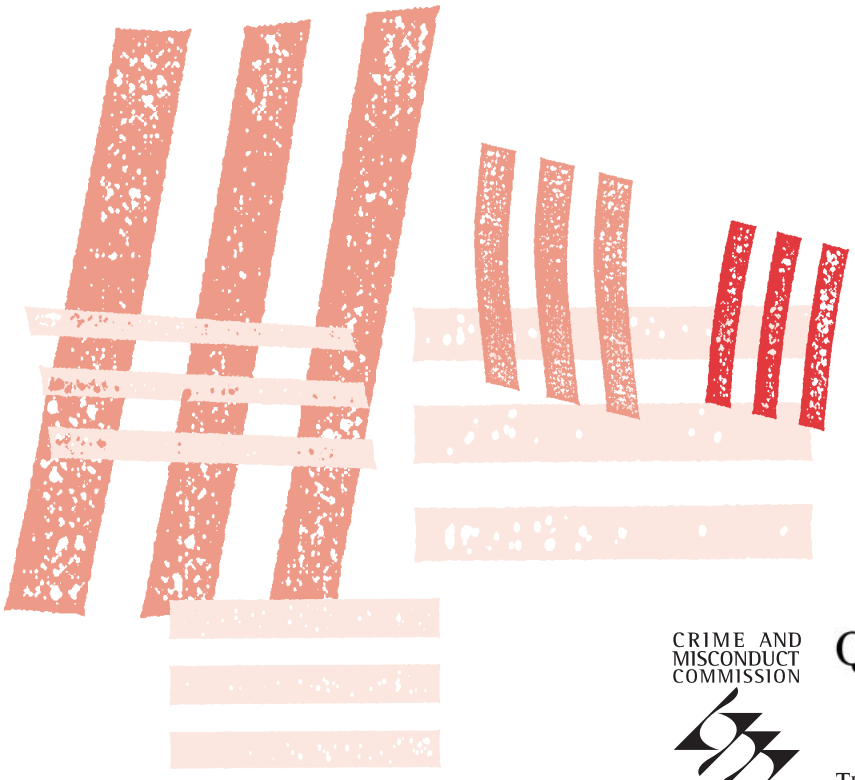
Leigh Krenske • Paul Mazerolle • Greg Fowler
Aden Fanning • Jake M Najman

exploring drug use

Prevalence and patterns among emergency department patients

2004



CRIME AND MISCONDUCT COMMISSION QUEENSLAND

QADREC
THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

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.

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Crime and Misconduct Commission
140 Creek Street, Brisbane, Australia
GPO Box 3123
Brisbane Qld 4001
Tel: (07) 3360 6060
Fax: (07) 3360 6333
E-mail: mailbox@cmc.qld.gov.au

FOREWORD

This study involved a collaborative research project known as PADIE (prevalence of alcohol and drug use in emergency departments) conducted by the CMC and QADREC. The PADIE project examined the nature and extent of alcohol and drug use among patients attending the fourth-busiest emergency department in Australia: the Gold Coast Hospital Emergency Department.

PADIE was one of the first studies of its kind conducted in Australia.The results it has gathered provide important evidence of the very high levels of drug and alcohol use observed in people who attend hospital emergency departments, and at the same time illustrate the close association between recent usage of drugs and hospital presentation. While the results cannot confirm a causal link between illicit drug use and accidents or injuries (for example, overdose), they do suggest that certain forms of drug use can lead to adverse health consequences for some individuals. Furthermore, they reveal evidence of a range of risk-taking behaviours associated with drug use, such as driving a motor vehicle under the influence of drugs or alcohol, which have clear implications for public health and public safety across Queensland.

The results from this study will be of particular interest to individuals committed to effective drug prevention initiatives. The study illustrates the value of using hospital emergency department data to illuminate drug use patterns among a selective grouping of individuals. Perhaps most importantly, the PADIE study illustrates the potential of this data source to inform decision-making in respect of effective drug policy initiatives.

Dr Paul Mazerolle
Director
Research and Prevention
Crime and Misconduct Commission

Professor Jake M Najman
Director
Queensland Alcohol & Drug Research & Education Centre
The University of Queensland

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ABBREVIATIONS

ADAM	Arrestee Drug Abuse Monitoring Program
AIHW	Australian Institute of Health and Welfare
AUDIT	Alcohol Use Disorders Identification Test
DAWN	Drug Use Warning Network (United States)
DUMA	Drug Use Monitoring in Australia
CMC	Crime and Misconduct Commission
IDRS	Illicit Drug Reporting System
NDSHS	National Drug Strategy Household Survey
PADIE	prevalence of alcohol and drug use in emergency departments
QADREC	Queensland Alcohol and Drug Research and Education Centre
QHIDUS	Queensland Household Illicit Drug Use Survey

ACKNOWLEDGMENTS

This study was undertaken by the Queensland Alcohol and Drug Research and Education Centre (QADREC) in partnership with the Research and Prevention Unit of the Crime and Misconduct Commission (CMC).

Research at the cutting edge of any field inevitably involves certain challenges, but a field such as this — drug and alcohol use in our society with all its attendant problems and complexities — could never have been undertaken without the help and cooperation of many people, not least being the patients who agreed to be interviewed at a time of, for many, considerable distress.

The results reported in this study would not have been possible without the active assistance of Dr David Green, Director of the Gold Coast Hospital Emergency Department, and his staff. In addition, the authors wish to acknowledge Stuart Kinner and Kerrianne Watt from QADREC for supervising their team of researchers during data collection, and Julianne Webster from the CMC for her involvement at the beginning of the project.

This publication was prepared for publication by the CMC's Publishing Unit.

Ms Leigh Krenske	Research Officer, CMC
Dr Paul Mazerolle	Director, Research and Prevention, CMC
Mr Greg Fowler	Senior Research Officer, QADREC, University of Queensland
Mr Aden Fanning	Research Officer, CMC
Professor Jake M Najman	Director, QADREC, University of Queensland

SUMMARY

Background

This study involved a collaborative research project by the CMC (Crime and Misconduct Commission) and QADREC (the University of Queensland's Alcohol and Drug Research and Education Centre). Known as PADIE (prevalence of alcohol and drug use in emergency departments), the project examined the nature and extent of alcohol and drug use among patients attending the fourth-busiest emergency department in Australia: the Gold Coast Hospital Emergency Department.

The objectives of the project were to:

- gather benchmark data that provide information on the patterns of drug use and drug-related problems among people presenting at a hospital emergency department
- gain a greater understanding of drug use among this population, including the health consequences of use
- identify some preventive measures to combat the ill effects of drug-taking (for example, health problems and increased risk-taking behaviours resulting in crime, injury or accident).

During a two-week period, 1451 presentations were made by patients aged 16–79 years attending the hospital for treatment. Over the 24-hour-a-day operation of the emergency department, a team of trained interviewers approached patients and asked them whether they would participate in a detailed survey of their patterns of drug use (both licit and illicit) and of problems resulting from this use. Data were also collected on risk-taking behaviours such as injecting drug use, drink and drugged driving, drink spiking and criminal activity. Participants were screened for a number of mental health conditions including depression, anxiety and psychosis. A total of 812 patients agreed to be interviewed.

Preliminary analysis of data relating to drug use is presented here. Although the authors acknowledge that polydrug use is an important component of illicit drug use consumption patterns, it is not explored comprehensively in the current analysis. Further examination of this issue will be considered in future publications.

In this summary of the findings, information on the prevalence of illicit drug use among the sample is reported in Figure 1. Additionally, a summary of the distribution of demographic characteristics across different levels of illicit drug use prevalence is provided in Table 1.

Where possible, the results of this study have been compared to data collected by the Australian Institute of Health and Welfare (AIHW) through the National Drug Strategy Household Survey (NDSHS) and to information collected by the CMC in 2002 on drug-use prevalence across the Queensland household population aged 18 and over. Such benchmarking exercises are useful for placing the findings from the current study into context. A summary of this information is provided in Table 2.

Figure 1: Prevalence of any illicit drug use among emergency department attendees

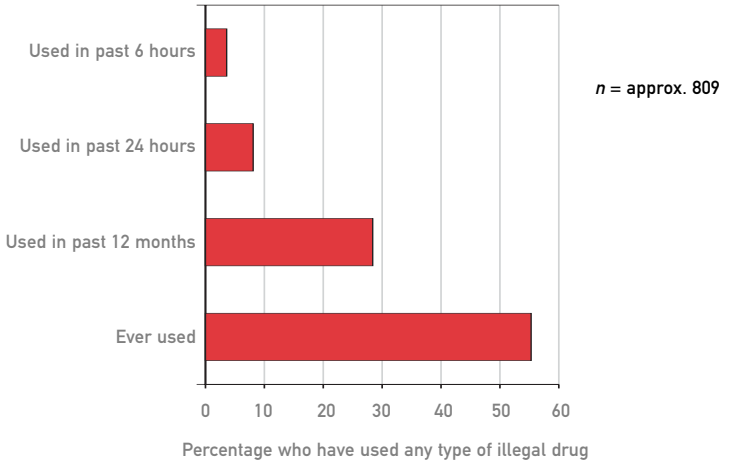

Table 1: Summary of demographic characteristics and illicit drug-use prevalence among emergency department attendees

Demographic characteristics	Ever used	Used in the past 12 months	Used in the past 24 hours	Used in the past 6 hours
Gender				
Male	61.1	68.1	81.5	79.3
Female	38.9	31.9	18.5	20.7
Age				
16–19	12.4	18.6	20.3	24.1
20–24	21.9	27.0	23.4	27.6
25–29	13.3	15.5	17.2	17.2
30–34	16.9	17.7	15.6	10.3
35–39	9.5	5.8	4.7	6.9
40–49	16.0	11.5	14.1	10.3
50–59	7.9	3.1	3.1	3.4
More than 60	2.0	0.9	1.6	–
Marital status				
Single	55.3	69.9	72.3	82.8
Married/de facto	32.2	23.6	18.5	10.3
Separated/divorced	11.4	6.5	9.2	6.9
Widowed	1.1	–	–	–
Employment				
Full-time work	44.6	43.7	35.4	31.0
Part-time/casual	21.1	24.0	23.1	27.6
Unemployment benefits	8.3	9.2	9.2	6.9
Aged pension/disability benefits	10.1	8.7	16.9	17.2
Other	15.9	14.4	15.4	17.2
(%) Within total sample	**55.3**	**28.4**	**8.1**	**3.6**
Total number*	**449**	**231**	**66**	**29**

* Total number may vary due to missing data.

Table 2: Comparison of illicit drug-use prevalence by drug type for current emergency department sample and Queensland household population

	DRUGS EVER USED (%)*		DRUGS USED IN THE PAST 12 MONTHS (%)		MEAN AGE OF INITIATION (YEARS)	
Type of drug	PADIE	Queensland household†	PADIE	NDSHS Qld‡	PADIE	Queensland household†
Cannabis	53.4	32.3	26.0	12.7	17.7	18.5
Amphetamines	21.0	8.4	9.8	2.9	20.1	22.4
Ecstasy	16.9	4.6	8.5	1.7	21.2	22.0
Heroin	4.9	1.5	1.1	0.2	20.7	20.7
Methadone	2.5	–	0.9	–	28.0	21.8
Ketamine	3.0	–	1.5	–	21.4	–
LSD/acid	15.2	7.7	2.0	0.8	19.3	18.8
Cocaine	9.3	3.0	3.3	0.7	21.2	22.1
GHB/fantasy	3.0	–	1.1	–	23.5	–
Any illicit drug	55.3	33.3§	28.4	16.5	17.8	18.5§

* Used at least once in a lifetime.

† NDSHS computer files held by CMC.

‡ AIHW 2002, p. 8.

§ Includes use of inhalants.

Results

Prevalence of licit drug use

Tobacco

- Just over 40% of respondents smoked cigarettes on a daily basis, and 17.3% smoked 20 or more cigarettes each day.
- Males were more likely than females to use tobacco and be heavy smokers.
- The likelihood of using tobacco decreased with age, and those aged 40 or older were least likely to report tobacco use.

Medications

- Over-the-counter pain relief was the most common form of medication used by respondents (62.9% using within the previous month).
- Just over 15% of respondents reported using sleeping tablets, 11.2% had used antihistamines, 10.5% had used antidepressants and 8.2% had used heart drugs within the past month.

Alcohol

- Nearly one in five (18.7%) respondents did not consume alcohol.
- Just under one-third (27.2%) drank alcohol monthly, one in five (19.3%) drank weekly, 17.2% drank between two and four times each week and a further 17.2% drank five times or more each week.
- Males (22.7%) were more likely than females (10.2%) to report the use of alcohol five or more times a week.

- Just over half (50.4%) of respondents consumed alcohol in a low-risk manner, 21.2% used alcohol in a hazardous manner, and 9.6% consumed in a harmful manner.
- Male respondents, in comparison to females respondents, were more likely to drink alcohol as well as drink in a hazardous or harmful manner.

Prevalence of illicit drugs

- Approximately 55% of the sample had used an illicit drug at least once in their lifetime, 28.4% had used in the past 12 months, 8.1% had used in the past 24 hours and 3.6% had used in the past 6 hours (see Figure 1, page xi).
- Patterns of illicit drug use varied as a function of gender, age, marital status and main source of income (see Table 1, page xi). No significant differences in patterns of illicit drug use were observed by Indigenous status or level of income.
- Cannabis was the most prevalent illicit substance used by respondents; 53.4% had used cannabis at least once in their lifetime, approximately one in four (26%) had used in the past 12 months, 6.6% had used in the past 24 hours and 2.2% had used within the past 6 hours (see Table 2).
- In terms of illicit drugs used within the previous 12 months, 9.8% of the sample reported using amphetamines, 8.5% had used ecstasy, 3.3% had used cocaine, 2% had used LSD/acid, 1.5% had used ketamine and approximately 1% had used heroin, GHB/fantasy or methadone (see Table 2).
- The prevalence of illicit drug use was significantly higher in the emergency department sample compared to the prevalence of illicit drug use found in the Queensland household population. The average age of initiation to illicit substances was earlier for attendees at the Gold Coast Hospital Emergency Department compared to Queenslanders in general (see Table 2).

Dimensions of illicit drug use

- Just over half (50.5%) of recent users reported regular polydrug use. ('Recent use' refers to any illicit drug use in the past 12 months.)
- Just under 5% of recent illicit drug users reported injecting illicit substances at least once in their lifetime.
- Male respondents who were recent illicit drug users (6.9%) were three times more likely than female recent illicit drug users (2.2%) to report ever injecting illicit substances.
- More than three-quarters (76.9%) reported first using illicit drugs between the ages of 13 and 20 years inclusive and the most common mean age of initiation was 16 years (18.5%). Cannabis had the lowest age of initiation (17.7 years), followed by LSD/acid (19.3 years), amphetamines (20.1 years), heroin (20.7 years), cocaine (21.2 years) and ecstasy (21.2 years).
- Respondents with early onset to illicit drug use (defined as first used illicit substances at 13 years or younger) reported using illicit drugs more regularly than late onsetters (defined as first used illicit substances at 14 years or older).

High-risk and criminal activity

- Forty-seven per cent of recent illicit drug users reported driving under the influence of illicit drugs and 33.5% reported driving under the influence of alcohol within the previous year.
- Just over 40% of recent illicit drug users reported that they had given illicit substances to somebody else and 18.6% stated that they had sold illicit substances for profit.

- Twenty-seven per cent of recent illicit drug users had been arrested for criminal behaviour not involving illicit drugs.
- A relationship between early initiation and frequency of illicit drug use and the likelihood of participating in high-risk and criminal activity was observed. Early onsetters were more likely than late onsetters to report regular polydrug use, driving under the influence of illicit drugs and driving under the influence of alcohol within the past 12 months. Early onsetters with recent use of illicit drugs were more likely than late onsetters to report that they had been arrested for a drug-related offence and to have sold illicit or prescription drugs for profit.
- Recent illicit drug users who had been arrested (44%) were more likely to be daily users of illicit drugs than recent illicit drug users who had not been arrested (26%).
- Arrestees with recent illicit drug use were four times more likely than non-arrestees with recent illicit drug use to report ever injecting an illicit substance.
- Recent illicit drug users who had been arrested were more likely than non-arrestees with recent illicit drug use to report polydrug use, driving under the influence of alcohol, driving under the influence of illicit drugs, selling illicit or prescription drugs for profit and giving illicit drugs to another person.

Implications

The results of this study provide important information about the nature and extent of drug and alcohol use from a sample of individuals attending the Emergency Department at Gold Coast Hospital in October 2002. The results provide evidence of the very high levels of drug and alcohol use observed in this population, and at the same time illustrate the close association between recent usage of drugs and hospital presentation. While the results cannot confirm a causal link between illicit drug use and accidents or injuries (for example, overdose), they do suggest that certain forms of illicit drug use can lead to negative health consequences for some individuals. Furthermore, they reveal evidence of a range of risk-taking behaviours associated with drug use, such as driving a motor vehicle under the influence of drugs or alcohol, which have clear implications for public health and public safety across Queensland.

The results indicate a need to consider the range of preventive initiatives currently required to respond effectively to drug and alcohol problems in Queensland. Of particular interest to stakeholders committed to effective drug policy is the need to target specific initiatives to the specific problems that appear to generate the most need. Users of illicit drugs in this sample are disproportionately young (under 25), male and single. The relative proportions of this demographic profile are magnified when the prevalence of recent drug use is considered. For example, when past 24-hour drug use is examined, the results reveal that four out five past-day users of illicit drugs are male, one in five is aged between 16 and 19 years and nearly three-quarters are single. The results are equally troubling when considering the situation for users of illicit drugs over the past six hours.

Finally, this study confirms the value of using hospital emergency department data to assess the range of drug problems. Perhaps more importantly, it illustrates the potential of this source to inform decision-making in respect of effective drug policy initiatives.

Chapter 1
INTRODUCTION

This introductory chapter gives the background to the joint CMC–QADREC project PADIE (prevalence of alcohol and drug use in emergency departments). It provides an overview of the patterns of drug use in Queensland, explains the methodology used in the project, outlines the demographic characteristics of the sample, and gives some general advice on interpreting the data presented in the report.

Project background

Drug use can have such serious social and health consequences for individuals, families and communities that it is important to understand the nature and extent of drug use in society. A range of important benefits, both social and practical, can come from this understanding — for example, health and law enforcement resources can be better directed at minimising the harms that arise from drug use.

Much of the current knowledge of drug-use patterns and trends is, however, based on samples of household populations (AIHW 2002a) or, at the other end of the spectrum, focused samples of high-risk groups such as regular injecting drug users or arrestees (for example, Illicit Drug Reporting System [Breen et al. 2004], Drug Use Monitoring in Australia [Milner, Mouzos & Makkai 2004], and Drug Use Careers of Offenders [Makkai & Payne 2003]). Relatively little is known about the drug-using patterns of people presenting at hospital emergency departments seeking assistance (Lind et al. 2003). This means that there is an important gap in our knowledge about both the prevalence and the nature of drug-related problems among this segment of the population. Hence, the PADIE project provides an important opportunity to gather information from an under-researched population.

The collection of drug-use data from hospital emergency departments significantly contributes to our understanding of drug use and drug-related problems, while at the same time measuring levels of demand for drug-related treatment services.

PADIE, the first study of its kind conducted in Queensland, involved documenting the nature and extent of licit and illicit drug use among individuals entering a hospital emergency department on the Gold Coast in Queensland. Over a period of two weeks, 24 hours a day, trained interviewers collected self-report information from people entering the emergency department about their drug use, including types of drugs used, quantity and frequency of use, risk-taking behaviours, mental health status and involvement in criminal activity. By describing drug-using patterns among a select group of respondents, the study contributes toward building a more comprehensive view of drug use in Queensland. It provides an initial first step or

benchmark for developing a more routine, systematised data-collection effort across all hospital emergency departments throughout the state in the future.

The objectives of this project were to:

- gather benchmark data that provide information on the patterns of drug use and drug-related problems among people presenting at a hospital emergency department
- gain a greater understanding of drug use among this population, including the health consequences of use
- identify some preventive measures to combat the ill effects of drug-taking (for example, health problems and increased risk-taking behaviours resulting in crime, injury or accident).

A detailed exploration of polydrug use is not presented in the current analysis. This issue will be examined in future publications.

Measuring drug use in Queensland

Collecting reliable information about illicit drug use in the community produces a range of challenges for researchers. The illegal nature of illicit drug use means that users are often hidden and have a vested interest in maintaining distance from those not directly involved in their drug use. As a result, research that relies on self-report data may under-report the prevalence of illicit drug use and may not succeed in accessing reliable information about the dynamics of different drug markets. The methodological strategies employed by researchers to collect information may also mean that those most likely to use illicit drugs are not captured adequately, while sampling strategies that target specific populations will not produce highly representative information.

A range of general and specific population studies have been conducted in Queensland because of the methodological difficulties of drug-use research aimed at measuring the prevalence and patterns of drug use in different populations. These studies include the National Drug Strategy Household Survey (NDSHS), which through telephone and self-completed interviews collects drug-use data from a sample of Queensland households (AIHW 2002b). The Illicit Drug Reporting System (IDRS) collects data about injecting drug users in Queensland (Kinner & Fischer 2004), and a related program called the Party Drugs Initiative (PDI) collects information about party drug use (Fischer & Kinner 2004).

An increasingly important source of data is the Drug Use Monitoring in Australia (DUMA) program run by the Australian Institute of Criminology.[1] DUMA gathers data about police detainees in a number of sites around Australia, including Southport and Brisbane (Weierter & Lynch 2002). In the United States, successful surveys of arrestees (including urinalysis) have been conducted since the mid-1980s through the Arrestee Drug Abuse Monitoring (ADAM) program. DUMA is affiliated with the International Arrestee Drug Abuse Monitoring Program (I-ADAM) and ensures that comparable data are being collected in a range of countries, including the United States, England, Scotland and South Africa. Such data enable comparisons of local illicit drug markets at an international level.

In addition to these regular data-collection programs, surveys are also conducted to explore specific drug-use patterns and populations at particular points in time or as part of program evaluations. Current examples in Queensland include studies of the amphetamine market conducted by the CMC (CMC 2003; and Lynch et al. 2003), and the cannabis diversion

1 DUMA measures drug use among those people who have been recently apprehended by police. The information gathered is used to explore issues such as the relationship between drugs and property and violent crime, monitor patterns of drug use across time, and help assess the need for drug treatment among the arrestee population.

outcome study component of the Queensland Illicit Drug Diversion program evaluation (Swan, Alberti & Ritter 2003). State data on illicit drug seizures and arrests by law enforcement are also regularly published in the Australian Illicit Drug Report series published by the Australian Crime Commission (2003). A complete guide to data sources on drug use in Australia is published by the Australian Bureau of Statistics (2001).

An acknowledged gap in the range of data sources about drug problems in Australia is presentations at hospital emergency departments. For three decades the Drug Abuse Warning Network (DAWN) in the United States has been a key data source for drug-program planning and policy making. DAWN has two components: one that collects data on drug-related visits to a national sample of emergency departments, and another that collects data on drug-related deaths from medical examiners and coroners throughout the United States. Patients are not interviewed as part of the DAWN program. All data are collected through a retrospective review of patient medical records and decedent case files.[2] Of particular interest to the DAWN program is the extent of *drug episodes* and *drug mentions* occurring across the sampled hospitals.[3]

The strength of the DAWN program rests in its ability to track changes in levels of drug episodes and mentions over time as well as consider any emerging drug issues or changes to drug-specific patterns. Overall, the DAWN program provides a useful mechanism for consistently monitoring some of the deleterious effects of drug use. The current PADIE study provides a model that could serve to inform a similar network in Australia and adds to the limited, but growing, body of research about drug use in the community.

Methodology

Because drug use, and in particular heavy drug use, is often associated with accidents or injuries, impaired mental health and drug overdose, this study examined patterns of drug use among a sample of people seeking assistance in a hospital emergency department.

The research team was aware of the methodological procedures used in related projects conducted in other jurisdictions (see the DAWN study in the USA). Additionally, members of the team had used similar research protocols during a recent study that accessed emergency department attendees (Roche et al. 2001). The procedures used in the current study were carefully developed to ensure that a large segment of the study population was approached and provided with the opportunity to participate. At the same time, efforts were made to collect the data in the least intrusive way possible, given the circumstances. Data collection was greatly assisted by the cooperation of staff of Gold Coast Hospital.[4]

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2 United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Office of Applied Statistics. Drug Abuse Warning Network (DAWN), <http://www.samhsa.gov/oas/dawn.htm>.

3 SAMHSA (2003, p. 25) defines a drug episode as an 'Emergency Department (ED) visit that was induced by or related to the use of an illegal drug(s) or the non-medical use of a legal drug for patients aged 6 to 97 years', while a drug mention refers to a 'substance that was recorded ("mentioned") during a drug-related episode'. More than one substance may be recorded in relation to each drug episode.

4 The Gold Coast Hospital Emergency Department is the fourth-busiest emergency department in Australia.

Survey procedures

Four out of every five patients presenting for treatment to the Emergency Department at Gold Coast Hospital, Queensland, were interviewed over a continuous 14-day period in October 2002.[5]

The interviews were conducted by experienced interviewers trained in administering questionnaires. Interviewers were selected also on the basis of being able to work with minimal supervision and having experience in highly stressful, unpredictable environments. Prior to commencing interviews, the interviewers were familiarised with the hospital environment.

Details of all patients presenting for treatment (that is, gender, age, triage code, patient location, presenting complaint, and time of presentation), including patients not interviewed, were recorded in a Case Log Book. Previous research carried out in this particular setting (Roche et al. 2001) and throughput data provided by the hospital indicated that it would not be feasible to approach every patient for interview; thus, every fifth patient was not approached. In situations where more than one eligible patient was available for interview at a given time, patients were approached in the order that they had presented.

Interviewers approached potential respondents and informed them of the nature of the study. Respondents were then provided with an information sheet about the study and invited to sign a consent form and then to complete an interview. Wherever possible, interviews were conducted in a private location. Laminated A4 cue cards, which displayed visual responses to more difficult or sensitive questions (for example, types of drugs consumed), were used to improve the accuracy of responses. Each morning the Case Log Book was compared with hospital data for the previous day to check that all patients had been accounted for.

Data-collection instrument

The data-collection instrument consisted of 122 items and took 15–20 minutes to administer. Survey domains included general demographic information, as well as information on the lifetime and annual prevalence of licit and illicit drug use. In addition, information assessing alcohol and other substance use in the 6 and 24 hours prior to presentation was included, as well as information gauging the frequency of different types of drugs used and age at first use.

Information regarding respondents' mental health (that is, the Hospital Anxiety and Depression Scale [HADS], the Psychosis Screen [PS] scale), problematic alcohol use (AUDIT) and involvement in criminal activity and other high-risk behaviours was included to assess relationships with drug-using patterns.

Participants

Respondents eligible for interview during the data-collection period were:

- aged 16–79 years
- able to be interviewed
- able to provide informed consent.

5 It is acknowledged that data collected for the PADIE study will possibly reflect the broader alcohol and drug consumption trends found in the Gold Coast region. Indeed, Krenske and Mazerolle (forthcoming) have found that the prevalence of illicit drug use is greater for respondents living in urban coastal regions compared to other Queensland locations.

Information about ineligible, non-consenting, transferred or speedily discharged patients was also recorded.

Of 1451 presentations throughout the 14-day data-collection period, 812 (56%) were interviewed. Of respondents not interviewed:

- 280 (19.3%) were not approached, because they were outside the age range or unable to consent to be interviewed
- 63 (4.3%) were not able to be interviewed due to the nature or severity of their presenting complaint
- 115 (7.9%) patients did not wait for medical treatment.

Therefore, of the 993 eligible patients:

- 107 (10.8%) did not consent to participate
- 69 (7%) were missed (i.e. left hospital or were transferred to another ward before they could be interviewed)
- 812 (82.2%) were interviewed.

The overall response rate for the study was 82.2% of all eligible respondents.

Interpreting the information presented in the report

When interpreting the information presented in this report, it is important to bear in mind the following points:

- Total percentages may vary between tables and figures due to missing data.
- Total sample sizes may vary slightly between response categories and status groups due to missing data.
- Given that the findings are based on self-reported information, the accuracy and reliability of results may be affected by respondent recall — this consideration is especially important when interpreting information provided on initiation age to illicit drug use.
- When interpreting demographic data, 'Indigenous' refers to Aboriginals, Torres Strait Islanders and Pacific Islanders; while 'Other' under main source of income refers to self-funded retirees, homemakers and others not defined.

The next chapter provides details on the demographics of the sample.

Chapter 2
DEMOGRAPHIC PROFILE OF THE SAMPLE

The demographic characteristics of the sample of respondents are shown in Figure 2.1. Summary statements in relation to the demographic characteristics of the sample are presented below:

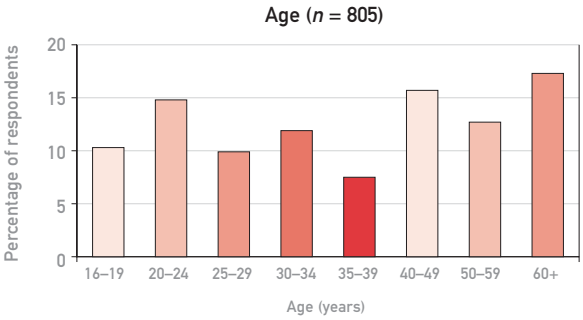
- The sample included more males (55.7%) than females (44.3%).
- Respondents ranged in age from 16 to 79 years, and had a mean age of 40.1 years. Nearly half (45.6%) of the sample were aged over 40 and almost one in five (17.3%) were aged 60 years or over. Just over 10% of respondents were aged between 16 and 19 years.
- A significant proportion of respondents (44.6%) had not completed high school;[6] however, 14.3% were university students or had completed at least one tertiary degree. A similar proportion of respondents had finished Year 12 (21.6%) compared to respondents who had completed a TAFE course or taken a trade (19.5%).
- Most respondents were either single (41.2%) or married/de facto (42.3%). Although the sample was slightly skewed towards older people, only 3% of those surveyed were widowed.
- A significant proportion of respondents (61.9%) reported living in households earning $30 000 or less (before tax) in the past 12 months; 46% lived in households with a combined annual income of between $10 001 and $30 000, while only 15.4 per cent lived in households with an annual income of $50 000 or over.
- Just over a third (36.6%) of the sample were involved in full-time work during the month preceding the survey. Approximately one in five respondents received a disability benefit or aged pension; 17.2% were involved in part-time work; and 6.9% relied mainly on unemployment benefits for their income.
- Nearly 3% of those surveyed (n = 22) identified as Aboriginal, Torres Strait Islander or of Pacific/South Sea Islander descent.

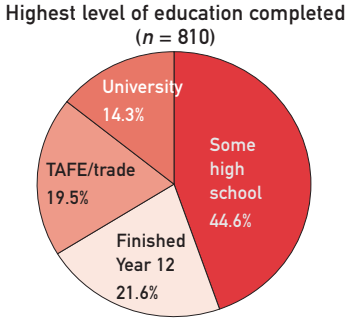
6 Incomplete high-school includes 13 current secondary-school students.

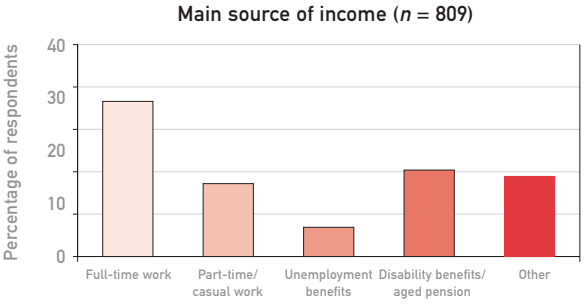
Figure 2.1: Demographic profile of sample

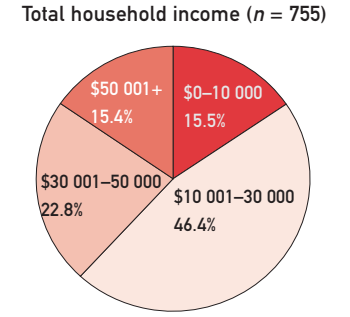
Gender (n = 811)	%
Males	55.7
Females	44.3

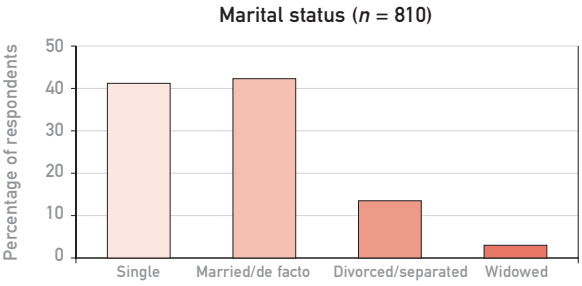
Indigenous status (n = 809)	%
Non-Indigenous	97.3
Indigenous	2.7











Chapter 3

PREVALENCE OF LICIT DRUG USE

Research has shown that the use of licit drugs such as tobacco and alcohol can place a significant burden on the health and welfare of individuals (Murray & Lopez 1997; Mathers et al. 2001). This chapter presents information on the use of tobacco, medications and alcohol within the hospital emergency department sample, reported in relation to various socio-demographic characteristics.

Use of tobacco

Despite a gradual decline in the overall consumption of cigarettes over the past 30 years, smoking continues to be a concern for public health authorities around the world. In Australia, it is estimated that 20% of those aged over 14 are daily smokers, while 23% are current smokers (AIHW 2003, p. xiv).[7]

In general, the prevalence of cigarette smoking was higher in the emergency department sample than in the general population. Information on the average daily number of cigarettes used by males and females in the sample is shown in Table 3.1. Information on the relationship between tobacco use and age, among survey respondents, is reported in Table 3.2. Overall, the findings reveal:

- Just over 40% of those surveyed smoked cigarettes on a daily basis and about 17% smoked more than 20 cigarettes a day (see Table 3.1).
- Males were more likely than females to smoke cigarettes and to be heavy smokers[8] (see Table 3.1).
- The average number of cigarettes used each day varied slightly as a function of age (see Table 3.2).
- The likelihood of using tobacco tended to fluctuate across age groups, with respondents aged 40 or older least likely to report daily cigarette use (see Table 3.2).
- The prevalence of smoking was greatest for those aged between 20 and 24, with more than half of this age group smoking on a daily basis (see Table 3.2).
- The proportion of heavy smokers was greatest for those aged between 30 and 39 (21.2%); however, a significant proportion of those aged between 16 and 19 also indicated that they were heavy smokers (15.6%) (see Table 3.2).

7 AIHW defines 'current smokers' as those who have used tobacco less than daily over the past 12 months but have smoked more than 100 cigarettes in their lifetime.

8 'Heavy smoking' is defined as smoking 20 or more cigarettes a day.

Table 3.1: Average number of cigarettes smoked per day by gender

Cigarettes per day	GENDER Male (*n*)	Male %	Female (*n*)	Female %	TOTAL (*n*)	TOTAL %
None	251	55.5	225	62.7	476	58.7*
1–9	34	7.5	32	8.9	66	8.1
10–19	76	16.8	53	14.8	129	15.9
20–29	58	12.8	35	9.7	93	11.5
≥ 30	33	7.3	14	3.9	47	5.8*
Average no. cigarettes	21.5		18.7		20.3	

* = p < .05; chi^2 test

Table 3.2: Average number of cigarettes smoked per day by age

Cigarettes per day	AGE 16–19 (*n*)	16–19 %	20–24 (*n*)	20–24 %	25–29 (*n*)	25–29 %	30–39 (*n*)	30–39 %	≥ 40 (*n*)	≥ 40 %	TOTAL (*n*)	TOTAL %
None	45	54.2	52	43.7	45	56.3	80	51.3	253	68.9	475	59.0
1–9	10	12.0	20	16.8	11	13.8	11	7.1	13	3.5	65	8.1
10–19	15	18.1	33	27.7	12	15.0	32	20.5	36	9.8	128	15.9
20–29	10	12.0	9	7.6	4	5.0	24	15.4	45	12.3	92	11.4
≥ 30	3	3.6	5	4.2	8	10.0	9	5.8	20	5.4	45	5.6
Average no. cigarettes	17.7		15.9		20.1		20.6		23.4		20.2	

* = p < .001; chi^2 test

Demographic characteristics of cigarette users

Table 3.3 (next page) presents demographic information on different types of cigarette users. For the purpose of this analysis, 'daily smokers' refers to respondents who use cigarettes on a daily basis, while 'heavy smokers' are daily smokers who use 20 or more cigarettes a day. As shown:

- Non-smokers are more likely to be female than male, and daily and heavy smokers are more likely to be male than female. More males were heavy smokers (65%) than daily smokers (60%).
- Smoking cigarettes was most prevalent among younger people. However, those aged between 16 and 25 years were more likely to be daily smokers than heavy smokers, and more than a quarter of heavy smokers (27.7%) were aged between 40 and 49 years (compared to 15.7% of the total population).
- More than half (52.7%) of daily smokers and 45% of heavy smokers reported being single (compared to 41.2% of the total sample), while 16.2% of daily smokers and 19.3% of heavy smokers stated that they were separated/divorced (compared to 13.5% of the total sample).
- Approximately 40% of daily smokers and heavy smokers reported being employed full time (compared to 36.6% of the total sample), and 10.1% of daily smokers and 9.3% of heavy smokers stated that they were unemployed (compared to 6.9% of the total sample).

Table 3.3: Demographic characteristics of cigarette users

Demographic characteristics	PERCENTAGE WITHIN TYPE OF CIGARETTE USE			TOTAL
	Non-smokers	Daily smokers	Heavy smokers*	
Gender				
Male	52.7	60.0	65.0	55.7
Female	47.3	40.0	35.0	44.3
Age				
16–19	9.5	11.5	9.5	10.3
20–24	10.9	20.3	10.2	14.8
25–29	9.5	10.6	8.8	9.9
30–34	10.5	13.9	15.3	11.9
35–39	6.3	9.1	8.8	7.5
40–49	14.3	17.6	27.7	15.7
50–59	13.9	10.9	12.4	12.7
More than 60	25.1	6.1	7.3	17.3
Marital status				
Single	33.2	52.7	45.0	41.2
Married/de facto	51.5	29.3	32.1	42.3
Separated/divorced	11.6	16.2	19.3	13.5
Widowed	3.8	1.8	3.6	3.0
Employment				
Full-time work	32.9	41.8	40.0	36.6
Part-time/casual	16.9	17.6	14.3	17.2
Unemployment benefits	4.6	10.1	9.3	6.9
Aged pension/disability benefits	24.5	14.6	17.9	20.4
Other	21.1	15.8	18.6	18.9
(%) Within total sample	**58.7**	**41.3**	**17.3**	
Total number†	**476**	**335**	**140**	

* Heavy smokers are defined as those who smoke more than 20 cigarettes a day.

† Sample sizes may vary slightly between status categories due to missing data. Daily smokers and heavy smokers are not discrete categories. Heavy smokers may also be daily smokers.

Use of medications

The use of medications was common among respondents attending the hospital emergency department. More than three-quarters of respondents (77.4%) indicated that they had used sleeping tablets, pain relief, antidepressants, heart drugs or antihistamines within the previous month. Table 3.4 reports on the different types of medications recently used by respondents. As shown:

- The most common type of medication used by respondents was over-the-counter pain relief. Nearly two-thirds (62.9%) of those surveyed indicated that they had used this type of medication within the previous month and, given the context of the survey, it is not surprising that 21.1% reported that they had used such medications in the 6 hours prior to the survey.
- Just under 20% reported using prescription pain relief within the past month and 8% indicated that they had used within the previous 6 hours.
- A significant proportion (15.4%) reported using sleeping tablets in the past month.
- The use of prescription drugs used to treat chronic health conditions (such as antidepressants and heart drugs) remained relatively constant across the different reporting frames. For example, just over 8% of the sample reported that they had used heart drugs within the past month, 7.9% within the past week and 7.8% within the past 24 hours.

Table 3.4: Recent medication use

Medication	TAKEN IN THE PAST ... 6 hours		24 hours		week		month	
	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%
Pain relief — over the counter	170	21.1	301	37.3	424	52.5	508	62.9
Pain relief — prescription	64	8.0	123	15.3	139	17.3	159	19.8
Sleeping tablets	20	2.5	69	8.6	92	11.4	124	15.4
Antihistamines	14	1.7	34	4.2	54	6.7	90	11.2
Antidepressants	23	2.8	65	8.0	75	9.3	85	10.5
Heart drugs	26	3.2	63	7.8	64	7.9	66	8.2

Use of medications by gender and age

Additional analysis reveals that the types of medication used varied as a function of gender and age. Significant relationships between gender and the use of antidepressants, age and the use of pain relievers, heart medications and sleeping tablets and antidepressants were observed.[9] The results also show that:

- Women were more likely than men to report use of antidepressants in the past month.
- Those aged 30 and over were more likely than younger people to use pain relievers.
- Not surprisingly, heart medications were primarily used by those aged 40 years or more.
- A greater proportion of respondents aged 40 and over, compared to younger users, reported using sleeping tablets and antidepressants.

Use of alcohol

The consumption of alcohol is highly prevalent in Australia. Consumption trends, however, have remained relatively constant in the period between 1991 and 2001 (AIHW 2003, p. 11). The 2001 NDSHS survey found that 83.1% of Queenslanders and 82.1% of Australians had used alcohol at least once within the past 12 months (AIHW 2003, p. 11), with 8.4% of Queenslanders drinking daily and 37.8% drinking weekly (AIHW 2002b, p. 5).

Table 3.5 (next page) provides information on the use of alcohol by attendees at the emergency department and shows comparisons by gender. The results reveal greater than average frequencies of consumption by attendees compared to the general population and a relationship between alcohol consumption patterns and gender. As shown:

- Just over 80% of respondents reported the use of alcohol, 34.4% drank alcohol more than once a week, 17.2% drank five times or more a week and 19.3% drank weekly.
- Males were more likely as females to report the use of alcohol, and males reported drinking alcohol more regularly than females.
- Nearly one in four females (23.7%) stated that they completely abstained from the use of alcohol, compared to 15.5% of males.
- Males were twice as likely as females to state that they used alcohol five or more times a week (22.7% compared to 10.2%).

9 Results from these analyses are available upon request. Statistical comparisons were based on chi^2 tests, largest $p < .05$.

Table 3.5: Alcohol consumption by gender

Regularity of alcohol use	GENDER Male (*n*)	Male %	Female (*n*)	Female %	TOTAL (*n*)	TOTAL %
Never	69	15.5	84	23.7	153	19.2
Monthly	103	23.2	114	32.2	217	27.2
Weekly	77	17.3	77	21.8	154	19.3
2–4 times/week	94	21.2	43	12.1	137	17.2
5 or more times/week	101	22.7	36	10.2	137	17.2
Total	**444**		**354**		**798**	

*chi*² test; p = <.001

Alcohol use and age

Table 3.6 reveals the relationship between patterns of alcohol consumption and age. As shown:

- Alcohol consumption patterns varied as a function of age.
- The prevalence of more regular drinking (five or more times each week) was greatest for those aged over 35 years, while respondents aged between 16 and 29 years were more likely than average to report drinking monthly or less.
- Respondents aged 60 and over were most likely to never consume alcohol (31.9% compared to 19.3% for the total sample).
- About one in five respondents aged between 20 and 29 years, nearly 22% of respondents aged between 40 and 49 years and 23% of those aged between 50 and 59 years reported drinking between two and four times each week. This compares to 12.3% of 16–19 year olds, 14.6% of 30–35 year olds, 11.9% of 35–39 year olds and 9.6% of those aged over 60.

Table 3.6: Alcohol consumption by age

Regularity of alcohol use	AGE 16–19 (*n*)	16–19 %	20–24 (*n*)	20–24 %	25–29 (*n*)	25–29 %	30–34 (*n*)	30–34 %	353–9 (*n*)	353–9 %	40–49 (*n*)	40–49 %	50–59 (*n*)	50–59 %	≥ 60 (*n*)	≥ 60 %	TOTAL (*n*)	TOTAL %
Never	11	13.6	14	11.9	15	18.8	14	14.6	12	20.3	23	18.5	21	21.0	43	31.9	153	19.3
Monthly or less	34	42.0	36	30.5	24	30.0	26	27.1	11	18.6	28	22.6	19	19.0	36	26.7	214	27.0
Weekly	22	27.2	32	27.1	16	20.0	26	27.1	14	23.7	20	16.1	11	11.0	13	9.6	154	19.4
2–4 times per week	10	12.3	26	22.0	17	21.3	14	14.6	7	11.9	27	21.8	23	23.0	13	9.6	137	17.3
5 or more times per week	4	4.9	10	8.5	8	10.0	16	16.7	15	25.4	26	21.0	26	26.0	30	22.2	135	17.0

*chi*² test, p <.001

AUDIT measures of alcohol use

While Table 3.5 (above) shows the frequency of alcohol use, it does not provide information on levels of alcohol consumption. The use of alcohol by attendees of the emergency department was therefore assessed using the Alcohol Use Disorders Identification Test (AUDIT) developed by the World Health Organization (Babor et al. 1992; Conigrave, Hall & Saunders 1995).

The AUDIT is a 10-item scale that establishes the prevalence of low, hazardous or harmful patterns of alcohol consumption. Responses to the 10 items are added to obtain a total AUDIT score. The established risk categories for female AUDIT scores are: low (1–6); hazardous (7–12); and harmful (13+); whereas male AUDIT categories are: low (1–7); hazardous (8–14); and harmful (15+).

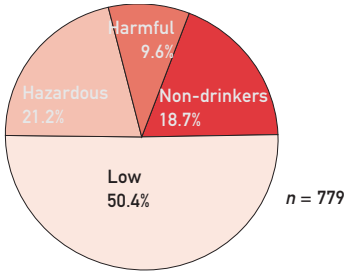
The AUDIT scores of the total sample (see Figure 3.1) indicated that:

- nearly a fifth (18.7%) of the sample reported that they did not consume alcohol (i.e. AUDIT scores of zero)
- approximately half of those surveyed (50.4%) consumed alcohol in a low-risk manner
- 21.2% of respondents reported drinking in a hazardous manner
- 9.6% of respondents reported drinking in a harmful manner
- AUDIT scores ranged from 0 to 40 (the maximum score possible) for males (mean = 7.35; SD = ±6.96) and 0 to 26 for females (mean = 4.21; SD = ±5.11)[10]
- six patients (all male) had extremely high AUDIT scores of 30 or above, indicating harmful alcohol use and likely dependence.

Although directly comparable AUDIT scores for the Australian population are not available, Heale et al. (2000) have found the distribution of alcohol risk for long-term harm in the general population to be 20% for high risk, 19% for medium risk and 61% for low risk. For short-term harm they have identified levels of risk to be distributed as 24% high risk, 27% medium risk and 49% low risk.

The AIHW (2003, p. 13) reported that in 2001, 72.7% of Australians consumed alcohol at low levels of risk for long-term alcohol-related harms, while 7% used alcohol at risky levels and 2.9% at high-risk levels. Patterns of alcohol consumption with low risk of short-term harm were apparent for 48.1% of the population, while 34.4% drank alcohol at risky or high-risk levels.[11] Similar patterns of consumption were found for Queenslanders (AIHW 2002b, pp. 6–7). These comparisons, while not directly compatible because of different measurement protocols, are largely consistent with findings in the current survey.

Figure 3.1: AUDIT risk assessment of alcohol consumption



10 One-sample T test, p <.001.

11 Risk of harm in the short term is related to levels of drinking on a single occasion and incidents of harm such as falls, accidents and violence. Low risk of harm in the short term for males refers to the consumption of up to six standard drinks on any one day. Low risk of harm in the short term for females refers to the consumption of up to four standard drinks on any one day. High risk of harm in the short term for males refers to the consumption of seven or more standard drinks on any one day. High risk of harm in the short term for females refers to the consumption of five or more standard drinks on any one day. Risk of harm in the long term is related to consistent high-level alcohol consumption over months and years and is associated with health problems such as liver disease, some cancers and dementia. Risk of harm in the long term for males refers to: the consumption of up to 28 standard drinks per week ('low risk'), 29 to 42 per week ('risky') and 43 or more per week ('high risk'). Risk of harm in the long term for females refers to: the consumption of up to 14 standard drinks per week ('low risk'), 15 to 28 per week ('risky') and 29 or more per week ('high risk').

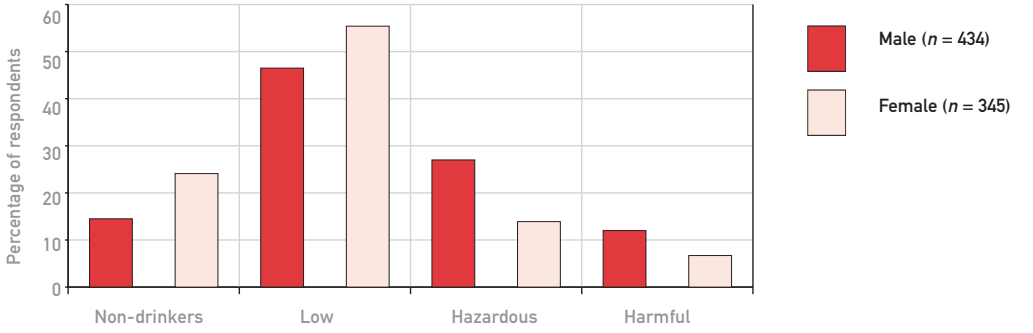
AUDIT measures and gender

Figure 3.2 displays the proportion of respondents in each of the AUDIT risk categories and also includes comparisons by gender. The results revealed that:

- Male respondents were more than twice as likely as females to consume alcohol in a hazardous or harmful manner.
- Twenty-seven per cent of males compared to 12% of females were identified as hazardous alcohol drinkers, while 13.9% of males used alcohol in a manner that was harmful to their health compared to 6.7% of females.
- Women were more likely than men to abstain from using alcohol altogether and to be low-risk alcohol users.

Although not directly comparable to AUDIT measures, the AIHW found that at-risk patterns of alcohol consumption are more apparent for males than females. In the NDSHS, nearly 40% of males reported risky or high-risk alcohol consumption patterns related to short-term harm compared to 29.6% of females. Approximately three-quarters of males compared to 69.8% of females used alcohol at low-risk levels in terms of risk of long-term harm, while 10.2% males and 9.4% of females consumed alcohol at risky or high-risk levels. Similar patterns of consumption were found for Queenslanders (AIHW 2002b, pp. 6–7).

Figure 3.2: AUDIT risk category by gender



chi^2 test = 33.4; p < .001

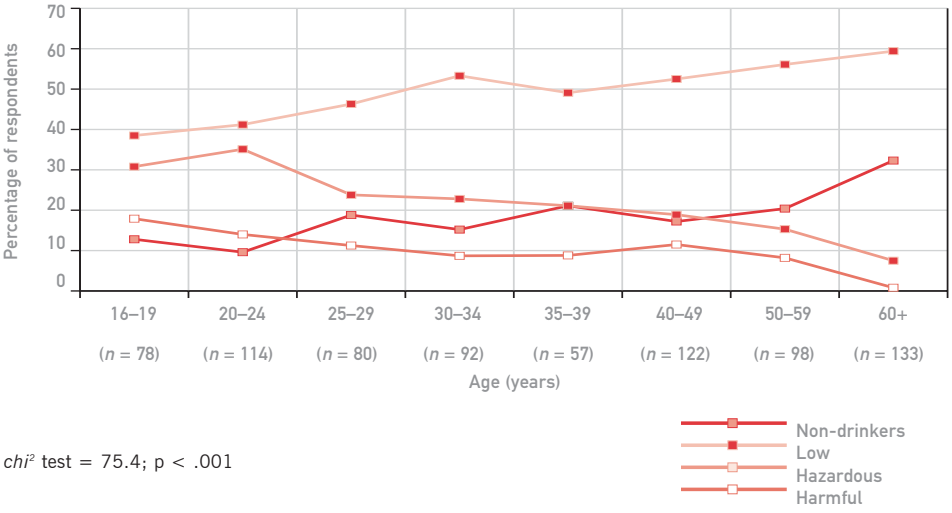
AUDIT measures and age

Although the current study is not longitudinal, an assessment of alcohol use by age based on AUDIT categories provides some indication of how patterns of alcohol consumption may change over the life course. Figure 3.3 shows the AUDIT assessment of drinking behaviour by age. As shown:

- Low-risk drinking behaviour is the most common type of alcohol consumption across all age groups and the likelihood of hazardous or harmful drinking behaviour tends to decrease with age.
- Nearly half of those aged between 16 and 24 years were shown to participate in hazardous or harmful drinking behaviours and respondents aged 16–19 were found to have the highest proportion of harmful drinkers (17.9%). Thus, while those aged between 16 and 19 years reported drinking less regularly than older people (see Table 3.6), they were also shown to drink large quantities of alcohol.
- A second peak of harmful drinking behaviour was evident in the 40–49 age group.

Although not directly comparable to AUDIT measures, the AIHW found that the risk of long-term and short-term harm related to patterns of alcohol consumption generally diminished for those aged 30 years and above. The greatest prevalence of drinking patterns leading to risk of harm in the long term occurred for those aged between 20 and 29 years (4.5%). This age group also had the highest proportion of people reporting patterns of alcohol consumption associated with risk of harm in the short term (60.4%) (AIHW 2003, pp. 13–14).[12]

Figure 3.3: AUDIT risk category by age



chi^2 test = 75.4; p < .001

Summary

The findings in this chapter reveal that among the sample of emergency department respondents:

- the prevalence of licit drug use was higher when compared to levels of use found in the general population
- generally, males were more likely than females to use licit drugs and report higher levels of licit drug use; however, females were more likely than males to report the use of antidepressants in the last month
- older people were generally less likely to use tobacco and alcohol than younger people, but more likely to use licit medications
- the proportion of respondents in the sample that were low-risk, hazardous or harmful users of alcohol, while not directly comparable with other studies, was largely consistent with levels in the general community.

12 See footnote 11 for definitions.

Chapter 4
PREVALENCE OF ILLICIT DRUG USE

This chapter considers patterns of illicit drug use reported by surveyed respondents attending the Gold Coast Hospital Emergency Department during the study period. The chapter reports on the overall lifetime prevalence of illicit drug use (i.e. ever used), the use of illicit drugs within the past 12 months (that is, recent use), and the prevalence of illicit drug use within the past 24 hours and past 6 hours. These latter indicators gauge very recent illicit drug use that may be related directly or indirectly to respondents' reasons for attending a hospital emergency department. Patterns of illicit drug use are explored in relation to various socio-demographic characteristics.[13]

Lifetime prevalence of illicit drug use

Figure 4.1 presents the prevalence of any type of illicit drug ever used by respondents and also includes comparisons by gender, age, marital status and main source of income. As shown:

- Over half of those surveyed (55.3%) reported that they had used an illicit drug at some stage during their life. This result was largely driven by the use of cannabis, which 53.4% of the sample had tried at least once.
- Sixty-one per cent of male respondents compared to 48.6% of female respondents reported that they had used an illicit drug at some time in their life.
- The prevalence of ever using an illicit drug was greatest for those aged between 20 and 24 and decreased for those aged 35 and above. Two-thirds (66.3%) of respondents aged under 20 reported having used an illicit drug. The next age cohort — 20 to 24 years — reported considerably more experience with such use (81.5%). Those aged 60 and over were least likely to have tried illicit drugs (6.5%). The age cohort illicit drug experiences reported here may reflect the changing preferences and availability of illicit drugs over the previous four decades.
- The prevalence of ever using an illicit drug was greatest for those respondents identifying as single (74%). Respondents who were married were slightly less likely to have used illicit drugs (42.1%) than those respondents who were divorced or separated (47.2%).
- The prevalence of ever using an illicit drug did not vary significantly with main source of income. Approximately two-thirds of those respondents whose main source of income in the past month was full-time work, part-time/casual work or unemployment benefits indicated that they had tried illicit drugs. Lower levels of illicit drug use were reported by respondents whose main source of income was classified as 'other' (46.7%) and those who received a disability benefit or aged pension (27.3%).

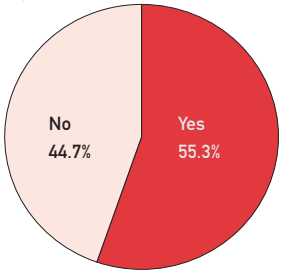
13 Differences in the lifetime prevalence of illicit drug use among respondents across varying levels of household income as well as Indigenous status were not statistically significant.

- The prevalence of ever using illicit drugs did not vary between Indigenous and non-Indigenous respondents. However, the small proportion of Indigenous people in the sample may not represent levels of illicit drug use in the general Indigenous population.

The lifetime prevalence of illicit drug within the PADIE sample is significantly higher than the prevalence rates found in a recent survey of illicit drug use in the Queensland household population conducted by the CMC. This study revealed that just under a third of the

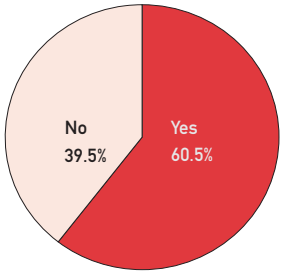
Figure 4.1: Ever used illicit drugs by total sample, gender, age, marital status and main source of income

Ever used any type of illicit drug use (n = 809)

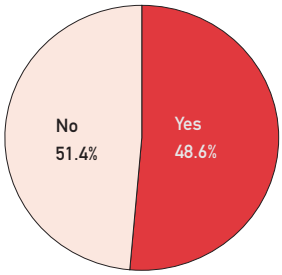


Ever used any type of illicit drug use by gender

MALES (n = 451)

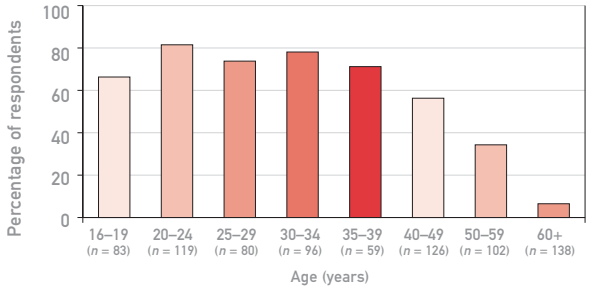


FEMALES (n = 358)



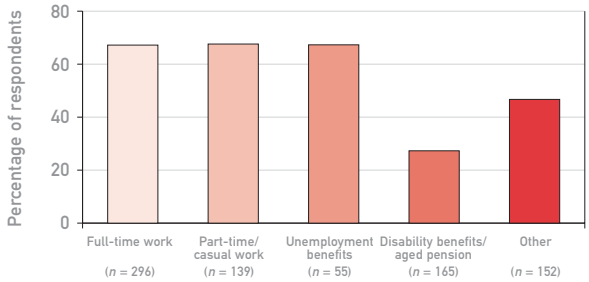
chi^2 test = 11.5; p < .001

Ever used any type of illicit drug use by age



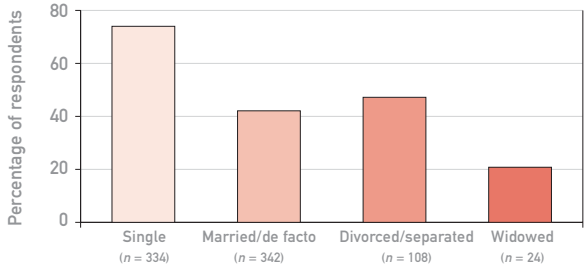
chi^2 test = 225.3; p < .001

Ever used any type of illicit drug use by main source of income*



chi^2 test = 85.7; p < .001

Ever used any type of illicit drug use by marital status†



chi^2 test = 85.5; p < .001

* Respondent sources of income are likely to be highly age-graded. The mean ages for the different main source of income groups are: full-time (34.2); part-time/casual (31.7); unemployed (34.7); disability/aged pension (60.7); and other (39).

† It is well known that marital status is highly correlated with age. The mean ages in years for the different groups are: single (28.4); married/de facto (46.5); divorced/separated (49.6); widowed (65.1)

Queensland population (aged 18 and over) reported ever using an illicit drug (Krenske & Mazerolle, forthcoming). Additionally, in the recent 2001 national household survey of illicit drug use, the lifetime prevalence of illicit drug use for Australians was 37.7% (AIHW 2003) and in Queensland was 33.3% (NDSHS computer files held by CMC 2001).

Demographic characteristics of respondents who report that they have ever used illicit drugs

Demographic characteristics of respondents reporting that they have used an illicit drug at least once in their lifetime are reported in Table 4.1.[14] Of respondents that had ever used an illicit drug:

- Three out five were male, compared to 55.7% of the total sample.
- Only 2% were aged over 60 years, compared to 17.3% of all respondents.
- Just over half were single and nearly one-third were married/de facto, compared to 41.2% and 42.3% respectively of the total sample.
- Forty-five per cent were in full-time employment (compared to 36.6% of all respondents), 21.1% were involved in part-time/casual work (compared to 17.2% of all respondents), and 8.3% were unemployed (compared to 6.9% of all respondents).

Table 4.1: Demographic characteristics of respondents who have ever used illicit drugs

Demographic characteristics	Percentage with respondents who have ever used illicit drugs	Percentage within total sample
Gender*		
Male	61.1	55.7
Female	38.9	44.3
Age*		
16–19	12.4	10.3
20–24	21.9	14.8
25–29	13.3	9.9
30–34	16.9	11.9
35–39	9.5	7.5
40–49	16.0	15.7
50–59	7.9	12.7
More than 60	2.0	17.3
Marital status*		
Single	55.3	41.2
Married/de facto	32.2	42.3
Separated/divorced	11.4	13.5
Widowed	1.1	3.0
Employment*		
Full-time work	44.6	36.6
Part-time/casual	21.1	17.2
Unemployment benefits	8.3	6.9
Aged pension/disability benefits	10.1	20.4
Other	15.9	18.9
(%) Within total sample	**55.3**	
Total number†	**449**	

* = $p < .001$; chi^2 test

† Number may vary slightly between status categories due to missing data.

14 A summary of the demographic characteristics of illicit drug users by alternative definitions of drug-use prevalence (ever, past year, past 24 hours, past 6 hours) is reported in Table 1, p. xi.

Lifetime prevalence of types of illicit drugs used by gender

Table 4.2 provides information on the lifetime prevalence of various illicit drugs used by survey participants. The information is presented separately for males and females to assess sub-group differences in self-reported lifetime use. As shown:

- Cannabis was the most common illicit drug ever used by respondents (53.4%). The use of amphetamines (21%), ecstasy (16.9%), LSD/acid (15.2%), cocaine (9.3%) and heroin (4.9%) followed. Relatively few respondents indicated that they had used GHB/fantasy, ketamine or methadone.
- The lifetime prevalence of illicit drug use across all drug types was significantly higher for males than for females. Male respondents were significantly more likely to use all types of illicit drugs. These differences appeared most salient for amphetamines, LSD/acid, cocaine, heroin, GHB/fantasy, ketamine and methadone.

The overall lifetime prevalence of different drugs used by respondents from the PADIE sample is substantially higher than among respondents in either the Queensland Household Illicit Drug Use Survey (Krenske & Mazerolle, forthcoming) or the 2001 National Drug Strategy Household Survey (AIHW 2003).

The Queensland Household Illicit Drug Use Survey found that 30.8% of respondents had ever used cannabis, 4.6% of Queenslanders had used amphetamines, 3% had used ecstasy, 4.3% had used LSD and 1% had used heroin (Krenske & Mazerolle, forthcoming).[15]

The 2001 NDSHS found that 33.1% of Australians had used cannabis, 8.9% had used amphetamines, 6.1% had used ecstasy, 7.6% had used LSD, 4.4% had used cocaine and 1.6% had used heroin (AIHW 2003, p. 17).[16] It also found that 32.6% of Queenslanders had used cannabis, 8.4% had used amphetamines, 4.6% had used ecstasy, 7.8% had used LSD, 3% had used cocaine and 1.5% had used heroin.[17]

Table 4.2: Lifetime prevalence of illicit drug use by drug type and gender

Drug	GENDER				TOTAL	
	Male		Female			
	(*n*)	%	(*n*)	%	(*n*)	%
Cannabis	263	58.3	169	47.2	432	53.4*
Amphetamines	114	25.3	56	15.6	170	21.0*
Ecstasy	89	19.7	48	13.4	137	16.9*
LSD/acid	99	22.0	24	6.7	123	15.2*
Cocaine	59	13.1	16	4.5	75	9.3*
Heroin	35	7.8	5	1.4	40	4.9*
GHB/fantasy	22	4.9	2	0.6	24	3.0*
Ketamine	20	4.4	4	1.1	24	3.0*
Methadone	18	4.0	2	0.6	20	2.5*
Other	26	5.8	4	1.1	30	3.7*
Any illicit drug	273	60.5	174	48.6	447	55.3*

* = $p < .05$; chi^2 test

15 The Queensland Household Illicit Drug Use Survey (QHIDUS) did not measure the prevalence of cocaine use.

16 Differences in the prevalence of illicit drug use found by the QHIDUS and NDSHS can be explained by variation in regional use across the nation as well as the different methodologies employed by each study. The QHIDUS surveyed persons aged 18 years or over in Queensland households and used CATI (computer-assisted telephone interviewing), while the NDSHS surveyed persons aged 14 years or over in Australian households and used both CATI and self-completion interviewing strategies. The QHIDUS collected data in 2002 and the NDSHS collected data in 2001.

17 Information for Queensland is drawn from the NDSHS data files held by the CMC.

Lifetime prevalence of types of illicit drugs used by age

The lifetime prevalence of illicit drug use across different age groups is reported in Table 4.3. Not surprisingly, the results illustrate important age-related differences in the use of illicit drugs. In particular:

- Respondents aged between 20 and 24 years report the highest lifetime prevalence of any illicit drug use. Respondents in this age group report the highest use of cannabis (78.2%), amphetamines (43.7%), which is virtually identical to the prevalence among 25–29 year olds, ecstasy (39.5%) and ketamine (7.6%).
- Those aged 25 to 29 years report the highest lifetime prevalence of amphetamines (43.8%), LSD/acid (35.0%), cocaine (26.3%), heroin (12.5%), GHB/fantasy (8.8%) and methadone (8.8%).
- Cannabis is the most commonly used illicit drug for all age groups. Approximately three-quarters of those aged between 20 and 34 years reported cannabis use and more than half of those aged between 40 and 49 years reported that they had used cannabis at least once. Only 6.5% of those aged 60 and over reported that they had ever consumed cannabis.
- While amphetamine use was generally more prevalent than ecstasy use across the different age groups, among 16–19 year olds a higher proportion indicated that they had tried ecstasy (30.1%) compared to amphetamines (22.9%).

The results presented in Table 4.3 show lifetime prevalence of use and illustrate ascendant drug-use patterns or cohort effects across time. The recent increase in amphetamine and ecstasy use is evident, for example, among respondents in the 35–39 and 40–49 age groups. The cumulative effect of higher rates of amphetamine and ecstasy use in younger age cohorts may have significant impact on the patterns of illicit drug use in the future. Additionally, it is of interest to note the higher than expected lifetime prevalence of LSD/acid among respondents aged 50–59 as well as the absence of the use of ketamine as a recreational drug for those aged 40 and over.

Table 4.3: Lifetime prevalence of illicit drug use by drug type and age

	AGE (YEARS)																TOTAL	
Drug	16–19		20–24		25–29		30–34		35–39		40–49		50–59		> 60			
	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%
Cannabis	52	62.7	93	78.2	57	71.3	74	77.1	40	67.8	70	55.6	33	32.4	9	6.5	428	53.3*
Amphetamines	19	22.9	52	43.7	35	43.8	27	28.1	14	23.7	15	11.9	5	4.9	1	0.7	168	20.9*
Ecstasy	25	30.1	47	39.5	25	31.3	21	21.9	12	20.3	5	4.0	1	1.0	–	–	136	16.9*
LSD/acid	10	12.0	30	25.2	28	35.0	19	19.8	9	15.3	13	10.3	13	12.7	1	0.7	123	15.3*
Cocaine	4	4.8	21	17.6	21	26.3	13	13.5	9	15.3	4	3.2	2	2.0	1	0.7	75	9.3*
Heroin	1	1.2	10	8.4	10	12.5	6	6.3	6	10.2	4	3.2	3	2.9	–	–	40	5.0*
Ketamine	3	3.6	9	7.6	6	7.5	4	4.2	2	3.4	–	–	–	–	–	–	24	3.0*
GHB/fantasy	2	2.4	8	6.7	7	8.8	2	2.1	3	5.1	2	1.6	–	–	–	–	24	3.0*
Methadone	1	1.2	1	0.8	7	8.8	2	2.1	3	5.1	3	2.4	2	2.0	1	0.7	20	2.5
Other	5	6.0	6	5.0	7	8.8	3	3.1	–	–	6	4.8	3	2.9	–	–	30	3.7
Any illicit drug	55	66.3	97	81.5	59	73.8	75	78.1	42	71.2	71	56.3	35	34.3	9	6.5	443	55.2*

* = $p < .001$; chi^2 test

Illicit drug use within the past 12 months (annual prevalence)

Questions assessing the prevalence of illicit drug use over the past 12 months, as well as the type of illicit drugs used by respondents, were also included in the survey.[18] Figure 4.2 (p. 22) presents information on the annual prevalence of illicit drug use for the total sample as well as for groups differentiated by gender, age, marital status and main source of income.[19] The findings reveal that:

- Nearly 30% of all respondents, and just over half (51.5%) of respondents who self-identified as having ever used an illicit drug, in the study population reported that they had used an illicit drug in the past 12 months. This compares with 16.9% of the general population in the NDSHS (AIHW 2003, p. 19). Once again this finding was largely driven by the prevalence of cannabis use.
- Thirty-five per cent of male respondents compared to 20.4% of female respondents reported that they had used an illicit drug in the past 12 months.
- The prevalence of illicit drug use within the past 12 months generally declined with age. Just over half (50.6%) of those aged between 16 and 24 years had used an illicit drug in the past 12 months, compared to 41.7% of those aged between 30 and 34 years, 20.6% of those aged 40 to 49 years and 1.4% of those aged 60 and over.
- Survey respondents who were single were significantly more likely to report the use of illicit drugs in the past 12 months in comparison to respondents who were married, divorced, separated or widowed. While nearly half (48%) of single respondents indicated that they had used an illicit drug in the previous year, only 15.8% of those who were married or in a de facto relationship and 13.9% of divorced or separated respondents stated that they had used in this period.
- Although the prevalence of illicit drug use in the past 12 months did not vary significantly with employment status of respondents, part-time and unemployed workers appeared to be slightly more likely to report recent illicit drug use than were full-time workers. The proportion of full-time, part-time and unemployed workers reporting illicit drug use within the past 12 months was 34%, 39.6% and 38.2% respectively. Only 12.1% of respondents on disability or aged pension benefits indicated that they had used within the previous year.

Demographic characteristics of respondents who have used illicit drugs in the past 12 months

Table 4.4 (p. 23) reveals demographic characteristics of respondents reporting that they have used an illicit drug in the past 12 months. Of these:

- Nearly 70% were male, compared to 55.7% of the total sample.
- Just over a quarter were aged between 20 and 24 years, compared to 14.8% of all respondents and less than 1% were aged 60 years or over, compared to 17.3% of the total sample.
- More than two-thirds were single and 23.6% were married/de facto, compared to 41.2% and 42.3% respectively of the total sample.
- Nearly 44% were in full-time employment, approximately one-quarter were involved in part-time/casual work and 9.2% were unemployed, compared to 36.6%, 17.2% and 6.9% respectively of all respondents.

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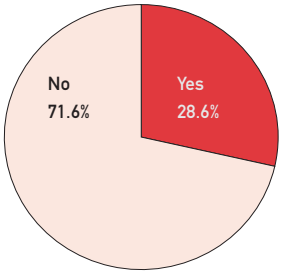
18 Illicit drug use within the past 12 months also includes more recent use reported in the past 24 and 6 hours.

19 Differences in the annual prevalence of illicit drug use among respondents across varying levels of household income as well as Indigenous status were not statistically significant.

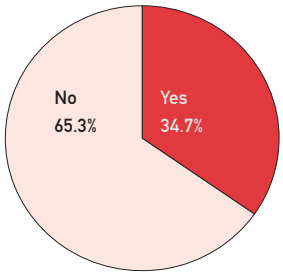
Figure 4.2: Illicit drug use in the past 12 months by total sample, gender, age, marital status and main source of income

Illicit drug use in the last 12 months (n = 807)

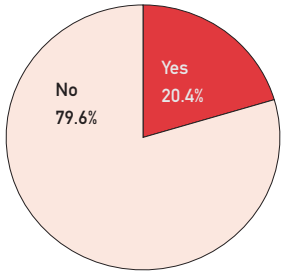


Illicit drug use in the last 12 months by gender

MALES (n = 449)

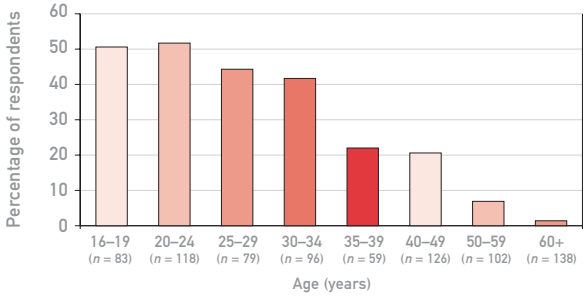


FEMALES (n = 358)



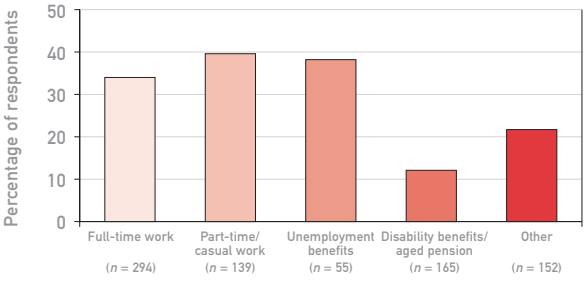
chi^2 test = 11.5; p < .001

Illicit drug use in the last 12 months by age



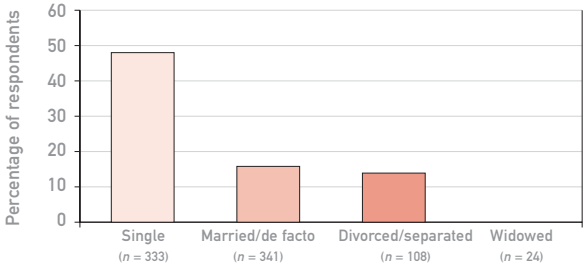
chi^2 test = 147.8, p <.001

Illicit drug use in the last 12 months by main source of income



chi^2 test = 40.5, p < .001

Illicit drug use in the last 12 months by marital status



chi^2 test = 110.4; p < .001

Table 4.4: Demographic characteristics of respondents who have used illicit drugs in the past 12 months

Demographic characteristics	Percentage within respondents who have used illicit drugs within the last 12 months	Percentage within total sample
Gender*		
Male	68.1	55.7
Female	31.9	44.3
Age*		
16–19	18.6	10.3
20–24	27.0	14.8
25–29	15.5	9.9
30–34	17.7	11.9
35–39	5.8	7.5
40–49	11.5	15.7
50–59	3.1	12.7
More than 60	0.9	17.3
Marital status*		
Single	69.9	41.2
Married/de facto	23.6	42.3
Separated/divorced	6.5	13.5
Widowed	0.0	3.0
Employment*		
Full-time work	43.7	36.6
Part-time/casual	24.0	17.2
Unemployment benefits	9.2	6.9
Aged pension/disability benefits	8.7	20.4
Other	14.4	18.9
(%) Within total sample	**28.4**	
Total number†	**231**	

* = $p < .001$; chi^2 test

† Number may vary slightly between status categories due to missing data.

Types of illicit drugs used in the past 12 months by gender

Information on different types of illicit drugs used in the past 12 months by survey participants including comparisons by gender is reported in Table 4.5 (next page). The results reveal:

- The five most common illicit drugs used in the past 12 months were cannabis (26%), amphetamines (9.8%), ecstasy (8.5%), cocaine (3.3%) and LSD/acid (2%). Relatively few respondents reported using ketamine, heroin, GHB/fantasy or methadone in the past 12 months. These rates of recent illicit drug use are two to three times higher than those reported for the general population.
- Although nearly 5% of those surveyed reported ever using heroin, only 1.1% indicated that they had used this drug within the past 12 months.
- Significant gender differences in the use of different illicit drugs in the past 12 months were evident. Male respondents were nearly twice as likely as female respondents to report using amphetamines (12.2% compared to 6.7%) and ecstasy (10.7% compared to 5.9%) during the past 12 months. Males were also more likely than females to report using cannabis, cocaine, ketamine, heroin and methadone in the past 12 months.

The prevalence of illicit drug use within the past 12 months observed in the PADIE sample is substantially higher than that reported in both the QHIDUS and the 2001 NDSHS.

The QHIDUS found that 7.1% of Queenslanders had used cannabis and 0.1% had used heroin within the past 12 months (Krenske & Mazerolle, forthcoming), while the NDSHS found that 12.7% of Queenslanders had used cannabis, 2.9% had used amphetamines, 1.7% had used ecstasy, 0.8% had used hallucinogens, 0.7% had used cocaine and 0.2% had used heroin within the past 12 months (AIHW 2002b, p. 8).

These results can also be compared with the NDSHS findings that show that 12.9% of Australians had used cannabis, 3.4% had used amphetamines, 2.9% had used ecstasy, 1.1% had used hallucinogens, 1.3% had used cocaine and 0.2% had used heroin within the past 12 months (AIHW 2003).[20]

Overall, cannabis appears to be the primary drug of choice among respondents who reported that they had used illicit drugs in the past 12 months, followed by amphetamines and ecstasy.

Table 4.5: Illicit drug use in the past 12 months by drug type and gender

	GENDER				TOTAL	
Drug	Male		Female			
	(*n*)	%	(*n*)	%	(*n*)	%
Cannabis	146	32.4	64	17.9	210	26.0*
Amphetamines	55	12.2	24	6.7	79	9.8*
Ecstasy	48	10.7	21	5.9	69	8.5*
Cocaine	22	4.9	5	1.4	27	3.3*
LSD/acid	12	2.7	4	1.1	16	2.0
Ketamine	11	2.4	1	0.3	12	1.5*
Heroin	9	2.0	–	–	9	1.1*
GHB/fantasy	7	1.6	2	0.6	9	1.1
Methadone	7	1.6	–	–	7	0.9*
Other	4	0.9	2	0.6	6	0.7
Any illicit drug	156	34.7	73	20.4	229	28.4*

* = $p < .05$; Fisher's exact test, 2-sided

Types of illicit drugs used in the past 12 months by age

As with the comparison for lifetime illicit drug use, there were significant age-related differences in the prevalence of past-year drug use as well as important differences in the types of drug used across different age groups. Table 4.6 reveals the prevalence of illicit drug use within the past 12 months across different age groups. As shown:

- Approximately half of respondents aged between 16 and 24 reported using an illicit drug over the past 12 months. The past-year prevalence of any illicit drug use for this age group was nearly twice that of the total sample prevalence (28.2%).
- Cannabis was the most commonly used illicit drug within the past 12 months across the different age groups — approximately 45% of those aged between 16 and 29 years indicated that they had used cannabis within the previous year.
- Respondents aged between 20 and 24 years reported the highest past-year prevalence of amphetamines (24.4%), ecstasy (25.2%) and cocaine use (8.5%), while respondents aged 25 to 29 years had the highest reported use of ketamine (5.1%).
- The use of LSD/acid, GHB/fantasy and heroin within the past 12 months was rarely reported by respondents aged 35 and over, and the use of ketamine and methadone during the previous year was not reported for respondents aged 40 and over.
- Cannabis was the only illicit drug used in the past 12 months by those aged 60 and over (1.4%).

20 See footnote 16.

Table 4.6: Illicit drug use in the past 12 months by drug type and age

Drug	AGE (YEARS) 16–19		20–24		25–29		30–34		35–39		40–49		50–59		> 60		TOTAL	
	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%
Cannabis	38	45.8	54	45.4	35	43.8	36	37.5	11	18.6	24	19.0	7	6.9	2	1.4	207	25.8*
Amphetamines	15	18.1	29	24.4	16	20.3	10	10.4	14	5.1	5	4.0	1	–	–	–	79	9.9*
Ecstasy	18	21.7	30	25.2	9	11.4	8	8.3	12	3.4	2	1.6	–	1.0	–	–	69	8.6*
Cocaine	3	3.6	10	8.5	5	6.3	5	5.2	3	5.1	1	0.8	–	–	–	–	27	3.4*
LSD/acid	6	7.2	4	3.4	4	5.1	2.1	2.1	–	–	–	–	–	–	–	–	16	2.0*
Ketamine	3	3.6	3	2.5	4	5.1	1	1.0	1	1.7	–	–	–	–	–	–	12	1.5*
GHB/fantasy	2	2.4	3	2.5	3	3.8	–	–	–	–	1	0.8	–	–	–	–	9	1.1*
Heroin	–	–	4	3.4	2	2.5	1	1.0	–	–	4	3.2	1	–	–	–	9	1.1
Methadone	–	–	1	0.8	2	2.5	2	2.1	2	3.4	3	2.4	–	1.1	–	–	7	0.9
Other	1	1.2	1	0.8	2	2.5	–	–	1	1.7	6	4.8	–	–	–	–	6	0.7*
Any illicit drug	42	50.6	61	51.7	35	44.3	40	41.7	13	22.0	26	20.6	7	6.9	2	1.4	226	28.2*

* = p < .05, chi^2 test

Illicit drug use in the past 24 hours[21]

Information on recent drug use was also collected in the survey. The results reported in this section show the prevalence of illicit drug use over the 24-hour period prior to the time of the survey.[22]

Figure 4.3 (next page) provides information on the prevalence of illicit drug use within the past 24 hours as reported by respondents. Comparisons by gender, age, marital status and main source of income are also provided.[23] As shown:

- Just over 8% of all respondents (or 14.6% of those who had ever used an illicit drug) reported that they had used an illicit drug within the past 24 hours. The most likely used illicit substance was cannabis — 6.6% of respondents stated that they had used cannabis within the past 24 hours.
- Male respondents (11.8%) were significantly more likely to have consumed an illicit drug in the previous 24 hours than were female respondents (3.4%).
- The prevalence of illicit drug use within the past 24 hours was highest for respondents aged between 16 and 24 (15.7%), 20 and 24 (12.7%) and 25–29 (13.9%) years. Only 0.7% of respondents aged over 60 reported the use of an illicit drug within the past 24 hours.
- Respondents who were single (14.1%) were significantly more likely to report the use of an illicit drug within the previous 24 hours than those respondents who were involved in relationships or widowed. However, divorced or separated respondents (5.6%) were slightly more likely than married or de facto respondents (3.5%) to report illicit drug use within the past 24 hours.
- A relationship between main source of income and the use of illicit substances in the past 24 hours was not observed. However, slightly more respondents who were unemployed (10.9%) or involved in part-time/casual work (10.8%) reported the use of illicit drugs in the past 24 hours than respondents who were employed full-time (7.8%) or on a disability or aged pension (6.7%).

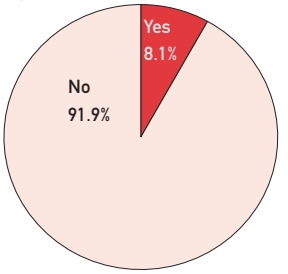
21 Caution should be exercised when interpreting these data due to small cell sizes.

22 Illicit drug use in past 24 hours includes use in past 24 hours and 6 hours.

23 Differences in the prevalence of illicit drug use among respondents across varying levels of household income as well as Indigenous status were not statistically significant.

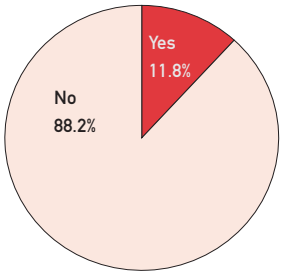
Figure 4.3: Illicit drug use in the past 24 hours by total sample, gender, age, marital status and main source of income

Illicit drug use in the last 24 hours (n = 807)

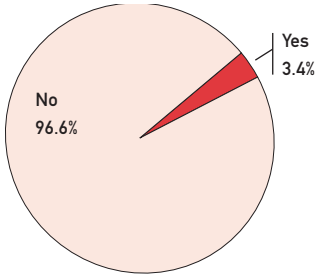


Illicit drug use in the last 24 hours by gender

MALES (n = 449)

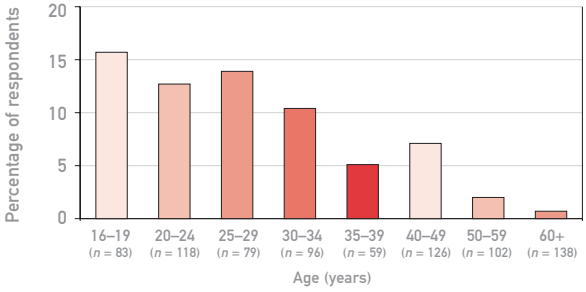


FEMALES (n = 358)



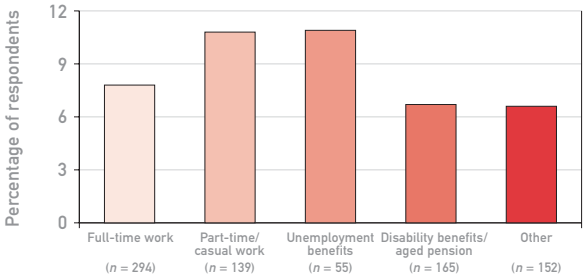
chi^2 test = 19.2; p < .001

Illicit drug use in the last 24 hours by age



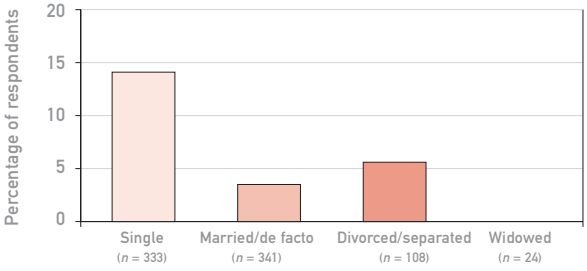
chi^2 test = 30.5, p < .001

Illicit drug use in the last 24 hours by main source of income



chi^2 test = 2.90, p = .574

Illicit drug use in the last 24 hours by marital status



chi^2 test = 29.0, p < .001

Demographic characteristics of respondents who have used illicit drugs in the past 24 hours

Table 4.7 reveals information on the demographic characteristics of respondents reporting that they had used an illicit drug in the past 24 hours. Of respondents reporting that they had used an illicit drug during the previous 24-hour period:

- Four out of five were male, compared to 55.7% of the total sample.
- One in five were aged between 16 and 19 years, compared to 10.3% of the total sample, and approximately one-quarter were aged between 20 and 24 years, compared to 14.8% of all respondents.
- Nearly three-quarters were single and 18.5% were married/de facto, compared to 41.2% and 42.3% respectively of the total sample.
- Just over 23% were involved in part-time/casual work and 9.2% were unemployed, compared to 17.2% and 6.9% respectively of all respondents.

Table 4.7: Demographic characteristics of respondents who have used illicit drugs in the past 24 hours

Demographic characteristics	Percentage within respondents who have used illicit drugs within the last 24 hours	Percentage within total sample
Gender*		
Male	81.5	55.7
Female	18.5	44.3
Age*		
16–19	20.3	10.3
20–24	23.4	14.8
25–29	17.2	9.9
30–34	15.6	11.9
35–39	4.7	7.5
40–49	14.1	15.7
50–59	3.1	12.7
More than 60	1.6	17.3
Marital status*		
Single	72.3	41.2
Married/de facto	18.5	42.3
Separated/divorced	9.2	13.5
Widowed	–	3.0
Employment		
Full-time work	35.4	36.6
Part-time/casual	23.1	17.2
Unemployment benefits	9.2	6.9
Aged pension/disability benefits	16.9	20.4
Other	15.4	18.9
(%) Within total sample	**8.1**	
Total number†	**66**	

* = $p < .001$; chi^2 test

† Number may vary slightly between status categories due to missing data.

Types of illicit drugs used in the past 24 hours by gender

Information on the different types of illicit drugs used in the past 24 hours by survey respondents with comparisons by gender is reported in Table 4.8. As shown:

- The overall prevalence of illicit drug use within the past 24 hours was relatively low. Cannabis (6.6%) was the most prevalent illicit drug consumed within the past 24 hours, followed by amphetamines (1.4%), ecstasy (1.0%), heroin (0.4%) and methadone (0.2%).
- Gender differences in the use of different illicit drugs in the past 24 hours were evident. Male respondents were five times more likely than female respondents to report using cannabis (10.2% compared to 2%) and nearly four times more likely to have used amphetamines (2% compared to 0.6%) during the past 24 hours.
- The proportion of recent (used in the past 12 months) heroin (33.3%), methadone (28.6%) and cannabis (25.2%) users reporting that they had used heroin, methadone or cannabis within the past 24 hours was higher than the proportion of other recent illicit drug users reporting the use of their corresponding drugs in the previous day; this included recent amphetamine (13.9%) and ecstasy (11.6%) users.
- No respondents reported the use of cocaine or GHB/fantasy within the past 24 hours. The use of ketamine and LSD/acid was reported by only one respondent for each illicit drug.

Table 4.8: Illicit drug use in the past 24 hours by drug group and gender

Drug	GENDER				TOTAL	
	Male		Female			
	(*n*)	%	(*n*)	%	(*n*)	%
Cannabis	46	10.2	7	2.0	53	6.6*
Amphetamines	9	2.0	2	0.6	11	1.4
Ecstasy	5	1.1	3	0.8	8	1.0
Heroin	3	0.7	–	–	3	0.4
Methadone	2	0.4	–	–	2	0.2
Ketamine	1	0.2	–	–	1	0.1
LSD/acid	1	0.2	–	–	1	0.1
Cocaine	–	–	–	–	–	–
GHB/fantasy	–	–	–	–	–	–
Other	1	0.2	–	–	1	0.1
Any illicit drug	53	11.8	12	3.4	65	8.1*

* = $p < .05$; Fisher's exact test, 2-sided

Types of illicit drugs used in the past 24 hours by age

Table 4.9 reveals information on the prevalence of illicit drug use within the past 24 hours by age. As shown:

- Cannabis was the most common illicit drug used within the past 24 hours across the different age groups. The use of this drug within the past 24 hours was most prevalent for those aged between 25 and 29 years (15%) and at least 8% of those aged between 16 and 34 years indicated that they had used within the past 24 hours.
- Respondents aged between 16 and 19 years were more than twice as likely to report the use of ecstasy (6%) rather than amphetamines (2.4%) in the past 24 hours and were the age group most likely to have used ecstasy in the past 24 hours compared to other age groups.
- The use of amphetamines, ecstasy, heroin and methadone within the past 24 hours was relatively low compared with annual prevalence and was rare for respondents aged 30 and above.

Table 4.9: Illicit drug use in the past 24 hours by drug type and age

Drug	AGE (years) 16–19		20–24		25–29		30–34		35–39		40–49		50–59		> 60		Total	
	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%
Cannabis	7	8.4	13	10.9	12	15.0	8	8.3	2	3.4	7	5.6	2	2.0	1	0.7	52	6.5*
Amphetamines	2	2.4	3	2.5	3	3.8	1	1.0	1	1.7	1	0.8	–	–	–	–	11	1.4
Ecstasy	5	6.0	1	0.8	1	1.3	1	1.0	–	–	–	–	–	–	–	–	8	1.0*
Heroin	–	–	1	0.8	–	–	1	1.0	–	–	1	0.8	–	–	–	–	3	0.4
Methadone	–	–	–	–	1	1.3	–	–	1	1.7	–	–	–	–	–	–	2	0.2
Ketamine	1	1.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	0.1
LSD/acid	1	1.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	0.1
Cocaine	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
GHB/fantasy	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other	–	–	–	–	–	–	–	–	–	–	1	0.8	–	–	–	–	1	0.1
Any illicit drug	13	15.7	15	12.7	11	13.9	10	10.4	3	5.1	9	7.1	2	2.0	1	0.7	64	8.0

* = p < .001; chi^2 test

Illicit drug use in the past 6 hours[24]

The results provided in this section include information on the prevalence of illicit drug use occurring within the past 6 hours as reported by survey respondents. The use of an illicit drug six hours prior to the survey being administered may have been a factor in the respondent's visit to the emergency department. Drug use over the previous 6 hours may also imply some level of intoxication.

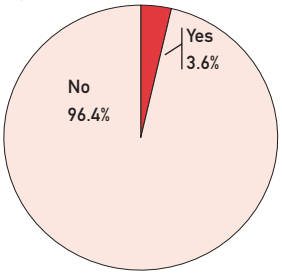
Figure 4.4 (p. 30) presents the prevalence of any type of illicit drug use within the past 6 hours. The information is also examined by gender, age, marital status and main source of income.

- Approximately 4% of respondents surveyed (or 6.5% of those who had ever used an illicit drug) reported using an illicit drug in the past 6 hours.
- Male respondents (5.1%) were considerably more likely than female respondents (1.7%) to indicate that they had used an illicit drug in the 6 hours prior to the survey.
- The prevalence of illicit drug use within the past 6 hours decreased with age. More than 8% of respondents aged between 16 and19 years reported using an illicit drug in the previous 6 hours, compared to 6.3% of those aged 25–29, 3.4% of those aged 35–39 and 1% of those aged 50–59. No respondents aged 60 or over reported the use an illicit drug within the past 6 hours.
- The likelihood of using illicit drugs in the past 6 hours was greatest for single respondents (7.2%), and respondents who were separated or divorced (1.9%) were more likely to report using illicit substances in the past 6 hours than married/de facto respondents (0.9%).
- A relationship between main source of income and the use of illicit drugs in the past 6 hours was not observed. However, slightly more respondents who were employed on a part-time/casual basis (5.8%) reported using illicit substances in the past 6 hours than those unemployed (3.6%), employed full-time (3.1%) or on a disability or aged pension (3%)

24 Caution should be used when interpreting these figures due to small cell sizes.

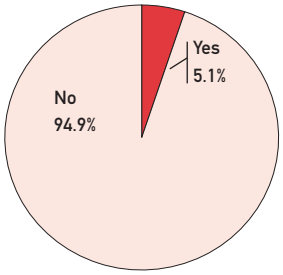
Figure 4.4: Illicit drug use in the past 6 hours by total sample, gender, age, marital status and main source of income

Illicit drug use in the last 6 hours (*n* = 807)

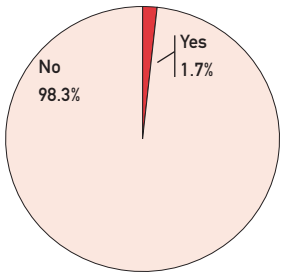


Illicit drug use in the last 6 hours by gender

MALES (*n* = 449)

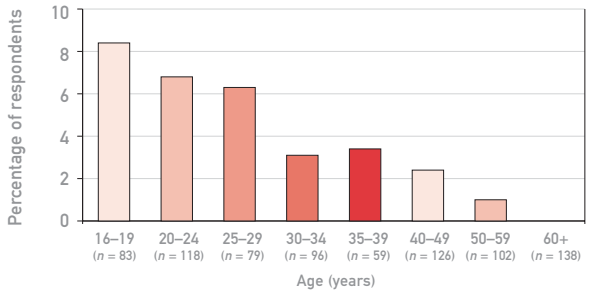


FEMALES (*n* = 358)



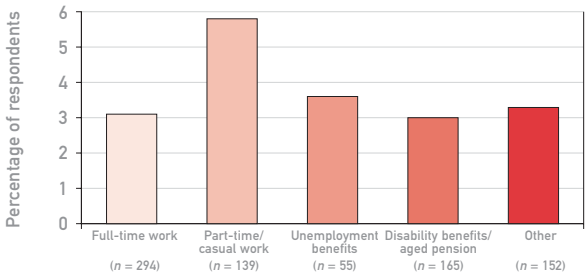
*chi*² test; 6.8, p < .01

Illicit drug use in the last 6 hours by age



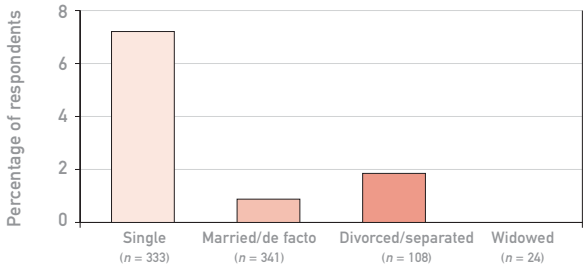
*chi*² test, 18.4; p = .01

Illicit drug use in the last six hours by main source of income



*chi*² test, 2.30; p = .68

Illicit drug use in the last 6 hours by marital status



*chi*² test; 21.6; p < .001

Demographic characteristics of respondents who have used illicit drugs in the past 6 hours

Table 4.10 reveals information on the demographic characteristics of respondents reporting that they have used an illicit drug in the past six-hour period. Of respondents that had used an illicit drug within the previous 6 hours:

- Four out of five were male, compared to 55.7% of the total sample.
- Nearly a quarter were aged between 16 and 19, compared to 10.3% of all respondents; just over a quarter were aged between 20 and 24 years, compared to 14.8% of all respondents; and none was aged 60 years or over, compared to 17.3% of the total sample.
- Approximately four out of five were single and 10.3% were married/de facto, compared to 41.2% and 42.3% respectively of the total sample.
- Over a quarter were involved in part-time/casual work, compared to 17.2% of all respondents.

Table 4.10: Demographic characteristics of respondents who have used illicit drugs in the past 6 hours

Demographic characteristics	Percentage within respondents who have used illicit drugs within the last 6 hours	Percentage within total sample
Gender*		
Male	79.3	55.7
Female	20.7	44.3
Age*		
16–19	24.1	10.3
20–24	27.6	14.8
25–29	17.2	9.9
30–34	10.3	11.9
35–39	6.9	7.5
40–49	10.3	15.7
50–59	3.4	12.7
More than 60	0.0	17.3
Marital status*		
Single	82.8	41.2
Married/de facto	10.3	42.3
Separated/divorced	6.9	13.5
Widowed	0.0	3.0
Employment		
Full-time work	31.0	36.6
Part-time/casual	27.6	17.2
Unemployment benefits	6.9	6.9
Aged pension/disability benefits	17.2	20.4
Other	17.2	18.9
(%) Within total sample	**3.6**	
Total number†	**29**	

* = $p < .01$; chi^2 test

† Number may vary slightly between status categories due to missing data.

Types of illicit drugs used in the past 6 hours by gender

Information on the types of illicit drugs used in the past 6 hours with comparisons by gender are reported in Table 4.11. As shown:

- The prevalence of illicit drug use within the past 6 hours was relatively low. The illicit drugs used within the previous six hours were cannabis (3.5%), amphetamines (1.3%), ecstasy (0.9%), methadone (0.2%) and 'other' (0.2%).
- For all types of illicit drugs, male respondents were more likely than female respondents to report that they had used in the past 6 hours, although this result was only statistically significant for cannabis.

Table 4.11: Illicit drug use in the past 6 hours by drug type and gender

Drug	GENDER				TOTAL	
	Male		Female			
	(*n*)	%	(*n*)	%	(*n*)	%
Cannabis	16	3.5	2	0.6	18	2.2*
Amphetamines	6	1.3	2	0.6	8	1.0
Ecstasy	4	0.9	2	0.6	6	0.7
Methadone	1	0.2	–	–	1	0.1
Cocaine	–	–	–	–	–	–
GHB/fantasy	–	–	–	–	–	–
Heroin	–	–	–	–	–	–
Ketamine	–	–	–	–	–	–
LSD/acid	–	–	–	–	–	–
Other	1	0.2	–	–	1	0.1
Any illicit drug	23	5.1	6	1.7	29	3.6*

* = $p < .05$; Fisher's exact test, 2-sided

Types of illicit drugs used in the past 6 hours by age

Table 4.12 includes information on the prevalence of illicit drug use within the past 6 hours by age.[25] As shown:

- The use of cannabis within the past 6 hours was most prevalent for those aged 20–24 (5.9%) and 25–29 (5.0%) years.
- Amphetamine use within the past 6 hours was greatest for those aged between 25 and 29 years (3.8%); ecstasy use within the previous 6 hours was most prevalent for respondents aged between 16 and 19 (3.6%).
- A relatively large proportion of overall illicit drug use within the past 6 hours reported by those aged 16–19 involved amphetamine and ecstasy use.
- Only one respondent reported the use of methadone within the previous 6 hours and this person was aged in the 35–39 year age group.

25 Caution should be used when interpreting these results as illicit drug use in the past 6 hours and age comparisons cannot be conducted due to the small sample size.

Table 4.12: Illicit drug use in the past 6 hours by drug type and age

Drug	AGE (years) 16–19		20–24		25–29		30–34		35–39		40–49		50–59		> 60		Total	
	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%
Cannabis	2	2.4	7	5.9	4	5.0	2	2.1	1	1.7	1	0.8	1	1.0	–	–	18	2.2*
Amphetamines	2	2.4	1	0.8	3	3.8	1	1.0	–	–	1	0.8	–	–	–	–	8	1.0
Ecstasy	3	3.6	1	0.8	1	1.3	1	1.0	–	–	–	–	–	–	–	–	6	0.7
Methadone	–	–	–	–	–	–	–	–	1	1.7	–	–	–	–	–	–	1	0.1
Cocaine	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
GHB/fantasy	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Heroin	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ketamine	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
LSD/acid	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other	–	–	–	–	–	–	–	–	–	–	1	0.8	–	–	–	–	1	0.1
Any illicit drug	7	8.4	8	6.8	5	6.3	3	3.1	2	3.4	3	2.4	1	1.0	–	–	29	3.6

* = $p < .05$, chi^2 test

Summary

The findings in this chapter reveal that among the sample of emergency department respondents:

- the prevalence of illicit drug use was higher when compared to levels of use found in the general population
- drug-use prevalence varies as a function of recency of use; for example, approximately 55% of respondents reported ever using an illicit substance, 28.4% reported using in the past 12 months, 8.1% reported using in the past 24 hours and 3.6% reported using in the past 6 hours
- cannabis was the most common illicit drug used among respondents across all prevalence assessment periods
- male respondents were more likely than female respondents to report using illicit drugs.

Chapter 5

DIMENSIONS OF ILLICIT DRUG USE

Individual patterns of illicit drug use can vary along several dimensions, including the age of initiation, the frequency of use and whether individuals inject certain drugs. Information on these various aspects of illicit drug use is included in this chapter.

Frequency of illicit drug use

The risks associated with illicit drug use vary as a function of the type of illicit drug used and the frequency with which it is consumed. Information on the frequency of illicit drug use by drug type for respondents who had used each drug in the past 12 months (also referred to as recent users) is reported in Table 5.1. As shown:

- Methadone was the drug most likely to be used on a daily basis. Just over 83% of respondents who had used this drug in the past 12 months reported using it 'about once a day'. Given that methadone is the most common prescription drug therapy for opiate dependence, this pattern of use is not unexpected.
- A substantial proportion of recent heroin (37.5%) and cannabis (31.2%) users also reported that they used these drugs on a daily basis. In contrast, only 4% of recent amphetamine users indicated that they used daily.
- Just over a third of recent cannabis (35.6%), amphetamine (38.0%) and ecstasy (38.3%) users reported that they used these drugs a few times a month, while more than half of recent users of amphetamines (57.7%) and ecstasy (61.7%) indicated that they used only a few times a year.
- Recent LSD/acid, ketamine, cocaine and GHB/fantasy users generally reported that they had only used these drugs a few times within the past year.

Table 5.1: Frequency of drug use for respondents who have used drugs in the past 12 months

Drug	FREQUENCY OF USE						TOTAL	
	About once a day		Few times a month		Few times a year			
	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%
Methadone	5	83.3	–	–	1	16.7	6	0.7
Heroin	3	37.5	2	25.0	3	37.5	8	1.0
Cannabis	63	31.2	72	35.6	67	33.2	202	25.3
Amphetamines	3	4.2	27	38.0	41	57.7	71	8.9
Ecstasy	–	–	23	38.3	37	61.7	60	7.5
LSD/acid	–	–	3	21.4	11	78.6	14	1.8
Ketamine	–	–	2	18.2	9	81.8	11	1.3
Cocaine	–	–	2	8.3	22	91.7	24	2.9
GHB/fantasy	–	–	–	–	6	100.0	6	0.7
Other	3	60.0	–	–	2	40.0	5	0.6
Any illicit drug	68	31.2	74	33.9	76	34.9	218	27.2

Injecting illicit drugs

The results in this section examine the illicit drug-injecting practices of respondents as a function of gender and age. Injecting illicit drugs is associated with greater risks of developing problematic or dependent drug use, as well as increases in injection-related harms, including poor vein care and the transmission of blood-borne viruses.

Types of illicit drugs ever injected by type of illicit drug used in the past 12 months by gender

Information on the proportion of respondents indicating they had ever injected illicit drugs by drug type used in the past 12 months is reported in Table 5.2. Comparisons by gender are also included. As shown:

- Just under 5% of respondents who have used an illicit drug in the past 12 months reported that they had injected at least once in their lifetime.
- The four most common illicit drugs ever injected by recent illicit drug users in descending order were amphetamines (4.5%), heroin (2.4%), ecstasy (1.2%) and cocaine (1.1%).
- Male respondents who had recently used illicit drugs were more likely to report ever injecting illicit drugs than were female recent illicit drug users. Just over 6% of male respondents reported that they had injected amphetamines compared to 2.2% of female respondents, 4% of males had injected heroin compared to 0.3% of females and 2% of males reported injecting ecstasy compared to 0.3% of females.

Although the injection of amphetamines was more prevalent than the injection of heroin within the study population, recent heroin users were more likely to have ever injected their drug than were recent amphetamine users. Approximately two-thirds (66.7%) of recent heroin users compared to 34.2% of recent amphetamine users indicated that they had ever injected these illicit drugs. The proportion of recent ecstasy users (11.8%) and recent cocaine users (11.1%) indicating that they had ever injected these drugs was smaller.

Table 5.2: Ever injected by drug type used in the past 12 months and gender

Drug	Male		Female		Total	
	(*n*)	%	(*n*)	%	(*n*)	%
Amphetamines	28	6.2	8	2.2	36	4.5*
Heroin	18	4.0	1	0.3	19	2.4*
Ecstasy	9	2.0	1	0.3	10	1.2*
Cocaine	8	1.8	1	0.3	9	1.1*
Benzodiazepines	5	1.1	1	0.3	6	0.7
Methadone	4	0.9	–	–	4	0.5
Ketamine	3	0.7	–	–	3	0.4
GHB/fantasy	2	0.4	–	–	2	0.2
Other	6	1.3	–	–	6	0.7*
Any illicit drug	31	6.9	8	2.2	39	4.8*

* = $p < .05$; Fisher's exact test, 2-sided

Types of illicit drugs ever injected by type of illicit drug used in the past 12 months by age

The prevalence of ever injecting by drug type recently used and age is reported in Table 5.3. As shown:

- Respondents aged between 25 and 29 years of age were most likely to have ever injected illicit drugs.
- Amphetamines were the most common illicit drug ever injected across the different age groups. One in 10 respondents aged between 25 and 29 reported injecting amphetamines at some stage, compared to 7.6% of those aged between 20 and 24, 7.1% of 30–39 year olds and 6.1% of those aged between 16 and 19 years.
- Relative to the injection of amphetamine, the injection of heroin was more likely to be associated with older age groups. No respondents aged between 16 and 19 years reported the injection of heroin and a similar proportion of respondents reported the injection of this drug within the 25–29 and 30–39 year old age groups (5% and 4.5% respectively).
- The injection of ecstasy was most common among respondents aged between 20 and 24 years (4.2%) and the injection of cocaine was most prevalent for respondents aged between 25 and 29 years (3.8%).

Table 5.3: Ever injected by drug type used in past 12 months and age

Drug	AGE (YEARS) 16–19		20–24		25–29		30–39		≥ 40		TOTAL	
	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%	(*n*)	%
Amphetamines	5	6.1	9	7.6	8	10.0	11	7.1	3	0.8	36	4.5*
Heroin	–	–	5	4.2	4	5.0	7	4.5	3	0.8	19	2.4
Ecstasy	1	1.2	5	4.2	3	3.8	1	0.6	–	–	10	1.2
Cocaine	–	–	3	2.5	3	3.8	2	1.3	1	0.3	9	1.1*
Benzodiazepines	–	–	1	0.8	2	2.5	2	1.3	1	0.3	6	0.7
Methadone	–	–	1	0.8	1	1.3	1	0.6	1	0.3	4	0.5
Ketamine	–	–	1	0.8	2	2.5	–	–	–	–	3	0.4
GHB/fantasy	–	–	–	–	1	1.3	1	0.6	–	–	2	0.2
Other	–	–	1	0.8	–	–	2	1.3	3	0.8	6	0.7
Any illicit drug	5	6.1	9	7.6	8	10.0	11	7.1	6	1.6	39	4.9*

* = $p < .05$, chi^2 test

Initiation to illicit drug use

Research reveals that the use of illicit drugs at an early age is often associated with an increased risk of problematic drug use, criminal pathways and poorer health in later life (Spooner, Hall & Lynskey 2001). This section provides information on the average age of initiation to illicit drug use, compares the average age of initiation to various illicit drugs by gender and shows the type of illicit drug first used by survey respondents. Comparisons of early and late onset drug users in relation to a range of demographic characteristics are also included.

Age of onset to illicit drug use

Information on the cumulative distribution of age of initiation to illicit drug use for the survey respondents is presented graphically in Figure 5.1 and numerically in Table 5.4. As shown:

- The age of initiation to illicit drug use ranged from 8 to 63 years.
- Initiation to illicit drug use generally occurred during the teenage years or in early adulthood — 86% of respondents who had used an illicit drug had done so by 21 years of age; 54% who had used an illicit drug had done so by age 16.
- The mean age of initiation to illicit drug use was 17.8 years, the median was 16 years and the mode was 16 years.
- Initiation into illicit drug use is concentrated in the adolescent years. More than three-quarters (76.9%) of the sample reported that they had initiated illicit drug use when they were between the ages of 13 and 20 years inclusive.

Figure 5.1: Age of onset to illicit drug use

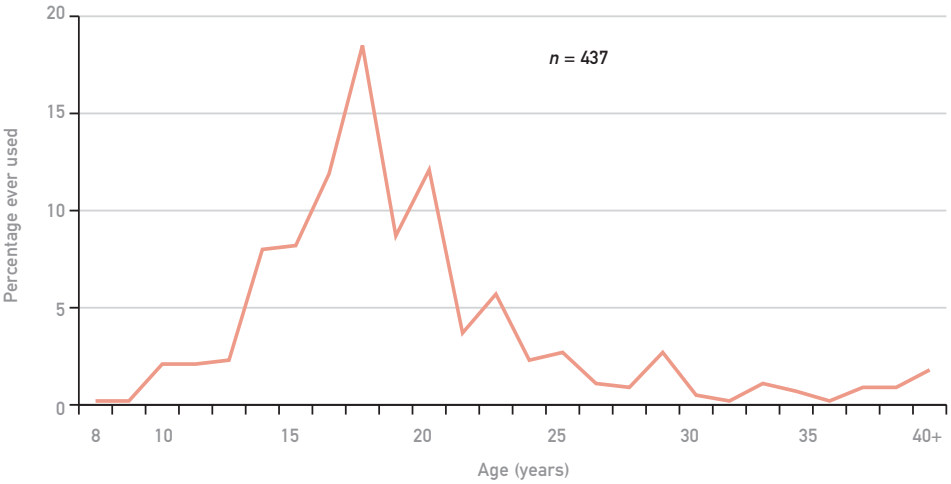


Table 5.4: Age of onset to illicit drug use

AGE	FREQUENCY	(%)	CUMULATIVE (%)
8	1	0.2	0.2
9	1	0.2	0.5
10	9	2.1	2.5
11	9	2.1	4.6
12	10	2.3	6.9
13	35	8.0	14.9
14	36	8.2	23.1
15	52	11.9	35.0
16	81	18.5	53.5
17	38	8.7	62.2
18	53	12.1	74.4
19	16	3.7	78.0
20	25	5.7	83.8
21	10	2.3	86.0
22	12	2.7	88.8
23	5	1.1	89.9
24	4	0.9	90.8
25+	12	9.2	100.0

Age of first illicit drug use by gender

Information on the average age of initiation to different illicit drugs for males and females is presented in Table 5.5. As shown:

- The youngest average age of initiation to use was for cannabis (17.7 years), followed in ascending order by LSD/acid (19.3 years), amphetamines (20.1 years), heroin (20.7 years), cocaine (21.2 years) and ecstasy (21.2 years). The oldest average age of initiation to use was for methadone (28 years).
- Although male respondents were more likely than female respondents to use illicit drugs, the average age of onset to the use of different illicit drugs did not vary significantly as a function of gender except in the case of ecstasy. For ecstasy, female respondents (19.9 years) were significantly more likely to use ecstasy earlier than male respondents (21.9 years). This may be explained by the ancillary culture of use associated with ecstasy consumption. Indeed, the ecstasy drug population has been shown to be different from other drug use populations (see Longo et al. 2001).
- The average age for injecting illicit drugs appeared to be lower for males (20 years), although it did not vary significantly by gender.

The patterns of initiation to various drugs can be explained in part by the relative accessibility and perceived risks of each drug. In Australia cannabis, for example, is generally considered to be less harmful, and is more readily available and cheaper, than heroin, ecstasy and cocaine. The older average age of initiation to methadone use is not surprising, given that this drug is usually accessed as a pharmacological replacement for heroin at opioid dependence treatment services.

Table 5.5: Average age of onset for illicit drug use by gender

Drug	AGE (YEARS)				TOTAL	
	Male		Female			
	(*n*)	Age	(*n*)	Age	(*n*)	Age
Cannabis	256	17.3	169	18.3	425	17.7
LSD/acid	92	19.5	24	18.8	116	19.3
Amphetamines	107	20.3	54	19.6	161	20.1
Heroin	31	20.9	5	19.0	36	20.7
Cocaine	56	21.3	16	21.1	72	21.2
Ecstasy	81	21.9	45	19.9	126	21.2*
Ketamine	19	21.8	4	19.5	23	21.4
GHB/fantasy	18	23.7	2	22.0	20	23.5
Methadone	12	26.4	2	37.5	14	28.0
Other	22	17.9	3	14.0	25	17.4
Any illicit drug	264	17.5	173	18.3	437	17.8
Injecting	31	20.0	8	21.5	39	20.3

* = p < 05; one-sample T test, 2-sided

First illicit drug used

The results presented in Table 5.5 (above) reveal the average age of initiation to different illicit drugs; however, they do not specify which drug was first used by respondents. Further information on the type of drug first used by survey respondents is reported in Table 5.6.

As shown:

- Nearly 95% of all illicit drug users had used cannabis within the first year of their drug use and cannabis was the first drug used by at least 87.6% of all illicit drug users identified within the sample.[26]
- A small number of respondents reported that the first illicit drug that they had ever used was LSD (1.4%), amphetamines (1.4%) and ecstasy (1.1%).
- Just over 7% of respondents reported that they had used more than one drug in the year they commenced the use of illicit drugs. This suggests that the vast majority of illicit drug users identified in the survey were not polydrug users during the first year of their using drugs.

Table 5.6: First illicit drug used

Drug	Total (*n*)	%
Cannabis	383	87.6
LSD	6	1.4
Amphetamines	5	1.1
Ecstasy	5	1.1
Cocaine	1	0.2
Heroin	1	0.2
Methadone	1	0.2
Other	3	0.7
Used more than one drug	32	7.3
Total	**437**	**100.0**

Early illicit drug use

This section examines the relationship between early use of illicit drugs and the risk of establishing frequent and more problematic patterns of illicit drug use in later life. For the purposes of the following discussion, respondents who reported using an illicit drug at or before 13 years of age will be referred to as early onsetters and those aged 14 or over will be referred to as late onsetters. The section begins by comparing the demographic characteristics of early and late onsetters.

Demographic characteristics of early and late onsetters

Information in Table 5.7 (next page) reveals the demographic features of early onsetters to illicit drug use compared to late onsetters. As shown:

- Almost 15% of all illicit drug users (or 8% of the total sample) were identified as early onsetters, while 85.1% of all illicit drug users (or 45.9% of the total sample) were late onsetters.
- Males were more likely than females to be both early and late onsetters, reflecting the greater likelihood of males to use illicit drugs compared to females. Just under two-thirds (64.6%) of early onsetters were male compared to 59.7% of late onsetters, indicating that males were slightly more likely to be early onsetters than late onsetters.

26 This is the minimum percentage for cannabis; it could be as high as 94.7%. The reason for the discrepancy is that the data have the age of onset (in years) for each drug, so where more than one drug is used at the age of first illicit drug use we cannot be certain which drug was first used. The age of onset for each drug was measured in whole years. Therefore, for respondents who used more than one drug at this age it cannot be determined with certainty which drug they used first. This measurement problem affected only 7% of the respondents.

- Early onsetters had a significantly greater proportion of users who were in the 16–19 year old age group (29.2%) compared to late onsetters (9.5%), indicating a higher prevalence of earlier onset in more recent cohorts.
- Just under three-quarters (70.8%) of early onsetters identified as single compared to 51.6% of late onsetters
- Late onsetters were slightly more likely to be employed in full-time work than early onsetters. This observation provides further indication that early onset to illicit drug use is associated with less desirable outcomes in later life.

Table 5.7: Demographic characteristics of early and late onsetters to illicit drug use

Demographic characteristics	Percentage within early and late onsetters		Total illicit drug users
	Early onsetters	Late onsetters	
Gender			
Male	64.6	59.7	60.4
Female	35.4	40.3	39.6
Age*			
16–19	29.2	9.5	12.5
20–24	24.6	20.7	21.2
25–29	13.8	13.9	13.9
30–34	13.8	17.7	17.1
35–39	10.8	9.2	9.5
40–49	6.2	17.4	15.7
50–59	–	9.5	8.1
More than 60	1.5	2.2	2.1
Marital status*			
Single	70.8	51.6	54.5
Married/de facto	18.5	35.5	33.0
Separated/divorced	10.8	11.6	11.4
Widowed	–	1.3	1.1
Employment			
Full-time work	33.8	46.8	44.9
Part-time/casual	23.1	20.2	20.6
Unemployment benefits	10.8	7.5	8.0
Aged pension/disability benefits	9.2	10.5	10.3
Other	23.1	15.1	16.2
(%) Within total sample	**14.9**	**85.1**	
Total number†	**65**	**372**	

* = $p < .05$; chi^2 test
† Number may vary slightly between status categories due to missing data.

Age of onset, patterns of illicit drug use and injection practices

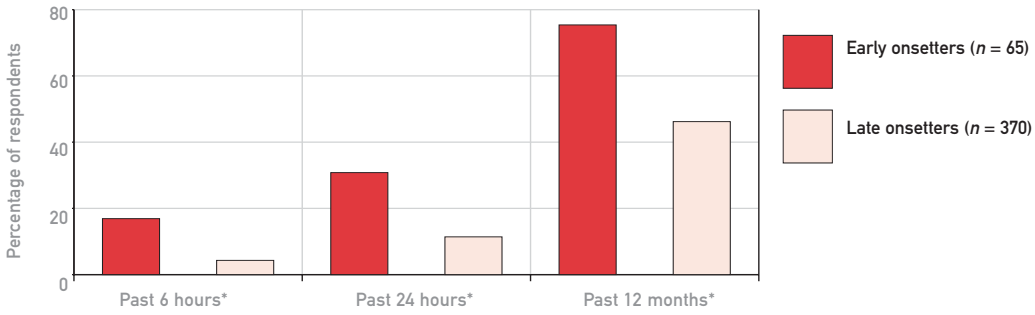
Information presented in Figure 5.2 compares early onsetters with late onsetters in relation to patterns of illicit drug use and injection practices. As shown:

- Respondents identified as early onsetters reported using illicit drugs more regularly than late onsetters. They were almost twice as likely to have used an illicit drug within the past 12 months, approximately three times as likely to have used an illicit drug in the past 24 hours, and nearly four times more likely to have used an illicit drug within the past 6 hours.

- For respondents who had used an illicit drug within the past 12 months, early onsetters (52.2%) were significantly more likely to have reported daily use of illicit drugs than late onsetters (24.2%).
- Early onsetters were more than four times more likely to have ever injected a drug than late onsetters.
- Early onsetters were three times more likely to have injected within the past 12 months as well as within the past month and past day, compared to late onsetters.

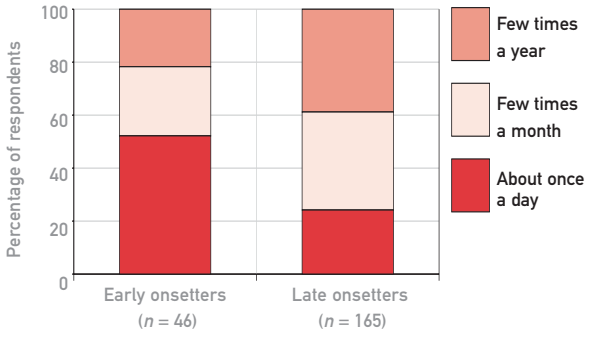
Figure 5.2: Age of onset and patterns of illicit drug use

Used in the last 12 months



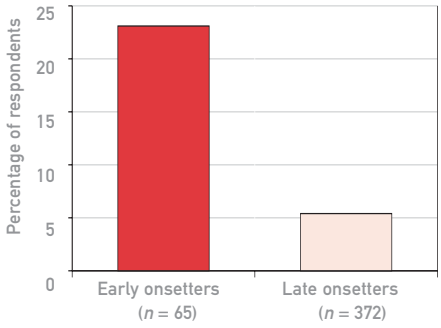
* = p < .001; *chi*² test

Frequency of use for those who have used an illicit drug in the last 12 months



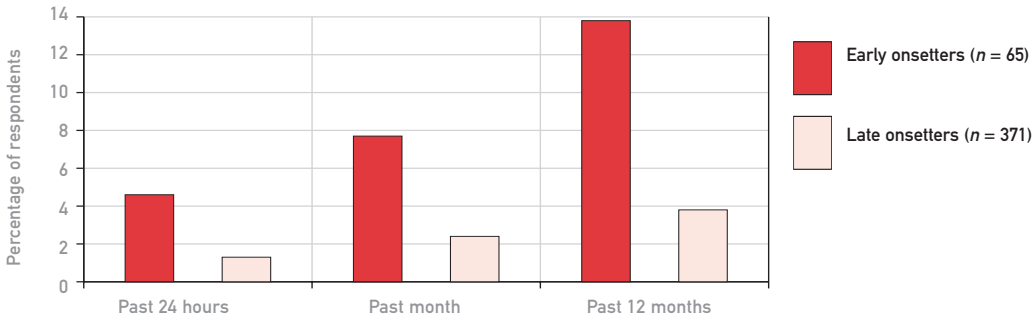
*chi*² test = 13.5; p = .001

Ever injected



*chi*² test = 23.5; p = < .001

Injected in last 12 months



*chi*² test = 11.6; p = .01

Summary

The findings in this chapter reveal that among the sample of emergency department respondents:

- methadone, heroin and cannabis were the drugs most likely to be used on a daily basis
- nearly 5% of the sample reported that they had injected illicit drugs at least once, with amphetamines being the most common drug injected
- the average age of initiation to illicit drug use was 17.8 years and cannabis was the initial illicit drug used by most respondents
- the average age of initiation to various types of illicit drugs shows that illicit substances such as cannabis and LSD/acid are often tried before amphetamines, heroin, cocaine and ecstasy
- a clear relationship between early onset to illicit drug use and the risk of developing more frequent and injecting patterns of use was observed.

Chapter 6

DRUGS, CRIME AND OTHER HIGH-RISK ACTIVITY

Information on the prevalence of high-risk and criminal behaviour reported by respondents who had used illicit drugs in the past 12 months (referred to as recent users) is presented in this chapter. It shows levels of participation in high-risk and criminal activities across a range of dimensions including gender, age of onset to illicit drug use, and arrest status. The demographic characteristics of respondents who reported that they had been previously arrested are also provided. The chapter includes information on the relationship between arrest status and patterns of illicit drug use.[27]

Prevalence of high-risk and criminal activity

Information on the proportion of recent illicit drug users reporting that they had been involved in high-risk or criminal activity is shown in Table 6.1 (next page). This information also includes comparisons by gender. As shown:

- Polydrug use was common among recent illicit drug users. Just over half of these users indicated that they regularly used more than one drug (including alcohol) at the same time.
- Forty-seven per cent of recent illicit drug users reported driving a vehicle within two hours of taking illicit drugs and 33.5% stated that they had driven a vehicle while under the influence of alcohol within the past year.
- More than one in five recent illicit drug users indicated that they believed that they had had their drink spiked with an unknown substance at some stage, while 5.2% admitted to giving alcohol or drugs to someone in order to have sex with them and 2.4% stated that they had had sex with someone in order to obtain drugs at some stage.
- The prevalence of low-level illicit drug distribution is indicated by the proportion of recent users stating that they had given an illicit drug to another person (42.7%) or sold illicit or prescription drugs for profit (18.6%). One in five recent users reported having been arrested for offences related to illicit drug use.
- Twenty-seven per cent of recent illicit drug users reported that they had been arrested at some time for criminal behaviour not involving drugs, while 37.6% reported having that they had ever been arrested.
- The analyses revealed that the prevalence of criminal activity (as defined by the survey) varied by gender. Recent illicit drug users who were male were significantly more likely than recent female users to report that they had given drugs to another person, sold illicit or

27 Recent illicit drug users represented 28.4% of the total sample.

prescription drugs and have a recorded criminal history. Approximately 48% of male users had been arrested at some point, in comparison to 14.9% of female users.

- Recent illicit drug users who were male were also significantly more likely than female recent illicit drug users to be regular polydrug users, to have driven while under the influence of alcohol or illicit drugs within the previous year, to be involved in the supply of illicit drugs and to have been arrested (for either illicit drug related crimes or criminal behaviour not involving illicit drugs).

Table 6.1: High-risk and criminal activity for respondents who had used illicit drugs in the past 12 months by gender

High-risk and criminal activity	GENDER				TOTAL	
	Male		Female			
	(*n*)	%	(*n*)	%	(*n*)	%
Regularly use more than one drug (including alcohol) at the same time	82	56.6	25	37.3	107	50.5*
Driven a car or a motorbike just after (i.e. two hours) using drugs in the past year	79	55.2	20	29.9	99	47.1*
Given illicit drugs to another person	68	47.2	22	32.8	90	42.7*
Ever arrested	69	48.3	10	14.9	79	37.6*
Driven a car or a motorbike within two hours of using alcohol† in the past year	58	41.4	11	16.7	69	33.5*
Arrested for other criminal behaviour not involving drugs	51	35.4	6	9.0	57	27.0*
Had drink spiked with an unknown substance	28	19.4	20	30.3	48	22.9
Been arrested for drug involvement (i.e. using or selling illicit drugs)	37	25.9	5	7.5	42	20.0*
Sold illicit or prescription drugs for profit	33	23.1	6	9.0	39	18.6*
Given someone else alcohol or drugs in order to have sex with them	10	6.9	1	1.5	11	5.2
Had sex in order to obtain drugs	4	2.8	1	1.5	5	2.4

* = $p < .05$; chi^2 test

† If male, six or more standard drinks containing alcohol; if female, four or more standard drinks containing alcohol.

Age at onset to illicit drug use and involvement in high-risk or criminal activity

Previous research reveals that early onset to illicit drug use is associated with a range of undesirable outcomes, including involvement in high-risk activities and participation in crime (Zhang, Wieczorek & Welte 1997; Esbensen & Elliot 1994). The results reported in Table 6.2 show the relationship between age at initiation to illicit drug use (early versus late onset) and the self-reported high-risk and criminal behaviours of recent illicit drug users. As shown:

- Early onsetters were more likely than late onsetters to participate in a range of high-risk and criminal activities.
- Early onsetters were more likely than late onsetters to report regular polydrug use (68.9% compared to 46.8%), to have driven a car under the influence of illicit drugs within the past year (59.1% compared to 43.1%) and to have driven a car under the influence of alcohol in the past year (38.6% compared to 32.2%).

- Recent illicit drug users reporting early onset to illicit drug use were significantly more likely than late onsetters to be involved in and be arrested for a criminal offence, in particular for offences involving selling or providing illicit substances to another person.
- Just under 70% of early onsetters reporting recent use of illicit drugs stated that they had given illicit drugs to other people, compared to only 36.6% of late onsetters with recent illicit drug use experience.
- Early onsetters with recent illicit drug use experience were twice as likely as late onsetters to indicate that they had been arrested for a drug-related offence and three times as likely to have sold illicit or prescription drugs for profit.
- The likelihood of being arrested for a non-drug-related offence was similar for both early and late onsetters reporting recent illicit drug use — 26.7% compared to 26.1%.

These findings reinforce the view that early onset to illicit drug use represents a strong indicator of problematic drug use as well as other high-risk activities, such as crime.

Table 6.2: Criminal activity for respondents who had used illicit drugs in the past 12 months by age of onset to illicit drug use

High-risk and criminal activity	AGE ONSET			
	Early onsetters		Late onsetters	
	(*n*)	%	(*n*)	%
Regularly use more than one drug (including alcohol) at the same time	31	68.9*	72	46.8
Driven a car or a motorbike just after (i.e. two hours) using drugs in the past year	26	59.1	66	43.1
Given illicit drugs to another person	31	68.9*	56	36.6
Driven a car or a motorbike within two hours of using alcohol† in the past year	17	38.6	48	32.2
Arrested for other criminal behaviour not involving drugs	12	26.7	40	26.1
Had drink spiked with an unknown substance	13	29.5	32	20.9
Been arrested for drug involvement (i.e. using or selling illicit drugs)	16	35.6*	23	15.1
Sold illicit or prescription drugs for profit	17	37.8*	20	13.2
Given someone else alcohol or drugs in order to have sex with them	4	8.9	6	3.9
Had sex in order to obtain drugs	5	11.1*	–	–

* = $p < .05$, Fisher's exact test, 2-sided

† If male, six or more standard drinks containing alcohol; if female, four or more standard drinks containing alcohol.

Demographic characteristics of people arrested

Information in Table 6.3 (next page) reveals the demographic characteristics of arrestees compared to non-arrestees for respondents who have used illicit drugs in the past 12 months.[28] As shown:

- Approximately 87% of arrestees were male compared to 56.5% of non-arrestees. Thus, even among recent illicit drug users there is a strong relationship between gender and crime, which is consistent with previous research.

28 As noted previously, information on offending and arrest status was only assessed for the sub-set of respondents who reported illicit drug use over the previous year, which in this study is defined as recent use.

- Respondents who reported recent illicit drug use and had been arrested were more likely to be older than those who had not been arrested. The average age of arrestees (30.7 years) was higher than non-arrestees (27.9 years) and a greater proportion of non-arrestees (50.8%) were aged between 16 and 24 years compared to arrestees (30.8%). Conversely a greater proportion of arrestees were aged between 30 and 49 years (47.4%) compared to non-arrestees (26.1%).
- Differences were not observed between arrestees and non-arrestees in relation to marital status. Non-arrestees, however, were slightly more likely to be in full-time employment than arrestees.

Table 6.3: Demographic characteristics of respondents who had used illicit drugs in the past 12 months by arrest status

Demographic characteristics	Percentages within arrestee status		Total recent illicit drug users
	Arrestee	Non-arrestee	
Gender*			
Male	87.3	56.5	68.1
Female	12.7	43.5	31.9
Age †*			
16–19	10.3	20.8	16.8
20–24	20.5	30.0	26.4
25–29	19.2	16.9	17.8
30–34	20.5	13.8	16.3
35–39	12.8	2.3	6.3
40–49	14.1	10.0	11.5
50–59	2.6	3.8	3.4
More than 60	–	2.3	1.4
Marital status			
Single	70.9	71.0	71.0
Married/de facto	24.1	20.6	21.9
Separated/divorced	5.1	8.4	7.1
Widowed	–	–	–
Employment			
Full-time work	38.0	44.3	41.9
Part-time/casual	20.3	27.5	24.8
Unemployment benefits	13.9	6.9	9.5
Aged pension/disability benefits	16.5	6.9	10.5
Other	11.4	14.5	13.3
(%) Within total sample	**37.6**	**62.4**	
Total number‡	**79**	**131**	

* = $p < .01$; chi^2 test

† Average age of arrestees = 30.7 years; average age of non-arrestees = 27.9 years.

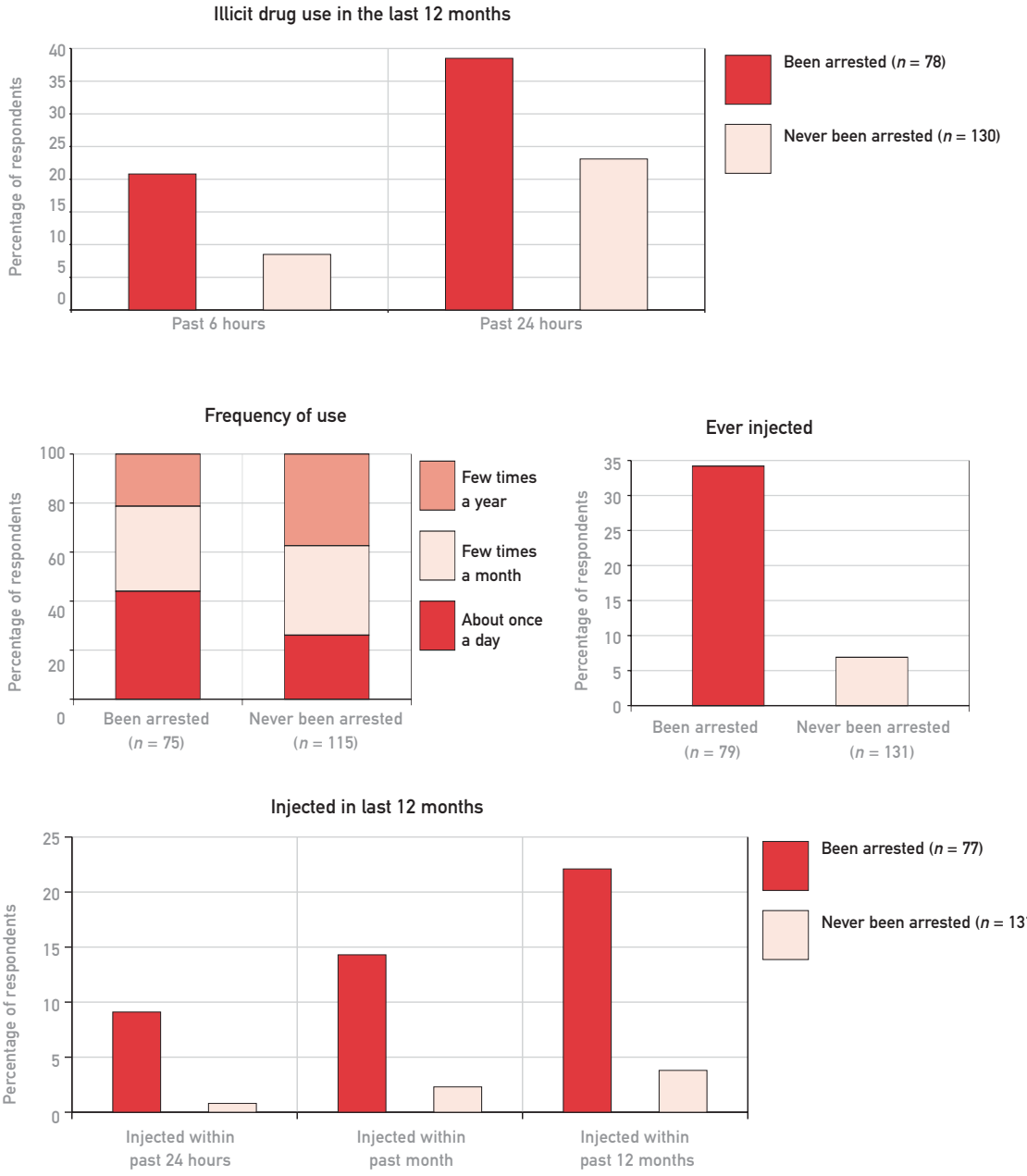
‡ Number may vary slightly between status categories due to missing data.

Arrest status and patterns of illicit drug use

Further information is provided on the relationship between crime and illicit drug use. The results reported in Figure 6.1 reveal:

- Respondents who had been arrested were more likely than non-arrested recent illicit drug users to report the use of illicit drugs within the 6 and 24 hours prior to the survey.

Figure 6.1: Patterns of illicit drug use by arrest status for respondents who have used an illicit drug in the past 12 months



- Respondents who reported a previous arrest (44%) were more likely than non-arrestees (26%) to be daily users of illicit drugs.
- Arrestees who reported recent illicit drug use were four times more likely than non-arrestees to have ever injected an illicit drug.
- Arrestees with recent illicit drug use were five times more likely than non-arrestees to have injected illicit drugs within the past 24 hours, past month and past 12 months.

Arrest status and patterns of high-risk and criminal activity

Offending behaviour is highly correlated with a range of deviant and high-risk behaviour (Gottfredson & Hirschi 1990; Moffitt 1994). The results in Table 6.4 present information on the prevalence of high-risk and criminal activity among respondents who had used an illicit drug in the last 12 months by arrest status. The results show that:

- There was a relationship between involvement in high-risk and criminal activities and the arrest status of recent illicit drug users. Not unexpectedly, levels of risk taking and criminal behaviour are significantly more prevalent for arrested than non-arrested recent illicit drug users.

Table 6.4: High-risk activity for respondents who had used illicit drugs in the past 12 months by arrest status

High-risk and criminal activity	EVER ARRESTED			
	Been arrested		Never arrested	
	(*n*)	%	(*n*)	%
Arrested for other criminal behaviour not involving drugs.	57	72.2*	–	–
Regularly use more than one drug (including alcohol) at the same time.	52	66.7*	54	41.9
Driven a car or a motorbike just after (i.e. two hours) using drugs in the last year.	48	61.5*	51	38.9
Given illicit drugs to another person.	44	55.7*	45	34.4
Been arrested for drug involvement (i.e. using or selling illicit drugs).	42	53.2*	–	–
Driven a car or a motorbike within two hours of using alcohol† in the last year.	35	45.5*	34	26.6
Sold illicit or prescription drugs for profit.	26	32.9*	13	9.9
Had drink spiked with an unknown substance.	19	24.1	28	21.7
Given someone else alcohol or drugs in order to have sex with them.	7	9.0	4	3.1
Had sex in order to obtain drugs.	4	5.1	1	0.8

* = $p < .05$; Fisher's exact test, 2-sided.

† If male, six or more standard drinks containing alcohol; if female, four or more standard drinks containing alcohol.

- Respondents who reported that they had been arrested previously were more likely than non-arrestees to report that they had been involved in a range of high-risk and criminal activities including polydrug use, driving a car under the influence of illicit drugs or alcohol and giving illicit drugs to another person.

Summary

The findings in this chapter reveal that among the sample of emergency department respondents:

- polydrug use was highly prevalent among respondents reporting recent drug use
- male respondents were significantly more likely than female respondents to report participation in high-risk and criminal activities
- more than a third of the sample of recent drug users self-reported that they had been arrested previously
- a clear relationship between early onset to illicit drug use and involvement in high-risk and criminal activity was observed
- a clear relationship between arrest status and more frequent patterns of illicit drug use and higher levels of injecting practices was evident.

Chapter 7
CONCLUSION

The PADIE study represents a unique research project in that it provides details of the patterns of licit and illicit drug use in a population not traditionally accessed by social investigators. The findings in this report are useful for illuminating the scope of drug-related problems for this population, benchmarking the findings against other populations, and illuminating the need for policy makers to use such information routinely when developing interventions for drug-related harms.

Overview of key findings

The findings of the study show that the prevalence of licit and illicit drug use by people attending a hospital emergency department is higher than levels of use found in the general population. Consistent with other studies, however, the consumption of these drugs varied as a function of factors such as gender, age and marital status. Males were generally more likely than females to use various licit and illicit drugs in all age cohorts within the sample. The use of illicit substances was generally most prevalent for those aged between 20 and 34 years. Furthermore, single respondents were more likely to use illicit substances than respondents who were involved in relationships or widowed. Interestingly, significant differences in drug use patterns were not observed across Indigenous status or various levels of income in this sample.

While the consumption of cigarettes and alcohol was common among the sample, cannabis was clearly the most prevalent and most regularly used illicit drug. A relatively high proportion of respondents also indicated that they had recently used amphetamines and ecstasy — an issue of concern for criminal justice and health-related agencies. The use of other 'party drugs' such as ketamine and GHB/fantasy was relatively rare among respondents. Although the use of heroin and methadone was limited, the high prevalence of daily use among users of opiate substances within the sample was consistent with what is known about the addictive properties of opiate-related drugs. The daily use of amphetamines by a small number of respondents was also identified and is an issue that should be monitored in the future.

The findings illustrate the age-graded nature of certain patterns of drug use. This was particularly evident in the levels of use of amphetamines and ecstasy by young people compared to older people. Overall, a relatively high number of respondents aged between 16 and 29 years indicated that they had used amphetamines and ecstasy (recently, in the past 24 hours and in the past 6 hours) compared to those aged 30 and above. These findings may point towards a trend of increased use of amphetamines and ecstasy in the future.

The results of the study also highlight the complex relationship between the use of illicit drugs and involvement in criminal activity. A number of interrelated high-risk indicators were used to explore the drug–crime nexus, including age of first use, frequency of illicit drug use and route of administration. Consistent with previous research, the results of this study demonstrated a

relationship between the early initiation to illicit drugs, polydrug use, injection of illicit substances, and involvement in crime.

The study provides evidence of much higher levels of drug and alcohol use in this population than in the population as a whole. At the same time it illustrates the close association between recent usage of drugs and hospital presentation. While the results cannot confirm a causal link between illicit drug use and accidents or injuries (for example, overdose), they do suggest that certain forms of illicit drug use can lead to negative health consequences for some individuals. Furthermore, the results reveal evidence of a range of risk-taking behaviours associated with drug and alcohol use, such as driving a motor vehicle under the influence of drugs or alcohol, which have clear implications for public health and public safety throughout Queensland.

Implications and future directions

The findings outlined here have important implications for the development of responses to drug use in the community. The need for targeted early or developmentally appropriate interventions is especially evident in the relationship between early illicit drug use and the risk of progressing to more frequent and problematic illicit drug use, as well as potential involvement in criminal activity.

In addition to exploring the relationship between patterns of drug use and crime among emergency department patients, this study has some significant public health implications. Hospital emergency departments offer a site for assessment, intervention and referral for at-risk drug users. Hence, many patients with drug-related problems view an emergency department as an appropriate place to go for treatment. However, there may be a number of barriers to effectively meeting patients' needs in this setting. Anecdotal evidence suggests, for example, that emergency department management and staff do not perceive emergency departments as a legitimate setting for treating drug users. Furthermore, the increasing pressure on emergency departments for primary care services has left some hospitals under-resourced to meet demand and deliver their core business.

Addressing these barriers to effective health care for this population will require both organisational change and, at least in the short term, improved funding levels to better coordinate health care, emergency and policing services. Ongoing monitoring of drug-related presentations in emergency departments, perhaps along the lines of DAWN in the United States (see page 3), would both help in the planning of emergency department services and fill a major gap in the current capacity to monitor changing patterns of drug use and drug-related problems in Queensland and Australia.

On this front, further consideration should be given to increasing the opportunities to use hospital emergency department presentations as a useful vehicle for monitoring drug problems and effectiveness of current interventions. The methodological strategies utilised in this study also address some of the challenges associated with the measurement of illicit drug use. The information collected comes from a broader range of people than through acutely targeted and small samples (e.g. IDRS, DUMA and PDI), and may not represent the level of under-reporting found in general population surveys. Indeed the PADIE methodology appears to capture information at a time when people are reasonably willing to discuss their illicit drug use history.

Data generated using the PADIE methodological framework also produce information that is beneficial to both health and law-enforcement agencies. The implementation of a monitoring system that involves hospital emergency departments across the country will serve to monitor the effectiveness of existing drug-related strategies, guide the development of future initiatives and provide an opportunity for effective collaborations between health and law-enforcement agencies.

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