IDRS EDRS

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Key findings

- Lifetime cocaine use amongst the Australian general population has increased slightly over recent years. Recent use has remained relatively stable at approximately 1%, although this increased to 1.6% in 2007.
- While a range of risks and harms have been associated with cocaine use, the prevalence of these harms in Australia is relatively low with indicator data (hospital admissions, mortality and arrests) suggesting most harms occur in NSW.
- The Illicit Drug Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (EDRS) sample from two distinct groups of drug users. The IDRS samples people who regularly inject drugs (PWID) and the EDRS samples regular ecstasy users (REU).
- Cocaine is one of the few drugs where use is reported by both samples and allows for a comparison of the patterns of use between them.
- In 2007, reported recent use of cocaine was far greater in the EDRS than in the IDRS jurisdictional samples, with the exception of NSW and the NT where recent use was similar in both groups.
- Among those who had recently used, frequency of use was typically low at a median of approximately two days (i.e. once every three months) in the six months preceding interview for both the IDRS and EDRS samples, with the exception of the NSW IDRS where median days was 20 days (approximately once a week).
- The NSW EDRS sample did not report substantially different use patterns to the EDRS samples in the other states and territories; however, a larger proportion of the NSW sample were able to answer questions regarding cocaine market characteristics. Consequently, the price, purity and availability of cocaine was examined in the NSW IDRS and EDRS samples only.
- Examination of the reported price, perceived purity and availability were similar in the NSW EDRS and IDRS samples. The median price of cocaine was reported to be $300 per gram, approximately one-quarter of the samples reported purity as 'high', and approximately two-fifths reported that cocaine was 'very easy' to obtain.

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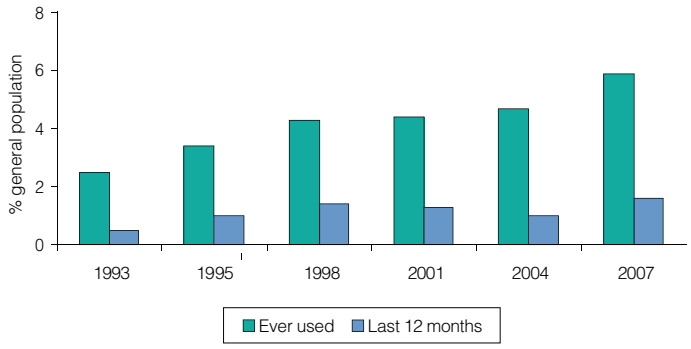
Cocaine use in Australia

Use of cocaine in the general population

In recent years, the use of cocaine in Australia has been reported at relatively similar levels to other countries. For example, lifetime use of cocaine has been reported to be 6.8% in the United Kingdom, 4.9% in Spain, comparable to 4.7% in Australia[1, 2]. The United States is the exception with a considerably higher prevalence of lifetime use at 14.7%[3].

Lifetime cocaine use amongst the Australian general population has increased slightly over recent years, from 2.5% in 1993 to 5.9% in 2007 (see Figure 1)[4,5]. Recent use amongst the general population remained relatively stable at around 1%, although in 2007 this significantly increased to 1.6%[5]. In 2004, as has been the case in previous years, the highest prevalence of reported recent use was in New South Wales (NSW) at 1.2% or 66,000 people and Victoria (VIC) at 1.2% or 49,000 people. Together these two states have accounted for the majority (70%) of Australians who reported recent cocaine use[1]. Note: full 2007 NDSHS data were unavailable at time of printing.

Figure 1: Prevalence of cocaine use in Australia, 1993-2007



Source: NDSHS 1993-2007[1, 4-8]

Risks and harms associated with cocaine use

Cocaine users in a recent Australian study[9] reported low levels of cocaine-related harms, a finding also reflected in recent European research[10]. In Australia, this may in part be due to the low and infrequent patterns of use and the high cost and scarcity of cocaine

relative to other drugs such as ecstasy and methamphetamine.

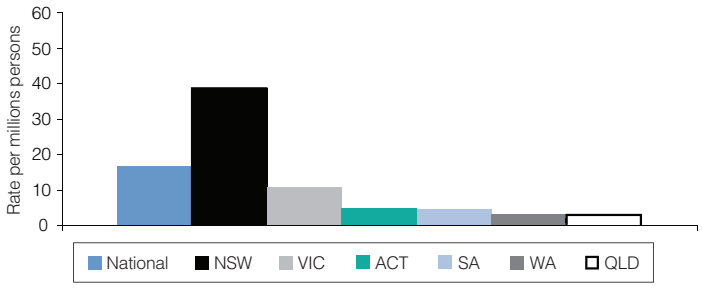
Cocaine-related harms include[11]:

- cardiovascular and cerebrovascular problems (e.g. heart attack, stroke);
- increased risk of HIV transmission;
- psychological problems (e.g. dependence, psychosis, anxiety and depression);
- overdose; and
- elevated risk of criminal activity (specifically when engaged in polydrug use)

Hospital admissions

Figure 2 displays the rate of inpatient hospital admissions for a principal diagnosis relating to cocaine per million persons, by jurisdiction. As might be expected, given the reported population prevalence of use described above, NSW had the highest rate of cocaine-related hospital admissions in 2005/06. It should also be noted that these figures are small relative to those for opioids (NSW- 594 per million) and amphetamines (NSW- 237 per million). This may in part be due to the high co-occurrence of other drug use such as heroin[12, 13], that could lead users to present with health issues such as heroin dependence which may take precedence or mask cocaine related problems. Shearer et al (2007) reported that low availability of cocaine- specific treatment services may also be a factor[9]. These authors found that, across a range of different demographic groups, PWID were most likely to report experiencing a range of physical, psychological and social problems. However, they did not seek treatment specific to their cocaine use. This underlines the importance of adequately resourced treatment interventions flexible enough to meet the needs of a diverse group of users.

Figure 2: Rate of principal cocaine-related hospital admissions per million persons among people aged 15-54 years, by jurisdiction, 2005/06



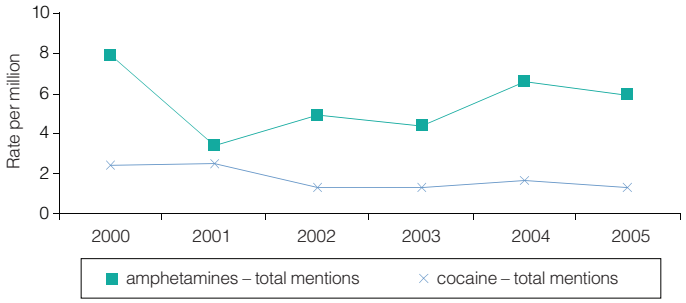
Source: AIHW; ACT, TAS, NT, QLD, SA, NSW, VIC and WA Health Departments 2005/06

Note: There were no cocaine-related hospital admissions recorded in the NT and TAS in 2005/06.

Mortality

Deaths due to cocaine toxicity are due primarily to cardiovascular complications, such as myocardial ischemia and infarction and cardiac arrhythmias[14]. In 2005 there were 15 drug-related deaths in which cocaine was mentioned among the 15-54 year age group. The rate of death where cocaine was mentioned has remained low since 2000, especially in comparison to deaths where meth/amphetamine was mentioned (see Figure 3)[15]. Consistent with other data, the majority of these deaths occurred in NSW.

Figure 3: Rate of accidental drug-induced deaths with cocaine or methamphetamine mentions per million people aged 15-54 years, Australia 2000-2005

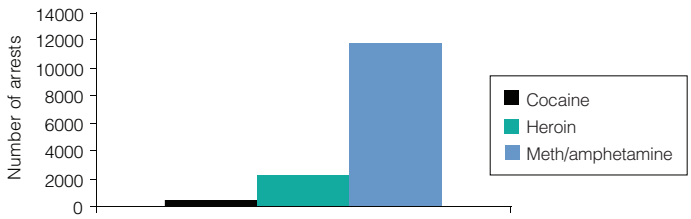


Source: Degenhardt & Roxburgh, 2007[15]

Arrests related to cocaine

In 2005/06 there were 396 cocaine arrests Australia-wide. As with the number of cocaine-related hospital admissions and the number of cocaine-related deaths, the majority of these (52%) occurred in NSW. It must be noted that arrests for cocaine-related offences were lower than those for other illicit drugs such as heroin and methamphetamine (see Figure 4).

Figure 4: Total number of cocaine consumer and provider arrests in Australia, 2005/06



Source: ACC 2007[16]

Note: The arrest data for each state and territory include Australian Federal Police data.

The Illicit Drug Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (EDRS)

The Illicit Drug Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (EDRS) are national monitoring systems conducted annually in each capital city in Australia. Results from the regular drug user components of each project are examined below.

Characteristics of the 2007 national IDRS and EDRS samples

The characteristics of the national 2007 IDRS and EDRS samples are presented in Table 1. Overall demographic differences noted between groups included: the IDRS participants were older (36 years old compared to 25 years old), had overall fewer years of formal schooling and tertiary education, were less likely to be employed and more likely have a prison history and be involved in drug treatment. See[17, 18] for details of recruitment methods and entry criteria.

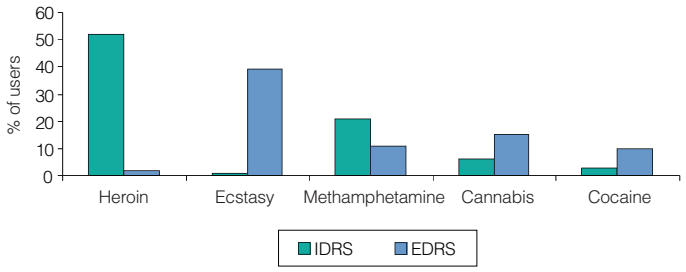
Table 1: IDRS and EDRS demographics 2007

Characteristic	IDRS (N=909)	EDRS (N=742)
Mean age (years)	36	25
% male	66	58
% English-speaking background	95	98
% Aboriginal and/or Torres Strait Islander	15	2
Mean years completed at school	10	12
% tertiary qualifications	47	56
% unemployed	79	16
% prison history	51	6
% currently in drug treatment	43	4

Source: IDRS PWID and EDRS REU interviews, 2007

As can be seen from Figure 5, there is as expected substantial variation between the two samples and their reported drug of choice. The most common drug of choice for the IDRS sample was heroin at 52%, and the most common drug of choice for the EDRS sample was ecstasy at 39%. Cocaine was reported to be the drug of choice by much smaller proportions of the samples (3% for IDRS and 10% for EDRS).

Figure 5: Drug of choice in the National IDRS and EDRS samples, 2007



Source: IDRS PWID and EDRS REU interviews, 2007

Use of cocaine in the national IDRS and EDRS samples in 2007

Figure 6 presents recent use of cocaine amongst the IDRS and EDRS samples in 2007. Recent use refers to use in the six months preceding interview. With the exception of NSW and the NT, recent use of cocaine was greater amongst the EDRS samples then the IDRS samples in all jurisdictions. NSW had the greatest proportion of users reporting recent use in both samples. This is possibly an indication of cocaine availability and affordability.

Figure 6: Recent use of cocaine in the IDRS and EDRS samples, 2003-2007

Source: IDRS PWID and EDRS REU interviews, 2007

Figure 7 presents median days of use of cocaine in the IDRS and EDRS samples, among recent cocaine users, in the six months preceding interview in 2007. In contrast to recent use, frequency of use was more consistent amongst the two samples in each jurisdiction, with the exception of NSW. Median days of use in both samples in the other jurisdictions was low at approximately two days (or once every three months). Median days of use in the NSW IDRS sample was 20 days (approximately once a week), compared to a median of two days in the NSW EDRS sample.

Figure 7: Median days of cocaine use among recent cocaine users in the national IDRS and EDRS samples, 2007

Source: IDRS PWID and EDRS REU interviews, 2007

Whilst recent use and median days of cocaine use were greater in NSW than any of the other jurisdiction for the IDRS sample, this was not the case amongst the EDRS sample where use in NSW was relatively similar to the other jurisdictions. However, relatively large numbers of participants in both the NSW IDRS and EDRS felt confident to answer questions regarding price, perceived purity and availability of cocaine compared to other jurisdictions, where numbers responding were typically small (n<10). Therefore, a comparison of the use, price, purity and availability of cocaine focus on NSW IDRS and EDRS samples.

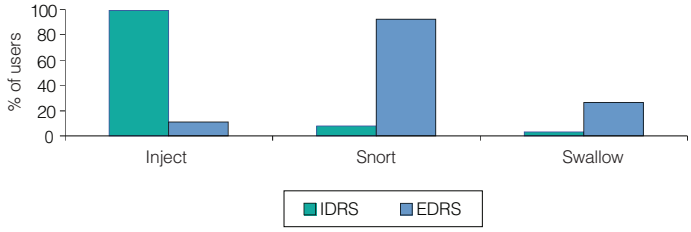
Cocaine use and market amongst the IDRS and EDRS samples in NSW, 2007

Route of administration

Route of administration for cocaine by the IDRS and EDRS samples are presented in Figure 8. As can be expected due to the entry criteria for each study[1], there were marked differences between the two samples. Nearly all recent cocaine users in the IDRS sample (99%) reported injecting cocaine, although a notable minority also reported snorting (8%) cocaine in the six months preceding interview. In comparison, the vast majority (92%) of EDRS participants reported snorting cocaine, with a smaller proportion reporting that they had swallowed it (26%) in the six months preceding interview. These differences in usual route of administration have implications in terms of risk of harms associated with cocaine use.

1 In the IDRS, participants must have injected on a monthly (or greater) basis in the six months preceding interview, whilst participants in the EDRS must have used ecstasy on a monthly (or greater) basis in the six months preceding interview.

Figure 8: Route of administration for recent cocaine amongst the NSW PWID and REU samples, 2007



Source: NSW IDRS PWID and EDRS REU interviews, 2007

Price, perceived purity and availability

The reported price, perceived purity and availability of cocaine by the two samples were quite similar. In 2007, both samples reported a median price of $300 per gram of cocaine. With respect to purity only, approximately one-quarter of both samples reported cocaine purity as 'high' (22% in the IDRS and 28% in the EDRS). The remaining three-quarters of the samples reported it as either 'medium' (40% IDRS vs. 30% EDRS) 'low' (21% IDRS vs. 24% EDRS) or were unsure (9% IDRS vs. 11% EDRS). This suggests that these samples may be purchasing 'street' or cut cocaine, and are not typically obtaining it from an earlier point in the supply chain, where purer forms would be expected. There was also consistency among the two samples in regards to cocaine availability. Approximately two-fifths of the samples reported that cocaine was 'very easy' to obtain (36% in the IDRS and 41% in the EDRS). The remaining three-fifths reported that cocaine was 'easy' (41% IDRS vs. 35% EDRS), 'difficult' (17% each) or 'very difficult' (0% IDRS vs. 6% EDRS) to obtain or they were unsure (7% IDRS vs. 1% EDRS). Overall, although the IDRS and EDRS samples differ in terms of demographics, drug use and route of administration, the samples reported similar characteristics of the cocaine market with respect to price, purity and availability.

Summary and implications

- The self-reported lifetime use of cocaine in the general population of Australia has slightly increased since 1993; however, recent use has remained relatively stable at around 1%.
- With respect to the drug monitoring samples, in comparison to the EDRS samples recent use of cocaine was greater among the IDRS samples across all states and territories, with the exception of NSW and the NT. Median days of use were low and consistent for the IDRS and EDRS samples, with the exception of the NSW IDRS sample.
- Low levels of cocaine-related health and law enforcement-related harms are reported in Australia relative to figures reported for opioids and methamphetamine. This may reflect lower levels of use, rather than less serious harms.

- Although PWID are at highest risk of reporting cocaine-related harms, they do not typically seek treatment specifically for their cocaine use[9]. In part this may be linked to the high levels of poly drug use engaged in by injecting cocaine users which mask the health effects of cocaine and/or the lack of treatment services that specifically address cocaine use[9].
- NSW was the only jurisdiction where sufficient numbers of participants in both studies were able to comment on cocaine market characteristics. Reports of price, purity and availability were consistent across the two samples, suggesting that the cocaine market is relatively consistent across the two groups.
- In comparison to other drugs, the use of cocaine in these two samples is relatively low although it has been postulated that a 'hidden' population of affluent cocaine users exists[9]. This affluent group may not appear in routine monitoring systems as most treatment for cocaine dependence is provided by the private health sector[19]; other reasons may include, the reluctance of this group to participate in research and low levels of contact with law enforcement[20].
- Routes of administration differed between the two groups. The IDRS sample typically injected cocaine, while the EDRS sample typically reported intranasal use, followed by swallowing. Harm reduction efforts should be targeted to the particular demographic groups and routes of administration employed.

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