



criminal justice bulletin

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Cannabis supply into and within Australia

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Key Points

- The majority of cannabis distributed within Australia is grown in Australia
- The most commonly detected form of cannabis is hydroponically grown cannabis. This is probably more to do with there being a greater number of hydroponic cannabis crops than outdoor crops
- With an apparent low overall risk of detection combined with high financial gain, the expansion of the hydroponic cannabis industry is unlikely to slow in at least the short to medium term. This will have significant implications for law enforcement policy
- Large quantities of cannabis are distributed throughout Australia using complex networks and sophisticated concealment techniques. However, at the consumer level, the great majority of cannabis is sold or given away in private residences through social contacts
- Quality and type of cannabis are the most important determinants of cannabis price. The range in price in any given year is often large, disguising potential upwards or downwards trends. However, across Australia and over the past 10 years, the price of cannabis appears to have varied in some instances, while remaining relatively stable in others
- While the overall number of cannabis arrests has fallen since the mid-1990s, more people are still arrested for supplying cannabis than any other drug type. The number of cannabis seizures follows a similar trend to cannabis supply arrests
- As would be expected, the average sentence length is greater for those successfully prosecuted for cultivating large commercial quantities of cannabis than for smaller quantities
- The larger the cannabis cultivation enterprise, the more likely it is that there will be multiple players involved and that the crops will be located outdoors



Background

Cannabis is the most widely used illicit drug nationally and internationally, and is generally considered easily available (ACC 2007). In the most recent National Drug Strategy Household Survey (NDSHS), it was reported that one in three Australians aged 14 years and over had used cannabis at least once in their life, with around 1.5 million indicating use in the past 12 months (AIHW 2008).

The cultivation, possession, use and supply of cannabis remain illegal throughout Australia, as does its importation. In some jurisdictions, police have the discretion to apply civil penalties to minor offenders caught with small quantities of cannabis for personal use. Other jurisdictions also now divert certain minor offenders to education and treatment programs, although the eligibility, processes and penalties differ under each of the diversion schemes (Wundersitz 2007).

Cannabis is produced in most areas of Australia with a trend in recent years towards the use of hydroponics, as growers believe that hydroponic cultivation produces a better yield, reduces the chance of detection and mitigates seasonal climate changes. Cannabis is imported, although the large volume of domestic cultivation generally makes this importation unprofitable. Exceptions to this involve importations of cannabis resin and oil, and also high-quality cannabis grown in the highlands of Papua New Guinea (ACC 2007).

Organised crime groups, including outlaw motorcycle gangs, are involved in the cultivation and distribution of cannabis within Australia. Also, there has been a noticeable increase in the involvement of some South-East Asian crime groups in the distribution of cannabis in Australia in recent years. However, no single criminal group dominates cannabis cultivation or supply in Australia (ACC 2007). A production-driven cannabis industry (like Australia's domestic cannabis market) can typically sustain large numbers of producers and growers through multiple, often small, cannabis cultivation sites (Bouchard 2007).

Australian border

Cannabis products are more likely than many other drug types to be detected at the border because they are bulky, difficult to conceal and have a strong odour (ACC 2007). Most border detections of cannabis are small in size and are sent via the postal system. For example, in 2006–07, 92 percent of cannabis detections at Australia's border were sent by mail, while seven percent were found on air passengers and fewer still through shipping and aircraft (Australian Customs Service 2007). These trends largely reflect the importation of cannabis for personal use rather than for commercial or marketable purposes.

Australian domestic market

Cannabis production

As already noted, the majority of cannabis distributed within Australia is grown in Australia. Cultivation is prolific in all jurisdictions. It is probably because cannabis is bulky, pungent-smelling and sold at low prices which makes adaptive strategies available to importers of drugs like heroin and cocaine (for example, decreasing the size of importations but increasing their frequency) less efficient than producing it domestically (Bouchard 2007).

Large outdoor bush plots remain common in some areas, although overall the most frequently detected means of cultivating cannabis is through indoor, hydroponic methods. This is probably more to do with there being a greater number of hydroponic cannabis crops than outdoor crops, rather than there being a greater risk of detecting hydroponically grown cannabis per se. In support of this, a recent study in Quebec, Canada (Bouchard 2007), estimated that even the largest hydroponic cannabis facilities had a two to three percent risk of detection, compared with a risk of between 19 and 37 percent for outdoor sites. This suggests that hydroponic cannabis

growers are better than other growers at protecting themselves and their cultivation sites from police notice.

Compared with bush crops, the number of plants grown is usually lower for hydroponic crops in Australia. However, hydroponically cultivated cannabis can be grown year-round and produces a higher yield of the most sought-after cannabis components – heads or buds (ACC 2007). It also permits the cultivation of cannabis in urban settings. The trend from outdoor to indoor hydroponically grown cannabis production has been observed in several other cannabis-producing countries over the past decade; for example, in Canada, the United States and Europe (Bouchard 2007). With an apparent low overall risk of detection combined with high financial gain, the expansion of the hydroponic cannabis industry is unlikely to slow in at least the short to medium term.

Cannabis distribution

As highlighted above, no single criminal group dominates cannabis supply in Australia, although outlaw motorcycle gangs and certain other suspected crime groups have been involved in the distribution of cannabis in this country in recent years. A variety of methods are used to distribute the drug within Australia. However, private and rented vehicles appear to be the most common means of transport.

Large quantities of cannabis are distributed throughout Australia using complex networks and sometimes quite sophisticated concealment techniques (including concealment in fake vehicle fuel tanks and vehicle panels) (ACC 1996, 2003). Among a sample of police detainees in 2007 who said they had used cannabis in the past 12 months ($n=546$), two-thirds said they were not involved in growing or distributing cannabis. However, four percent of respondents said they had grown cannabis to sell for profit, 12 percent said they had sold cannabis to friends, 25 percent said they had given cannabis to friends for free, six percent said they were involved in middle market distribution and five percent said they were involved in street-level distribution (AIC 2007 DUMA collection [computer file]).

At the general consumer level, the majority of cannabis is sold or given away in private residences through social contacts. For example, in the NDSHS around 70 percent of cannabis users indicated that they obtained the drug from friends or acquaintances, rather than through a dealer or elsewhere (AIHW 2005). Similarly, 93 percent of regular cannabis users in a WA study who sold or gave away cannabis did so to friends (Lenton et al. 2005).

Cannabis price

Quality and type of cannabis are the most important determinants in cannabis prices, with users typically paying more for cannabis grown hydroponically than cannabis grown outdoors. This is largely because of the higher yield of heads and buds in hydroponically grown cannabis, which have higher concentrations of the plant's main psychoactive chemical.

It is difficult to comment in detail on trends in price in the mid to high-end cannabis market, as not every police jurisdiction has publically reported drug buy/bust data consistently or in full over time. The range in price in any given year is also often large, disguising potential upwards or downwards trends. However, as a general statement, across Australia and over the past 10 years the price of cannabis appears to have varied in some instances, while remaining relatively stable in others (ACC 1996–2007). There have also been variations in cannabis price across urban, regional and remote locations within Australia, with many remote Indigenous communities reportedly paying higher prices for the drug (Delahunty & Putt 2006).

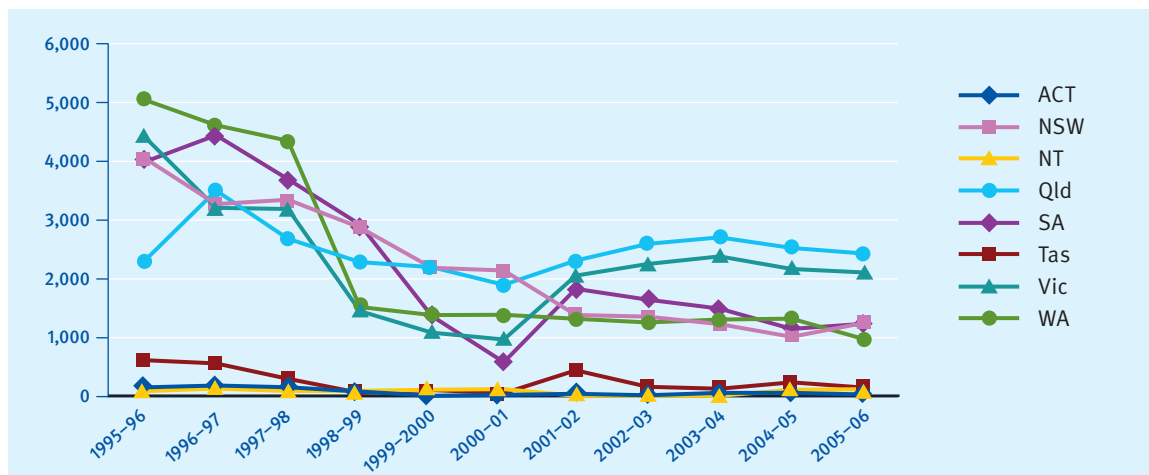
Australian law enforcement and cannabis

Cannabis supply arrests

Cannabis supply figures provide some insight into the Australian cannabis market, or at least police activity in relation to that market. The number of cannabis supply (or provider) arrests in each Australian jurisdiction has remained relatively stable since 2001 (Figure 1). While the overall number of cannabis arrests has dropped since the mid-1990s (Figure 2), more people are still arrested for supplying cannabis than any other drug type. For instance, in 2005–06 more than half (56%) of all arrests for supplying drugs were for cannabis, while one-quarter were for supplying amphetamines and other amphetamine-type stimulants (ATS). However, while the percentage of arrests for cannabis supply has fallen since the mid-1990s, the percentage of arrests for supply of amphetamines and ATS has steadily increased over the same period (from 4% in 1995–96 to 25% in 2005–06). Since the period of reduced heroin availability in the early 2000s, only a small percentage of drug supply arrests have involved heroin and other opioids (5% in 2005–06). In any year, around one percent of all arrests for supplying drugs involve cocaine. Around 80 percent of drug supply arrests in any given year involve males (ACC 1996–2007).

Figure 1

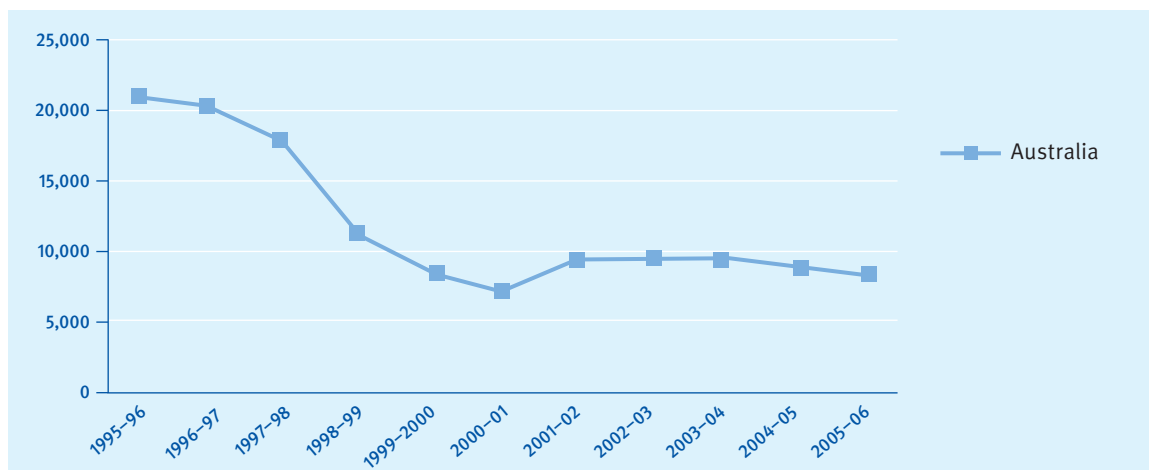
Cannabis provider arrests in Australian jurisdictions, 1995-96 to 2005-06



Source: ACC Australian illicit drug reports and Illicit drug data reports, 1996–2007

Figure 2

Cannabis provider arrests in Australia, 1995-96 to 2005-06



Source: ACC Australian illicit drug reports and Illicit drug data reports, 1996–2007



Cannabis seizures

The number of cannabis seizures follows a similar trend to cannabis supply arrests, with a relatively stable pattern observable in most jurisdictions over the past five years (Figure 3). The sharp rise and subsequent fall in overall cannabis seizures between 1998 and 2000 is somewhat exaggerated by a lack of available seizure data from South Australia prior to 1997–98 and again in 1999–2000.

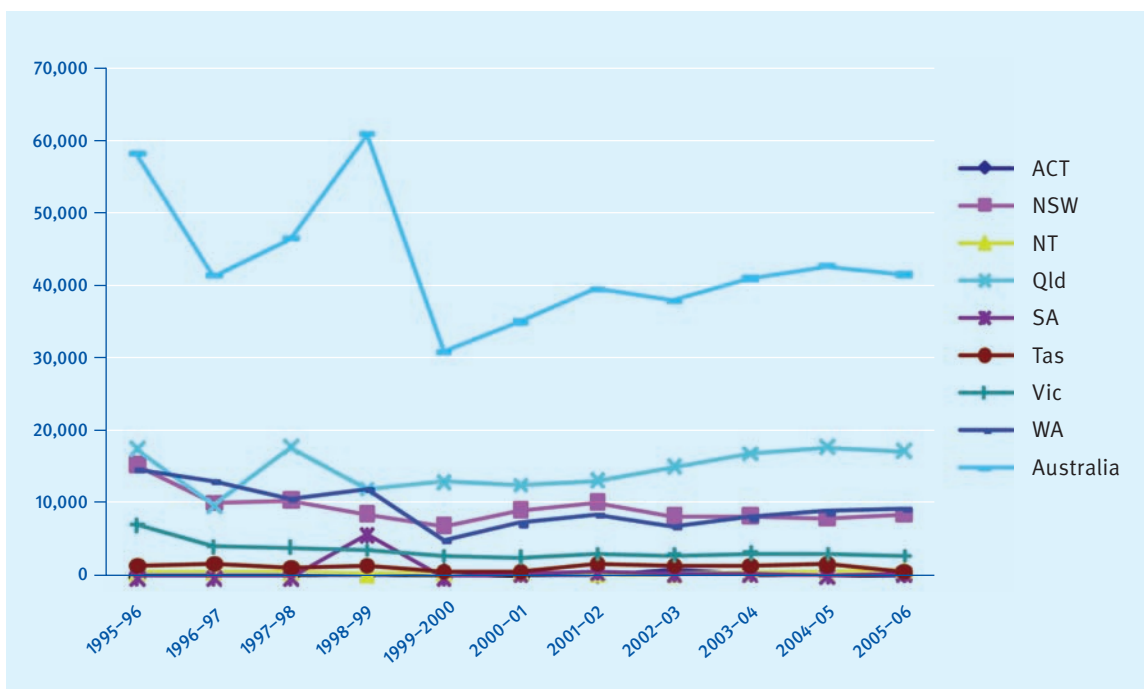
The weight of cannabis seizures has fluctuated over the past 10 years, although there has been an overall decrease in the weight of cannabis seizures for the past three years. This probably reflects the greater detection by police of smaller, hydroponically grown cannabis crops.

Australian courts

Australian courts provide both Commonwealth and state case law online through the AustLII Databases (see <http://www.austlii.edu.au>). These cases provide a wealth of information on cannabis supply issues, although it is highly resource-intensive to examine each separate case. However, a number of jurisdictions now provide useful case law summaries. For example, the NSW Public Defenders Office has summarised key case law elements for major cannabis supply cases from 1991 to the present. An examination of cases dealing with ‘commercial’ and ‘large commercial’ quantities¹ of cannabis reveals a number of patterns, as outlined below.

Figure 3

Cannabis seizures in Australia, 1995–96 to 2005–06



Source: ACC Australian illicit drug reports and Illicit drug data reports, 1996–2007

Note: Includes Australian Federal Police seizure data. Except for 1998–99, WA data include only those seizures where a drug weight was recorded. SA data were unavailable in 1995–96 and 1999–2000. Only AFP data were provided for SA in 1997–98.

1 Under the NSW *Drug Misuse and Trafficking Act 1985*, the weight ranges differ depending on the type of cannabis (i.e. whether leaf, oil, hydroponic, plant or resin.) For example, a commercial quantity of cannabis leaf is considered to weigh between 25 kg and 100 kg, while a large commercial quantity weighs above 100 kg. However, a commercial quantity of hydroponic cannabis is considered to weigh between 50 kg and 200 kg, while a large commercial quantity weighs over 200 kg.



As would be expected in cases brought before the courts, the mean number of cannabis plants detected differs markedly, depending on whether the cannabis operations are of a commercial or large commercial nature. For instance, in cases brought before the NSW Court of Criminal Appeal between 1991 and the present, the mean number of plants seized was 647 where commercial quantities of cannabis were involved (Table 1). In the same period, a mean of 11,827 plants were seized, which involved large commercial quantities of cannabis plants. The mean number of sentence months (primarily imprisonment) was greater for those successfully prosecuted for cultivating large commercial quantities of cannabis (56 months) than commercial quantities of cannabis (40 months).

However, an interesting pattern emerges in terms of the sentence length for those who successfully appealed their initial sentence. While the mean appeal sentence length was less than the original sentence given for those prosecuted for cultivating commercial quantities of cannabis, the mean sentence length actually *increased* for those who appealed their prosecution for cultivating large commercial quantities of cannabis.

In terms of prior criminal records, there appears to be no significant difference in the backgrounds of the accused. Most accused had no prior convictions (60% for those involved in cultivating commercial quantities and 67% for those involved in growing large commercial quantities of cannabis). For those who did have convictions, the major types of prior convictions related to drug possession and supply. There was also little difference between the two categories of cases (commercial and large commercial) in terms of whether the accused were likely to plead guilty or not guilty, and whether the cases were likely to be successfully appealed.

Other points of interest are that the larger the cannabis cultivation venture, the more likely it is that there will be multiple players involved and that the crops will be located outdoors. For example, since 1991 in New South Wales, 67 percent of large commercial-quantity cases have involved co-accused offenders, whereas only 27 percent of commercial-quantity cases of cannabis involved co-accused offenders (Table 1). Similarly, of 15 cases in which large quantities of cannabis were cultivated, 13 were grown exclusively outdoors. In comparison, only half of the cases of smaller commercial quantities of cannabis were grown outdoors; the remaining half was cultivated hydroponically.

These findings suggest that differences in court outcomes for commercial and large commercial cannabis crops are not simply about the overall number of plants seized, but are intrinsically linked to the degree of sophistication of the cultivation enterprise. Put simply, the bigger the cannabis production, the more people needed to tend the plants and oversee the operation.

Table 1

Court of Criminal Appeal outcomes in New South Wales, 1991–2008

	Commercial quantity	Large commercial quantity
Co-accused (%)	27 (n=15)	67 (n=18)
Plants (n)		
mean	647	11,827
range	250–1,855 ^a	1,239–30,051
Type (n)		
outdoor only	7	13
hydroponic only	7	0
both outdoor/hydroponic	0	1
other	0	1
Initial sentence (mean months)		
minimum term	40	56
additional term (or non-parole period)	20	29
Appeal sentence (mean months)		
minimum term	34	67
additional term (or non-parole period)	19	41

a One case, in which 1,855 plants were involved, was incorrectly tried as a commercial, rather than large commercial, quantity case

Note: Calculations are based on valid statistics only (i.e. where necessary, excludes missing data)

Source: NSW Public Defenders Office, http://www.lawlink.nsw.gov.au/lawlink/pdo/ll_pdo.nsf/pages/PDO_sentencingtables#Drugs

Summary and conclusion

Police intelligence demonstrates that Australia's cannabis market is heterogeneous in nature, ranging from small-scale hydroponic cultivation to large-scale outdoor production. Moreover, it appears to be a prolific production-driven industry, in which large numbers of growers are increasingly being supported through multiple, often small, cannabis cultivation sites. The large volume of domestic cultivation generally makes importation of cannabis a less attractive enterprise.

Law enforcement data show that the most commonly detected form of cannabis is hydroponically grown cannabis. It is because of the sheer number of these crops that more of them are detected than outdoor crops. In reality, because hydroponically grown cannabis is cultivated indoors (literally 'behind closed doors'), it has a reduced overall risk of detection. One study overseas estimated that only around two to three percent of hydroponically grown cannabis crops were detected by police. There is no recent, comparable Australian estimate, but if it in any way reflects the situation here then it should give pause for thought. What would a two percent, or even five percent, risk of detection equate to in terms of numbers of undetected cannabis crops in Australia?

It appears that the continuing expansion of the hydroponic cannabis industry is probable, at least in the short term. This is because of a combination of:

- high financial gain (higher prices are achieved selling hydroponic cannabis)
- a relative low risk of detection to growers.

Some users have supplied their own needs through home-grown cannabis for a long time. However, in permitting a greater number of small-scale growers, the hydroponic cannabis industry has facilitated the entry of regular users into the supply-side cannabis market, both for their own personal needs, and also to supply the needs of others (particularly friends and acquaintances).

It is not known how much of this has occurred in Australia. However, it has muddied the waters in terms of a perceived separation between growers, suppliers and users.

The supply of cannabis within Australia and how law enforcement tackles this is growing in complexity. Despite a plethora of research about cannabis, there are still clear gaps in knowledge, particularly in terms of both the changing nature and level of domestic cannabis supply. Ongoing research is required in each of these areas to adequately inform the decisions of law enforcement, the courts and policymakers.

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