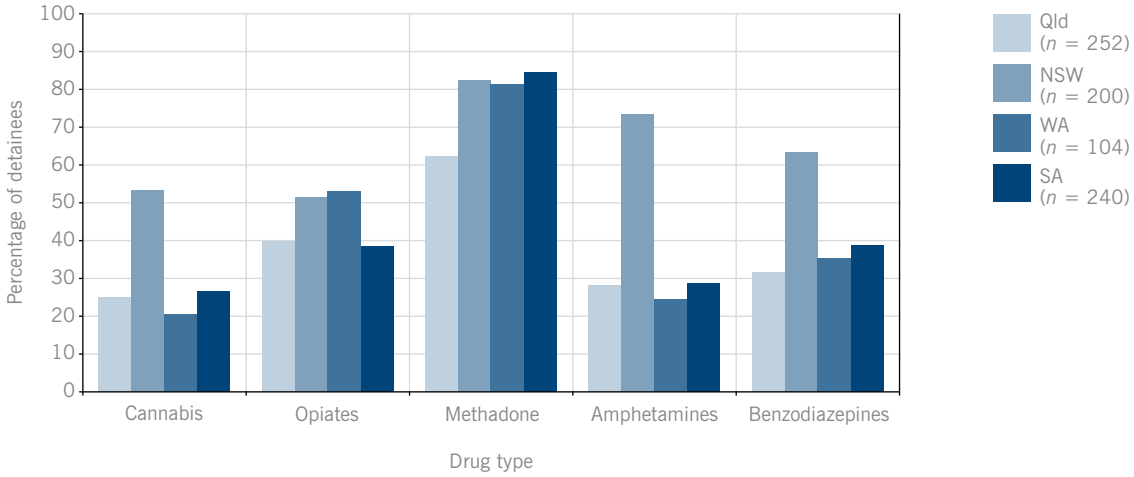
Figure 6.3: Proportion of Queensland detainees testing positive to urinalysis by drug type and current participation in treatment by year, 2000–01 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2000–01 to 2004–05 [computer file].

Note: the sample size for cocaine was too small for analysis

Figure 6.4: Proportion of detainees testing positive to urinalysis by drug type and current treatment participation and state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

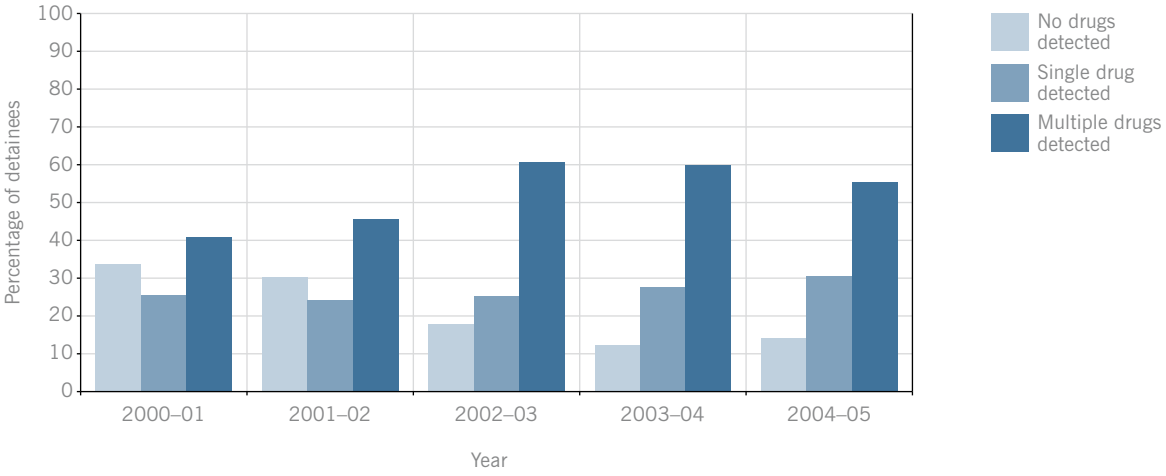
TREATMENT PARTICIPATION BY VARIOUS DEMOGRAPHIC FACTORS

Figures 6.5 and 6.6 demonstrate the proportions of Queensland detainees reporting that they had attended a drug or alcohol treatment program, either in the past or at the time of their arrest, by the urinalysis results which indicated whether, at the time of their arrest, they had no drugs, a single drug or multiple drugs in their systems.

Both graphs clearly demonstrate that the majority of detainees who had participated, or were participating, in treatment programs were multiple drug users. Further, only a small proportion of those who had undertaken treatment were without any illicit substances in their systems at the time of the interview.

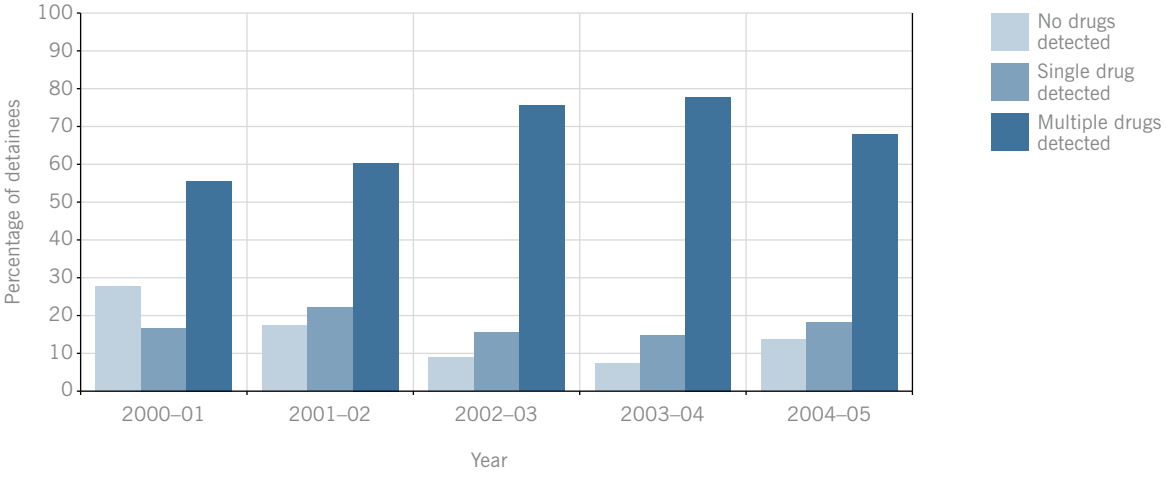
As noted above, however, many of the detainees with drugs in their systems were using methadone, and about two-thirds of those were participating in methadone maintenance, at the time of their arrest. Methadone may, therefore, account for many of the substances detected. However, methadone was often detected in the presence of other drugs.

Figure 6.5: Proportion of all Queensland detainees who had ever participated in a drug or alcohol treatment program by single or multiple drug use (urinalysis results, 2000–01 to 2004–05)



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 6.6: Proportion of all Queensland detainees who were participating in a drug or alcohol treatment program at the time of their arrest by single or multiple drug use (urinalysis results, 2000–01 to 2004–05)

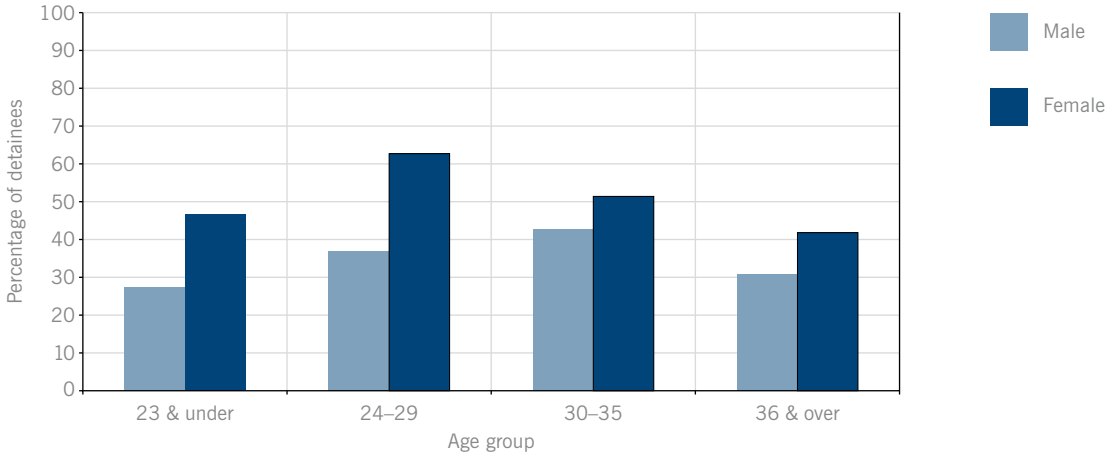


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 6.7 shows the proportion of Queensland detainees who admitted using illicit drugs in 2004–05, who reported that they had participated in a drug or alcohol treatment program at some stage in their lives, by age and gender.

- Females, regardless of age, were more likely than males to have been in a treatment program. The largest gender difference was found for detainees aged 24–29 years.
- Among female detainees, those aged 24–29 years were most likely to have participated in a drug or alcohol treatment program (62.7%). Among males, those aged 30–35 years (42.6%) were most likely to have participated in a treatment program.

Figure 6.7: Proportions of Queensland detainees who had used illicit drugs and who had participated in a drug or alcohol treatment program, by age and gender, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Notes:

a n = 426

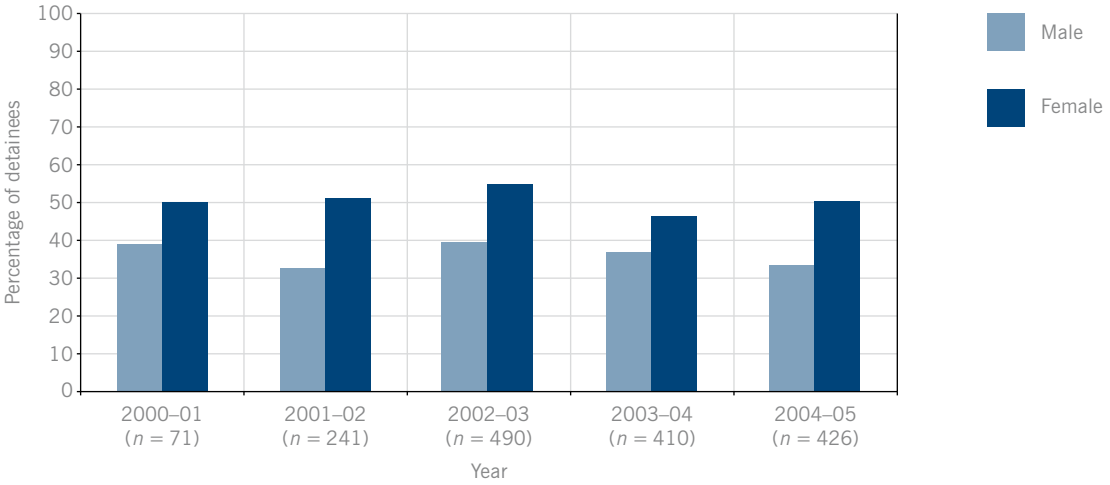
b Treatment options included detoxification, rehabilitation program/therapeutic community, outpatient/counselling, support group, methadone maintenance, naltrexone, buprenorphine and general practitioner treatment.

c Detainees aged 17 years were not included in the graph, due to the small sample size (female n = 4; male n = 30).

Figure 6.8 (next page) shows the proportions of Queensland detainees who admitted ever using drugs from 1999–2000 to 2004–05, who had participated in a drug or alcohol treatment program at some stage in their lives, by gender.

- An average of 50.5 per cent of all female detainees over this period reported that they had undertaken some form of drug or alcohol treatment. The fewest number participating in treatment was recorded in 2003–04 (46.3%), the greatest in 2002–03 (54.8%).
- Only a third of males, on average (36.3%), reported undertaking drug treatment: the fewest in 2001–02 (32.6%), the greatest in 2002–03 (39.5%).

Figure 6.8: Percentage of Queensland detainees admitting drug use who had participated in a drug or alcohol treatment program at some stage in their lives, by gender and year, 2000–01 to 2004–05



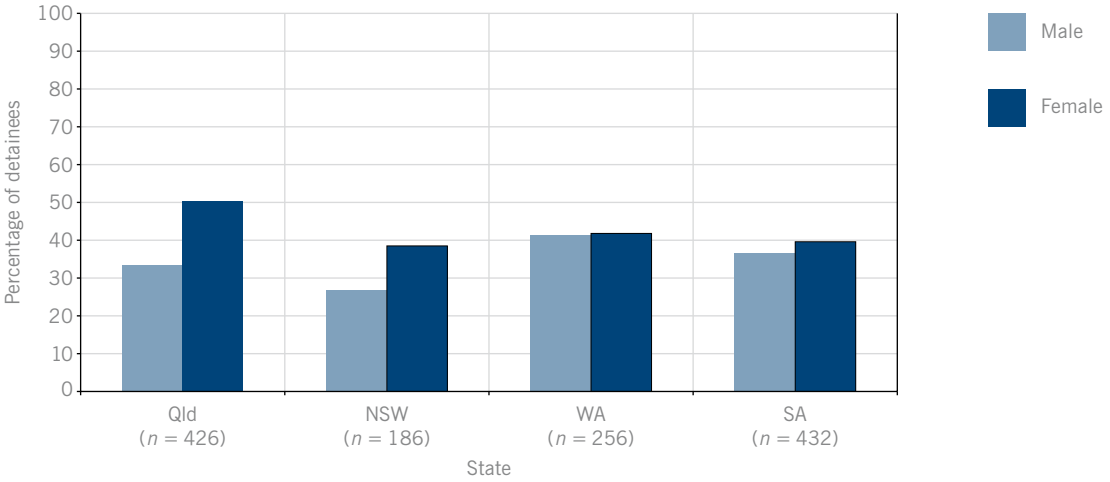
Source: Australian Institute of Criminology, DUMA collection, 2000–05 [computer file].

Note: No data available for 1999.

Figure 6.9 compares drug treatment participation among detainees who admitted using drugs, by gender and state.

- Queensland recorded the highest proportion of female detainees who had at some time participated in a treatment program (50.5%).
- Both Queensland (males 33.4%; females 50.5%) and New South Wales (males 26.8%; females 38.5%) showed large gender differences in treatment participation. This was not the case for Western Australia (males 41.5%; females 41.8%) or South Australia (males 36.7%; females 39.6%), but overall usage rates were slightly higher in Western Australia.

Figure 6.9: Percentage of detainees admitting drug use who had participated in a drug or alcohol treatment program at some stage in their lives, by gender and state, 2004–05

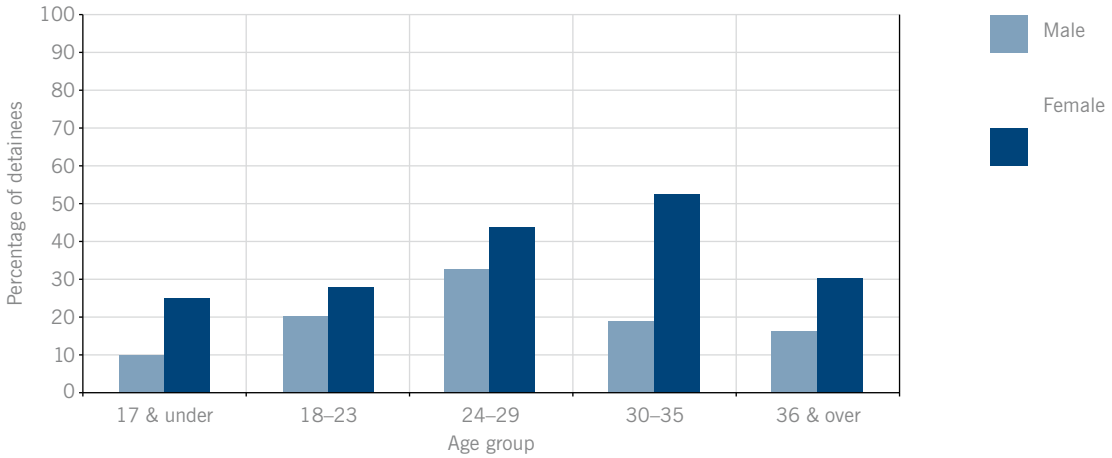


Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 6.10 shows, among Queensland detainees who admitted illicit drug use at some stage in their lives, how many were participating in a drug or alcohol treatment program at the time of the DUMA interview.

- About a quarter (25.6%) of the detainees were currently enrolled in a treatment program.
- About 15 per cent more females (38.5%) than males (21.8%) were enrolled in a treatment program at the time of their arrest. Across all age groups, females were more likely than males to be participating in drug treatment at the time of their arrest.
- The highest proportion of Queensland detainees undertaking treatment were aged 24–29 years (35.6%).
- Among females, as age increased, participation in treatment programs decreased. For males, participation rose with age until 29 years (32.6%), then dropped (to 18.8%).

Figure 6.10: Percentage of Queensland detainees admitting illicit drug use who were participating in a drug or alcohol treatment program at the time of the DUMA interview, by gender and age, 2004–05



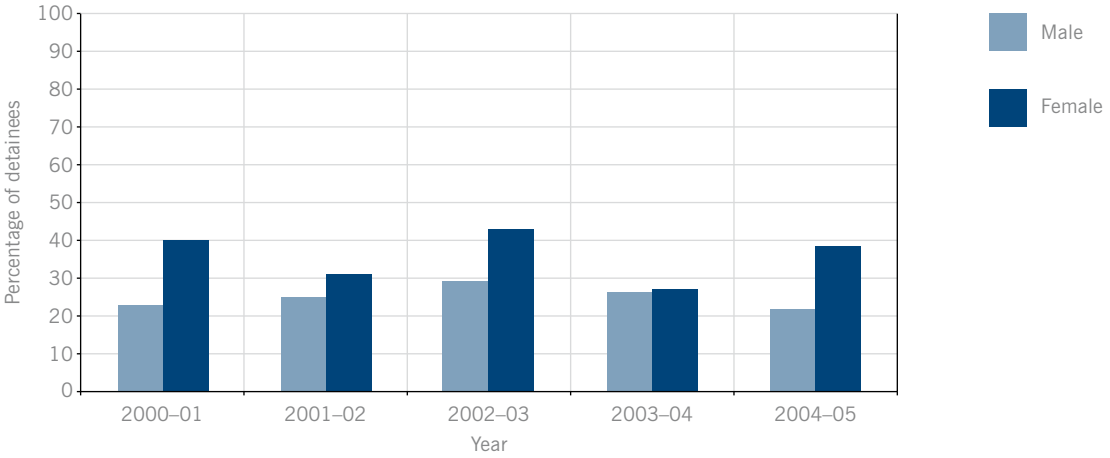
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Figure 6.11 (next page) shows the proportions of Queensland detainees admitting illicit drug use who were participating in a treatment program at the time of the DUMA interview, between 2000–01 and 2004–05.

- Females were consistently more likely to be participating in a treatment program at the time of their interview than males.
- The proportion of male detainees participating in a treatment program at the time of their interview steadily increased, from 23 per cent in 2000–01 to about 30 per cent in 2002–03, then declined steadily to about 22 per cent in 2004–05.
- There were greater fluctuations in the proportions of female detainees participating in a treatment program at the time of their arrest than males. As for the males, the highest percentage was reported in 2002–03 (43%); the lowest was in 2003–04 (27%).

Across the states, many more detainees who admitted illicit drug use were participating in a treatment program in New South Wales (51.6%) than in Queensland (25.6%), Western Australia (21.9%) and South Australia (28.0%).

Figure 6.11: Participation in a drug or alcohol treatment program at the time of the DUMA interview among Queensland detainees who admitted illicit drug use, by gender, 2000–01 to 2004–05



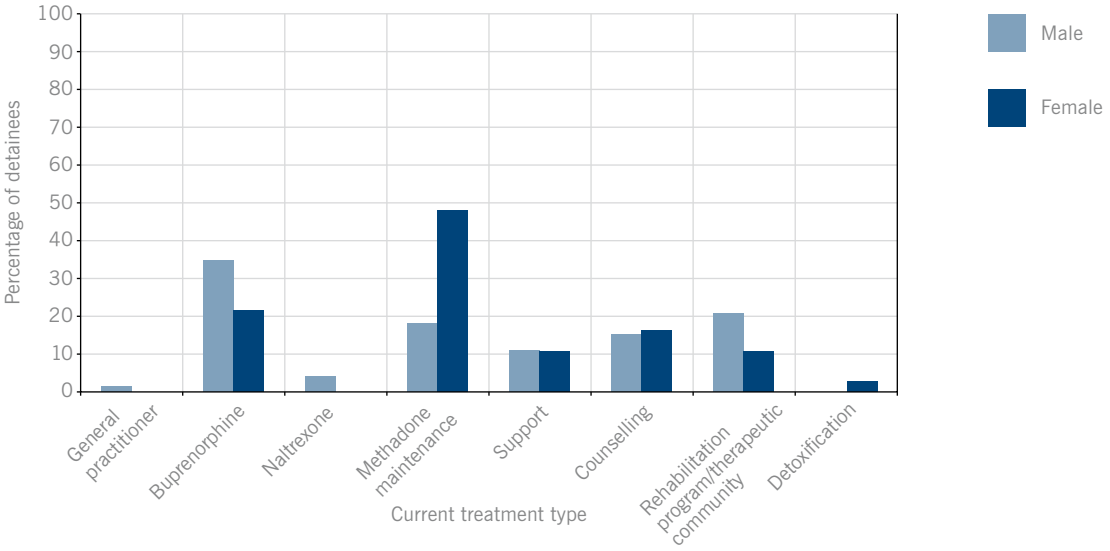
Source: Australian Institute of Criminology, DUMA collection, 2000–05 [computer file].

Note: No data available for 1999.

Figure 6.12 shows the different types of treatment programs in which Queensland detainees were participating at the time of their arrest in 2004–05.

- Nearly half (48.6%) of the female detainees and less than one-fifth of male detainees (18.1%) were participating in methadone maintenance programs.
- About one-third of the male detainees (34.7%) and one-fifth of the female detainees (21.6%) were participating in buprenorphine treatment.
- Twice as many male as female detainees were in rehabilitation (males 20.8%; females 10.8%).
- None or very few of the detainees were undergoing detoxification (males 0.0%; females 2.7%), naltrexone (males 4.2%; females 0.0%) or general practitioner treatments (males 1.4%; females 0.0%).

Figure 6.12: Proportion of Queensland detainees admitting illicit drug use who were participating in various treatment programs at the time of their interview by gender, 2004–05



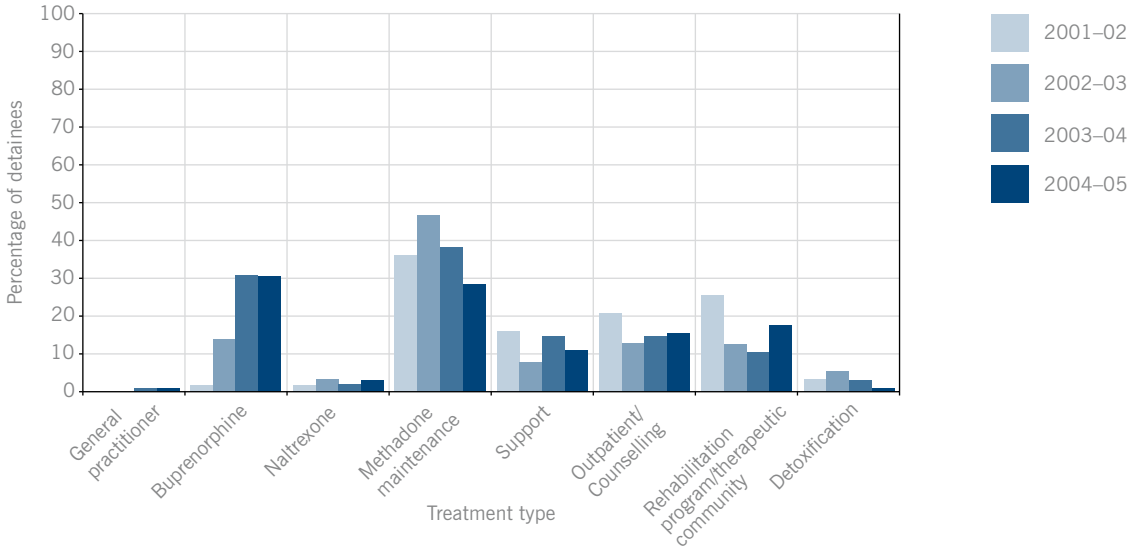
Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Note: Caution should be taken when interpreting these data due to the small sample size (n = 109).

Figure 6.13 shows the various treatment programs in which Queensland detainees who admitted illicit drug use were participating at the time of their interview between 2001–02 and 2004–05.

- Methadone maintenance was by far the most prevalent treatment overall, reaching a peak in 2002–03 (47.1%), but declining steeply to 28.4 per cent in 2004–05.
- There were considerably higher proportions of detainees in rehabilitation (25.4%) or in outpatient/counselling (20.6%) in 2001–02 than in other years.
- The proportion of detainees participating in buprenorphine treatment in 2003–04 (30.6%) and 2004–05 (30.3%) was more than double the 2002–03 figure (14.2%).

Figure 6.13: Proportion of Queensland detainees admitting illicit drug use who were participating in various treatment programs at the time of their interview, 2001–02 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2000–05 [computer file].

Notes:

a No data available for 1999.

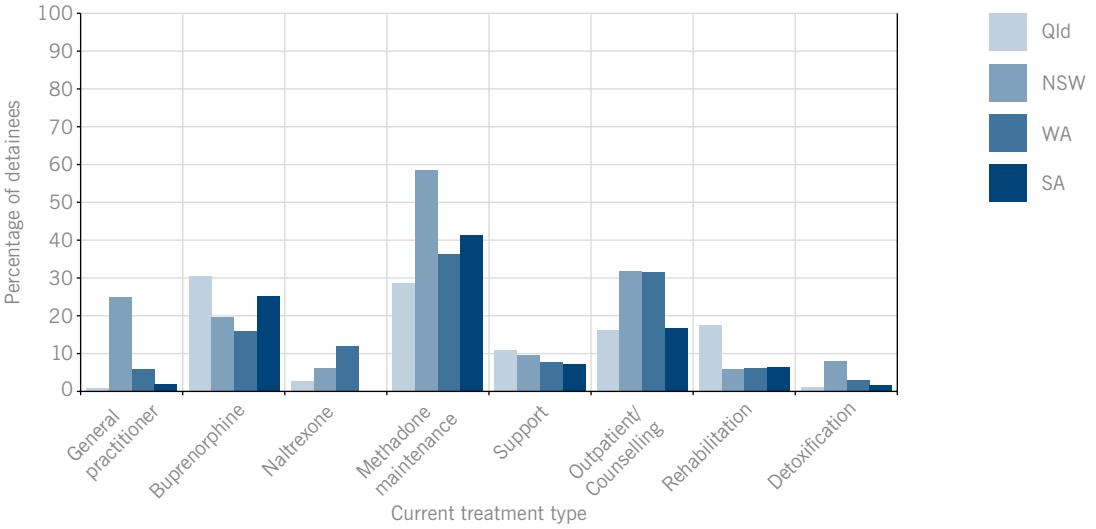
b Caution should be taken when interpreting these data due to the small sample sizes.

c Data for 2000–01 (n = 18) were not included in comparisons due to small sample size.

Figure 6.14 (next page) compares detainees' participation in treatment programs at the time of their interview by state. It shows:

- New South Wales outstripped all other states in the proportions of detainees undergoing methadone maintenance (58.3%), general practitioner treatment (25.0%) and detoxification (8.3%).
- The proportion of Queensland detainees in rehabilitation programs (17.4%) was about triple that of any other state.
- Queensland also had the highest rates for buprenorphine treatment (30.3%) and support (11.0%).
- The proportions of detainees participating in outpatient/counselling in Western Australia (32.1%) and New South Wales (32.3%) were about double those of Queensland (15.6%) and South Australia (16.5%).
- Queensland recorded the lowest proportions of detainees undertaking methadone maintenance (28.4%), detoxification (0.9%), outpatient/counselling (15.6%) and general practitioner treatment (0.9%).

Figure 6.14: Detainees' participation in various treatment programs at the time of their interview by state, 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

REASONS FOR SEEKING TREATMENT

Detainees were asked why they had sought treatment for their illicit drug use: the options provided were 'drug court requirement', 'other legal order', 'police diversion scheme' or 'voluntary participation'. Table 6.1 shows the reasons provided by Queensland detainees in 2004–05.

- The overwhelming majority of detainees had sought treatment of their own volition, with females reporting a slightly higher rate of seeking treatment voluntarily (86.5%) than males (81.9%). Previous research has found that women who enter treatment programs report higher levels of psychological distress, medical problems, family or social difficulties, and addiction than do men (Alterman, Randall & McLellan 2000; Arfken et al. 2001, Marsh & Miller 1985; McLellan et al. 1992).
- More males (12.5%) than females (8.1%) were participating in a treatment program because of a drug court requirement.

Table 6.1: Queensland detainees' reasons for seeking treatment by gender, 2004–05

Reason in treatment	Detainees reporting reason for entering treatment program (*n* and %)			
	Male		Female	
	n	%	*n*	%
Drug court requirement	9	12.5	3	8.1
Other legal order	4	5.6	2	5.4
Voluntary	59	81.9	32	86.5
Police diversion scheme	0	0.0	0	0.0
Total	72	100	37	100

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

Table 6.2 (facing page) shows Queensland detainees' reasons for seeking treatment between 2000–01 and 2004–05, and state comparisons for 2004–05.

- Except in 2000–01, the majority of Queensland detainees reported consistently that they participated in treatment voluntarily.

- The proportion of Queensland detainees in treatment as a drug court requirement fell significantly from 2000–01 (53.8%) to 2003–04 (4.6%) but increased slightly again in 2004–05 (to 11.0%).
- In 2004–05, Western Australia (1.8%) had a much lower proportion of detainees entering treatment as part of a drug court requirement than did New South Wales (12.5%), Queensland (11.0%) or South Australia (9.1%).
- In 2004–05 Queensland had fewer detainees in treatment because of an 'other legal order' (5.5%) than the other states.
- New South Wales had the lowest rate of detainees who reported their treatment to be voluntary (78.1%) in 2004–05.

Table 6.2: Detainees' reasons for seeking treatment by state and year, 2000–01 to 2004–05

Reason in treatment	Detainees reporting reason for entering treatment (*n* and %)							
	Queensland					NSW	WA	SA
	2000–01	2001–02	2002–03	2003–04	2004–05	2004–05	2004–05	2004–05
Drug court requirement	53.8	31.7	11.0	4.6	11.0	12.5	1.8	9.1
Other legal order	0.0	9.5	4.0	9.3	5.5	8.3	12.5	9.9
Voluntary	46.2	58.7	85.7	86.1	83.5	78.1	83.9	81
Police diversion scheme	0.0	0.0	0.6	0.0	0.0	1.0	1.8	0.0
Total % (*n*)	100 (13)	100 (63)	100 (154)	100 (108)	100 (109)	100 (96)	100 (56)	100 (121)

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

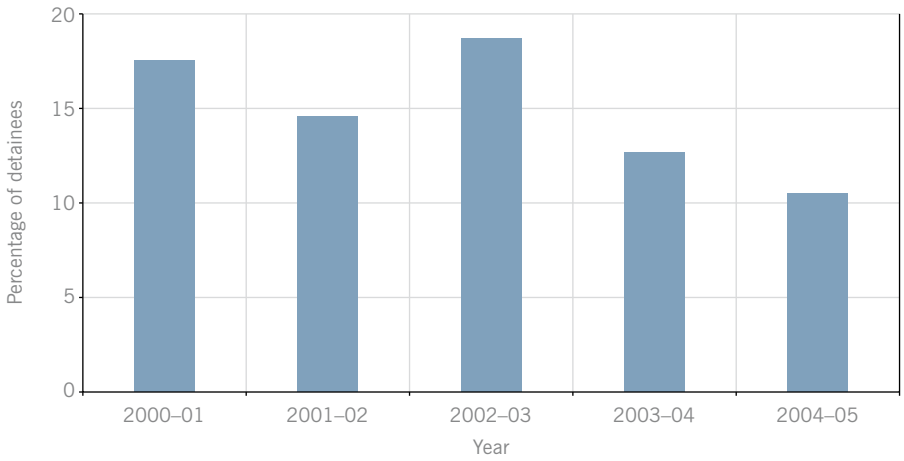
Notes:
a *n* = 720
b No Queensland data available for 1999–2000.

FAILED ATTEMPTS TO ENTER TREATMENT PROGRAMS

Detainees who reported using drugs in the preceding 12 months were asked to indicate whether they had ever tried, during this period, to enter a drug or alcohol treatment program but were turned away due to a lack of places. Figure 6.15 presents the findings for Queensland detainees interviewed between 2000–01 and 2004–05:

- On average, about 15.0 per cent of the detainees who had used drugs in the previous 12 months stated that they had been denied access to a treatment program during this period, but by 2004–05 only 10.5 per cent stated that this had been the case.

Figure 6.15: Proportion of Queensland detainees who had used illicit drugs in the preceding 12 months who stated that they had been denied access to drug treatment programs, 2000–01 to 2004–05



Source: Australian Institute of Criminology, DUMA collection, 2000–05 [computer file].

Figure 6.16 compares by state the proportions of detainees who, in 2004–05, had used illicit substances in the preceding 12 months who stated that they had been denied access to treatment. The percentages for Queensland (10.5%), New South Wales (9.8%) and Western Australia (11.0%) were fairly similar; but considerably fewer reported denial of access to treatment in South Australia (3.7%).

Figure 6.16: Proportion of detainees who had used illicit drugs in the preceding 12 months and who reported denial of access to treatment programs, by state, 2004–05

Source: Australian Institute of Criminology, DUMA collection, 2004–05 [computer file].

CHAPTER SUMMARY

This chapter has described the drug treatment experiences of detainees who were either detected with illicit substances in their systems by urinalysis or self-reported their drug use during interview. The urinalysis and self-reported results were analogous and the key findings were as follows:

- **About a quarter of the detainees who self-reported their drug use were participating in a treatment program at the time of their arrest.**
- **The most common type of treatment that had been undertaken by detainees was methadone maintenance. Further, most detainees who either tested positive for methadone by urinalysis or self-reported their methadone use were participating in a methadone program at the time of their arrest. Very few either testing positive for, or self-reporting use of, cannabis, amphetamines, benzodiazepines or opiates were undertaking relevant treatment.**
- **Female drug users, regardless of age, were more likely than males to have participated in treatment programs: overall, about half of the females and a third of the males reported participation in treatment. Gender differences were particularly marked in Queensland and New South Wales.**
- **Consistently more detainees from New South Wales than from other states who tested positive by urinalysis or self-reported their drug use had undertaken treatment (although there were gender differences: e.g. more females from Queensland than from the other states reported treatment participation). New South Wales also had higher proportions of detainees participating in general practitioner treatment and detoxification programs, while Queensland detainees had higher participation rates in rehabilitation programs, buprenorphine treatment and support. Queensland recorded the lowest proportions of detainees participating in methadone maintenance, detoxification, outpatient/counselling and general practitioner treatment overall.**
- **The overwhelming majority of detainees had sought treatment of their own volition, with females reporting a slightly higher rate of voluntary treatment than males. On the other hand, more males than females reported that they were participating in treatment programs because of drug court requirements.**

- **New South Wales had the lowest rate of voluntary participation in treatment and Queensland had fewer detainees in treatment because of an 'other legal order' than in the other states.**
- **On average, about 15 per cent of Queensland detainees who had used drugs in the previous 12 months stated that they had been denied access to a treatment program during this period, but by 2004–05 this proportion had dropped to 10.5 per cent. A similar profile was shown for all states except South Australia, where significantly fewer reported being denied access to a treatment program.**

The meaning of the results reported in this chapter can be interpreted in opposing ways:

- **On the one hand, the experiences of past and current drug treatment, reported by detainees who had just been arrested for allegedly committing a crime, may mean that these treatment programs had failed to prevent further criminal activity among treatment participants. This may especially be the case for the subgroups who demonstrated the highest levels of treatment participation: females, detainees on methadone maintenance and detainees from New South Wales.**
- **On the other hand, the finding that a substantial proportion of detainees had either undertaken treatment in the past or were enrolled in treatment at the time of their arrest can be taken as an indication of the relative availability of treatment programs for those in need (in 2004–05, only about 1 in 10 drug users reported having been denied access to treatment in the preceding 12 months).**

The outcomes of drug treatment programs can be affected by a number of factors, such as the type of treatment undertaken, the extent to which participants maintain attendance in the program and the severity of the initial drug dependence and withdrawal symptoms, to name but a few. This study did not seek information about any of these factors and cannot, therefore, draw any conclusions about either the positive or negative nature of the results reported above. However, these data may be useful for watch-house officers and treatment providers and may lead to further in-depth assessments of the relationships between drug use, drug treatment and criminal activity.

7

Conclusions and implications

This report has provided an in-depth analysis of the illicit drug-using behaviours and prior criminal histories of samples of Queensland watch-house detainees. It has also shown trends in these behaviours over time, and comparisons with other states.

Not surprisingly, the socio-demographic profile of the participating detainees indicated a predominance of single males, aged about 30 years, with low levels of education and high levels of unemployment.

The prevalence of illicit drug use by the sample was very high — much higher than has been shown for the general population.[8] A detailed examination of the links between the drugs used by the detainees and various measures of their criminal activity supports the theory of the existence of a drugs–crime nexus. Further, it suggests that watch-house detainees may be a useful group for targeted early intervention or treatment programs that aim to reduce both drug use and recidivism.

PREVALENCE OF DRUG USE BY QUEENSLAND DETAINEES

Self-reported drug use and objective urinalysis indicated high levels of illicit drug use by the detainees participating in the DUMA study. Levels of agreement between measures of recent use (self-reported and objective urinalysis) via the kappa statistic were strong, thereby providing a degree of confidence in the findings.

Some of the key results were as follows:

- Over the past six years, on average, about three-quarters of Queensland detainees consistently tested positive to urinalysis for illicit substances.
- Cannabis was found to be the most prevalent drug used by detainees, both by urinalysis (about half of the detainees tested positive overall) and self-report (88.4% reported having ever used it). Amphetamines and benzodiazepines were also prevalent: about a third of the detainees tested positive for each of these drugs by urinalysis, about 70 per cent reported that they had used amphetamines and about 50 per cent reported that they had used ecstasy. Fewer detainees tested positive for opiates (about one in five) and methadone (about one in ten) and only a tiny proportion (about 1%) tested positive for cocaine. Self-report measures, however, indicated much higher rates of use (e.g. 44.6% reported in 2004–05 that they had used cocaine at some stage in their lives).
- In 2004–05, multiple drug use was detected in more than half (54.5%) of those testing positive to illicit substances. Cannabis was the most likely 'single' drug to be detected, and cannabis with amphetamines (8.4%) was the most commonly detected multiple drug combination, closely followed by a combination of cannabis and benzodiazepines (8.2%).
- Heroin and amphetamines were by far the most prevalent drugs to have been injected in the preceding 12 months and 30 days, although by only about one in five to one in three detainees.
- The high prevalence of drug use in this sample of detainees suggests that a proportion of detainees may be drug-dependent (Yacoubian 2005). Indeed, almost half reported that they had used drugs too frequently, and many thought they were dependent on various drugs. Further, most of the detainees (70%) admitted to consuming illegal drugs to ameliorate feelings of unhappiness, anger and/or boredom, and some links between specific drug dependencies and offences were noted. Again, this information may be useful for early intervention purposes.

8 The CMC has recently released the results of a survey (CMC 2007), which estimates that 30 per cent of the Queensland population have used cannabis at some stage in their lives.

Changes in drug use by Queensland watch-house detainees over time

A better picture of illicit drug use by Queensland watch-house detainees comes from tracking changes over time: significant and persistent changes, rather than 'one-off' events, are more likely to be detected in this way. Queensland detainees were tracked from 1999–2000 to 2004–05, and during this period the following changes were noted:

- The proportion of detainees engaged in full-time work steadily increased.
- Some significant increases in drug use were detected. For example:
  - » There was a steady, albeit subtle, increase in the proportion of detainees testing positive for amphetamines and/or cannabis.
  - » There was an upward trend in the number of detainees combining amphetamines and benzodiazepines.
  - » The proportion of detainees who had ever used amphetamines increased by about 5 per cent, and the proportion of detainees who had ever used ecstasy increased by nearly 20 per cent.
- There were also some significant decreases in drug use. For example:
  - » There was a steady decline in the proportion of detainees testing positive for cannabis only.[9]
  - » The number of detainees who had used hallucinogens in the preceding 12 months decreased by about half.
  - » The proportion of detainees injecting benzodiazepines reduced significantly.
  - » The number of detainees injecting ecstasy almost halved.
- There were also some changes in the drug markets. For example, there was a slight reduction in the number of detainees paying cash for amphetamines.

Socio-demographic factors associated with illicit drug use

A range of socio-demographic factors were shown to be associated with positive drug tests, and these differed by the type of drug and whether multiple drugs were used. For example, the females in this sample were more likely than the males to report that they had used heroin, morphine and cocaine at some stage in their lives, as well as more recent use of amphetamines and inhalants, and the injection of cocaine and amphetamines. These findings are generally inconsistent with general population findings (e.g. AIHW 2005) and the possible links between illicit drug use and criminal behaviour in females, in particular, may therefore warrant further investigation.

DRUG USE AND CRIMINAL ACTIVITY

More than half of the detainees (53.3%) had been previously arrested (twice, on average, in the preceding 12 months). Further, there were demonstrable links between the various measures of drug use (such as individual drug types, single and multiple use) and a range of criminal outcomes, such as prior arrests and drug-related offences in the preceding 12 months. For example, even though only about one-third of the detainees overall told us that the offences they had committed in the previous 12 months were drug-related, significantly more who tested positive to methadone (about two-thirds) and more than half who tested positive to opiates told us that this had been the case. We also demonstrated that multiple drug use was more likely than single drug use to be associated with drug-related crime, and that detainees receiving an income from illegal activities were substantially more likely than those who did *not* receive an income from such activities to test positive for all drug types. It is important to note, however, that very few of the detainees (about 11–15%) stated that they were actively seeking drugs at the time the offences were committed.

9 This may not be a positive sign, if associated with increased multiple drug use.

Given the cross-sectional nature of the study, it is not possible to draw causal conclusions about the association between illicit drug use and crime in this sample. (Control or comparison groups with high drug use and minimal criminal activity were not used.) However, there is clear evidence of excessive drug use in this sample compared to other population samples. Therefore, crime prevention and health service efforts that target, within watch-house settings, detainees who are users of illicit drugs could be beneficial.

DRUG MARKETS

Some interesting information about drug markets has been reported, especially the differences in market characteristics by different drug types. Cash was used, on average, for only about one-third of the drug purchases. The most commonly reported methods of obtaining cannabis, cocaine, heroin and amphetamines without paying cash were receiving the drugs as a gift or sharing them with someone else. However, purchasing methods varied significantly with the type of drug, with the timeframe of purchase (1999–2000 to 2004–05) and between states. For example, in Queensland in 2004–05 more than half of the detainees (55.5%) paid cash for cannabis, considerably fewer purchased amphetamines (35.5%) and heroin (19.9%) with cash, and almost none purchased cocaine (2.7%) with cash.

To obtain drugs, most detainees contacted their suppliers by telephone; again, however, the extent to which this occurred varied with drug type. For example, telephone contact accounted for about 75 per cent of the cash purchases of heroin but much less (about 40%) for cash purchases of cannabis and cocaine. Similarly, there was considerable consistency in the types of places where most drugs (cannabis, cocaine and amphetamines) were bought — predominantly in houses or apartments — but heroin stood out as an exception because it was far more likely than any other drugs to be bought on the streets.

Regardless of whether detainees had personally sold drugs, most (more than 80%) were of the view that police action made it risky to sell certain drugs, such as heroin and cocaine, in the area where they lived. Slightly fewer — about three-quarters — felt it was risky to sell amphetamines and about two-thirds felt it was risky to sell cannabis in the area in which they lived. Although many considered it risky to buy drugs in the area where they lived, it was viewed as less risky than selling drugs — with slightly more than two-thirds of the detainees perceiving it as risky to buy heroin, cocaine, amphetamines and cannabis in the area where they lived.

Mobile telephones seem to have brought about a shift from open markets to closed markets, presenting a major challenge for law enforcement agencies. Law enforcement strategies may, however, benefit from the information provided about the different features of local drug markets presented in this report.

STATE COMPARISONS

Many state differences were found. For example, compared to Queensland, South Australia and Western Australia recorded slightly higher proportions of detainees testing positive for any drug and New South Wales recorded lower proportions of detainees testing positive for any drug. These differences are likely to be a function of the different drug market characteristics of each state (including supply and demand), various health strategies and drug users' access to treatment, and the various law enforcement strategies implemented in each state. For example, New South Wales recorded the lowest levels of drug use by urinalysis but the highest level of treatment uptake.

IMPLICATIONS

The results of this study have important implications for the development of policy and treatment options for a readily accessible sample of people — watch-house detainees — who clearly have high levels of drug use and active criminal careers. If watch-house detainees are

motivated to participate, treatment or diversion options have the potential to reduce their illicit drug use and its associated harms, and consequently decrease their criminal activity.

Most detainees reported engaging in drug use as a means of dealing with feelings of unhappiness, anger and/or boredom, and many admitted to spending more time than they intended consuming illegal drugs. Most expressed a desire to reduce their illicit drug use. Indeed, many identified drug dependence as a serious issue for them. However, only about a quarter of the detainees were enrolled in a treatment program at the time of their arrest. As this study did not seek any details about their participation in treatment, we cannot draw any conclusions about the impact of this participation on their current detention. Further research to determine the context and implications of such involvement would be beneficial.

Knowledge about multiple drug use is also relevant to treatment services. For example, the treatment approach required for detainees who use opiates and amphetamines might be different from the approach required for those who use opiates alone. Overall, more than 50 per cent of the detainees who used drugs (40% of all detainees) used more than one type of drug, with the combinations of cannabis with amphetamines and cannabis with benzodiazepines most frequently cited. Treatment interventions that focus on single drug use may not be as effective as those that focus on multiple drug use, since multiple drugs may have interactive or additive effects on the users' behaviour (Bennett & Holloway 2005).

Drug treatment is not the only answer, of course. Early intervention may also be a key strategy for weakening the link between illicit drug use and crime. About two-thirds (60.4%) of the detainees were receiving welfare benefits. Research has shown that low income can be correlated with illicit drug involvement (Agrawal et al. 2005) and the third-variable hypothesis suggested by Casavant and Collin (2001) indicates that poverty may explain the link between drug use and crime. Gender and age-based variations in the life experiences of detainees were observed. More women detainees than men, for example, were unemployed, had dependent children, were separated or divorced, used prescription medications, had been in treatment, and derived income through welfare or government assistance, prostitution and/or shoplifting. Different types of early intervention and prevention measures targeting different subgroups therefore seem warranted, and socio-economic status and gender, in particular, are important factors to consider.

Another important factor is the presence of dependent children, because just over a quarter of Queensland detainees had at least one dependent child in their household. As the children of drug users, these children are at risk of engaging in illicit drug use themselves, and displaying aggressive and delinquent behaviour (Brook et al. 2001). They may benefit from early intervention to break this pattern. Also, some of the detainees were quite young (17 years or less), suggesting an opportunity for specific adolescent substance abuse treatments. These may go some way towards disrupting the likely progression of young detainees to increased drug use and adult crime (Kinlock, Battjes & Gordon 2004).

We believe that the diverse material presented in this report has the potential to provide a valuable resource for police, corrective services, health and other relevant social services. This information may be useful for planning watch-house accommodation and staffing requirements, and for developing and implementing targeted and evidence-based drug policies as well as various health and law-enforcement policies and procedures.

Appendix

Offence categories

Violent

111	Murder
121	Conspiracy to murder
122	Attempted murder
131	Manslaughter
132	Driving causing death
211	Aggravated assault
212	Non-aggravated assault
299	Acts intended to cause injury
311	Aggravated sexual assault
312	Non-aggravated sexual assault
321	Non-aggravated sexual offences against a child
329	Non-aggravated sexual offences, nec
491	Neglect of person under care
511	Other dangerous or negligent acts endangering persons, nec
511	Abduction and kidnapping
521	Depravation of liberty/false imprisonment
611	Aggravated robbery
612	Non-aggravated robbery
621	Blackmail and extortion
1111	Import or export prohibited weapon/explosives
1112	Sell, possess and/or use prohibited weapons/explosives
1119	Prohibited weapons/explosives offences, nec[10]
1121	Unlawfully obtain or possess regulated weapons/explosives
1122	Misuse of regulated weapons/explosives
1123	Deal or traffic regulated weapons/explosives
1129	Regulated weapons/explosives offences, nec

Property offence

711	Unlawful entry with intent/burglary, break and enter
813	Theft of motor vehicle parts or contents
821	Theft from a person (excluding by force)
822	Theft of intellectual property
823	Theft from retail premises
829	Theft (except motor vehicle), nec
831	Receiving or handling proceeds of crime
841	Illegal use of property (except motor vehicle)
911	Cheque or credit card fraud
912	Make, use or possess equipment to make false financial transactions
913	Fraudulent trade practices
914	Prescription drug fraud
915	Fare evasion
919	Fraud, nec
921	Counterfeiting, currency and related offences
931	Dishonest conversion
941	Bribery involving government officials
949	Bribery, nec
991	Misrepresentation of professional status
992	Non-fraudulent trade practices
999	Deception offences, nec
1211	Property damage by fire or explosion
1212	Graffiti
1219	Property damage, nec
1311	Trespass

10 nec = not elsewhere classified

Drug

1011	Import illicit drugs
1012	Export illicit drugs
1021	Deal or traffic in illicit drugs — commercial quantity
1022	Deal or traffic in illicit drugs — non-commercial quantity
1031	Manufacture or cultivate illicit drugs
1041	Possess illicit drug
1041	Use illicit drug
1099	Illicit drug offences, nec

Car theft

811	Theft of a motor vehicle
812	Illegal use of a motor vehicle

Other

411	Driving under the influence of alcohol or drugs
412	Dangerous or negligent operation (driving) of a vehicle
1221	Air pollution offences
1222	Water pollution offences
1223	Noise pollution offences
1229	Environmental pollution offences, nec
1312	Offensive language
1313	Offensive behaviour
1314	Criminal intent
1315	Conspiracy
1319	Disorderly conduct, nec
1321	Betting and gambling offences
1322	Liquor and tobacco offences
1323	Censorship offences
1324	Prostitution offences
1325	Offences against public order sexual standards
1329	Regulate public order offences, nec
1411	Driving while licence suspended or cancelled
1412	Driving without a licence
1419	Driving licence offences, nec
1421	Registration offences
1422	Roadworthiness offences
1431	Exceeding the prescribed content on alcohol limit
1432	Exceeding legal amphetamines limit
1433	Parking offences
1439	Regulatory driving offences, nec
1441	Pedestrian offences
1511	Escape custody offences
1512	Breach of bail
1513	Breach parole
1514	Breach of domestic violence order
1515	Breach of other restraining order
1519	Breach of justice order, nec
1521	Subvert the course of justice
1522	Resist or hinder police officer or justice official
1523	Prison regulation offences
1529	Offences against justice procedures, nec
1531	Resist or hinder government officer
1539	Offences against government security, nec
1541	Resist or hinder government official
1549	Offences against government operations, nec
1611	Harassment and private nuisance
1612	Offences against privacy
1613	Threatening behaviour
1614	Defamation and libel
1621	Sanitation offences
1622	Disease prevention offences

1623	Occupational health and safety offences
1624	Transport offences
1625	Dangerous substances offences
1626	Licit drug offences
1629	Public health and safety offences, nec
1631	Commercial/industrial/financial regulation
1691	Environmental regulation offences
1692	Immigration regulation offences
1693	Quarantine offences
1694	Import/export regulations
1695	Procure or commit illegal abortion
1699	Miscellaneous offences, nec

References

Agrawal, A, Gardner, CO, Prescott, CA & Kendler KS 2005, 'The differential impact of risk factors on illicit drug involvement in females', *Social Psychiatry and Psychiatric Epidemiology*, vol. 40, pp. 454–66.

Alterman, A, Randall, M & McLellan, A 2000, 'Comparison of outcomes by gender and fee-for-service versus managed care: a study of nine community programs', *Journal of Substance Abuse Treatment,* vol. 19, pp. 127–34.

Anglin, MD, Hser, Y & Chou, C 1993, 'Reliability and validity of retrospective behavioural self-report by narcotics', *Evaluation Review,* vol. 17, pp. 91–108.

Apospori, EA, Vega, WA, Zimmerman, RS, Warheit, GJ & Gil, AG 1995, 'A longitudinal study of the conditional effects of deviant behaviour on drug use among three racial/ethnic groups of adolescents', in HB Kaplan (ed.), *Drugs, crime, and other deviant adaptations: longitudinal studies*, Plenum, New York.

Arfken, C, Klein, C, di Menza, S & Schuster, C 2001, 'Gender differences in problem severity at assessment and treatment retention', *Journal of Substance Abuse Treatment,* vol. 20, pp. 53–57.

Australian Bureau of Statistics 1998, *Experimental estimates of the Aboriginal and Torres Strait Islander population, 30 June 1991 – 30 June 1996,* Cat. No. 3230.0, ABS, Canberra.

Australian Bureau of Statistics 2005, *Corrective services Australia*, 22 September 2005, Cat. No. 4512.0, ABS, Canberra.

Australian Institute of Health and Welfare 2005a, *2004 National Drug Strategy Household Survey: first results*, AIHW Drug Statistics Series, no. 13, Cat. No. PHE 57, AIHW, Canberra.

Bennett, T & Holloway, K 2005, 'The association between multiple drug misuse and crime', *International Journal of Offender Therapy and Comparative Criminology,* vol. 49(1), pp. 63–81.

Bernstein, LR, Folkman, S & Lazarus, RS 1989, 'Characterization of the use and misuse of medications by an elderly, ambulatory population', *Medical Care*, vol. 27(6), pp. 654–63.

Brook, JS, Brook, DW, De La Rosa, M, Whiteman, M, Johnson, E & Montoya, I 2001, 'Adolescent illegal drug use: the impact of personality, family, and environmental factors', *Journal of Behavioral Medicine,* vol. 24, pp. 183–203.

Brownstein, HH 2002, 'Towards a drugs and crime research agenda for the 21st century', *National Institute of Justice,* US Department of Justice, Washington, DC.

Callaghan, RC & Cunningham, JA, 2002, 'Gender differences in detoxification: predictors of completion and re-admission', *Journal of Substance Abuse Treatment,* vol. 23, pp. 399–407.

Canela-Cacho, JA, Blumstein, A & Cohen, J 1997, 'Relationship between the offending frequency of imprisoned and free offenders', *Criminology*, vol. 35, pp. 133–75.

Casavant, L & Collin, C 2001, 'Illegal drug use and crime: a complex relationship', Library of Parliament, Canada, <www.parl.gc.ca/37/1/parlbus/commbus/senate/com-e/ille-e/library-e/collin-e.htm>.

Collins, DJ & Lapsley, HM 2002, *Counting the cost: estimates of the social costs of drug abuse in Australia 1998–99,* Department of Health and Ageing, Australian Government, Canberra.

Crime and Misconduct Commission 2007, *Illicit drug use in Queensland: a survey of households 2002–05*, CMC, Brisbane.

Cunningham-Williams, RM, Cottler, LB, Compton, WM, Spitznagel & Ben-Abdallah, A 2000, 'Problem gambling and comorbid psychiatric and substance use disorders among drug users recruited from drug treatment and community settings', *Journal of Gambling Studies*, vol. 16(4), pp. 347–76.

Day, C, Woolcock, G & Weatherall, AM 2003, in E Southgate, C Day, J Kimber, AM Weatherall, M MacDonald, G Woolcock, S McGuckin & K Dolan (eds), *Dealing with risk: a multidisciplinary study of injecting drug use, hepatitis C and other blood-borne viruses in Australia*, ANCD Research Paper, Australian National Council on Drugs, Canberra, p. 65.

Degenhardt, L, Day, C, Dietze, P, Pointer, S, Conroy, E, Collins, L & Hall, W 2005, 'Effects of sustained heroin shortage in three Australian states', *Society for the Study of Addiction,* vol. 100, pp. 908–20.

Dietze, P 2003, 'The relationship of ethnography to illicit drug surveillance', *International Journal of Drug Policy,* vol. 14, pp. 131–5.

Dindia, K & Allen, M 1992, 'Sex differences in self-disclosure: a meta-analysis, *Psychological Bulletin,* vol. 112(1), pp. 106–24.

Edmunds, M, Hough, M & Urquia, N 1996, *Tackling local drug markets*, Crime Detection and Prevention Series Paper 80, Home Office, London.

Farrington, D & Coid, J (eds) 2003, *Early prevention of adult antisocial behaviour*, Cambridge University Press, Cambridge, UK, pp. 130–204.

Feucht, TE, Stephens, RC & Walker, ML 1994, 'Drug use among juvenile arrestees: a comparison of self-report, urinalysis and hair assay', *Journal of Drug Issues*, vol. 24(1), pp. 99–116.

French, MT, McGeary KA, Chitwood, DD, McCoy CB, Inciardi, JA & McBride, D 2000, 'Chronic drug use and crime', *Substance Abuse,* vol. 21(2), pp. 95–109.

Gordon, MS, Kinlock, TW & Battjes, RJ 2004, 'Correlates of early substance use and crime among adolescents entering outpatient abuse treatment', *American Journal of Drug and Alcohol Abuse,* vol. 30, pp. 39–59.

Gossop, M, Trakada, K, Stewart, D & Witton, J 2005, 'Reductions in criminal convictions after addiction treatment: 5-year follow-up', *Drug and Alcohol Dependence*, vol. 79, pp. 295–302.

Graham, K, 1980, 'Theories of intoxicated aggression', *Canadian Journal of the Behavioral Sciences,* vol 12, pp. 141–58.

Hanlon, TE, Nurco, DN, Kinlock, TW & Duszynski, KR 1990, 'Trends in criminal activity and drug use over an addiction career' *American Journal on Alcohol Abuse,* vol. 16, pp. 223–38.

Harrison, LD 1992, 'Trends in illicit drug use in the United States: conflicting results from national surveys', *International Journal of the Addictions,* vol. 27, pp. 817–47.

Hays, RD & Ellickson, PL 1996, 'Associations between drug use and deviant behaviour in teenagers' *Addictive Behaviors,* vol. 21, pp. 291–302.

Hunt, DE, Lipton, DS & Spunt, B 1984, 'Patterns of criminal activity among methadone clients and current narcotics users not in treatment', *Journal of Drug Issues,* vol. 14, pp. 687–702.

Innes, CA & Greenfield, LA 1990, *Violent state prisoners and their victims*, Special report, Department of Justice, Washington, DC.

Junger-Tas, J & Marshall, IH 1999, 'The self-report methodology in crime research', in M Tonry (ed.), *Crime and justice: a review of research*, vol. 25, pp. 291–366, University of Chicago Press, Chicago.

Kandel, D & Logan, J 1984, 'Patterns of drug use from adolescence to young adulthood', *American Journal of Public Health*, vol. 74(7), pp. 660–71.

Kaplan, HB 1995, 'Drugs, crime, and other deviant adaptations', in HB Kaplan (ed.), *Drugs, crime, and other deviant adaptations: longitudinal studies,* pp. 3–46, Plenum, New York.

Kassel, JD, Stroud, LR & Paronis, CA 2003, 'Smoking, stress, and negative affect: correlation, causation, and context across stages of smoking', *Psychological Bulletin,* vol. 129, pp. 270–304.

Khantzian, EJ 1997, 'The self-medication hypothesis of substance abuse disorders: a reconsideration and recent applications', *Harvard Review of Psychiatry,* vol. 4, pp. 231–44.

Kinlock, TW, Battjes, RJ & Gordon, MS 2004, 'Factors associated with criminal severity among adolescents entering substance treatment', *Journal of Drug Issues*, vol. 34(2), pp. 293–318.

Kinlock, TW, O'Grady, KE & Hanlon, TE 2003, 'Prediction of the criminal activity of incarcerated drug-abusing offenders', *Journal of Drug Issues,* vol. 33(4), pp. 897–920.

Krenske, L, Mazerolle, P, Fowler, G, Fanning, A & Najman, JM 2004, *Exploring drug use: prevalence and patterns among emergency department patients,* Crime and Misconduct Commission and Queensland Alcohol and Drug Research and Education Centre, Brisbane.

Landis, J & Koch, G 1977, 'The measurement of observer agreement for categorical data', *Biometrics,* vol. 33, pp. 159–74.

Lo, CC 2000, 'Timing of drinking initiation: a trend study predicting drug use among high school seniors', *Journal of Drug Issues,* vol. 30, pp. 525–54.

McGregor, K & Makkai, T 2003, *Self-reported drug use: how prevalent is under-reporting?*, Trends & Issues in Crime and Criminal Justice, no. 260, Australian Institute of Criminology, Canberra.

McLellan, A, Kushner, H, Metzger, D, Peters, R, Smith, I, Grissom, G, Pettinati, H & Argeriou, M 1992, 'The fifth edition of the Addiction Severity Index', *Journal of Substance Abuse Treatment,* vol. 9(3), pp. 199–213.

Makkai, T 2001, 'Patterns of recent drug use among a sample of Australian detainees', *Addiction,* vol. 96, pp. 1799–1808.

Marsh, J & Miller, N 1985, 'Female clients in substance abuse treatment', *International Journal of the Addictions,* vol. 20, pp. 995–1019.

Martin, SE & Bryant, K 2001, 'Gender differences in the association of alcohol intoxication and illicit drug abuse among persons arrested for violent and property offenses', *Journal of Substance Abuse*, vol. 13(4), pp. 563–81.

May, T & Hough, M 2001, 'Illegal dealings: the impact of low-level police enforcement on drug markets', *European Journal on Criminal Policy and Research,* vol. 9, pp. 137–62.

Mayhew, P 2003, *Counting the costs of crime in Australia*, Trends and Issues in Crime and Criminal Justice, no. 247, Australian Institute of Criminology, Canberra.

Mieczkowski, T, Newel, R & Wraight, B 1998, 'Using hair analysis, urinalysis, and self-reports to estimate drug use in a sample of detained juveniles', *Substance Use and Misuse,* vol. 33(7), pp. 1547–67.

Miller, FT, Whitney, R & Washousky, R 1986, 'Alcoholism diagnoses for convicted drink drivers referred for alcoholism evaluation', *Alcoholism: Clinical and Experimental Research,* vol. 10, pp. 651–6.

Nagin, DS, Farrington, DP & Moffit, TE 1995, 'Life-course trajectories of different types of offenders', *Criminology*, vol. 33(1), pp. 111–39.

Newcomb, MD, Galaif, ER & Vargsa Carmona, J 2001, 'The drug–crime nexus in a community sample of adults', *Psychology of Addictive Behaviors,* vol. 15(3), pp. 185–93.

Oltmanns, TF & Emery, RE 2004, *Abnormal psychology,* 4th edition, Pearson Prentice Hall, New Jersey.

Rydelius, PA 1988, 'The development of antisocial behaviour and sudden violent death, *Acta Psychiatria Scandinavia*, vol. 77, pp. 398–403.

Simoni-Wastila, LS, Ritter, G & Strickler G 2004, 'Gender and other factors associated with the nonmedical use of abusable prescription drugs, *Substance Use & Misuse,* vol. 39(1), pp. 1–23.

Stafford, J, Degenhardt, L, Black, E, Bruno, R, Buckingham, K, Fetherston, J, Jenkinson, R, Kinner, S, Moon, C & Weekely, J 2005, *Australian drug trends 2004: findings from the Illicit Drug Reporting System (IDRS)*, NDARC Monograph no. 55, National Drug and Alcoholic Research Centre, University of New South Wales, Sydney.

Standards Australia 1995, *Recommended practice for the collection, detection and quantification of drugs of abuse in urine*, Australian Standard AS4308-1995, Standards Australia, Sydney.

Vailant, GE & Milofsky, ES 1982, 'Natural history of male alcoholism: IV, Paths to recovery', *Archives of General Psychiatry,* vol. 39, pp. 127–33.

Weatherburn, D, Jones, C & Makkai, T 2003, 'Supply control and harm reduction: lessons from the Australian heroin "drought"', *Addiction,* vol. 98, pp. 83–91.

Whitley, BE 1996, *Principles of research in behavioral science,* Mayfield, Mountain View, California.

Wilcox, SM, Himmelstein, DU & Woolhandler, S 1994, 'Inappropriate drug prescribing for the community-dwelling elderly', *Journal of the American Medical Association,* vol. 272(4), pp. 292–6.

Wills, TA & Shiffman, S 1985, 'Coping and substance use: a conceptual framework', in S Shiffman & TA Wills (eds), *Coping and substance use,* pp. 3–24, Academic Press, New York.

Wislar, JS & Fendrich, M 2000, 'Can self-reported drug use data be used to assess sex risk behaviour in adolescents?' *Archives of Sexual Behavior,* vol. 29(10), pp. 77–89.

Yacoubian, GS 2005, 'Estimating the prevalence of alcohol and drug abuse and dependence among New Orleans arrestees', *American Journal of Addiction,* vol. 14, pp. 471–7.

Zhang, L, Wieczorek, WF & Welte, JW 1997, 'The impact of age of onset of substance use on delinquency', *Journal of Research in Crime and Delinquency,* vol. 34, pp. 253–68.

Zucker, RA & Gomberg, ES 1986, 'Etiology of alcoholism reconsidered: the case for a biopsychological process', *American Psychologist,* vol. 41, pp. 783–93.