Illicit drug markets in Queensland

A strategic assessment
**Acknowledgments**

In preparing this document, officers of the Crime and Misconduct Commission (CMC) consulted with the Queensland Police Service, the New South Wales Police Force, Victoria Police and South Australia Police. We also consulted federal law enforcement agencies — the Australian Customs and Border Protection Service, the Australian Crime Commission and the Australian Federal Police (including ACT Policing) — and the Australian Government Attorney-General’s Department (Illicit Drugs Section).

We consulted with Queensland Health officers from Alcohol, Tobacco and Other Drugs Services, the Queensland Needle and Syringe Program, the Environmental Health Unit (Drugs and Poisons), Forensic and Scientific Services, and the Health Statistics Centre. We also consulted with representatives from the Australian Institute of Criminology (Drug-Arm), James Cook University (School of Indigenous Australian Studies), the National Cannabis Prevention and Information Centre, the National Drug Law Enforcement Research Fund, the National Drug and Alcohol Research Centre, the Queensland Alcohol and Drug Research and Education Centre (University of Queensland), the Queensland Ambulance Service, Wuchopperan Health Service (Cairns), Youthlink (Cairns), the Pharmacy Guild of Australia (Queensland) and a representative from the pharmaceutical industry.

We wish to acknowledge the valuable assistance provided by these stakeholders and their officers.

The CMC’s Strategic Intelligence Unit was primarily responsible for writing the report and conducting the analyses presented, but would like to acknowledge the assistance provided by other areas of the organisation in completing the report. The report was prepared for publication by the Communications Unit.

**Abbreviations**

| ACC | Australian Crime Commission | NDLERF | National Drug Law Enforcement Research Fund |
| AFP | Australian Federal Police | NDS | National Drug Strategy |
| AIC | Australian Institute of Criminology | NSPs | Needle and Syringe Program services |
| AIHW | Australian Institute of Health and Welfare | OMCG | outlaw motorcycle gang |
| ATODS | Alcohol, Tobacco and Other Drugs Services (Queensland Health) | PE | phenylephrine |
| ATS | amphetamine-type stimulant | PMA | paramethoxyamphetamine |
| CDOU | Cultivated Drug Operations Unit within the State Drug Investigation Unit, QPS | PNG | Papua New Guinea |
| CJC | Criminal Justice Commission (in 2001 the CJC and the Queensland Crime Commission merged to become the CMC) | PSE | pseudoephedrine |
| CMC | Crime and Misconduct Commission | QADREC | Queensland Alcohol and Drug Research and Education Centre (University of Queensland) |
| DPMP | Drugs Policy Modelling Program | QAS | Queensland Ambulance Service |
| DU/MA | Drug Use Monitoring in Australia program | QCC | Queensland Crime Commission (in 2001 the CJC and the Queensland Crime Commission merged to become the CMC) |
| EDRS | Ecstasy and Related Drugs Reporting System | QHFS | Queensland Health Forensic and Scientific Services (formerly Queensland Health Scientific Services) |
| EUD | end user declaration | QPS | Queensland Police Service |
| GBL | gamma-butyrolactone | REUs | regular ecstasy users |
| GHB | gamma-hydroxybutyrate | SAPOL | South Australia Police |
| IDDR | Illicit Drug Data Report | SCOC | State Crime Operations Command, QPS |
| IDR | Illicit Drug Reporting System | SDIU | State Drug Investigation Unit, QPS |
| IDUs | injecting drug users | SOCA | Serious Organised Crime Agency (UK) |
| LEAs | law enforcement agencies | THC | delta-9-tetrahydrocannabinol |
| LSD | lysergic acid diethylamide | TI | telecommunications interception |
| MDA | 3,4-methylenedioxymethamphetamine | UN | United Nations |
| MDMA | 3,4-methylenedioxymethylamphetamine | UNODC | United Nations Office on Drugs and Crime |
| NCIPC | National Cannabis Prevention and Information Centre | UK | United Kingdom |
| NDARC | National Drug and Alcohol Research Centre (University of New South Wales) | US | United States |
| | | 1,4-B | 1,4-butanediol |
Scope of our assessment

The purpose of this strategic assessment is to:

- determine the extent to which there has been any change in the significance of, and risk associated with, specific illicit drug markets in Queensland
- identify demand and supply trends for specific illicit drug markets
- identify trends in the production and use of particular illicit drugs and the impact of those trends on assessed levels of harm and risk
- identify key drivers of illicit drug markets
- describe the characteristics of specific illicit drug markets
- identify strategies, or improvements to existing strategies, where appropriate to enhance law enforcement efforts to effectively detect and disrupt illicit drug markets.

The CMC has jurisdiction to examine illicit drug markets under s. 25 of the Crime and Misconduct Act 2001, which states that the CMC has a responsibility to investigate major crime as referred to it by the CMC Reference Committee.

This assessment primarily examines the illicit markets for methylamphetamine, ecstasy-group substances, cannabis, cocaine and heroin.

We also briefly discuss:

- the analogue stimulants market
- gamma-hydroxybutyrate (GHB or fantasy)
- gamma-butyrolactone (GBL)
- 1,4-butanediol (1,4-B)
- hallucinogens, including LSD
- the diversion of prescription drugs.

However, these markets are not considered in detail because the drugs have not been detected in significant quantities in Queensland. In the case of prescription drugs, there is insufficient evidence of significant organised crime involvement in the illicit market to warrant detailed examination in an assessment of organised crime markets.

Summary

This strategic intelligence assessment presents a market-based analysis of the risk posed by illicit drug markets in Queensland, with a particular focus on organised criminal involvement in those markets. By examining aspects such as demand and supply, price and purity, market drivers, and the harms associated with particular illicit drugs, we can identify key trends and determine the extent to which there has been any change in the risk associated with each market.

Previous assessments

We have conducted two previous assessments of organised crime markets, including illicit drug markets, in Queensland. The first assessment in 1999, known as Project Krystal, was conducted jointly by the Queensland Crime Commission and the Queensland Police Service (QPS). The second assessment, Organised crime markets in Queensland: a strategic assessment (2004), was conducted by the Crime and Misconduct Commission (CMC). We used a risk assessment methodology, as outlined in Chapter 1, to assess the level of risk associated with each significant illicit drug market. Table 1 summarises the assessed level of risk for each market from the 1999 and 2004 assessments.

As a result of a recommendation in the 2004 assessment, we also conducted a more detailed assessment of the cocaine market in Queensland in 2007.

The 1999 and 2004 assessments examined a range of organised crime markets in Queensland in a single report. We decided to conduct the 2009 assessment of organised crime markets in Queensland differently by publishing four separate, but related, assessments:

- organised property crime markets in Queensland
- organised fraud in Queensland
- money laundering and organised crime in Queensland
- illicit drug markets in Queensland.

Table 1: Summary of risk assessment by illicit drug market, 1999 and 2004 assessments

<table>
<thead>
<tr>
<th>Illicit drug market</th>
<th>Assessed level of risk</th>
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<tbody>
<tr>
<td></td>
<td>1999</td>
</tr>
<tr>
<td>Amphetamine</td>
<td>High</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>—</td>
</tr>
<tr>
<td>Cannabis</td>
<td>Medium</td>
</tr>
<tr>
<td>Cocaine</td>
<td>High</td>
</tr>
<tr>
<td>Heroin</td>
<td>Very high</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td>—</td>
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<tr>
<td>GHB/fantasy</td>
<td>—</td>
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</table>
How we conducted our assessment

The assessment uses information from a variety of sources, including relevant research literature, intelligence assessments, human sources and law enforcement operations. We also used recorded crime data provided by the QPS; treatment, hospitalisation and forensic data from Queensland Health; calls for service data from the Queensland Ambulance Service; and statistical data from other agencies.

We consulted the Queensland Police Service, the Australian Federal Police (including ACT Policing), the Australian Crime Commission (ACC) and the Australian Customs and Border Protection Service. We also consulted police services in other Australian jurisdictions, including the New South Wales Police Force, Victoria Police and South Australia Police. We also consulted with Queensland Health officers from the Alcohol, Tobacco and Other Drugs Services units, the Needle and Syringe Program, the Environmental Health Unit and Forensic and Scientific Services, as well as a number of other health agencies.

We also consulted with other non–law enforcement stakeholders, including the Australian Institute of Criminology, Drug-Arm, the Queensland Alcohol and Drug Research and Education Centre and pharmaceutical industry representatives.

Methylamphetamine

We continue to assess the Queensland methylamphetamine market as a VERY HIGH\(^1\) risk, but assess that the risk is DECREASING. This is based on a downgrading of our assessment of the capability of organised criminal groups to reliably source pseudoephedrine and other precursors, because of effective efforts at market regulation.

- Overall, the Queensland methylamphetamine market is assessed to be in the initial phase of a sustained period of contraction after an extended period of expansion and stability. This is supported by noticeable changes in key data indicators of supply and demand.

Demand indicators

- Recent methylamphetamine use among the general population in Queensland has declined since our previous assessment (3% in 2004, compared with 2% in 2007).
- The rate of recent methylamphetamine use among specific populations (injecting drug users and regular ecstasy users) has also reduced, from around 80 per cent in 2006 to 55 per cent in 2008.
- Queensland Health data show that hospital admissions for ‘other stimulant’ dependence or abuse have declined since 2001–02. However, there has been an increase in the number of treatment episodes by alcohol and drug treatment services since 2002–03. This may relate to the acute and long-term effects of methylamphetamine use.
- A shift from methylamphetamine injection to less invasive routes of administration (swallowing and smoking) may be occurring. Although this has benefits from a harm minimisation perspective, it also presents some challenges for health agencies in terms of opportunities for intervention and monitoring of consumption patterns.\(^2\)

Supply indicators

- The total weight of methylamphetamine analysed by Queensland Health Forensic and Scientific Services (QHFSS) decreased significantly in 2007–08 to 10.1 kg. This is in contrast to the general upward trend observed between 2001–02 (6 kg) and 2006–07 (14.8 kg).
- The median purity of methylamphetamine seized in Queensland more than halved between 2002–03 (23.4%) and 2007–08 (10.2%).
- There were fewer clandestine laboratories detected in Queensland in 2008-09 than in 2004–05 when our previous assessment was conducted.

Assessment of the market

- The contraction of the Queensland methylamphetamine market can be attributed primarily to the multifaceted approach to reducing domestic retail diversion of pseudoephedrine, the main precursor used in methylamphetamine production.

\(^1\) Normally a downgrading of the capability component of the risk assessment formula would result in a downgrading of risk. However, we believe the methylamphetamine market still requires a sustained period of contraction before we can support a downgrading of the overall level of assessed risk.

\(^2\) Smoking and swallowing methylamphetamine also have disadvantages from a health perspective and we discuss these further in Chapter 3.
This multi-faceted approach included the rescheduling\(^3\) of pseudoephedrine-based (PSE-based) products, the emergence of phenylephrine-based products, real-time monitoring of Schedule 3 PSE-based products purchases and proactive partnerships between law enforcement, government agencies and private industry.

Effective domestic market regulation directed at the retail end of the pseudoephedrine supply-chain (predominantly pharmacies) has:
- reduced the effectiveness of ‘pseudo-running’ to source pseudoephedrine
- reduced opportunistic methamphetamine production within Queensland
- contributed to a substantial increase in pharmacy ‘break and enters’ from 2006 (270) to 2008 (617)

There is some evidence that domestic organised criminal groups are directing attention to the importation of pseudoephedrine or methamphetamine.

We identify the importance of a nationally consistent legislative and regulatory approach to further disrupt the methamphetamine market and consolidate the gains made over the past five years. This would include uniform regulation of the purchase of PSE-based products — that is, mandating the use of Project STOP by pharmacies in all states and territories; parity in the scheduling of controlled substances and equipment across all jurisdictions; and stronger regulation of industries involved in the transportation, supply and destruction of products and chemicals (by adherence to product security requirements and mandating the submission of end user declarations for controlled substances and equipment).

**Ecstasy-group substances**

*Note:* We have used the term ecstasy-group substances to cover drugs marketed, consumed or seized as ecstasy. It includes tablets purported to be ecstasy that may contain no MDMA and may contain various other drugs (for example, methamphetamine and analogues of methamphetamine and MDMA).

We assess that the risk associated with the market for ecstasy-group substances currently remains **HIGH**. However, we predict that the risk will **INCREASE** in the short to medium term because of an increase in the harm likely to be associated with tablets that contain a variety of stimulants and drugs other than MDMA, and an increase in the number of tablets typically taken by users in a session.

**Demand indicators**

- Recent ecstasy use in the general Queensland population more than doubled between 2001 (1.7%) and 2007 (3.7%). The upward trend in ecstasy use is in contrast to the downward trend in methamphetamine use.
- Urine testing of police detainees in the Southport (Gold Coast) watch-house showed a consistently higher proportion of positive ecstasy results than the national average between 2001 and 2008. Ecstasy results for detainees at the Brisbane City watch-house have been comparable to, or below, the national average.
- There was a marked increase in the number of treatment episodes by alcohol and drug treatment services associated with ecstasy-group substances between 2002–03 (30 episodes) and 2007–08 (522 episodes). However, the number of treatment episodes remains much lower than that for methamphetamine over the same period.

**Supply indicators**

- The total weight of seized MDMA analysed by QHFSS in 2007–08 (24.5 kg) was more than four times that analysed in 2004–05 (5.3 kg), with significant increases from 2005–06 onwards. The increase in the weight of ecstasy-group substances seized has been consistent across all QPS regions since 2004–05.
- Seizure data indicate that since our last assessment the ecstasy market has expanded to more regional locations. Previously, the market was predominantly centred in South-East Queensland.
- The median purity of ecstasy tablets seized in 2008 (17.2%) is almost half that of 2004 levels (32.8%). The reduction in median purity is likely to have contributed to an increase in the average number of tablets consumed by users in a session, from one in 2004 to two in 2008.
- The reduction in purity, coupled with increased demand for ecstasy, is likely to have driven increased diversity in the content of tablets available on the market.
- There has been an increase in the incidence of tablets containing multiple drugs, including tablets containing no MDMA at all. The range of substances in tablets now available includes methamphetamine, anti-depression drugs, ketamine (a veterinary anaesthetic) and analogues of ecstasy such as 3,4-methylenedioxymethamphetamine (MDA) and the highly toxic paramethoxyamphetamine (PMA, known as ‘death’).

**Assessment of the market**

- The market for ecstasy-group substances, both in Queensland and nationally, has expanded significantly since our 2004 assessment.
From a demand perspective, the swallowing of tablets as a non-invasive route of administration has contributed to the incorrect perception by users that ecstasy is a ‘safe’ drug. However, data on the purity of seized tablets and the range of substances in some of the tablets on the market indicate that there are significant health risks.

Organised criminal groups in Queensland remain dependent on their ability to source product and precursors from interstate and international markets.

The locations of international ecstasy production and ecstasy precursor trafficking routes have diversified. Ecstasy production was traditionally located in Europe, but North America (particularly Canada) now represents a higher risk for ecstasy importation to Australia.

Attempts by organised criminal groups to produce ecstasy in Queensland have been limited and relatively unsuccessful. This is in contrast to the successful large-scale production of ecstasy observed interstate.

The domestic availability of tablet presses has enabled domestic organised criminal groups to press tablets on a commercial scale and this highlights the need for increased regulation.

MDMA was recently rescheduled from a Schedule 2 to a Schedule 1 drug in an effort to curb the supply and trafficking of the drug. A range of industry-directed initiatives aim to reduce opportunities for the domestic diversion of ecstasy precursors such as sassafras oil. For example, in Queensland as of June 2008, it is a requirement that end user declarations be submitted to QPS Chemical Diversion Desk for sale of controlled precursor chemicals.

However, organised criminal groups continue to exploit vulnerabilities within the market. For example, the prominence of social networks in the supply of ecstasy at the retail level of the market insulates groups from law enforcement attention.

At present the health data (such as overdoses and hospitalisations) do not support an increase in the overall risk rating for the ecstasy-group substances market. However, we predict that this is likely to change over the next three to five years.

We identify that maintaining and possibly increasing sustained awareness-raising campaigns targeted at specific user demographics will be an important strategy to assist disruption of the ecstasy-group substances market in Queensland over the next five years. Highlighting the adverse health facts and legal ramifications related to use of tablets may encourage consumers to reduce consumption.

**Cannabis**

Based on the size and entrenched nature of the cannabis market, the high level of profits and criminality, and the risk associated with further expansion of the hydroponic sector, we have upgraded our assessment of the level of harm of the cannabis market to **HIGH**. As a result the overall level of risk (on a statewide basis) has also increased to **HIGH**.

**Demand indicators**

- Despite some moderation in use among the general population, cannabis remains the most-used illicit drug in our community.
- Recent cannabis use in Queensland (9.5%) is slightly higher than the national average (9.1%). This represents about 323,000 Queensland residents using cannabis in the previous 12 months.
- The frequency of cannabis use in the general community appears to be reducing, with a shift from daily or weekly use to a more sporadic pattern across most age brackets. However, survey data indicates that over 550,000 Australians may be using cannabis at least weekly.
- Although there has been a significant increase in people seeking treatment for cannabis-related problems since our last assessment, this has been driven to some extent by a relatively high rate of police and court diversion for cannabis possession offences in Queensland.

**Supply indicators**

- Police, health agencies and drug users all report that cannabis is easily and consistently available throughout the state. The supply of hydroponic cannabis is more consistent than that of bush cannabis.
- The price of cannabis has remained relatively consistent over the past five years, although users report that it is more expensive in Queensland than in some other Australian jurisdictions.
- Cannabis continues to dominate drug-related policing activity in Queensland. Almost 70 per cent of drug-related arrests in 2007–08 involved cannabis, although almost 90 per cent of those were for user-type (consumer) offences.
- The QPS reports an increase in the number of hydroponic cannabis crops detected over the past few years. The observed trend is consistent with trends elsewhere in Australia.
- Despite the apparent increase in the level of hydroponic production, bush crops remain prevalent in Queensland.
Cannabis use in remote Indigenous communities

- From a demand perspective, the issue of most concern is that cannabis use by Indigenous Australians, particularly those in remote communities, is following the opposite trajectory to the decline observed in the general community.
- Initial research indicates that levels of cannabis use in Cape York and Torres Strait Island communities will be at least as high as those found in Northern Territory communities in recent years (around 60% of residents using cannabis at least weekly and many reporting ‘heavy’ daily use).
- Early initiation into cannabis use (with children as young as 10 years of age using regularly), a high level of ‘spinning’ (combining tobacco with cannabis), the use of ‘bucket bongs’, and high levels of poly drug abuse are all troubling aspects of cannabis use in remote Indigenous communities.
- Local dealers see the cannabis market in remote Indigenous communities as a lucrative one, with the cost of cannabis much higher than that in the wider community.
- It is unlikely that traditional organised criminal groups will directly supply cannabis into remote Indigenous communities, because of the need for strong family and/or cultural connections. However, although the local supply networks may not function in a manner traditionally associated with organised crime, they are nonetheless ‘organised’ and operate for profit.
- QPS Far Northern Region, in partnership with James Cook University and the National Cannabis Prevention and Information Centre, is working with communities in Cape York and the Torres Strait to reduce cannabis use and availability and strategically address the prospect of amphetamine-type stimulants being introduced to those communities.

Assessment of the market

- The cannabis market is attractive to organised criminal groups seeking to diversify their profit base and minimise their level of risk. The reliable income stream may provide a financial base for a broad range of other criminal activities.
- It is possible that there has been a change in the mix of personal, social and commercial cultivators in the Queensland cannabis market, with some growth in the commercial sector of the market.
- There is potential for the hydroponic sector of the market to expand further over the short to medium term. This is likely to be driven by organised criminal groups and the absence of a regulatory framework for the sale of hydroponic equipment necessary for commercial-scale hydroponic cannabis cultivation.
- Further growth of the hydroponic sector will increase the incidence and severity of a range of health and safety harms associated with cultivation practices for hydroponic cannabis.
- There are significant health and community harms associated with cannabis use, including a growing body of evidence on the relationship between mental health problems and cannabis use. There is also strong evidence of the adverse impact of cannabis on driving performance. This is of concern, bearing in mind the prevalence of cannabis use in the community and recent research on the prevalence of drug-impaired driving.
- The traditional view of cannabis as a ‘soft’ drug fails to recognise the high level of criminality involved in the supply side of the market, including extortion and physical violence.
- The volume of money generated by the cannabis market encourages money laundering. This in turn generates further criminal activity such as corruption and fraud and diverts money away from the legitimate economy.
- We predict that the risk associated with the cannabis market will remain stable (HIGH) in the short term (one to two years). There is potential for further expansion of the hydroponic sector of the market, particularly the syndication of hydroponic cannabis crops by organised criminal groups operating in Queensland in the medium to longer term (three to five years).
- The CMC intends to write to the Queensland Attorney-General seeking a review of the legislative and regulatory framework relating to cannabis cultivation and supply in Queensland. We believe the review should include an examination of options for regulating the hydroponics industry in Queensland.

Cocaine

We continue to assess the cocaine market in Queensland as a MEDIUM risk, but at the high end of the medium scale. There has been some expansion in the Queensland cocaine market since our 2007 assessment, although the market remains small in comparison with markets for other illicit drugs such as ecstasy-group substances and cannabis.

Demand indicators

- Reported cocaine use in Australia and Queensland is now at its highest level on record.
- Based on National Drug Strategy household survey data, the level of recent cocaine use by Queensland residents doubled between 2004 and 2007.
However, overall cocaine use remains lower than for other illicit drugs such as cannabis and ecstasy. Furthermore, the available data indicate that the frequency of cocaine use remains low and sporadic for most users and there is a low level of cocaine injection.

Although there has been an increase in drug and alcohol treatment episodes relating to cocaine use over the past four years, the overall level of treatment remains low compared with other illicit drugs.

Supply indicators

- On a national basis there has been an increase in the number and weight of cocaine detections at the Australian border since 2006–07.
- The purity of QPS cocaine samples has continued to fluctuate over the past five years, although there has been a general upward trend in the median purity of samples tested.
- Reports by regular ecstasy users suggest that the price of cocaine has remained relatively stable over the past four years or so.
- Reports by regular drug users and law enforcement intelligence indicate continuing fluctuations in cocaine supply in Queensland. The Queensland cocaine market appears to remain less stable than the more established markets in New South Wales and Victoria.
- User reports and law enforcement data indicate that cocaine has become more readily available in Queensland over the past three years.
- Consistent with our 2007 cocaine assessment, there is no evidence that ‘crack’ cocaine is readily available in Queensland.
- A broader range of criminal groups are now supplying the cocaine market.

Assessment of the market

- The growth in demand for cocaine and the attractiveness of it to a broad range of social drug users make the market attractive to organised criminal networks.
- The Queensland cocaine market has continued to expand. Overall, though, the cocaine market remains smaller than other illicit drug markets, particularly the cannabis, ecstasy-group substances and methylamphetamine markets.
- The Queensland cocaine market currently remains supply driven, with continuing fluctuations in supply and in the purity of cocaine seized. Ongoing restrictions on supply and consistently high prices (particularly relative to synthetic stimulants) are likely to limit significant expansion of the market in the short to medium term.
- Changes in international cocaine markets and emerging trafficking routes are likely to improve the reliable availability of cocaine in Australia.
- The attractiveness of cocaine to social drug-users, and continuing concerns about our understanding of the actual level of demand, and therefore the actual size of the cocaine market throughout Australia, indicate that the Queensland market requires continued close monitoring.

Heroin

We continue to assess the heroin market as a HIGH risk, primarily because of the associated harms. The market is generally stable, although short-term surges in supply continue to be evident.

Demand indicators

- Health agency and other research data indicate that there has been no increase in the prevalence of heroin use since our 2004 assessment.
- In general, heroin users are older than users of other illicit drugs. Furthermore, new users are unlikely to be attracted to the market because of the unfavourable perceptions associated with injection of the drug.
- Pharmaceutical opioids continue to be a favoured substitute for heroin users and are gaining a stronger position in the market.
- Injection of heroin continues to be the most popular route of administration. The prevalence of smoking heroin has fluctuated over the past decade. As smoking may represent a more attractive route of administration for new or young users, smoking rates should continue to be monitored.

Supply indicators

- The price of heroin has remained stable since 2003, at around $50 per ‘cap’ or street deal.
- Afghanistan remains the world’s largest opium producer (despite a decline in production in 2008), followed by Myanmar. The majority of the world’s opium now comes from South-West Asia (Afghanistan and Pakistan). The opium yield of the traditional ‘Golden Triangle’ region of South-East Asia (Myanmar, Laos PRD and Thailand) now represents less than 5 per cent of global production.
- The most significant change in the market has been a shift from the supply of heroin from South-East Asia to South-West Asia. This change has been more evident in the southern states of Australia, but the nature of the Australian supply market means that there will be a flow-on effect to the Queensland market.
- National data indicate an increasing trend in the proportion of heroin seized at the Australian border.
which originated in South-West Asia. However, South-East Asia continues to be an important source of heroin in Australia.

- Organised criminal groups dominate the importation and distribution of heroin in Australia.

**Assessment of the market**

- Heroin remains a high-risk market because of the harms associated with high levels of dependence and intravenous drug use.
- The Queensland heroin market continues to be supply driven, with most heroin sourced from Sydney and Melbourne.
- The Queensland market has been relatively stable since our 2004 assessment, although there continue to be short-term surges in supply.
- We predict that the Queensland heroin market will remain stable in the short to medium term. However, continued monitoring is essential to identify any sustained increase in the supply of heroin.

**Other illicit drugs**

We briefly discuss a number of smaller illicit drug markets, although they are not discussed in detail because the drugs have not been detected in significant quantities or are not associated with significant organised criminal involvement in the market.

- Analogue drugs are derivatives of a parent compound, typically a prohibited or scheduled drug, which have chemical and/or pharmacological similarities to the original. The emergence of an **analogue stimulants** market is probably associated with the expansion of Queensland’s ecstasy market. Some analogue stimulants are marketed as safe and legal alternatives to ecstasy and other illicit drugs. Unmet demand in the ecstasy market, coupled with a general culture of experimentation among drug users, may drive an expansion of the analogue stimulants market. Therefore the market requires continued monitoring.
- The availability and use of GHB (‘fantasy’) in Queensland appears to remain low. However, GHB use presents a high risk of overdose because it has a low margin for error in dosage.
- The use of **hallucinogens** in Australia is relatively low. LSD, the most commonly used hallucinogen, is available in Queensland but the supply is sporadic.
- Police and health agencies consistently identified the **diversion of prescription drugs**, including opioids and benzodiazepines, as a growing problem. Prescribed stimulants such as Ritalin® are now also more commonly being used illicitly. Health professionals were particularly concerned about the widespread diversion and misuse of benzodiazepines. However, there is no evidence of any significant organised criminal involvement in the illicit diversion of prescription drugs in Queensland or other parts of the country.
- Organised criminal involvement in the production and trafficking of **counterfeit pharmaceuticals** and medicines has emerged as a problem overseas. This is unlikely to become a significant problem in Australia, given our highly regulated pharmaceutical and drug industry.

**General developments**

We also noted a number of general observations and issues common to some or all of the illicit drug markets we assessed in 2009:

- There appears to be a general shift in illicit drug markets towards social drug-taking — primarily pills and, to a lesser extent, cocaine and analogue stimulants.
- Drug-taking in an infrequent social context (social drug-taking), such as with friends and associates at nightclubs and parties, has become normalised. Furthermore, it is less likely to be perceived as unlawful or delinquent behaviour by those who do it.
- Drug ‘dealing’ within social networks has also become normalised and is frequently not perceived as being associated with criminality.
- Social networks are an important mechanism for the supply of illicit drugs, particularly those associated with social drug-taking. This has important implications for law enforcement and health responses to illicit drug markets.
- The supply-base for illicit drugs appears to have broadened. This is likely to be associated with the shift towards social drug-taking markets, the role of social networks in supplying those markets and the normalisation of drug ‘dealing’ within those networks.
- Australia continues to have one of the most expensive illicit drug markets in the world. Generally speaking, the Queensland market is marginally more expensive than other Australian jurisdictions for most illicit drug commodities.
- New telecommunications interception powers will help Queensland law enforcement agencies to disrupt organised criminal groups producing and trafficking illicit drugs in Queensland.
- Proceeds of crime legislation is being used more by Queensland law enforcement agencies to reduce the capability of organised criminal groups to withstand law enforcement targeting.
Summary of the risk assessment for illicit drug markets

In 2009 we have upgraded the assessed level risk for the cannabis market from MEDIUM to HIGH. This reflects an increase in the assessed level of harm resulting from the high level of profits and criminality associated with the market, and the risk associated with further expansion of the hydroponic sector of the market.

The assessed level of risk for all other markets is consistent with our 2004 assessment. However, as shown in Table 2, we predict that the risk associated with the methylamphetamine market is likely to DECREASE as the impact of domestic market regulation efforts continues to reduce the capability of organised criminal groups to reliably source pseudoephedrine and other precursors.

On the other hand, we predict that the risk associated with the market for ecstasy-group substances is INCREASING. This is due to an increase in the adverse health effects and harms likely to be associated with tablets that contain a variety of stimulants and drugs other than MDMA, and an increase in the number of tablets typically taken by users in a session. The risk associated with the cocaine market is also increasing because of increasing levels of use and supply.

Table 2: Summary of 2009 risk assessment and predicted trend by illicit drug market

<table>
<thead>
<tr>
<th>Illicit drug market</th>
<th>Assessed level of risk</th>
<th>Predicted risk trend</th>
</tr>
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<tbody>
<tr>
<td>Methylamphetamine</td>
<td>Very high</td>
<td>Decreasing</td>
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<td>Ecstasy-group substances</td>
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<td>Increasing</td>
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<td>Cocaine</td>
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<td>Heroin</td>
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1: Introduction

This chapter provides a general overview of illicit drug use in Australia and Queensland. We then explain the scope of our strategic assessment, the reasons for our analysis of illicit drug markets in Queensland and the structure of the overall assessment.

Background

In December 2008, Prime Minister Rudd used his first national security statement to identify transnational crime and organised crime more broadly as a significant security threat to Australia. It was the first time that organised crime had been officially identified by the Australian Government as a national security threat. It has been estimated that the cost of organised crime in Australia is likely to be in excess of $15 billion per year. Furthermore, after investigations conducted as part of Operation Gordian, the ACC believes that $4–12 billion in ‘drug money’ is being sent offshore annually (McKenzie 2008).

Illicit drugs continue to be the principal activity undertaken by most high-threat criminal groups. At the same time a series of investigative news reports in the Courier-Mail, under the umbrella title ‘The drugs scourge’, highlighted the level of community concern about illicit drug use in Queensland and its effects on individuals, families and social and health services.

Having said that, the most recent general population survey found that overall reported illicit drug use by Australians is declining. Furthermore, the decline in recent use was evident across most categories of illicit drugs. On the other hand, there was an increase in reported recent use of cocaine, ecstasy and tranquillisers or sleeping pills for non-medical purposes (AIHW 2008c). This is consistent with what appears to be a general trend towards social drug-taking within the community, as we discuss further in our assessment.

Despite the general decline in illicit drug use in the community, the National Drug Strategy household survey indicates that more than two million Australians and 465,000 Queensland residents had used an illicit drug in the 12 months before the survey (AIHW 2008b, 2008c). Cannabis was the most commonly used illicit drug, followed by ecstasy, both nationally and in Queensland. Figure 1 shows the rate of recent illicit drug use by Queensland residents as reported in the household survey.5

The social cost of illicit drug abuse in Australia is significant. The total social cost in 2004–05 was estimated to be $8.2 billion, with almost half of that ($4 billion) related to the costs associated with crime (Collins & Lapsley 2008). The National Drug and Alcohol Research Centre’s Drug Policy Modelling Program (DPMP) has also done some preliminary work on estimating the social costs associated with different illicit drugs. Although further methodological refinement is required, the data provide policy makers with a tool for evaluating different policy responses in terms of cost savings to the community. Table 3 summarises the DPMP’s working estimates of the annual social costs associated with cannabis, cocaine, opiate and amphetamine use in Australia.

Figure 1: Recent use of illicit drugs by Queensland residents aged 14 years or older, 2007

![Percentage of respondents](image-url)

Table 3: Working estimates of the annual social cost of illicit drug use by drug type

<table>
<thead>
<tr>
<th></th>
<th>Cannabis</th>
<th>Cocaine</th>
<th>Opiates</th>
<th>Amphetamine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total costs — all drug users</td>
<td>$3 115 000</td>
<td>$2 990 000</td>
<td>$4 574 000</td>
<td>$3 731 000</td>
</tr>
<tr>
<td>Social cost per user</td>
<td>$1 631</td>
<td>$1 699</td>
<td>$30 633</td>
<td>$6 560</td>
</tr>
<tr>
<td>Social cost per dependent user</td>
<td>$11 296</td>
<td>$17 852</td>
<td>$105 342</td>
<td>$44 665</td>
</tr>
<tr>
<td>Social cost per non-dependent user</td>
<td>$192</td>
<td>$314</td>
<td>$1 965</td>
<td>$926</td>
</tr>
</tbody>
</table>


Table 4: Summary of risk assessment by illicit drug market, 1999 and 2004 assessments

<table>
<thead>
<tr>
<th>Illicit drug market</th>
<th>1999</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphetamine</td>
<td>High</td>
<td>Very high</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>—</td>
<td>High</td>
</tr>
<tr>
<td>Cannabis</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Cocaine</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Heroin</td>
<td>Very high</td>
<td>High</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td>—</td>
<td>Low</td>
</tr>
<tr>
<td>GHB/fantasy</td>
<td>—</td>
<td>Low</td>
</tr>
</tbody>
</table>

As a result of a recommendation in the 2004 assessment, we also conducted a more detailed strategic assessment of the cocaine market in Queensland in 2007 (MEDIUM risk). Any relevant findings from our previous assessments are noted in the discussion of specific illicit drug markets in the following chapters.

The 1999 and 2004 assessments examined a range of organised crime markets in Queensland. We decided to conduct the 2009 assessment of organised crime markets in Queensland differently by producing four separate, but related, assessments:
- organised property crime markets in Queensland
- organised fraud in Queensland
- money laundering and organised crime in Queensland
- illicit drug markets in Queensland.

**Scope of the assessment**

The purpose of this strategic assessment is to examine illicit drug markets in Queensland, primarily to reveal the nature and extent of organised criminal activity within this environment.

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6 The risk assessment methodology was not applied to the ecstasy, prescription drug and GHB markets in the 1999 QCC/QPS assessment.
As defined in Schedule 2 of the Crime and Misconduct Act 2001, organised crime means criminal activity that involves:
(a) indictable offences punishable on conviction by a term of imprisonment not less than 7 years; and
(b) 2 or more persons; and
(c) substantial planning and organisation or systematic and continuing activity; and
(d) a purpose to obtain profit, gain, power or influence.

Our assessment focuses predominantly on significant organised criminal groups and their involvement in specific illicit drug markets. The CMC has jurisdiction to examine illicit drug markets under s. 25 of the Crime and Misconduct Act 2001, which states that the CMC has a responsibility to investigate major crime as referred to it by the CMC Reference Committee.

More specifically, the aim of the illicit drug markets assessment is to:
- determine the extent to which there has been any change in the significance of, and risk associated with, specific illicit drug markets in Queensland
- identify demand and supply trends for specific illicit drug markets
- identify trends in the production and use of particular illicit drugs and the impact of those trends on assessed levels of harm and risk
- identify key drivers of illicit drug markets
- describe the characteristics of specific illicit drug markets
- recommend strategies, or improvements to existing strategies, where appropriate to enhance law enforcement efforts to effectively detect and disrupt illicit drug markets.

Our assessment primarily examines the illicit markets for methylamphetamine, ecstasy-group substances, cannabis, cocaine and heroin.

We also briefly discuss other illicit drug markets:
- the emerging analogue stimulants market
- gamma-hydroxybutyrate (GHB or 'fantasy') and the associated gamma-butyrolactone (GBL) and 1,4-butanediol (1,4-B)
- hallucinogens
- the diversion of prescription drugs.

However, these markets are not considered in detail because the drugs have not been detected in significant quantities in Queensland. In the case of prescription drugs, there is insufficient evidence of significant organised crime involvement in the illicit market to warrant detailed examination in an assessment of organised crime markets.

We hope that this report will be of interest to other government agencies, health agencies, drug and alcohol support services, academic institutions and other research agencies, members of parliament and some members of the general public.

**Structure of the report**

The assessment is presented in nine chapters. The content of the remaining chapters is summarised below:

- **Chapter 2** explains how we conducted our strategic assessment, the methodology and risk assessment process used, as well as the associated limitations in our data collection.
- **Chapter 3** assesses the methylamphetamine market in Queensland.
- **Chapter 4** assesses the market for ecstasy-group substances in Queensland. We have used the term ‘ecstasy-group substances’ to describe the market because many of the pills now available and sold as ‘ecstasy’ actually contain very little MDMA or none at all.
- **Chapter 5** assesses the cannabis market in Queensland.
- **Chapter 6** assesses the cocaine market in Queensland.
- **Chapter 7** assesses the heroin market in Queensland.
- **Chapter 8** briefly discusses a range of other illicit drug markets in Queensland, including the emerging analogue stimulants market; GHB (or ‘fantasy’); hallucinogens, including LSD; and the illicit diversion of prescription drugs such as opioids and benzodiazepines. We also discuss the increasing involvement of organised criminal groups in the production and trafficking of counterfeit pharmaceuticals.
- **Chapter 9** briefly outlines a number of general observations and overarching issues that are common to some or all of the illicit drug markets in Queensland.
2: How we conducted our strategic assessment

This chapter explains the methods used to gather information, the associated limitations and the risk assessment methodology used in our strategic assessment.

Methodology

Our assessment brings together information we obtained from:

- a review of relevant literature, including material from Queensland, other Australian jurisdictions and international sources
- a review of relevant legislation
- a review of relevant law enforcement investigations
- a review of intelligence database holdings
- analysis of information obtained from semi-structured interviews during consultations with key law enforcement agencies (LEAs) and other stakeholders
- analysis of information obtained from Crime and Misconduct Commission (CMC) coercive hearings
- analysis of quantitative data.

Consultations

We conducted a series of semi-structured interviews and consultations with representatives from law enforcement agencies, other government agencies, research agencies and private organisations. We consulted with:

- the Australian Government Attorney-General’s Department (Illicit Drugs Section)
- the Australian Crime Commission (ACC)
- the Australian Customs and Border Protection Service (Customs and Border Protection)
- the Australian Federal Police (AFP), including ACT Policing
- the Australian Institute of Criminology (AIC)
- Drug-Arm Australasia
- James Cook University — School of Indigenous Australian Studies
- the national Cannabis Prevention and Information Centre (NCPIIC) at the University of New South Wales
- the National Drug and Alcohol Research Centre (NDARC) at the University of New South Wales
- the National Drug Law Enforcement Research Fund (NDLDERF)
- the New South Wales Police Force (Chemical Operations Unit)
- the Pharmacy Guild of Australia (Queensland Branch)
- the Queensland Alcohol and Drug Research and Education Centre (QADREC) at the University of Queensland
- the Queensland Ambulance Service (QAS)
- Queensland Health (see further details below)
- the Queensland Police Service (QPS) (see further details below)
- South Australia Police — Drug Investigation Branch
- Victoria Police — Forensic Services Department
- the Wuchopperan Health Service in Cairns
- Youthlink in Cairns
- a pharmaceutical industry representative from the National Precursor Working Group.

We conducted consultations with QPS representatives in each police region between August and October 2008. Where possible, the Regional Crime Coordinator, the Regional Intelligence Coordinator, district intelligence officers and investigators participated in the semi-structured interviews. All QPS districts were represented apart from Mt Isa (Northern Region), Longreach (Central Region), and Charleville and Warwick (Southern Region).7 We also consulted with State Crime Operations Command (SCOC), including the State Drug Investigation Unit (SDIU) and Task Force Hydra (outlaw motorcycle gangs). A second round of consultations was conducted in 2009 and the feedback received was used to add further context to our assessment.

Consultations with AFP representatives were undertaken in Brisbane, Cairns and Canberra. We consulted with Customs and Border Protection officers in Brisbane, Cairns, Canberra, Sydney and Townsville, and with ACC representatives in Brisbane, Canberra and Sydney.

We also conducted consultations with Queensland Health representatives from Alcohol, Tobacco and Other Drugs Services (ATODS), the Queensland Needle and Syringe Program (NSP), Queensland Health Forensic and Scientific Services (QHFSS) and the Environmental Health Unit (Drugs and Poisons). We met with staff from ATODS and/or NSP services in Brisbane (Brisbane Harm Reduction Centre and Inala), Bundaberg, Cairns, Gold Coast (Palm Beach), Ipswich, Mackay, Nambour, Rockhampton and Townsville.

7 The Regional Crime Coordinators and Regional Intelligence Coordinators provided a general regional perspective and an overview of district-level trends and issues. Therefore it was not always necessary to meet individually with each QPS district.
Quantitative data
We analysed quantitative data from a range of sources to identify trends and emerging issues in specific illicit drug markets in Queensland. The following agencies provided us with statistical data for analysis:

Queensland Police Service
- Persons charged with offences relating to illicit drug use for each police district and region in Queensland (July 1998 to June 2009). The data, provided by QPS Statistical Services, were extracted from the QPRIME system using the counting rules established for the ACC’s annual Illicit drug data report (see further information in Appendix 3).
- Clandestine laboratories detected by the QPS, including date, location and the method of production, from 2003–04 to 2007–09. The data were provided by the Chemical Diversion Desk within the State Drug Investigation Unit, SCOC.
- Unlawful entry (‘break and enter’) offences involving pharmacies in Queensland (January 2006 to December 2008). The data were provided by the QPS Chemical Diversion Desk and do not represent official QPS statistics. There are several limitations to the data that should be considered: unsuccessful attempts to break into a pharmacy are not included; it is not possible to determine the primary motive for the offence and the purpose of some offences may not have been to obtain pseudoephedrine-based products; and it is not possible to distinguish offences that would be classified as opportunistic rather than organised.

Queensland Health
- Persons admitted to public and private acute hospitals in Queensland where the principal diagnosis is drug dependence or abuse (July 1999 to June 2008). The data are based on admitted patient episodes. See Appendix 3 for further information.
- Treatment episodes concerning illicit drug use provided by specialist publicly-funded alcohol and drug treatment services in Queensland (July 2004 to June 2008). Queensland Health Alcohol, Tobacco and Other Drugs Services provided us with a subset of the data they supply to the Australian Institute of Health and Welfare (AIHW) as part of the Alcohol and Other Drug Treatment Services National Minimum Data Set. These data are published annually by the AIHW as the Alcohol and other drug treatment services in Australia report.
- The data are based on ‘closed’ (or completed) treatment episodes. The number of closed treatment episodes does not equate to the total number of persons receiving treatment for drug use, as a single client may attend a number of different agencies, re-register with the same agency and be assigned a new personal identifier, or commence treatment for a different principal drug of concern.
- Illicit drug seizures analysed by Queensland Health Forensic and Scientific Services (QHFSS) (July 2001 to June 2008). QHFSS provided us with data on all seizures lodged with them for testing, including some seizures by federal agencies. However, not all samples seized by federal agencies are analysed by QHFSS — some samples are sent to laboratories interstate. For some of our analyses (in Chapters 3 and 4) we included all seizures tested by QHFSS regardless of the agency of origin, although the number of cases relating to federal agency seizures was small. In other cases (Chapter 6) we only included those seizures lodged by the QPS and the CMC in our analyses. In each case the data included in the analysis have been explained in a footnote. It should also be noted that not all law enforcement agency drug seizures are provided to QHFSS for forensic testing. For example, QPS does not send drug seizures for analysis where an offender is not likely to contest the charges.
- With respect to the chapters for methylamphetamine and ecstasy-group substances, QHFSS was selected as the data source for total weight of seizures (i.e. Figures 9 and 21). Several factors influenced our decision to use this data source versus QPS data. QHFSS data allowed us to more accurately identify and measure each type of stimulant sent for testing. Although QPS seizure data provides a better representation of all seizures, the type of drug can only be confirmed after analytical testing. For example, it is possible that the identification of a powder seized as methylamphetamine may be MDMA or have no controlled drugs present. A limitation of using QHFSS data is that several factors will determine whether a QPS seizure is sent for analytical testing. These factors include whether an offender is identified, whether the offender pleads guilty and the quantity of drug seized. Because of these factors, QHFSS seizure data only represents a proportion of total seizures in the state. It was not possible for us to ascertain what percentage of QPS seizures are sent/not sent for testing.

Queensland Ambulance Service
- Number of cases in Queensland attended by the QAS relating to a drug overdose (July 2007 to June 2008). There are a number of limitations associated with these data and these are explained fully in Appendix 3.

Australian Institute of Criminology
- The AIC provided us with data from the Drug Use Monitoring in Australia (DUMA) program collected in the Brisbane and Southport watch-houses (1999 to December 2008). The variables included self-reported drug use in the past 30 days, self-reported drug use in...
the past 48 hours and urinalysis results. In our analyses we also used data publicly available from the AIC’s drugs and offending online interactive data tool.8

**Pharmaceutical industry**

- A pharmaceutical industry representative from the National Precursor Working Group provided us with data regarding the stocking of phenylephrine-based tablets and pseudoephedrine-based tablets by Australian pharmacies between 2004 and 2008.

We also analysed data published in open source material to track trends in illicit drug use and supply. Key data sources were:

- the National Drug Strategy household survey
- the Illicit Drug Reporting System (IDRS)
- the Ecstasy and Related Drugs Reporting System (EDRS)
- the ACC’s Illicit drug data report
- reports produced by the United Nations Office on Drugs and Crime.

The datasets and other data sources we used are each subject to a number of caveats and limitations. Further information about the datasets and their limitations is provided in Appendix 3. Despite these limitations, by triangulating the quantitative data with information obtained during our consultations and other classified and open source reports, we have sought to verify and validate each information source where possible to inform our understanding of illicit drug markets in Queensland.

**Risk assessment**

The risk assessment methodology used in this paper is one that was used in the 1999 and 2004 organised crime markets assessments and in the 2007 assessment of the Queensland cocaine market. This provides consistency in the strategic assessment process and allows comparison with previous risk levels. Figure 2 provides an overview of our risk assessment methodology and Appendix 2 gives a more detailed explanation. The risk assessment relies on a series of factors to determine the level of risk.

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3: Methylamphetamine

This chapter summarises and discusses a range of law enforcement, health and other data and information relating to the methylamphetamine market in Queensland. We place particular emphasis on a range of domestic market regulation initiatives that have, to some extent, disrupted the ability of organised criminal groups to divert pseudoephedrine (the predominant precursor used for methylamphetamine production).

Overview

Scoping of the current environment has suggested some contraction in the size of Queensland’s methylamphetamine market from previous CMC assessments. This is a significant finding, given that our 1999 and 2004 assessments reported that Queensland’s methylamphetamine market was expanding.

The contraction of the market can be attributed to a multifaceted approach to regulating pseudoephedrine. In Queensland, pseudoephedrine extracted from ‘cold and flu’ medicines has been the predominant precursor used to produce methylamphetamine in the last 10 years. Reduced access to this precursor appears to be the primary factor that is affecting the market.

Since 2004, the retail availability of pseudoephedrine-based (PSE-based) products in Queensland (and Australia) has halved as a result of federal and state legislative change and introduction of alternative ‘cold and flu’ preparations. A partnership between law enforcement agencies and pharmacy retailers in Queensland has provided valuable intelligence to monitor pseudoephedrine purchases. ‘Pseudo-running’,9 which was the primary method used for diversion, is a less viable means of diverting pseudoephedrine for methylamphetamine manufacture.

The result of increased pseudoephedrine regulation at the ‘point of purchase’ has been the removal of some low-level producers from Queensland’s market. ‘Cooks’, who relied on this mode of diversion, can no longer access large amounts of precursor and only produce enough methylamphetamine to satisfy their own requirements (‘addiction-based cooks’).

These vulnerabilities are currently being addressed through increased regulation of the pharmaceutical industry.

Nationally, Queensland has been a leader in the regulation of pseudoephedrine and its associated industry. However, our ability to be truly effective in restricting the supply of methylamphetamine within Queensland is dependent on a nationally consistent framework across all jurisdictions. For example, there is a lack of consistency across states in the requirements for purchasing PSE-based products.

Currently, there is minimal evidence that sophisticated organised criminal groups operating in Queensland have shifted to ‘mega-labs’10 and some evidence of sourcing precursors from international sources. Australian border seizures for methylamphetamine and pseudoephedrine do not indicate a significant shift by organised crime to increased importation. However, we do predict that increased importation into Queensland (and Australia) will be likely to occur in the next five years. We assess that the main driver for such a shift will be uniform domestic regulation of pseudoephedrine and the ability of high-level organised criminal groups to identify and exploit residual demand.

Previous CMC assessments

We have conducted two previous assessments of Queensland organised crime markets that included illicit drugs markets. In 199911 and 2004, we assessed the level of risk associated with the methylamphetamine market in Queensland as HIGH and VERY HIGH respectively (see Table 5).

Table 5: Summary of previous CMC risk ratings for the methylamphetamine market in Queensland

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Intent</th>
<th>Capability</th>
<th>Threat</th>
<th>Harm</th>
<th>RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>High</td>
<td>Very high</td>
<td>High</td>
<td>Very high</td>
<td>High</td>
</tr>
<tr>
<td>2004</td>
<td>Very high</td>
<td>Very high</td>
<td>Very high</td>
<td>Very high</td>
<td>Very high</td>
</tr>
</tbody>
</table>

9 Targeting multiple pharmacies to source bulk amounts of pseudoephedrine-based products.

10 Clandestine laboratories capable of producing large volumes of methylamphetamine.

11 Defined as amphetamine in the 1999 assessment.
In 1999 we noted that:

- production involved ‘… groups of individuals with particular skills and similar motivation who join together …’ and was ‘… opportunistic, involving predominantly individuals who are loosely networked …’, and
- local production was facilitated by the easy availability of precursor chemicals and a majority of Queensland clandestine laboratories were ‘box-labs’.  

In 2004 we found that:

- transportation of methylamphetamine and diversion of precursors were main vulnerabilities in the market
- precursors, equipment and details of production methods were readily available, and
- methylamphetamine was sourced from interstate, from imports and from considerable local production.

Discussion of methylamphetamine users’ poly drug consumption and the reasons for such high-risk activity was a feature of numerous consultations. Poly drug use is discussed in more detail in ‘Patterns of use’ below.

**Prevalence of use**

Overall, the prevalence of methylamphetamine use in Queensland has declined since the last CMC assessment in 2004. Both general and specific population surveys support this finding. For example, when comparing recent use of methylamphetamine within the Queensland general population from 1998 to 2007, the trend line is relatively stable from 1998 to 2004. However, from 2004 to 2007 a downward trend of 33 per cent occurred. This decline is consistent with national trends, as shown in Figure 3 (AIHW 2000a, 2000b, 2002a, 2002b, 2005a, 2005b, 2008a, 2008c).

Analysis of drug user data supports the downward trend identified within the general population by the National Drug Strategy household survey. Drug Use Monitoring in Australia (DUMA) 13 urinalysis results of persons detained by police are performed at Southport (Gold Coast) and Brisbane in South-East Queensland. When compared from 2004 to 2008, positive testing for methylamphetamine decreased 41 per cent at Southport and 37 per cent at Brisbane. This downward trend in South-East Queensland locations is consistent with the national average for DUMA data (see Figure 4).

Surveys of the drug-using population also support a decrease in the prevalence of methylamphetamine use. The Queensland Illicit Drug Reporting System (IDRS) and

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12 Box-labs, usually the size of a suitcase, are small and portable, and significantly reduce production times.


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**Figure 3: Methylamphetamine use in the previous 12 months — proportion of persons aged 14 years and older, Queensland and Australia, 1998 to 2007**

![Figure 3](image-url)

Queensland Ecstasy and Related Drugs Reporting System (EDRS) are annual voluntary surveys of injecting drug users (IDUs) and regular ecstasy users (REUs) respectively.

Queensland IDRS data show that the prevalence of overall recent use\textsuperscript{14} of powder, base and crystal methylamphetamine by IDUs has decreased from 2003 to 2009. Queensland EDRS data indicate that recent use of powder, base and crystal methylamphetamine by REUs has also trended downward after peaking in 2005 (see Figure 5).

\textsuperscript{14} Use within the preceding six months.

**Occasions for treatment**

In 2007–08, the Queensland Ambulance Service (QAS) began categorising the type of drug suspected to contribute at callouts due to overdose.\textsuperscript{15} When comparing methylamphetamine and ecstasy, it is interesting to note that methylamphetamine is not the primary amphetamine-type stimulant responsible for overdose presentations (see Figure 6).

\textsuperscript{15} Before 2007–08, the QAS coded overdoses as recreational, prescription or other; therefore, commodity-based analysis was not possible.

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**Figure 4:** Positive tests for methylamphetamine use — proportion of police detainees, DUMA data, 1999 to 2008

![Figure 4: Positive tests for methylamphetamine use — proportion of police detainees, DUMA data, 1999 to 2008](image)

Source: Australian Institute of Criminology — DUMA data.

**Figure 5:** Recent methylamphetamine use — proportion of Queensland IDRS and EDRS sample, 2003 to 2009

![Figure 5: Recent methylamphetamine use — proportion of Queensland IDRS and EDRS sample, 2003 to 2009](image)

Hospitalisation where the primary diagnosis is due to the use of methylamphetamine is considered within a broader classification titled ‘other stimulants, including caffeine’. Because of this coding protocol, no detailed analysis of hospitalisations attributed to methylamphetamine is possible. However, from a broad perspective, it is noted that dependence and abuse hospitalisations for ‘other stimulants’ have decreased steadily over the last nine years (see Figure 7).

Data from Alcohol, Tobacco and Other Drugs Services (ATODS), a Queensland Health agency responsible for treatment of drug users, show an increasing presentation of clients requiring treatment for methylamphetamine (see Figure 8). This appears to contradict the decline noted in hospitalisation data. It should be noted that caution should be exercised when comparing hospitalisation and treatment service data sources. Many factors could contribute to an increase in occasions for treatment. For example, certain health implications of methylamphetamine use may take time to manifest themselves.

Figure 6: Illicit drug attributed to Queensland Ambulance Service overdose presentation, 2007–08

![Figure 6: Illicit drug attributed to Queensland Ambulance Service overdose presentation, 2007–08](image)

Source: Queensland Ambulance Service — unpublished data, analysis conducted by CMC.

Figure 7: Hospital admissions for drug abuse or dependence relating to ‘other stimulants, including caffeine’, Queensland, 1999–2000 to 2007–08

![Figure 7: Hospital admissions for drug abuse or dependence relating to ‘other stimulants, including caffeine’, Queensland, 1999–2000 to 2007–08](image)

Source: Queensland Health Client Services — unpublished data, analysis conducted by CMC.

Note: Figures for 2007–08 are preliminary data only and may be subject to change.
Patterns of use

Form

From 2004 to 2008, specific population survey data in Queensland support a decline in recent use of all forms of methylamphetamine (that is, powder, base and crystal). A closer look at Queensland IDUs shows that recent use of powder and base has nearly halved over this period after a sharp decline in 2007–08 (QADREC 2005a, 2006a, 2007a, 2008a, 2009a).

Of note is the increase since 2007 in recent use of crystalline methylamphetamine despite the decreased use of powder. We believe that this is attributable, in part, to the ability of domestic organised criminal groups to adulterate powder methylamphetamine so that it then has a crystalline appearance. See ‘Is there “ice” in Queensland?’ on page 24 for more detail.

Perception of availability and purity

For the purposes of this assessment, analysis of availability and purity will be restricted to powder methylamphetamine as this is the form most commonly used by the general population (AIHW 2002b, 2005b, 2008c).

For this assessment, patterns of use include analysis of form, perceptions of availability and purity, routes of administration and poly drug use.

In Queensland, IDUs report their perceptions of availability on a scale from ‘very easy’, ‘easy’ and ‘difficult’ to ‘very difficult’. From 2005 to 2008, the proportion of Queensland respondents reporting availability of powder methylamphetamine as ‘very easy’ or ‘easy’ remained stable (QADREC 2006a, 2007a, 2008a, 2009a).

However, users’ perceptions of purity changed. From 2006 to 2008, the number of IDUs who reported that purity was fluctuating doubled. Purity fluctuation may be a result of the reduction in median purity. For more information on changes in purity, see pages 20–21.

Routes of administration

The injection of methylamphetamine in South-East Queensland has almost halved in the last eight years. From 2001 to 2007, the Brisbane Harm Reduction Centre had a 46 per cent decline in amphetamine drug presentations (Queensland Health 2008).

Figure 8: Treatment episodes by alcohol and other drug treatment services where the principal drug of concern was an amphetamine-group substance, Queensland, 2002–03 to 2007–08

Source: Queensland Health Alcohol, Tobacco and Other Drugs Services — unpublished data collected for the Alcohol and Other Drug Treatment Services National Minimum Data Set, analysis conducted by CMC.

19 Includes methylnaphetamine, amphetamine, dexamphetamine, ephedrine, pseudoephedrine, norephedrine and ephedra.

20 Treatment refers to ‘closed’ (or completed) treatment episodes by publicly funded alcohol and other drug treatment services in Queensland. See the further explanation of Queensland Health treatment data in Chapter 2.
From a statewide perspective, Queensland Health NSPs advised that presentations related to ‘total amphetamines’ had remained relatively stable in recent years despite the trend identified in South-East Queensland.21

Within the other demographic groups analysed, namely Queensland REUs, the route of administration depended on the form of methylamphetamine used. Swallowing is the preferred route of administration for consumption of powder and base methylamphetamine, whereas smoking is preferred for consumption of crystalline methylamphetamine (QADREC 2005b, 2009b).

From a health perspective, health professionals report that smoking methylamphetamine is a riskier behaviour than swallowing. NSP staff reported that smoking can cause long-term health problems such as emphysema and cancer.

In July 2007, the Queensland Tobacco and Other Smoking Products Act 1998 was amended so that sale, supply and display of ‘ice’ pipes are now prohibited. Despite this action, the QPS has noted attempts to circumvent it through the use of improvised smoking devices.

In summary, we assess that Queensland’s general patterns of methylamphetamine consumption are evolving. We believe that a general shift from injection to less invasive and more socially acceptable routes of administration (such as swallowing and smoking) is continuing to occur. From a harm minimisation perspective this is perceived as a positive step. However, we note that the movement to less invasive routes of administration creates difficulty in monitoring prevalence of use. More importantly, with users who smoke there is a reduced capacity for health services to provide face-to-face harm minimisation intervention, in comparison with users who inject.22

Poly drug use
Consultations with health providers reinforced previous findings that Queensland methylamphetamine users continue a high rate of poly drug use. Methylamphetamine is taken concurrently with other stimulants, depressants, prescription medication and alcohol. The recent national survey reports that 8 out of 10 users had consumed alcohol with methylamphetamine, 6 out of 10 cannabis and 5 out of 10 ecstasy (AIHW 2008c).

Irrespective of the reasons for poly drug use, the health ramifications for the user include increased risk of intensifying the psychological and physiological effects of a particular drug, toxicity effects (including overdose and death), psychotic episodes when combining with psychoactive drugs, and/or depression and mental illness.

Supply and market regulation
Introduction
This section of the report will initially focus on supply indicators to emphasise the effectiveness that both national and state methylamphetamine supply reduction strategies have had in Queensland since the previous CMC assessment.

State seizure and regional spread
Since the 2004 CMC assessment of organised crime markets, the total weight of methylamphetamine analysed by Queensland Health Forensic and Scientific Services (QHFSS) increased until it peaked in 2006–07 (14.8 kg). In 2007–08, a 32 per cent reduction in total weight was observed (2007–08 10.1 kg — see Figure 9). Although previous decreases in total weight have been immediately followed by increases, we assess that this decline is a more permanent trend resulting from market regulation activity. This is supported by a decline in median purity from 2004–05 to 2007–08.

After peaking in 2002–03 (23.4%) the median purity of methylamphetamine decreased 56 per cent between 2002–03 and 2007–08 (10.2%). The significant decline in purity over this period is a supporting indicator that supply levels within Queensland are decreasing (see Figure 10).

Market regulation
This section on market regulation focuses on relevant amendments to legislation, changes in the legitimate retail supply of pseudoephedrine, and industry-directed regulations to restrict diversion of pseudoephedrine.

What legislative changes have occurred?
Since our previous assessment there have been legislative and regulatory amendments at a state and federal level that affect PSE-based products, controlled precursor chemicals, reagents and equipment. The amendments include:

- national rescheduling of all PSE-based products to either Schedule 4 (prescription only) or Schedule 3 (pharmacy only) (June 2005)
- amendment to the Queensland Health (Drugs and Poisons) Regulation 1996 regarding requirements for sale of Schedule 3 PSE-based products (January 2006), and
- amendment to the Queensland Drugs Misuse Regulation 1987 regarding end user declarations (June 2008).

21 Queensland needle and syringe providers provide presentation data to the Queensland Minimum Data Set for Needle and Syringe Providers (QMDS-NSP) as of December 2006. These data will give a more accurate depiction of state injection trends for the next assessment.

22 Smoking and swallowing negate the need for the consumer to attend needle and syringe providers to obtain equipment.
From the perspective of law enforcement agencies, the rescheduling of PSE-based products and requirements for sale have noticeably reduced organised crime’s capacity to divert (at a retail level). Restricting availability of such PSE-based products has affected the overall production of methylamphetamine in Queensland. This is of interest as our 2004 assessment noted that intelligence indicated that the bulk of methylamphetamine supplied to the Queensland market was also produced in Queensland (CMC 2004).

How has the legitimate availability of pseudoephedrine changed?
The national rescheduling of pseudoephedrine in June 2005\textsuperscript{23} and the introduction of phenylephrine-based (PE-based)\textsuperscript{24} products has resulted in products containing more than 720 mg total pseudoephedrine per packet being designated as ‘prescription only’. This caused packets with high individual concentration and packets with a large number of tablets to require a prescription. Products with less than 720 mg total

\begin{small}
\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure9}
\caption{Total weight of methylamphetamine analysed\textsuperscript{25}, Queensland, 2001–02 to 2007–08}
\end{figure}

Source: Queensland Health Forensic and Scientific Services — unpublished data, analysis completed by CMC.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure10}
\caption{Methylamphetamine median purity, Queensland\textsuperscript{26}, 2001–02 to 2007–08}
\end{figure}

Source: Queensland Health Forensic and Scientific Services — unpublished data, analysis conducted by CMC.
\end{small}

\textsuperscript{24} Phenylephrine cannot be used to manufacture methylamphetamine.

\textsuperscript{25} Based on seizures from the ACC, the CMC, Customs and the QPS, with the majority being QPS-related. Not all methylamphetamine seized is subjected to forensic analysis and in some instances seized drugs are only analysed for contested court proceedings. For further detail regarding use of QHFSS data, see page 13.

\textsuperscript{26} Median purity based on seizures from the ACC, the CMC, Customs and the QPS, with the majority being QPS-related.
Pseudoephedrine per packet can now only be purchased from a pharmacy under the direct supervision of the pharmacist. Prior to rescheduling, PSE-based products were identified as Schedule 2 drugs. This allowed general consumer access to PSE-based products without the direct supervision of a pharmacist.

Figure 11 shows the comparison of pharmacy stocking for PSE-based tablets and PE-based tablets in Australia between 2004 and 2008. This data shows that from 2004 to 2008:

- stocking of PSE-based tablets decreased 67 per cent, whereas
- PE-based tablets grew from 2 per cent to 63 per cent shares of total tablet volume.

The rescheduling of PSE-based products and the emergence of PE-based products have reduced the overall amount of pseudoephedrine available. Reduced opportunity for diversion from retail pharmacies, combined with pharmacy-directed initiatives (see below), means that pharmacies are now a less viable target for diversion of pseudoephedrine.

**Pharmacy-directed initiatives — targeting of ‘pseudo-runners’**

Project STOP is a successful pharmacy-directed initiative that helps prevent offenders targeting multiple pharmacies to source bulk amounts of PSE-based products — a practice known as ‘pseudo-running’. Project STOP was initially rolled out in Queensland in November 2005 and then nationally in mid-2007.

Project STOP is a real-time online database that allows pharmacists to determine whether a customer has made multiple purchases for Schedule 3 PSE-based products both in Queensland and in other states.

From a law enforcement perspective, Project STOP allows the QPS Chemical Diversion Desk to identify and investigate suspected ‘pseudo-runners’ across the state.

In July 2009, the Queensland Government indicated that legislation will be passed to require all Queensland pharmacies to report sales of PSE-based products electronically using Project STOP or a suitably endorsed program (Lion 2009). From a national perspective, the more pharmacies that use Project STOP, the more effective and robust the system will be for identifying ‘pseudo-running’ and preventing displacement to non-regulated states. However, the national roll-out of Project STOP has identified issues relating to the use of the system by pharmacies in other states. Therefore we hope that other states will draw on Queensland’s legislative precedent and mandate the use of Project STOP. Such action would achieve optimum rates of use and effectiveness of the program.

**Pharmacy-directed initiatives — targeting of pharmacists**

Another pharmacy-directed initiative in Queensland is aimed at pharmacists’ compliance. A Queensland Health taskforce, the Pseudoephedrine Enforcement Taskforce, commenced in 2006 as part of the Queensland Government’s Ice Breaker program.

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27 The market share of PE-based products is now expected to stabilise.
28 Most pharmaceutical preparations containing phenylephrine are identified by ‘PE’ in their title.
29 Mild winters and drought conditions between 2005 and 2008 may also have contributed to a reduced demand for these products.
Strategy. The taskforce profiles pharmacies, conducting a number of different indicators. These methods, along with close collaboration between the taskforce and relevant police areas, have allowed the successful targeting of suspicious retailers and offenders receiving the retailers’ products. To date the efforts of this taskforce have resulted in eight pharmacists losing their accreditation.

Industry-directed initiatives

The Code of Practice for Supply Diversion into Illicit Drug Manufacture (Code of Practice for Supply Diversion) is a voluntary national code developed by chemical and scientific industries with assistance provided by the National Precursor Working Group. This code categorises equipment (such as glassware) and 103 chemicals that can be used as precursors and reagents for illicit drug manufacture.

The key objective of the code is to establish a common system of practice for Australian chemical manufacturers, importers and distributors and scientific instrument suppliers to minimise diversion of chemicals and equipment. Currently not all states adhere to all 103 listed chemicals within their respective drug misuse legislation. This inconsistency in states’ drug schedules may allow organised criminal groups to exploit loopholes in sourcing of precursors and reagents.

Specific information relating to industry-directed initiatives

As part of the Code of Practice for Supply Diversion, a legitimate buyer is required to complete an end user declaration (EUD) when purchasing chemicals and scientific apparatus that are designated as a high risk for diversion. The EUD informs the purchaser that the item to be purchased is classified as a possible illicit drug precursor or reagent and requires completion of identification detail, along with a photocopy of a current photographic driver licence.

In June 2008, amendments to the Queensland Drugs Misuse Regulation 1987 required any Queensland supplier of designated chemicals and controlled equipment33 to submit EUDs to the QPS Chemical Diversion Desk. Improved consistency among states’ EUD legislation will continue to strengthen their value in discouraging diversion of chemicals.

How has regulation of pseudoephedrine affected organised criminal groups?

As a result of national rescheduling of PSE-based products and inception of Project STOP there has been a significant rise in break and enters of pharmacies across the state since 2006. The QPS State Drug Investigation Unit (SDIU) reports that the drivers for this increase in break and enters include reduced precursor availability from pharmacies, a sustained illegitimate demand and the high black-market worth of PSE-based products.

The increase in pharmacy break and enters demonstrates how criminal methodologies have shifted in order to obtain supplies of PSE-based products. Police have also detected attempts to divert PSE-based tablets from within the domestic supply-chain. Vulnerabilities in the supply-chain for PSE-based products are being addressed through amendments to the Australian Code of Good Wholesaling Practice for Medicines. The update of this code, currently being finalised, includes a section that recognises security requirements for pseudoephedrine (goods of high illicit value) during distribution/warehousing and during destruction. Compliance with this code will become a condition of licensing for the manufacturer.

Other avenues for production and sourcing of precursors

Methamphetamine market regulation, to date, has centred on successful domestic regulative efforts to restrict illicit diversion of pseudoephedrine. It is important, however, to recognise other avenues that organised crime could pursue to maintain methamphetamine supply. Use of such avenues could eliminate organised criminal groups’ need to divert pseudoephedrine. In recent years, the use of alternate methods of production has occurred in several jurisdictions including Queensland.

Trends in production, importation and distribution

This section will focus on methods of production, clandestine laboratories, importation, distribution and the production of crystalline methamphetamine, as this form attracts much media attention and requires clarification.

Production

When compared with other states, Queensland has had significantly higher clandestine laboratory (‘clan lab’) detections over the past 10 years. However, consideration needs to be given to the smaller size and limited production capacity of the majority of Queensland clan labs seized.

31 This strategy was implemented to address availability of crystalline methamphetamine and included illicit drug education campaigns, enhanced treatment services and law enforcement targeting of high-level offenders involved in diversion, production and trafficking.

32 The National Precursor Working Group, established in 2002, includes members from Australian Government, state and territory LEAs, forensic and health services, and the pharmaceutical and chemicals industry.

33 Includes tablet presses, laboratory glassware and other equipment, see Schedule 8B.
The most prevalent method of production in Queensland lends itself to a fast and efficient ‘cook’ that can be completed on a smaller scale and with limited skill.

In 2007–08, the QPS reported that the majority of clan lab seizures involved ‘addiction-based’ laboratories that produced low amounts of product. The QPS SDIU assesses that retail market regulation has most likely contributed to producers’ inability to source multiple packets of PSE-based products for larger ‘cooks’. A QPS drug squad supported this assertion, by observing that the majority of clan labs identified appeared to be used to satisfy demand only for a ‘cook’ and limited others.

Queensland’s trend towards ‘addiction-based’ clan labs is not commonly reflected in some other jurisdictions. For example, New South Wales Police Drug Squad (Chemical Operations) report that rescheduling of PSE-based products has resulted in an increase in larger-scale operations with precursors sourced from South-East Asia (Chemical Diversion Congress 2008).

As shown in Figure 12, Queensland clan lab detections peaked in 2004–05 but have decreased 42 per cent over the period from 2004–05 to 2007–08 (QPS Chemical Diversion Desk). Though we assess that the magnitude of this decline may be attributed to retail market regulation of PSE-based products, it may also reflect an increase in production sophistication, with less visibility to law enforcement activity.

From Figure 12, it is interesting to note the increase in clan labs from 2007–08 (121) to 2008–09 (156). At this stage, it is difficult to gauge whether this increase in clan labs is a trend or a spike. QPS Chemical Diversion Desk reports that increases in clan lab detections may indicate that organised criminal groups have adapted methodologies to domestically divert PSE-based products. An alternative argument is that intelligence resources (for example, Project STOP and EUDs) now allow QPS to better target offenders and locate clan labs.

We assess that increased regulation of glassware and other laboratory equipment\(^{16}\) may have some effect on methamphetamine production in Queensland. However, QHFSS note that the lack of specific equipment will encourage innovation by offenders. For example, improvised laboratory equipment (such as stainless steel vessels) is increasingly being detected.

**Is there ‘ice’ in Queensland?**

When considering the ‘ice’ market in Queensland it is important to understand the difference between the two types of crystalline methamphetamine. ‘Ice by analysis’ is authentic crystalline methamphetamine with a purity ranging between 60 and 70 per cent, whereas ‘ice by appearance’ or ‘faux ice’ may appear crystalline, but its purity is comparable to that of the powder form and can vary greatly.

Methamphetamine that appears crystalline can sell for more than twice the price of methamphetamine powder, despite being at a comparable or lower purity.\(^{37}\) QHFSS record that the majority of crystalline methamphetamine analysed in the preceding few years would be described as ‘faux ice’, with a median purity around 10 per cent.

The increased market demand for crystalline methamphetamine is influencing organised criminal groups’ marketing strategies. For example, NSP providers regularly

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*Figures and diagrams are not included in the text.*

36 Retailers of these goods in Queensland are now required to submit EUDs to the QPS Chemical Diversion Desk.

37 Personal communication with Queensland Health NSP staff.
report that many clients are mistakenly self-reporting use of crystalline methylamphetamine when it is likely that they are using adulterated methylamphetamine powder.

The majority of QPS regions consulted report minimal evidence of ‘ice’, with seizures reported as sporadic.

**International trends and importation**

Since the CMC’s last assessment, the majority of border seizures of methylamphetamine and precursor have occurred in other states. The geographic diversity of source countries and transportation routes for methylamphetamine is apparent when analysis of importation trends is considered from previous assessments.

In 2001–02, the United Nations Office on Drugs and Crime reported that the majority of methylamphetamine imported into Australia was thought to be sourced from the United States, Thailand and the Philippines, whereas by 2006–07 more than 90 per cent was sourced from Canada (UNODC 2008b). The Australian Customs and Border Protection Service (Customs and Border Protection) have reported some border seizures of precursor chemicals as well.

With regard to border detections, seizures do not yet support the argument that greater domestic regulation of PSE-based products will result in increased importations of methylamphetamine or precursors. Border seizures of methylamphetamine and precursors have remained sporadic over recent years, with no trend evident (see Figures 13 and 14). Despite this indicator, recent operations in Queensland may show that a transition to importation is already occurring.

**Distribution**

In our 2004 assessment we noted the involvement of some transport companies in interstate and intrastate transportation of methylamphetamine. We highlighted that Queensland’s geography and limited major roadways may present targeting opportunities for law enforcement (CMC 2004). Since that time the QPS has conducted a number of successful operations and intelligence gathering exercises on major transportation routes.

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**Figure 13: Methylamphetamine and crystal methylamphetamine seizures at the Australian border by number and weight, 1998–99 to 2007–08**

Source: Australian Customs Service annual reports, 1998–99 to 2007–08.\(^{38}\)

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\(^{38}\) The Australian Customs Service became the Australian Customs and Border Protection Service in December 2008. When referencing publications we refer to the name of the organisation at the time the document was published.
Consultation with law enforcement agencies, private industry and community sources identified that the groups involved in sourcing precursors and the production and distribution of methylamphetamine in Queensland remain varied. Our previous assessment identified that methylamphetamine manufacture and distribution were undertaken by people of diverse ethnic and criminal backgrounds, which included OMCG members and wider criminal networks (CMC 2004). Consultation and research for this assessment indicate that this has not changed.

39 References to ‘OMCGs’ in this document may relate to individuals who happen to be members of outlaw motorcycle gangs or may relate to the OMCG as an organisation. Criminal activities conducted by members of OMCGs may not be conducted with the knowledge and approval of all members of the group.
We believe that there has been some change to participants’ roles within the Queensland methylamphetamine market. Domestic market regulation of pseudoephedrine has forced domestic organised criminal groups to rethink how they conduct their criminal enterprises and appears to have caused an increase in the level of sophistication. We also believe that organised criminal groups with transnational networks will recognise any opportunity that market regulation causes and will adapt to exploit market conditions.

With respect to domestic diversion of pseudoephedrine, the changing roles of market participants are already evident. It appears that low-level opportunistic suppliers who relied on retail supply of PSE-based products have either been forced to exit the market or are operating at a reduced capacity.

Most QPS regions continue to identify OMCGs as major distributors of methylamphetamine. We noted, however, that OMCGs have increased their level of sophistication in this activity. Indicators include involvement with other established criminal networks and cooperation with rival OMCGs.

OMCGs now do not observe ethnic boundaries in relation to member recruitment and display greater cooperation with rival OMCGs. This intergroup cooperation extends their networks’ criminal reach and their ability to distribute illicit drugs. Through consultations we noted that OMCGs were cited as ‘commodity brokers’ and were primary participants in methylamphetamine distribution and other drug markets.

**Market assessment**

**Market drivers**

**Higher barriers to entry** — Queensland’s methylamphetamine market has been historically characterised as a ‘cottage industry’ where a high number of local producers satisfy local demand. In the past, PSE-based products were more easily diverted from retail locations (such as pharmacies) and this permitted local producers to reliably supply the market. Under current conditions, however, heightened regulation of PSE-based products and proactive intelligence-led policing (for example, Project STOP) have somewhat limited the instances of diversion. We believe that this has contributed to the overall removal of some opportunistic producers from the market. This appears to be supported by the decrease in clan lab detections in Queensland over the last five years.

**Consistency of national regulation** — In relation to Project STOP, we assess that the full impact of this initiative since its national roll-out is yet to be realised. As national compliance rates improve, retail diversion of PSE-based products will be further limited. Supporting evidence of this will be a continued reduction in clan labs across Australia.

Australian governments, law enforcement bodies, health departments and industry representatives are committed to a nationally consistent framework for the control of legitimately available chemicals that are capable of being diverted for use in illicit drug manufacture.

We support the fundamental objectives of this framework, which are:

- achieving consistency in precursor and controlled substance schedules across all jurisdictions in Australia
- adoption of best-practice supply-chain controls (such as recording, transport and security requirements) across all jurisdictions, and
- national mandatory submission of EUDs.

We believe that, if the fundamental objectives of this framework can be achieved, chemical diversion will be significantly restricted.

**Changes in international markets** — Another driver to consider will be any changes noted in international trafficking routes and production in other countries. International markets will be of particular importance as our domestic regulation strengthens. Any increases or decreases in the supply of precursors from influential source regions will affect trafficking patterns. Therefore, intelligence partnerships with other countries will become increasingly important in the next five years.

**Continued involvement by OMCGs and increased cooperation among groups** — QPS regions report that OMCGs remain involved in the distribution of methylamphetamine throughout the state. We believe that increased cooperation among Queensland-based OMCGs in their opposition to ‘anti-bikie’ legislation40 may lead to increased collaboration in their involvement in illicit drug markets. A further effect on the market environment would be the possible displacement to Queensland of interstate members from heavily legislated states. These members may facilitate interstate supply routes for methylamphetamine to Queensland.

**Ease of distribution** — In our 2004 assessment we noted that the ease of transportation of methylamphetamine was a main vulnerability exploited by organised crime. We assess that this vulnerability still exists because of the increased access that domestic air travel now provides. Currently, the growth of budget domestic airline carriers is allowing organised criminal groups to access locations in an efficient and affordable manner (see Chapter 9 for more detail). This is of particular

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40 See <www.umcinc.com.au>. This website is an example of such cooperation among OMCGs.
relevance to methamphetamine as it allows organised criminal groups who develop any market dominance\textsuperscript{41} to maximise profit through distribution to other locations.

**Marketing methamphetamine to social consumers** — The increased presence of ‘faux ice’ in Queensland highlights how organised criminal groups market methamphetamine in a form that is sought after by consumers. In our next chapter we describe how an increase in the consumption of tablets has contributed to the expansion of the market for drugs in tablet form. Because of this, it is reasonable to predict that organised criminal groups will increasingly market methamphetamine in this form to gain market share.

**Lack of a commercially viable therapeutic alternative to PSE** — We noted that domestic regulation and the introduction of phenylephrine-based products have halved the use of PSE-based products for treatments of cold and flu. With respect to phenylephrine-based products, it is suggested that they have a lower therapeutic efficacy than PSE-based products. This may limit the expansion of phenylephrine and maintain the commercial viability of pseudoephedrine. This situation would change should a more effective alternative to pseudoephedrine be developed by the pharmaceutical industry.

**Assessment of the market**

We assess that the methamphetamine market in Queensland has now entered a period of contraction after an extended period of expansion and stability. Both supply and demand indicators support this finding (for example, reduced detection of clan labs and reduced rates of use). However, it should be noted that methamphetamine remains as a large synthetic drug market in Queensland.

This contraction is believed to be mainly attributable to regulation of the retail availability of pharmaceutical products containing pseudoephedrine (PSE-based products). Pseudoephedrine has been the main precursor used to produce methamphetamine by Queensland producers in the last 10 years. Rescheduling and the monitoring of purchases of PSE-based products (through Project STOP) have reduced ‘pseudo-running’ and reduced domestic organised criminal groups’ ability to divert precursors.

We believe that organised criminal groups will continue to domestically divert PSE-based products from pharmacies. Because of this, we support efforts to ensure that nationally consistent regulation for the retail purchase of PSE-based products is achieved, for example, nationally mandating the use of Project STOP by pharmacies. However, when consistency in national regulation is achieved, it is reasonable to predict that organised criminal groups operating in Queensland (and interstate) will increasingly attempt to source precursors and product from international supplies.

Border seizures for product and precursors do not yet indicate a significant shift by organised crime to increased importation. However, we predict that increased importation into Queensland (and Australia) will be likely to occur in the next five years. If such a transition occurs, less emphasis will need to be placed on the number of clan lab detections in Queensland.\textsuperscript{42}

**Risk assessment**

The risk for methamphetamine in Queensland is assessed as \textbf{VERY HIGH}.\textsuperscript{43} This is consistent with our 2004 assessment.

The risk trend for methamphetamine is assessed to be DECREASING. In the 2004 assessment we assessed the risk trend to be STABLE. The justification for this change in risk trend is a downgrading of \textit{CAPABILITY} because of the effects of domestic market regulation activity.

- The \textit{INTENT} is assessed to remain as \textbf{VERY HIGH}. This relates to the desire and confidence of organised criminal groups involved with production and distribution of methamphetamine. We assess that organised crime’s confidence levels have reduced as a result of significant regulation of retail availability of PSE-based products. However, for this assessment, \textit{INTENT} is maintained as \textbf{VERY HIGH} because further sustained decreases are required in key indicators (such as provider offences, total seizure, purity and prevalence of use) to justify a downgrading.

- The \textit{CAPABILITY} is assessed as \textbf{HIGH}. It relates to the knowledge and resources of organised criminal groups. Though the knowledge base for methamphetamine distribution and production is well established, the ability for organised criminal groups to reliably source pseudoephedrine has been affected by domestic market regulation. Increasingly sophisticated methods will be needed to secure pseudoephedrine (for example, importation). This supports a \textit{CAPABILITY} downgrading from \textbf{VERY HIGH} to \textbf{HIGH}.

- The \textit{THREAT} is assessed as \textbf{HIGH}, given that it is a function of intent (\textbf{VERY HIGH}) and capability (\textbf{HIGH}).

\textsuperscript{41} For example, operating a mega-lab interstate with precursors supplied through importation.

\textsuperscript{42} Historically a good indicator because of the cottage industry nature of Queensland production.

\textsuperscript{43} Normally a downgrading of the capability component of the risk assessment formula would result in a downgrading of risk, however, we believe the methamphetamine market still requires a sustained period of contraction before we can support a downgrading of risk.
• The HARM is assessed as VERY HIGH. Significant physical and psychological effects ensue for abusers of methylamphetamine and there are significant social impacts that arise from criminal activity and from the need to remedy environmental harm caused by clan labs.

• The RISK is therefore assessed as VERY HIGH, as it is a function of threat (HIGH) and harm (VERY HIGH).

In the risk assessment formula, we assess CAPABILITY and INTENT to be factors that may be subject to change during the period through to our next assessment. A continued reduction in indicators such as clandestine laboratory seizures, provider offences, examples of diversion and forensic analysis of commodity would support a downgrading of the overall risk. Changes in these indicators will be dependent on whether consistency in market regulation can be nationally consolidated and border pressure alleviated.

**Strategies**

We strongly support legislative amendments to mandate the use of Project STOP by pharmacies in all states. We also support national consistency in the control of legitimately available chemicals that are capable of being diverted for use in illicit drug manufacture.

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**Figure 16: Risk assessment for the methylamphetamine market in Queensland**

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THREAT
HIGH

HARM
VERY HIGH

RISK
VERY HIGH

INTENT
(Desire and confidence)
VERY HIGH

CAPABILITY
(Knowledge and resources)
HIGH
```

x =
4: Ecstasy-group substances

This chapter summarises and discusses a range of law enforcement, health and other data and information relating to the market for ecstasy-group substances in Queensland. We discuss how several social factors are driving the market expansion of ‘ecstasy’ and how this is exploited by organised criminal groups. In addition we highlight the increasing health concerns arising from diversification and variation in the content of tablets.

The discussion in this chapter will cover drugs marketed, consumed or seized as ecstasy. It is well known that a large proportion of tablets purported to be ecstasy contain no MDMA and may contain various other drugs and adulterants, including methamphetamine and analogues of MDMA.

Overview

Since our previous assessment, data on prevalence and seizure indicate an expansion in the size of Queensland’s ecstasy tablet market. A comparison of amphetamine-type stimulants shows that, in Queensland, ecstasy consumption now outranks that of methamphetamine. Furthermore, the total weight of ecstasy seized in 2007–08 was double that for methamphetamine.

From a geographic perspective, the expansion of ecstasy is quite clear, with consumption now extending to most regions of Queensland. Targeting of entertainment precincts by the Queensland Police Service (QPS) has resulted in an increase in offences identified. The closed nature of retail supply and the ease of administration that tablets afford create challenges for law enforcement intervention.

With regard to administration in particular, swallowing ecstasy tablets will increasingly pose adverse health risks for users. A mistaken perception exists among users that ecstasy is a safe drug, and its use is becoming more socially acceptable behaviour among this group. Administration by swallowing extends the use of this drug to a wider target audience than more invasive routes such as injection.

Users prefer swallowing ecstasy because this method is perceived as a low health risk and allows the drug to be taken discreetly. A common misperception among users is that ecstasy has fewer negative outcomes than legal drugs such as alcohol. Some users rationalise the use of ecstasy by citing the increasing cost of alcohol in entertainment venues.

In reality, an ecstasy tablet is typically a lot more adulterated than it was five years ago — again increasing potential harm levels. The content and purity of tablets are increasingly changing and becoming more variable. Analysis of current median purity levels shows that the MDMA content of tablet seizures is now almost half that of 2004 levels. More importantly, it is less likely that a tablet will contain MDMA. The ecstasy market is increasingly represented by tablets containing multiple stimulants other than MDMA and by tablets marketed as ‘ecstasy’ that contain no MDMA. For example, tablets containing PMA, a highly toxic chemical analogue of MDMA, have been seized in Queensland and linked to deaths. Additionally, the emergence of tablets containing analogue stimulants demonstrates the diverse range of drugs now detected.44

‘Normalisation’ of ecstasy consumption was evident during our consultations. We assess that organised criminal groups are capitalising on the social acceptance of tablet consumption by supplying a diverse range of illicit drugs in this form. An inability to accurately discern the contents of tablets, combined with diversification in the drug content of tablets and increased median consumption levels, creates a higher health risk to users.

The Queensland market’s capacity to secure ecstasy supply remains dependent on interstate and international trends. Unsurprisingly, diversification now exists in international sources for production and trafficking. The Queensland ecstasy market also remains reliant on activity interstate. No clandestine laboratories that have produced MDMA have been identified in Queensland, but unsuccessful attempts have been identified. Distribution of illicit drugs to a range of Queensland locations is aided by affordable and efficient transportation routes.

Previous CMC assessments

In our 2004 assessment, we considered ecstasy as a separate market.45 We assessed the level of risk associated with the ecstasy market in Queensland as HIGH (see Table 6).

Table 6: Summary of previous CMC risk ratings for the ecstasy market in Queensland

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Intent</th>
<th>Capability</th>
<th>Threat</th>
<th>Harm</th>
<th>RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Very high</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

Intent x Capability = Threat

Threat x Harm = Risk

44 For more detail regarding analogue stimulants, see Chapter 8.

45 Our 1999 assessment grouped methamphetamine and ecstasy within the amphetamine market.
In 2004 we found that:

- the supply of ecstasy appeared to be increasing
- a diversification of the consumer base was reported, and
- production of ecstasy in Queensland was very limited and local supplies of (genuine) ecstasy would continue to be imported.

**Demand**

**Consumer profile**

From 2001 to 2007, within Australia’s general population, the 20–29 year age group was more likely to consume ecstasy than any other age group (AIHW 2002b, 2005b, 2008c). From 2000 to 2008, the mean age of first use among Queensland regular ecstasy users (REUs) has remained stable around 19.5 years (QADREC 2009b).

In terms of socio-economic factors, the average Queensland REU is well educated and has no criminal history. From 2000 to 2008, most Queensland REUs have completed secondary education and almost half are tertiary qualified. Fewer than 10 per cent of Queensland REUs have a previous conviction (QADREC 2009b). These figures highlight that an individual’s level of education and criminal history do not determine likelihood of ecstasy use.

**Prevalence of use**

Overall, the prevalence of ecstasy use in Queensland has increased since our 2004 assessment. Both general and specific population surveys support this finding.

For example, when analysing the recent use of ecstasy within the Queensland general population aged 14 years and older from 1998 to 2007, use of ecstasy in 2007 was more than double that observed in 2001 (see Figure 17). The increase in recent use of ecstasy in Queensland is consistent with the national trend. When compared with other stimulants, Queensland figures for recent use of ecstasy currently outrank recent use of methamphetamine (AIHW 2008a).

Drug Use Monitoring in Australia (DUMA) urinalysis testing of police detainees is performed in Queensland at Southport (Gold Coast) and Brisbane. When compared from 2004 to the present, positive testing for ecstasy (see Figure 18) doubled in Southport, but stabilised or trended downward in Brisbane after a peak in 2006. Data from Southport showed a rate of increase that significantly exceeded the increase noted in the national trend. In 2007, Southport outranked all other national sites (Southport 7.8%, Darwin 6.7%, then Bankstown (NSW) 3.3%).

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46 Regular ecstasy users are a specific population group canvassed by the Ecstasy and Related Drugs Reporting System.

47 Within the last 12 months.

**Figure 17: Ecstasy use in the previous 12 months — proportion of persons aged 14 years and older, Queensland and Australia, 1998 to 2007**

Occasions for treatment

As noted in the analysis of methamphetamine in Chapter 3, in 2007–08, the Queensland Ambulance Service (QAS) began categorising the type of drug suspected to contribute to callouts relating to overdose48 (see Figure 19). It is interesting to note that ecstasy is currently thought to be the primary amphetamine-type stimulant responsible for overdose presentations in Queensland.

48 Before 2007–08, the QAS coded overdoses as recreational, prescription or other and therefore commodity-based analysis was not possible.

Data from Queensland Health Alcohol, Tobacco and Other Drugs Services (ATODS) indicate an increase in Queensland client presentation where an ecstasy-group substance49 is identified as the principal drug of concern. Though the number of ecstasy-related presentations has increased markedly from 2002–03, the overall level remains low and is much lower than treatment episodes attributed to amphetamine-group substances for this period (see Figure 20).

49 Includes those coded as MDMA, MDEA, MDA, phenethylamines and PMA.

Figure 18: Positive tests for ecstasy — proportion of police detainees, DUMA data, 1999 to 2008

![Figure 18](chart18.png)

Source: Australian Institute of Criminology — DUMA data.

Figure 19: Illicit drug attributed to Queensland Ambulance Service overdose presentation, 2007–08

![Figure 19](chart19.png)

Source: Queensland Ambulance Service — unpublished data, analysis conducted by CMC.
Context of use

Ecstasy is a stimulant and euphoric drug that is often consumed in a range of social settings. Both public and private locations are reported as favoured locations for Queensland REUs, including nightclubs, live music events, private residences and parties (QADREC 2009b). Though Queensland ecstasy consumption occurs in a variety of locations, its use is generally purposeful and planned. Research shows that ecstasy use is generally organised before a social event (Fowler, Kinner & Krenske 2007).

Identification of ecstasy by law enforcement mainly occurs in a public environment. The majority of QPS regions report seizures of ecstasy tablets and capsules within entertainment precincts and at live music events. QPS regions highlighted the effectiveness of operations specifically targeted at entertainment precincts in recent years.

Patterns of use

Form

References and comments from consultations demonstrate that ecstasy and commodities purporting to be ecstasy are predominantly available as a tablet or capsule. These forms are consistent with those noted in our previous assessment.

Perceptions of availability and purity

Queensland REUs report perceptions of the availability of the drug on a scale from ‘very easy’, ‘easy’ and ‘difficult’ to ‘very difficult’.

The proportion of Queensland REUs reporting current availability as ‘easy’ and ‘very easy’ has steadily increased from 2000 to 2008 (2000 72%, 2008 96%) and has aligned closely with the national survey sample since 2004 (QADREC 2009b; NDARC 2005b, 2006a, 2007b, 2008b). Queensland REUs report perceptions of current ecstasy purity as ‘low’, ‘medium’, ‘high’ and ‘fluctuating’. Between 2004 and 2008, the data indicate that Queensland REUs perceive that ecstasy purity has decreased. This finding supports the reduction in median ecstasy purity identified by Queensland Health Forensic and Scientific Services (QHFSS) (see pages 34–35 for more detail).

Users’ perception of a decrease in purity may be considered a driver for the increase in the median number of tablets used in a session. Median tablet consumption has increased from one in 2001 to two from 2004 to 2008.

Figure 20: Treatment episodes by alcohol and other drug treatment services where the principal drug of concern was an ecstasy-group substance, Queensland, 2002–03 to 2007–08

Source: Queensland Health Alcohol, Tobacco and Other Drugs Services — unpublished data collected for the Alcohol and Other Drug Treatment Services National Minimum Data Set, analysis conducted by CMC.

50 Treatment refers to ‘closed’ (or completed) treatment episodes by publicly funded alcohol and other drug treatment services in Queensland. See the further explanation of Queensland Health treatment data in Chapter 2.
Route of administration
From 2000 to 2008, the predominant route of administration for Queensland REUs has consistently been swallowing (> 90%), followed by snorting (< 5%). Invasive routes of administration (such as injection) are rarely used by REUs (QADREC 2009b).

As noted earlier, swallowing an ecstasy tablet is favoured by consumers because this route of administration is more socially acceptable, is non-invasive and can be performed discreetly in any location. Swallowing is a familiar practice in Western society and does not have the negative perceptions associated with injection and spread of blood-borne viruses (Fowler, Kinner & Krenske 2007).

Poly drug use
As noted in our previous assessment, poly drug use is common among Queensland ecstasy consumers. For example, the National Drug Strategy (NDS) household survey in 2007 showed that, of ecstasy users, almost 9 out of 10 had consumed alcohol, 5 out of 10 cannabis and 3 out of 10 methylamphetamine concurrently with ecstasy. This is supported by Ecstasy and Related Drugs Reporting System (EDRS) data from 2004 to 2008, which indicate that 9 out of 10 Queensland REUs have used other drugs with ecstasy.

One of the findings of this assessment is the increased diversification of the contents of tablets. As noted below and on page 35, one tablet may contain multiple drugs and some tablets may contain no ecstasy. The conjunction of poly drug use and consumption of tablets containing multiple drugs increases the health risk and the chance of negative outcomes because of toxicity and cross-reaction between drugs.

Normalisation of use
A clear finding from our consultation process was that the consumption of ecstasy is becoming socially acceptable, specifically in younger demographic groups. For some users, the perception of ecstasy as an illicit drug is increasingly becoming blurred.

In terms of ecstasy’s acceptability, NDS household surveys from 2001 to 2007 show that the general population perceives that ecstasy is one of the ‘most acceptable illicit drugs for regular use’. For drugs thought to be associated with a drug ‘problem’, ecstasy consistently rates below cannabis, methylamphetamine and alcohol.

It is interesting to note that alcohol is more likely to be perceived as associated with a drug problem than is ecstasy. Some stakeholders commented that ecstasy users often rationalise their use of ecstasy by comparing and contrasting it with use of alcohol. Some users view ecstasy as having better qualities and effects than alcohol, both while under its influence and in recovery. From an economic viewpoint, users may also consider taking ecstasy to be a cheaper experience than consuming alcohol.

Supply and market regulation
Law enforcement data
Despite the absence of statistical data, one of the observations highlighted by several QPS regions was a noticeable increase in recent years in ecstasy-related offences. Another comment made by QPS regions was the noticeable increase in ‘cleanskin’ offenders committing supply offences. Though this increase may be attributed, in part, to an increased focus by the QPS on entertainment precincts and events, it is a significant finding. Further analysis of ‘cleanskin’ involvement in ecstasy supply is discussed below in the ‘Retail distribution’ section, see page 38.

State seizure and regional spread
Since the 2004 assessment, the total weight of ecstasy (MDMA) seizures analysed by QHFSS has increased significantly — a fourfold increase. This large increase can be attributed to significant increases in total ecstasy weight in the years 2006–07 and 2007–08. In 2006–07, ecstasy surpassed methylamphetamine in total analysed weight (see Figure 21).

Pill purity and content
The median percentage purity of MDMA contained within tablets analysed by QHFSS peaked in 2004, with the 2008 level almost half of this peak (see Figure 22).

As mentioned earlier, the decrease in the purity of ecstasy tablets seized in Queensland between 2004 and 2008 may be a contributing factor to the Queensland EDRS finding, from surveying REUs, that the median number of tablets consumed in a session increased from 1.5 to 2 between 2003 and 2004 and has remained stable until 2008.53

From a health perspective, the increase in the median number of ecstasy tablets consumed in a session increases the overall health risk to the user. The decrease in purity has led to increased availability of tablets containing multiple stimulants and drugs other than ecstasy. The variation in tablets raises the risk of toxic effects and overdose.

51 The new QPS database, QPRIME, was rolled out statewide in June 2006. QPRIME now allows Queensland police to record ecstasy offences as a separate amphetamine-type stimulant commodity. The previous database would only permit an ecstasy offence to be recorded within methylamphetamine offences. Because of this, reliable data for Queensland ecstasy offences are available for 2007–08 only.

52 A ‘cleanskin’ is a person with no previous criminal history.

53 In 2000 and 2001, the median was 1 pill.
Profiling of tablets analysed by QHFSS between 2003 and 2007 demonstrates this trend towards the diversification of tablet content. In this period, we found that the proportion of multi-drug tablets (that is, multiple drugs contained within one tablet) is increasing, whereas MDMA-only tablets are decreasing. Other drugs found in multi-drug tablets and in combination with MDMA included methylamphetamine, procaine and ketamine (anaesthetics), and alprazolam (a sedative).

The pattern of increased mixing of drugs with MDMA has been noted previously in other international markets. For example, in Canada between 2001 and 2007, the incidence of MDMA-only tablets decreased from 69 per cent to 3 per cent, and in Europe, which is considered a mature market, MDMA supply shortages in 2005 resulted in the growth of multi-drug tablets (UNODC 2008b).

Figure 21: Total weight of ecstasy and methylamphetamine analysed, Queensland,\textsuperscript{54} 2001–02 to 2007–08

![Graph showing total weight of ecstasy and methylamphetamine analysed in Queensland from 2001–02 to 2007–08.](image)

Source: Queensland Health Forensic and Scientific Services — unpublished data, analysis conducted by CMC.

Figure 22: Ecstasy median purity\textsuperscript{55} and median tablet consumption, Queensland, 2002 to 2008

![Graph showing ecstasy median purity and median tablet consumption in Queensland from 2002 to 2008.](image)

Source: Queensland Health Forensic and Scientific Services and Queensland EDRS, analysis completed by CMC.

Note: 2008 median purity based on data to September only.

\textsuperscript{54} Data based on seizures from the ACC, the CMC, Customs and the QPS, with the majority being QPS-related. For further detail regarding use of QHFSS data, see page 13.

\textsuperscript{55} Median purity based on seizures from the ACC, the CMC, Customs and the QPS, with the majority being QPS-related.
Pills sold as ‘ecstasy’

Common feedback from all QPS regions was that consumers of tablets and capsules may believe that they are swallowing an ecstasy tablet but ‘generally did not know what they were taking’. Harm reduction websites, reagent testing kits and subjective communication among users do not provide an accurate method of determining the content of a tablet. The true drug profile of a tablet can only be achieved through forensic analysis. It appears that users’ lack of awareness is being exploited by organised criminal groups who are producing non-MDMA tablets and marketing them as ‘ecstasy’.

Research performed by DUMA supports the view that consumers lack understanding about their use of ecstasy. Of those who tested negative for MDMA, a significant proportion tested positive for methylamphetamine.

For some ecstasy consumers, the concept of tablet ‘brand loyalty’ contributes to ecstasy purchasing patterns (Fowler, Kinner & Krenske 2007). Consumers generally differentiate tablets by colour, shape, size and (importantly) the type of logo pressed into the pill. Brand loyalty can be used as a marketing strategy for non-ecstasy tablets. For example, QHFSS provided examples where tablets of identical appearance were shown to have totally different chemical profiles. It has been shown that domestic organised criminal groups are pressing non-ecstasy tablets with logos the same as those of tablets with a reputation for ‘quality’, to improve marketability of their own product.

In another example, an organised criminal group used the allure of the word ‘ecstasy’ to market capsules as ‘Herbal Ecstasy’. Forensic analysis determined that these capsules contained no MDMA. The emergence of ‘Herbal Ecstasy’ and other drugs is discussed in ‘Analogue stimulants’ in Chapter 8.

Availability of tablet presses

Purpose-built tablet presses are not manufactured in Australia, with most imported from China, India and the United States. Tablet presses have a legitimate purpose within domestic industry (for pharmaceutical and alternative medicines), but are also used by organised criminal groups to produce ecstasy, methylamphetamine and other stimulants in tablet form.

In June 2009, approval was given to regulate the importation of tablet presses. However, domestic sale of tablet presses is not regulated in all jurisdictions. Although all jurisdictions have legislative provisions that make unlawful possession of a tablet press an offence, the lack of domestic regulation hinders law enforcement’s ability to monitor the movement and illicit use of tablet presses. Given the expansion identified in Queensland’s tablet market and the increased health risk posed by domestic production of so-called ‘ecstasy’ tablets, the CMC supports further domestic regulation of tablet presses. Introduction of a domestic licensing and certification regime and nationally mandated notification of tablet press sales will restrict the availability of tablet presses to organised criminal groups, without hampering their use within legitimate industry.

Trends in production, importation and distribution

Production

MDMA can only be manufactured using specific precursors. Since 2004, the number of ecstasy labs identified in Queensland has remained very low when compared with the number of methylamphetamine labs. This can be attributed to the decreased domestic availability of ecstasy precursors and the complexity of producing the drug.

QHFSS report that analysis of ecstasy clandestine laboratories (‘clan labs’ using large purpose-built reaction vessels and advanced extraction methods.

Apart from MDMA, there have been incidences of organised crime groups producing paramethoxyamphetamine (PMA), a high-toxicity ecstasy-group substance. PMA has been linked to deaths in other states. During 2008, law enforcement officials in Queensland separately located a laboratory suspected to be producing PMA and pills containing PMA.
**International trends**

Since our 2004 assessment, diversification has occurred in global ecstasy production and countries of embarkation. The focus of Australian law enforcement has extended from traditional production countries in Western Europe (such as the Netherlands and Belgium) to emerging ecstasy production locations in other continents. The market dominance of the Netherlands has reduced because of tighter domestic regulation of the chemical industry there. This has resulted in displacement of ecstasy production to neighbouring countries such as Poland, Estonia and the Czech Republic (Fowler, Kinner & Krenske 2007).

Apart from Western Europe, ecstasy seizures from North America, in particular Canada, have figured significantly in Australian border detections. Canada as a geographic location for ecstasy supply continues to highlight the flexibility and adaptability afforded by the ecstasy market (and synthetic drugs generally).

In addition to the diversification in international ecstasy production, law enforcement concerns exist in relation to the use of smaller island countries for trafficking routes. There is evidence that Pacific islands (such as Fiji, Samoa, Tonga and Papua New Guinea) are increasingly used as trans-shipment points to conceal the origin of shipments between South-East Asia and distributors in Australia (UNODC 2008b).

In summary, we believe that the international trafficking market for ecstasy and precursors will continue to evolve because of the high profit incentive provided in the Oceania region.63

**Importation and distribution**

The lack of evidence of production within Queensland supports comments from the QPS that ecstasy is believed to be supplied to this state mainly from southern states. Several QPS regions indicated that ‘pills’ were being sourced from the Gold Coast. Consultations with QPS South Eastern Region described the Gold Coast as a transit point for product sourced from New South Wales and Victoria.

To understand the supply dynamics of the Queensland ecstasy market it is important to appreciate the level of importation into Australia. Ecstasy was the most detected drug at the Australian border between 2004 and 2007. Queensland’s representation in the total weight of seizures is minimal in comparison with other states.64 A significant portion of this total is attributed to bulk seizures in New South Wales and Victoria. See Figure 23 for the pattern of MDMA seizures at the Australian border in the period 1999–2000 to 2007–08.

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63 The Oceania region has the highest retail price for ecstasy in the world – US$30.80/tablet (UNODC 2008b).

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**Figure 23: MDMA seizures at the Australian border by number and weight, 1999–2000 to 2007–08**

![Figure 23: MDMA seizures at the Australian border by number and weight, 1999–2000 to 2007–08](image)

Source: Australian Customs Service annual reports, 1998–99 to 2007–08.65

65 The Australian Customs Service became the Australian Customs and Border Protection Service in December 2008. When referencing publications we refer to the name of the organisation at the time the document was published.
Police in regional areas of Queensland report that road transportation remained the predominant mode for moving ecstasy supplies. Apart from the use of road transport to distribute ecstasy, QPS Far Northern Region Drug Squad highlighted the increased use of domestic airlines for tablet distribution. It is reasonable to suggest that organised criminal groups are using domestic airlines in this way to access other Queensland locations for distribution.

**Market regulation**

**What legislative changes have occurred?**

In June 2008, Queensland legislative amendments relevant to ecstasy-group substances were proclaimed as follows:

- rescheduling of MDMA and PMA from Schedule 2 to Schedule 1 dangerous drug (Drugs Misuse Regulation 1987)
- introduction of an analogue clause within the definition of dangerous drug (Drugs Misuse Act 1986), and
- amendment to the Queensland Drugs Misuse Regulation 1987 regarding end user declarations (EUD).

The rescheduling of MDMA and PMA aligns ecstasy-group substances with the scheduling of methylamphetamine, cocaine and heroin. This increases the maximum imprisonment term imposable and importantly signals a tougher stance on ecstasy-group substances by Queensland’s legislature.

**Industry-directed initiatives**

To combat the potential for domestic diversion of ecstasy precursors, there is a voluntary industry code of practice, the *Code of Practice for Supply Diversion into Illicit Drug Manufacture*. This voluntary code stipulates that businesses which sell sassafras oil and other category 1 chemicals do so only to ‘account customers’. It also requires that an EUD be submitted to the QPS Chemical Diversion Desk, identifying the purchaser and the designated purpose for the product.

In June 2008, an amendment to Queensland’s Drugs Misuse Regulation 1987 required that EUDs be submitted to the QPS Chemical Diversion Desk. We believe that mandatory submission of EUDs (within Queensland) will be an effective tool to:

- aid identification of suspicious ecstasy precursor purchases
- dissuade organised criminal groups from domestically diverting ecstasy precursors, and
- give law enforcement agencies an increased awareness of the legitimate industry use for ecstasy precursors.

Continued awareness-raising within high-risk industries regarding the threats posed by precursor diversion is likely to improve compliance with submitting EUDs. It will also strengthen law enforcement relationships with these private companies.

**Market participants**

**Supply**

We assess that participants in the Queensland ecstasy market will continue to exploit or identify further opportunities to source product or precursors from emerging and established international trafficking markets. Organised criminal groups will continue to smuggle finished product sourced from production locations such as Western Europe and North America. We also believe that close attention should be given to national trends in detection of ecstasy clan labs, in conjunction with increased monitoring for border seizures.

Organised criminal groups in Queensland that lack transnational ties or production capability will increasingly exploit the ecstasy market by producing tablets from other more accessible illicit drugs (such as methylamphetamine).67 While they have access to tablet presses and associated equipment, the opportunity remains for them to market pills as ecstasy which contain methylamphetamine, ketamine and so on. The increasing seizure of multi-drug pills is evidence of this activity.

**Retail distribution**

As noted, a development noted by the QPS was the increase in ‘cleanskin’ offenders involved in ecstasy-related supply offences. These arrests predominantly related to QPS operations focused on entertainment precincts.68 For example, it was not uncommon for ‘cleanskins’ to be arrested with five or more tablets. Police often described these offenders as middle-class, employed and well educated.

We assess that the increase in ‘cleanskin’ offences is evidence that this type of drug use is becoming more socially acceptable among younger people. Research has shown that retail transactions for ecstasy are mostly performed in a closed, trusting environment (such as the home) and occur between ‘friends’ rather than with a defined ‘dealer’. These types of transactions appear to be motivated by social reasons rather than profit (Nicholas 2008). The QPS reports that a proportion of ‘cleanskin’ offenders lack an

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66 National industry awareness raising forums were recently completed and they remain a focus of the QPS Chemical Diversion Desk.
67 See the discussion of analogue stimulants in Chapter 8 for a current example of this methodology.
68 For example, Operation Echo Coma (QPS North Coast Region), Operation Beval (QPS Central Region) and Operation Foxtrot Pluto (QPS Metropolitan North Region).
understanding of the legal ramifications of their actions and fail to recognise that supplying tablets to ‘friends’ is criminal.

Socially facilitated supply of ecstasy presents organised criminal groups with a reduced risk of detection by law enforcement. Dealing at the retail level appears to lack an organised crime component. Because of this, middle- to upper-level suppliers are insulated from exposure to law enforcement.

The current generation of retail suppliers are more likely to be technologically advanced. The internet, the wide range of communication devices and the continued popularity of social networking websites are increasing connectivity among retail ecstasy users.

**Market assessment**

**Market drivers**

**Involvement of organised criminal groups with transnational connections** — For the majority of organised criminal groups in Queensland, the production of genuine ecstasy will remain difficult. The increased need to import product or precursors from international sources is a significant barrier for most organised criminal groups. The lack of reliable access to precursors inhibits the involvement of opportunistic local producers in the market.

**Profitability of Australia and changes in international markets** — In its 2008 assessment of ecstasy, the United Nations Office on Drugs and Crime reported that the price of ecstasy in the Oceania region, which includes Australia, was the highest in the world69 (UNODC 2008b). Although, from an international perspective, Australia may be perceived as a relatively small market, we believe that the potential for high profit may motivate some international organised criminal groups to further target the market in Australia and Queensland. Given the profit incentive offered by this region, close attention should be paid to any changes in international trends.

**Increased domestic production** — Further to the consideration of transnational organised criminal groups, the detection of successful ecstasy clan labs in Queensland would be of significant strategic interest. Nationally, increased regulation of the importation and sale of tablet presses is likely to reduce the domestic production of tablets.

**Ability to exploit mechanisms of social distribution** — At the retail level, we believe that the increased supply of tablets within social networks is contributing to market growth. Within these user populations, dealing appears to be mostly motivated by social reasons. Because of this dynamic, upper-level organised criminal groups may continue to target users for distribution.

We believe that sustained awareness-raising targeted at specific user populations may reduce the incidence of social distribution (see ‘Strategies’, page 41).

**Marketing of tablets to social drug-users** — We believe that the swallowing of tablets, particularly in social environments, has influenced expansion of the ecstasy market. This route of administration is increasingly viewed as less ‘deviant’ behaviour within some user populations.

Because genuine ecstasy is difficult to source and produce, we believe that organised criminal groups in Queensland will increasingly market more accessible stimulants (such as methylamphetamine and analogue stimulants) in tablet form to supplement supply. Recent operational seizures of tablet presses and multi-drug tablets highlight this transition.

**Incidence of adverse health effects** — Compared with our last assessment, median ecstasy purity in Queensland has halved and the chemical profile of seized tablets has diversified (with an increased incidence of multi-drug tablets). If a consumer perception is maintained that ecstasy is a ‘safe’ drug, the incidence of adverse health effects will increase. Any increases in serious health problems may deter use by younger people or encourage current users to reduce consumption.

**Assessment of the market**

Queensland’s ecstasy and tablet market has continued to expand since our 2004 assessment. This expansion is in contrast to the contraction observed for methylamphetamine, Queensland’s other main stimulant market.

The growth of Queensland’s ecstasy market appears to be demand driven. We attribute growth to the following factors:

- continued poly drug use
- the perception that ecstasy is ‘safer’ than other drugs
- consumption in social environments (such as private parties and nightclubs), and
- the increasing practice of swallowing tablets.

However, Queensland’s current dependence on interstate and international supply of genuine ecstasy restricts reliable supply lines. Domestic production of genuine ecstasy and access to relevant precursors remains difficult. Groups with transnational connections to producer countries may develop some market dominance. For example, the increased representation of North America and Canada in ecstasy supply to Australia highlights the need to monitor any changes in international markets.

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69 Average wholesale ecstasy price per tablet: West and Central Europe = US$3.60, Oceania = US$16.90.
As well, close attention needs be paid to any increases in
detection of successful ecstasy clan labs in Queensland.
Increased domestic production would give organised criminal
groups an avenue to increase supply levels and facilitate
further expansion of the market. The emergence of newly
developed and easily domestically-produced synthetic drugs
(such as PMA) also deserves close observation by law
enforcement and health agencies.

Social networks will continue to have a significant effect
on any growth in the Queensland ecstasy market. This is
because of the role that individuals play in retail distribution
activities among friends and associates. This is not to suggest,
however, that their involvement will displace the traditional
supplier and consumer role as a dominant factor in drug
distribution.

Risk assessment

The risk for ecstasy-group substances in Queensland is
assessed as HIGH. We calculated this as follows (see
Figure 24):

The risk trend for ecstasy-group substances is assessed to
be INCREASING.

- The INTENT is assessed as VERY HIGH. This relates to
  the desire and confidence of organised criminal groups
  involved with production and distribution of
  ecstasy-group substances. Queensland’s demand for
  ecstasy and for tablet use is increasing. Tablet use is also
  now becoming more geographically dispersed within
  Queensland. The desire and confidence of organised
  criminal groups to be involved in this market are
  very high.

- The CAPABILITY is assessed as HIGH. It relates to the
  knowledge and resources of organised criminal groups.
  Although production of genuine ecstasy in Queensland
  remains minimal, we assess that the ease of access to
  equipment such as tablet presses encourages organised
  criminal groups to tablet other commodities and market
  them as ‘ecstasy’. However, current measures to restrict
  importation of tablet presses are likely to affect this.

  Note: The assessment of capability relates to
  ecstasy-group substances, including drugs marketed and
  consumed as ‘ecstasy’. This differs from our previous
  assessment, in which the capability rating related to real
  ecstasy only.

- The THREAT is assessed as HIGH, given that it is a
  function of INTENT (VERY HIGH) and CAPABILITY
  (HIGH).

- The HARM is assessed to remain as HIGH. This is
  primarily attributable to the diversity and variability of
  tablets, which have increased since our previous
  assessment. This includes tablets with lower-purity
  ecstasy and those containing multiple drugs, which can
  be particularly toxic combinations. Poly drug use also
  remains significant among ecstasy users. However,
  current indicators of adverse health implications do not
  support an increase in harm at this time. Therefore, on
  this basis the HARM risk rating remains HIGH.

  Note: We assess that harm indicators are an area that
  needs close monitoring in the next five years as they
  may be subject to increase.

Figure 24: Risk assessment for the ecstasy-group substances market in Queensland
The RISK is therefore assessed as \textbf{HIGH}, as it is a function of \textit{THREAT (HIGH)} and \textit{HARM (HIGH)}. The current absence of clear supporting harm indicators means that a higher risk rating could not be justified. Because of this we recommend that close attention be paid to any increases in ecstasy-related harm indicators (such as overdose and treatment presentations) to support any rise in overall risk. This is particularly important, as recent years have highlighted an increase in mean pill consumption by RELUs. It is also of concern that pills are more regularly being identified as containing adulterants and/or dangerous analogues such as PMA.

\textbf{Strategies}

\textbf{Awareness-raising campaigns targeted at specific user populations}

We believe that consideration should be given to maintaining and possibly intensifying a sustained awareness-raising campaign directed at specific user groups. With regard to information targeted at consumers, statistics that highlight legal and health ramifications could be considered. Our consultations demonstrated that many consumers didn’t understand that selling tablets to friends can constitute a supply or trafficking offence. Educating consumers about the legal and opportunity\textsuperscript{70} consequence of these offences may discourage participation. Additionally, raising awareness regarding the multi-drug contents of tablets may encourage consumers to reduce their consumption, based on factual information. For example, government advertisements on social networking internet sites may reach the intended audience more effectively.

\textsuperscript{70} Possible jail sentence and loss of some career prospects due to criminal record.
5: Cannabis

This chapter summarises and discusses a range of law enforcement, health and other data and information relating to the cannabis market in Queensland. We also highlight concerns about patterns of cannabis use in remote Indigenous communities. We identify factors that may drive further expansion of the cannabis market and some of the health and broader social harms associated with cannabis use and organised criminal involvement in supplying the cannabis market. Finally, we explain the rationale underlying our assessment of the risk posed by the cannabis market in Queensland and identify legislative and policy issues requiring further consideration.

Overview

The cannabis market in Queensland remains entrenched, despite household survey data indicating some moderation in the prevalence of cannabis use in the general community. There is evidence that the hydroponic sector of the market has expanded, as well as indications of a possible trend towards syndication of hydroponic crops by commercial cultivators, including organised criminal groups. Outdoor crops also remain prevalent in Queensland.

Organised criminal involvement in the market is driven by a range of factors, including continuing demand for cannabis in the community; the cost-effectiveness and relative simplicity of cannabis cultivation; and the profitability of cannabis cultivation and supply.

There are significant health and community harms associated with cannabis use, including a growing body of evidence on the relationship between mental health problems and cannabis use. Strong evidence of the adverse effect of cannabis on driving performance is also of concern, considering the prevalence of cannabis use in the community and research findings on the prevalence of drug-impaired driving. We also identify a range of health and safety issues and other community costs associated with hydroponic cannabis cultivation.

High rates and problematic patterns of cannabis use in remote Indigenous communities in Queensland are a significant concern. The health and social impact of high levels of cannabis abuse on already vulnerable communities makes disruption of supply, in concert with effective demand reduction strategies, a priority.

Based on the size and entrenched nature of the cannabis market, the levels of criminality, and the risk associated with further expansion of the hydroponic cannabis sector, we have upgraded our assessment of the level of risk posed by the cannabis market to the Queensland community to HIGH.

Previous CMC assessments

We conducted two previous assessments of Queensland organised crime markets that included illicit drugs markets. In both 1999 and 2004 we assessed the level of risk associated with the cannabis market in Queensland as MEDIUM (see Table 7).

The 1999 Queensland Crime Commission and Queensland Police Service (QPS) assessment noted an increase in hydroponic cannabis cultivation in southern states and continuing trade in cannabis from Papua New Guinea through the Torres Strait. The assessment concluded that domestic production and sale of cannabis in Queensland was a large-scale industry, with the climate and the soil fertility very conducive to cannabis cultivation.

In 2004 we found that:

- the cannabis market was entrenched and possibly expanding throughout Queensland
- the market in North Queensland had increased, particularly in the QPS Far Northern Region, where there had been resurgence in crop production; consequently, the risk associated with the market may have been higher in North Queensland compared with the state as a whole
- despite a trend towards hydroponic production in all areas of Queensland, outdoor crops remained prevalent, particularly in northern Queensland
- the advent of hydroponic production had broadened the supply base and increased the diversity of the market
- local supplies appeared to be sufficient to meet demand in most areas; however, local production in some QPS regions was supplemented by cannabis transported from New South Wales and South Australia.

Table 7: Summary of previous CMC risk ratings for the cannabis market in Queensland

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Intent</th>
<th>Capability</th>
<th>Threat</th>
<th>Harm</th>
<th>RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>High</td>
<td>Very high</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>2004</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Intent x Capability = Threat

Threat x Harm = Risk
Demand indicators

Prevalence of cannabis use

Cannabis continues to be the most-used illicit drug in our community. One-third (34%) of Australians over 14 years of age have used cannabis at some stage. However, recent cannabis use appears to have moderated significantly over the past decade. In 2007 only 9 per cent of Australians reported using cannabis in the previous 12 months, which is a substantial decline from the peak of 18 per cent in 1998 (AIHW 2008c). Cannabis use varies with age, with recent use highest among people in their twenties (21%).

Recent cannabis use by Queensland residents (9.5% or 323,000 people) is slightly higher than the national average (9.1% or 1.5 million people) (see Figure 25). This reflects a higher than average rate of recent use by Queensland females and young people aged 14 to 29 years.

Importantly, on a national basis there has been a marked decrease in both lifetime and recent use of cannabis among young people, particularly teenagers. In view of recent medical evidence regarding the possible effects of early cannabis use on mental and physical health in later life, this is a positive outcome.

The issue of most concern from a demand perspective is the fact that cannabis use by Indigenous Australians, particularly those in remote communities, is following the opposite trend to the decline observed in the general community. Cannabis use in Indigenous communities in Cape York and the Torres Strait is discussed in a separate section later in this chapter.

The National Drug and Alcohol Research Centre (NDARC) Drug Policy Modelling Program estimated that Australians consumed 281,500 kilograms of cannabis in 2004, with a plausible range of estimates from 173,000 to 699,000 kilograms annually (Moore 2007). Despite some methodological issues with the estimate, it is the best one available and provides an indication of the amount of cannabis required to support demand within the community. On the basis of an estimated national consumption of 282,000 kilograms in 2004, a rough estimate of consumption in Queensland in the same year would be 57,810 kilograms (20.5% of national consumption). This equates to over 1111 kilograms a week.

71 Comparable data for Queensland are not available in the most recent published NDS household survey results.


Figure 25: Cannabis use in the previous 12 months — proportion of persons aged 14 years and older, Queensland and Australia, 1995 to 2007


73 Data for Queensland were not published in the 1995 report. Several National Drug Strategy (NDS) surveys were also conducted between 1985 and 1993. However, the data from the earlier surveys are not comparable. Published data relating to prevalence of use in the previous 12 months concern respondents aged 20 years and older. Other published data concern the proportion of the population aged 14 years or older who had been offered drugs.
In global terms, cannabis prevalence rates are highest in Oceania (11.5%) and North America (10.5%) (UNODC 2009). A high annual rate of cannabis use in New Zealand (17.9% in 2007) skews the prevalence rate in the Oceania region to some degree (UNODC 2009a, p. 111).

**Frequency of cannabis use**

Patterns of cannabis use are important in terms of the physical and mental health harms associated with use. The NDS household survey suggests that the frequency of cannabis use in the general community has reduced, with a small shift from daily or weekly use to a more sporadic pattern across most age brackets. However, 15 per cent of recent users report using cannabis daily, with another 20 per cent using at least weekly. This equates to almost 550,000 Australians using cannabis at least weekly in 2007. On the other hand, more than half of recent users (52.8%) use cannabis every few months at most (AIHW 2008c).

Contrary to the overall trend, daily cannabis use among recent users under 20 years of age increased between 2004 and 2007. This probably indicates higher rates and levels of use among the more marginalised young people in the community, including those likely to be in contact with the criminal justice system. Frequent cannabis use also appears to be common among Indigenous Australians, as discussed later in this chapter.

Most recent users in the general population only smoked one joint or ‘cone’ on a day when they used the drug (AIHW 2008c).

**Type of cannabis used**

Only 6 per cent of recent cannabis users reported using cannabis oil, which is the most potent cannabis preparation; 12 per cent reported using cannabis resin, which is generally a more potent preparation than marijuana itself (AIHW 2008c).

Higher concentrations of delta-9-tetrahydrocannabinol (THC) are found in the flowering heads of the cannabis plant than in the leaves. Recent users more commonly reported using cannabis head (65%) than cannabis leaf (38%). Men seem to favour cannabis head, while women more commonly report using cannabis leaf (AIHW 2008c).

Over 40 per cent of recent users reported using hydroponic cannabis (AIHW 2008c).

See Appendix 4 for a discussion about whether or not the potency of cannabis has increased over time and whether hydroponically cultivated cannabis is more potent than bush cannabis.

**Treatment data**

Queensland Health data indicate a significant increase in demand for treatment for cannabis-related problems. In 2007–08 almost two in five alcohol- and drug-related treatment episodes in Queensland (38% or 8602 closed episodes) related to cannabis as the principal drug of concern. The proportion of cannabis-related treatment episodes in 2007–08 was consistent with the previous year and is higher than the 2006–07 national average of 23 per cent (AIHW 2008b). It should also be noted that the number of treatment episodes reflects a relatively high rate of police and court diversion for cannabis possession offences in Queensland. Mandatory treatment is generally an outcome of diversion.

In 2007–08 almost 17 per cent of drug-related hospital admissions (or 253 admissions) in Queensland involved cannabis abuse or dependence as the principal diagnosis. This is comparable to the number of admissions involving the ‘other stimulants’ category, which includes amphetamine-type stimulants.

**Supply indicators**

**Availability**

Cannabis remains widely, easily and consistently available throughout the state. The majority of recent cannabis users (88.4%) believe that cannabis is easy to obtain (AIHW 2008c).

The Illicit Drug Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (EDRS) provide more detailed information about regular drug user reports of their ability to obtain bush and hydroponic cannabis. Figure 26 tracks the perceptions of injecting drug users (IDUs) about the relative ease or difficulty of obtaining bush or hydroponic cannabis.

74 The United Nations defines Oceania as Australia, New Zealand and Norfolk Island; Fiji, New Caledonia, Papua New Guinea, the Solomon Islands and Vanuatu; and the Pacific island states and territories in Micronesia and Polynesia (source: <http://unstats.un.org/unsd/methods/m49/m49regin.htm>),

75 Personal communication with Professor Jan Copeland, Director, National Cannabis Prevention and Information Centre, on 18 February 2009.
What is most striking about Figure 26 is the relative stability in the reported availability of hydroponic cannabis compared with bush cannabis. Nearly 90 per cent of Queensland IDUs consistently reported that hydroponic cannabis is ‘very easy’ or ‘easy’ to obtain. On the other hand, the availability of bush cannabis appears to fluctuate significantly from year to year. Regular ecstasy users also report that hydroponic cannabis is easier to source than bush cannabis. However, the most significant finding overall is that few regular users report difficulties in being able to obtain cannabis when they want it.

Price
User reports of price
The price of cannabis in Queensland has remained reasonably consistent over the past five years. Surveys of injecting drug users indicate that the median price of a gram of cannabis in Queensland in 2008 was between $20 (bush) and $25 (hydroponic) (QADREC 2009a). The median cost of an ounce of bush cannabis has varied between $200 and $250 over the past six years, possibly reflecting fluctuations in availability. By contrast, the median cost of an ounce of hydroponic cannabis has remained consistent, but more expensive ($300), over the same period.79

Reports by injecting drug users indicate that cannabis is more expensive in Queensland than in some other Australian jurisdictions. The QPS (2008) also notes that some suppliers sell bush cannabis under the guise of hydroponic cannabis to increase profits.

QPS arrests and seizures
Cannabis continues to dominate drug-related policing activity in Queensland. Almost 70 per cent of drug-related arrests in 2008–09 involved cannabis.80 Most cannabis-related arrests (89%) in 2008–09 were for user-type (consumer) offences as opposed to supply-type (provider) offences.

There has been a marked decline in the rate of cannabis-related arrests over the past three financial years, particularly those relating to ‘provider’ offences (see Figures 27 and 28). This primarily reflects a steady decline in the number of arrests for ‘produce dangerous drugs’ over the past six financial years. The number of arrests for ‘supply dangerous drugs’ was relatively stable until a decline in 2007–08.

79 Similar to legal commodities, buying a single ‘deal’ quantity of cannabis (around 1 gram) is significantly more expensive than buying the product in bulk (ounce or greater quantities).

80 QPS Statistical Services, unpublished data relating to drug-related offenders. The data are consistent with those provided to the ACC for the Illicit drug data report.

Figure 26: Proportion of Queensland injecting drug users reporting that cannabis is ‘very easy’ or ‘easy’ to obtain and ‘difficult’ or ‘very difficult’ to obtain, 2004 to 200981


81 The figure for ‘Easy’ is the sum of the percentage of IDUs reporting that cannabis was ‘very easy’ to obtain and those reporting that cannabis was ‘easy’ to obtain. Likewise, the figure for ‘Difficult’ combines the categories ‘very difficult’ and ‘difficult’.
Apart from a spike in 2004–05, the number of cannabis seizures has been relatively stable over the past five financial years.\textsuperscript{82} Not surprisingly, there has been greater variation in the recorded weight of seizures. Overall the QPS seizure data tend to reflect a large number of smaller-weight seizures, consistent with a higher proportion of user-type rather than supplier-type seizures.

\textsuperscript{82} The following cannabis forms have been included in the calculation: plant, leaf, resin, oil, seed and hashish. This is consistent with the data reported in the ACC’s \textit{Illicit drug data report}.

Unfortunately it is not possible to track trends in seizures relating to hydroponically cultivated cannabis as the QPS crime recording system (QPRIME) does not distinguish the method of production.

**Border seizures**

The majority of border detections for cannabis concern the importation of cannabis seeds, usually in small numbers intended for home cultivation (ACC 2009a).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure27.png}
\caption{Rate of QPS cannabis-related arrests for consumption-type offences per 100 000 population, Queensland, 1998–99 to 2008–09\textsuperscript{83}}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure28.png}
\caption{Rate of QPS cannabis-related arrests for supply-type offences per 100 000 population, Queensland, 1998–99 to 2008–09\textsuperscript{84}}
\end{figure}

\textsuperscript{83} Consumer-related offences include possess and/or use dangerous drugs; possess things for use, or used in the administration, consumption, smoking of a dangerous drug; and drug offences (other).

\textsuperscript{84} Provider-related offences include supply dangerous drugs; produce dangerous drugs; import/export dangerous drugs; trafficking in dangerous drugs.
Cannabis importations into Australia are generally economically unattractive because of the low prices and the high levels of domestic cultivation (ACC 2009a). However, supplies of dried cannabis from Papua New Guinea are being imported into Queensland through the Torres Strait. This is discussed further in the section on cannabis use in Indigenous communities later in this chapter.

Other information on cannabis supply

Market participants

Cannabis suppliers can be divided into three broad categories of producers: personal, social and commercial cultivators. Social cultivators produce more than they require themselves, with the excess either gifted or supplied to friends at a nominal fee. However, a subgroup of social cultivators predominately supply their social network, but are motivated by profit, suggesting some blurring between this subgroup and the commercial cultivation sector.

The QPS Cultivated Drug Operations Unit further identifies three types of groups operating within the commercial cultivation sector: family-based syndicates; friendship-based syndicates; and traditional organised criminal groups such as outlaw motorcycle gangs (OMCGs).85

The QPS confirms that personal and social cultivators make up a significant proportion of the Queensland cannabis market. This cottage industry of small to medium producers is likely to be an inhibitor of organised crime domination of the market. However, law enforcement operations and intelligence continue to indicate a high level of organised crime involvement in the cannabis market.

The importance of social networks in the supply of cannabis

Researchers have highlighted the importance of social networks as a mechanism for the supply of cannabis in Australia (Nicholas 2008). This is also the case for the ecstasy and cocaine markets. The NDS household survey and the IDRS and EDRS surveys confirm that a high proportion of cannabis is sourced from friends and acquaintances. Gifting of cannabis between friends is also common (Willis 2008). In fact, friends were the most common source of cannabis for Queensland respondents in the 2008 IDRS and EDRS surveys.

It is interesting to note that, for IDRS and EDRS respondents, known dealers and street dealers appear to be a more common source of supply for hydroponic cannabis than for bush cannabis in Queensland and nationally (QADREC 2009a, 2009b).

Over the past three household surveys there has been a steady increase in the proportion of recent cannabis users nominating a dealer as their usual source of supply (20% in 2007) (see Figure 29). This may indicate a change in the proportion of commercial cultivators supplying the market.

In 2007 only 3 per cent of recent users in the general population nominated their own crop as their usual source of supply (AIHW 2008c). However, a higher proportion of police detainees surveyed as part of the Australian Institute of

85 Consultation with the QPS State Drug Investigation Unit, 19 March 2009.
Cannabis supply and use in remote Indigenous communities

Cannabis use in Indigenous communities

Cannabis use by Indigenous Australians, particularly those in remote communities, is following the opposite trend to the decline observed in the general community (Copeland 2008). The NDS household survey does not report specifically on drug use by Aboriginal and Torres Strait Island peoples. However, data from a range of sources compiled by Curtin University suggest that the rate of recent cannabis use by Aboriginal and Torres Strait Island peoples is at least double that in the general community.87 Other research indicates even higher rates of cannabis use in remote Indigenous communities (Clough et al. 2004; Delahunty & Putt 2006; Lee, Clough & Conigrave 2007; Lee et al. 2009; Robertson & Dowie 2008).

QPS Far Northern Region became aware of escalating rates of cannabis use in Indigenous Queensland communities about four years ago. In response, the Far Northern Region Drug Squad developed the ‘Weed It Out’ project, in partnership with James Cook University and, more recently, the National Cannabis Prevention and Information Centre (NCPIC), with the aim of reducing cannabis-related harms in Cape York and the Torres Strait (see case example on page 49).

The QPS funded an intensive six-month community and stakeholder consultation process in the latter half of 2008 to ensure that proposed ‘Weed It Out’ strategies are community owned and supported.88 Issues identified by participants in the consultation process included:

- possible drug substitution in some communities since the tightening of alcohol restrictions
- the use of intimidation and violence by cannabis users exerting pressure to obtain money for cannabis
- the relative power of drug dealers in the communities
- the threat of amphetamine-type stimulants coming into the communities through existing dealer networks
- the early uptake of cannabis by young people in the communities, and children making ‘bucket bongs’ from discarded drink bottles
- the use of cannabis as ‘self-medication’ to deal with environmental, social and historical stressors

87 Unpublished data compiled from various Australian Bureau of Statistics and AIHW publications by Associate Professor Dennis Gray at the National Drug Research Institute, Curtin University. The data were provided to the CMC by Professor Jan Copeland, National Cannabis Prevention and Information Centre, University of New South Wales.

88 The consultation team met with 231 people, representing 79 key agencies and community stakeholders in 11 communities and regional centres in Far North Queensland.

Criminology’s Drug Use Monitoring in Australia (DUMA) program reported growing their own cannabis. Ten per cent of detainees who reported using cannabis in the previous 12 months had grown cannabis for their own consumption during that period (AIC 2007).

Hydroponic cannabis production

QPS officers and intelligence staff reported a higher level of hydroponic cannabis detections over the past few years. The State Drug Investigation Unit (SDIU) suggests that to some extent this may reflect evolution in law enforcement strategies during that period. In the absence of data distinguishing between bush and hydroponic crop seizures, it is not possible to determine the number or proportion of hydroponic seizures or to confirm the trend reported anecdotally. However, the observed Queensland trend is consistent with national data indicating that the most commonly detected cannabis is cultivated hydroponically, or through other means of enhanced indoor cultivation (ACC 2009a).

Syndication of cannabis crops has long been observed in South Australia and more recently in New South Wales. In South Australia it became more common after the introduction of the Cannabis Expiation Notice scheme whereby between 1987 and 1999 offences involving up to 10 cannabis plants were eligible for expiation under the Cannabis Expiation Notice scheme.86 Syndication of crops across multiple sites is both a risk management strategy and a matter of logistics as larger-scale hydroponic operations require more floor space.

Outdoor cannabis cultivation

Despite the apparent increase in the level of hydroponic crops, the QPS believes that bush crops remain a significant method of cultivation in Queensland. The Queensland climate and geography support substantial bush crops.

Interstate supply

Queensland law enforcement operations confirm that locally produced cannabis is being distributed interstate. However, substantial quantities of cannabis are delivered from other Australian jurisdictions to supplement local supplies. South Australian hydroponically cultivated cannabis appears to be the major source of interstate supply.

Associated criminality in the cannabis market

There is a high level of criminality associated with the cannabis market. The use of armed crop sitters by some groups is well established. Some criminal groups are increasingly recruiting crop sitters and ‘cleanskins’ to distance themselves from the operation.

86 Currently in South Australia offences involving plants cultivated by enhanced indoor means are not eligible for expiation under the Cannabis Expiation Notice scheme.
• the health impacts of cannabis on users, including episodes of psychosis
• a lack of knowledge about the possible mental health effects of cannabis use
• the lack of community-based drug and alcohol education, treatment and support services (Robertson & Dowie 2008).89

The QPS, James Cook University and the NCPIIC are continuing research in Queensland communities. However, the initial consultation process indicated that rates of cannabis use in Cape York and Torres Strait Island communities will be at least as high as those previously found in Northern Territory communities (Robertson & Dowie 2008).90 Importantly, the consultation found that elected Indigenous community leaders, Elders and local agency representatives recognise that cannabis use in their communities is a serious problem. However, despite a strong desire to deal with these issues, they are hampered by a lack of capacity within the communities to develop and implement community-owned strategies.

A recent five-year study of cannabis use in three remote communities in Arnhem Land in the Northern Territory found a widespread pattern of heavy and dependent cannabis abuse. Around 60 per cent of residents were using cannabis at least weekly, with many reporting heavy daily use (more than six ‘cones’ daily) (Lee, Clough & Conigrave 2007). Furthermore, 90 per cent of Indigenous users reported symptoms of cannabis dependence, compared with around 20 per cent of users in the general population (Lee et al. 2009).

The impact of cannabis use on the Northern Territory community economies is substantial, with up to 10 per cent of the total monetary resources available within the communities studied spent on cannabis. On an individual basis, users were spending between 31 and 62 per cent of median weekly income on cannabis (Clough et al. 2004). Furthermore, ‘cannabis use was linked to substantial health problems and social burdens in these communities, which are already disadvantaged by isolation and poverty’ (Lee et al. 2009, p. 228).

Children as young as 10 years of age are using cannabis regularly in some Indigenous communities (Delahunty & Putt 2006). It seems that in some communities cannabis, rather than alcohol, is becoming the substance of choice for young people. Furthermore, nearly all Indigenous people in the communities studied who begin using cannabis remain problem cannabis users (MHCA 2006).

Typical patterns of cannabis consumption in these communities are also likely to exacerbate the health and social harms resulting from cannabis use. Information from our consultations with health agencies in Townsville and Cairns confirmed published research that indicates a high level of ‘spinning’ (combining tobacco with cannabis) and the use of ‘bucket bongs’ (which are often fashioned from plastic softdrink containers) by users, including children (Clough et al. 2004, Delahunty & Putt 2006).91 The ‘bucket bongs’ give users a rapid and intense dose with little lost smoke, although they increase the amounts of carbon dioxide and tar inhaled (Copeland, Gerber & Swift 2004; Lee et al. 2009). High levels of poly drug use and abuse in the communities are also a concern. Many users report concurrent alcohol and tobacco use and, in some cases, sniffing of volatile substances such as petrol.

CASE EXAMPLE

‘Weed It Out’ project — QPS Far Northern Region

In 2007 the QPS Far Northern Region Drug Squad, in partnership with James Cook University, initiated the ‘Weed It Out’ project. The project aims to reduce cannabis availability and use and strategically address the prospect of amphetamine-type stimulants being introduced into Cape York and Torres Strait communities. Based on a model of ongoing community engagement, the project includes a range of demand-reduction initiatives and targeted policing strategies to reduce the supply of cannabis to the communities (Robertson & Dowie 2008; consultation with QPS Far Northern Region Drug Squad).

Twenty-eight major communities in the Cape York and Torres Strait region have demonstrated their strong desire to take ownership of the problem and to work with the Weed It Out program by formally agreeing to implement strategies to reduce cannabis availability. In 2008 the National Cannabis Prevention and Information Centre joined the partnership to assist in the development of the demand-reduction strategies. The Commonwealth Department of Health and Ageing has provided funding to the QPS over three years (2008–2011) to implement capacity-building programs in each of the communities to assist them to develop their own harm minimisation strategies with the assistance of the QPS and James Cook University project teams. The programs emphasise drug awareness, the wide ranging harms associated with drug use and crime prevention strategies and programs, such as Crime Stoppers.

89 Additional information was provided by Alan Clough and Jan Robertson in a briefing note to Detective Senior Sergeant Mick Dowie, Officer in Charge, Far Northern Region Drug Squad, on 18 December 2008.

90 Personal communication with Professor Alan Clough, James Cook University, 13 February 2009.

91 It should be noted that these practices are not confined to Indigenous communities.
The supply of cannabis in remote Indigenous communities

Local dealers see the cannabis market in remote Indigenous communities as a lucrative one, with the cost of cannabis at lease double that in the wider community. The high profit margins are attractive to community members, particularly when many people are on low incomes and some may be spending $100 a week or more using cannabis themselves.

Papua New Guinea (PNG) has been identified as a key source of cannabis for communities in the Torres Strait Islands and, to a lesser extent, the Northern Peninsula Area of Cape York. Cultivators in Far North Queensland also supply remote communities in Cape York.

Although local drug supply networks do not operate in a manner traditionally associated with organised crime, they are nonetheless ‘organised’ and operate for profit. Strong family and/or cultural connections with the communities are necessary to operate effectively.

QPS Far Northern Region is working in partnership with Customs and Border Protection, the Australian Federal Police and transport companies to reduce the flow of cannabis and other drugs into the communities. As noted previously, the ‘Weed It Out’ project is proving successful and the QPS reports a noticeable decline in community tolerance of cannabis dealers with community members increasingly willing to provide police with assistance to detect and deal with cannabis suppliers.

Delahunty and Putt (2006) identified the efficiency and profitability of networks supplying cannabis to remote Indigenous communities and the potential for those networks to increase the supply of amphetamines into the communities. The community consultation process conducted by the QPS and James Cook University for the ‘Weed It Out’ program confirmed similar concerns within communities in Cape York and the Torres Strait region.

Market assessment

Market drivers

- **Continuing high demand** — Despite the apparent recent moderation in cannabis use in the general community, demand for cannabis remains high, and the cannabis market is the largest illicit drug market in Australia. Furthermore, the comparatively low cost of cannabis makes it accessible to a broad range of users.

- **Low barriers to entry** — The cannabis market is relatively open, with few barriers to entry. Cannabis cultivation is cost-effective and relatively simple, particularly in comparison with other illicit drugs such as synthetic stimulants, making cannabis cultivation attractive and accessible to a broad range of cultivators. However, the resources, experience and operating methods of organised criminal groups are well suited to syndicated cannabis cultivation, particularly hydroponic operations.

- **High profitability and low risk** — The cannabis market is highly profitable, and the risks associated are perceived to be lower than those associated with Schedule 1 drugs. The reliable income stream able to be generated from cannabis cultivation and supply will continue to attract organised criminal groups. The income generated by cannabis facilitates criminal groups’ involvement in and/or expansion into other criminal markets, including Schedule 1 drugs.

- **Community perceptions** — The most recent NDS household survey indicates that community acceptance of cannabis use is declining and that more people are now aware of the possible health problems associated with cannabis use. However, it would be fair to say that a broad section of the community still view cannabis as a relatively ‘soft’ drug and do not understand the level of criminality associated with cannabis cultivation and distribution in Australia.

Harms

The physical, psychological, economic and political effects or harms associated with each illicit drug markets are an important consideration in our assessment of the risk for each market. We have included a more detailed discussion of the harms associated with the cannabis market for several reasons: there is a growing body of evidence on the relationship between cannabis use and mental illness and other health problems; there is now a greater level of concern about the health and safety implications of increased hydroponic cannabis cultivation; and we have upgraded our assessment of the level of harm associated with the cannabis market.

Health-related harms

- **Dependence** — Cannabis is now the third most prevalent drug of dependence in Australia, behind alcohol and tobacco (MHCA 2006). Around 10 per cent of people who ever use cannabis will develop cannabis dependence, with the risk of dependence increasing with the frequency of use (McLaren & Mattick 2006). Cannabis dependency is associated with cognitive and motivational problems, relationship problems, memory problems and financial difficulties (McLaren & Mattick 2006). However, the risk of dependence on cannabis is lower than for other substances such as opioids (23%), alcohol (15%) and nicotine (32%) (MHCA 2006).

  Furthermore, in contrast to other drugs, the risk of fatal overdose from cannabis is extremely low (McLaren & Mattick 2006).
• Disease — There is mixed evidence on the link between cannabis use and respiratory disease and cancer. Tobacco is often mixed with cannabis and this is likely to increase the risk of cardiovascular and respiratory disease. Furthermore, when compared to smoking tobacco, cannabis tends to be smoked without filters and to a smaller butt size, leading to higher concentrations of smoke inhaled. Cannabis smokers also tend to inhale more deeply and hold their breath for longer allowing carcinogenic products to be deposited in the lower respiratory tract. Recent New Zealand research, which controlled for confounding variables including tobacco smoking, found that long-term and frequent cannabis use increases the risk of lung cancer in young adults by almost six times (Aldington et al. 2008).

• Mental illness — There is a growing body of evidence on the relationship between mental illness and cannabis. Although the research shows a strong association between mental health problems and cannabis use, no direct causal link has yet been established (MHCA 2006). However, the evidence suggests that early, frequent and continued cannabis use may increase the risk of depression in adulthood (McLaren, Lemon, Robins & Mattick 2008). There is also increasing evidence that regular cannabis use, especially by those who begin using at a young age, increases the risk of mental illness. The risk appears to be greatest for those with an established or revealed mental illness and for those with a vulnerability to psychosis, especially schizophrenia (MHCA 2006). The greatest harms are associated with heavy cannabis use and poly drug abuse.

• Burden of treatment — The treatment data outlined earlier in this chapter demonstrate the increasing treatment burden arising from cannabis use in the community. Around 20 per cent of alcohol and drug treatment episodes in Queensland relate to cannabis as the principal drug of concern. It should be recognised that treatment programs mandated by police and court diversionary schemes increase the level of reported cannabis-related treatment.

Other social impacts

• Drug driving — There is increasingly strong evidence about the adverse effect of cannabis on driving performance. Studies indicate that driving under the influence of cannabis increases the risk of road crash by two to three times. Prevalence data indicate that there is reason for concern about the level of cannabis-impaired driving in the community. A recent large-scale survey found that over one in ten (12.3%) Australian drivers reported driving within three hours of using cannabis in the previous year (Mallick et al. 2007). This was comparable to the rate of reported drink driving in the same survey.

The prevalence and frequency of drug driving among recent cannabis users is of particular concern. Over half the drivers who reported using cannabis in the previous 12 months (51.3%) said they had driven within three of hours of using cannabis during that period (Mallick et al. 2007). Furthermore, data from the Australian Institute of Criminology’s DUMA survey indicate that nationally almost half the police detainees who reported driving after using cannabis did so at least weekly (37% from the Brisbane watch-house; 42% from the Southport watch-house). Extrapolation from the results of the 2007 NDS household survey (where 10% of Queensland residents reported recent use of cannabis) suggests that it is possible that over 160,000 Queensland drivers are driving within three hours of using cannabis in any given year, with many doing so regularly.

• Fraud and money laundering — Illegal funds derived from the sale of cannabis need to be ‘laundered’. Money laundering generates further criminal activity such as fraud and corruption. It also diverts money from the legitimate economy. The proceeds of crime also provide cheap capital to finance the legitimate business interests of criminal groups, creating an unfair competitive advantage (Nicholas & Shoobridge 2006).

Health, safety and other issues associated with hydroponic cultivation

A range of health and safety issues and other community costs are associated with hydroponic cannabis cultivation. Hydroponic operations require significant amounts of water and electricity. Illegal diversion of electricity is common and the cost of stolen electricity is borne by the community generally. Tampering with electrical wiring and overloading electrical systems to accommodate lighting and ventilation requirements can lead to house fires. Other problems are:

• the need for costly remediation of properties (often rental properties) resulting from physical and structural changes made to accommodate cannabis cultivation, as well as water damage and other effects of excessive moisture
• toxic contaminants from moulds and spores produced by the large amounts of moisture required for hydroponic cultivation; these contaminants can remain even after premises are vacated; the mix of poisonous gases and oxygen can also cause explosions

92 Personal communication with Professor Jan Copeland, Director, National Cannabis Prevention and Information Centre, 18 February 2009.
93 Recent cannabis users are those who reported using cannabis in the previous 12 months.
94 Australian Institute of Criminology, DUMA Drug driving addendum tables (Quarter 3, 2008).
• chemical hazards caused by chemical spills and residues of pesticides, fertilisers and solvents used for the extraction of THC
• fire hazards resulting from heavy power usage, which can wear transformers prematurely and cause fires well after cultivators vacate premises. (Canadian Real Estate Association 2004; Nicholas & Shoobridge 2006; National Collaborating Centre for Environmental Health 2009)

In 2006, New South Wales introduced an aggravated offence with respect to the enhanced indoor cultivation of prohibited plants in the presence of children. The new offence recognised ‘the inherent risks to children of exposure to the hydroponic process, such as fire, electrocution, extreme heat, dangerous chemicals, insecticides and fumes as well as toxic gases and airborne bacteria’.95

In Canada, the number of hydroponic ‘grow ops’ has increased to such an extent that the Canadian housing industry is developing national guidelines for the assessment and remediation of properties. Furthermore, a Canadian public health agency recently issued recommendations for the safe re-occupancy of premises used for cannabis grow operations (National Collaborating Centre for Environmental Health 2009).

Assessment of the market

The cannabis market in Queensland clearly remains entrenched. There is evidence that the hydroponic cultivation sector of the market has expanded, as well as indications of a possible trend to syndication of hydroponic crops by commercial cultivators, including organised criminal groups.

However, there is some tension between NDS household survey data indicating further moderation in the prevalence of cannabis use within the general community and law enforcement reports suggesting expansion in the market since our 2004 assessment. A decrease in the number of cannabis-related arrests over the past three years further complicates the picture. There is a range of possible explanations for the variance, and it is likely that there are multiple factors at play. First, it is widely acknowledged that the NDS household survey sampling framework is likely to result in an underestimate of actual levels of drug use in the community. In part this is because marginalised people are more difficult to reach in a household survey and are therefore under-represented in the sample. Consequently, it is possible that the prevalence of cannabis use has not declined to the extent suggested by the 2007 NDS household survey. Furthermore, Clements and Daryal (2003) found that daily and weekly cannabis users account for over 90 per cent of total cannabis consumption. These heavy cannabis users are more likely than irregular users to be in that more marginalised group which is under-represented in official statistical data.

Investigative and operational priorities influence police activity, particularly for police-initiated offences (compared with complaint-based offences). In 2007, QPS State Crime Operations Command upgraded the cannabis market from a medium to a high investigative priority. This would have influenced the number of hydroponic crops detected.

It is also possible that there has been a shift in the mix of personal, social and commercial cultivators in the Queensland cannabis market. The increase in the proportion of recent cannabis users nationally reporting a dealer as their usual source of supply in the NDS household survey lends some support to this hypothesis. However, the market is likely to remain broadly supplied in the medium term.

There is potential for the syndicated hydroponic sector of the market to expand further over the short to medium term, particularly in the more densely populated urban areas of the state. Organised criminal groups have a greater capacity to recruit and manage crop sitters and other facilitators, to finance rental properties, to arrange transportation of bulk product, and to exploit existing distribution networks.

Despite predicted growth in the hydroponic sector of the market, outdoor cannabis production continues to be viable in many parts of the state. The preference of some users for bush cannabis, and the abundance of secluded sites and fertile land, will continue to attract some criminal groups to outdoor crop production.

High rates and problematic patterns of cannabis use in remote Indigenous communities in Queensland are a significant concern. The associated health problems and social burden on these communities, which are already significantly disadvantaged, are profound. Furthermore, there is the potential for existing cannabis supply networks to facilitate an increase in the supply of amphetamine-type stimulants into the communities, although there is limited evidence that this is happening at present. It is considered unlikely that traditional organised criminal groups will directly supply cannabis into remote Indigenous communities because strong family and/or cultural connections are necessary. Although the local supply networks may not function in a manner traditionally associated with organised crime, they are nonetheless ‘organised’ and operating for profit. Furthermore, the impact of high levels of cannabis abuse on already vulnerable communities makes disruption of supply, in concert with effective demand reduction strategies, a priority. The QPS is to be commended for its proactive and evidence-based approach to reducing the availability and use of cannabis in communities in Cape York and the Torres Strait, in partnership with local communities and other stakeholders.

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95 Extract from New South Wales Legislative Assembly Hansard and Papers, 25 May 2006 — second reading speech for the Drug Misuse and Trafficking Amendment Act (Hydroponic Cultivation) Bill.
Risk assessment

We have assessed the risk associated with the cannabis market in Queensland as HIGH. This represents an upgrading of the risk compared with the 2004 assessment, when the cannabis market was assessed as a medium risk. The change reflects an upgrading of the assessment of harm associated with the cannabis market, which is explained further below.

- Despite some moderation in cannabis use in the general community, demand for cannabis continues to be strong. The continuing trend towards increased hydroponic cultivation further reduces barriers to entry. Furthermore, organised cannabis cultivation and distribution is highly profitable, enabling criminal groups to generate a reliable income stream with a relatively low risk. Evidence of increasing organised crime involvement in the syndication of hydroponic cannabis crops reinforces the attractiveness of the cannabis market to criminal groups. Consequently, desire and confidence, and therefore INTENT, are assessed to be HIGH.

- Cannabis cultivation is cost-effective and relatively simple, particularly in comparison with other illicit drugs such as synthetic stimulants. Organised criminal groups are able to recruit crop sitters to tend hydroponic crops in urban centres, increasing their ability to ‘distance’ themselves and their capacity to manage large-scale syndicated operations. Consequently, a wide range of criminal groups have the knowledge and resources to cultivate and distribute cannabis. Therefore, CAPABILITY is assessed as HIGH.

- THREAT is therefore assessed as HIGH, given that it is a function of INTENT (HIGH) and CAPABILITY (HIGH).

- The assessment of HARM is more complex. Cannabis use is not linked to the commission of serious crime to the same extent as other drugs of dependence, particularly heroin and methylamphetamine. Cannabis is not injected and many users do not consume the drug to the extent that significant physical or mental health harms become a factor. Based on the advice of drug experts, the growing body of evidence on the relationship between mental health problems and cannabis does not currently justify an increase in the harm rating from a health perspective. However, a watching brief is recommended. Furthermore, the adverse effect of cannabis on driving performance is of concern, considering the prevalence of cannabis use in the general community and research on the prevalence of drug-impaired driving. Ongoing monitoring of the results of QPS random roadside drug testing will inform future risk assessments.

There is a range of other harms that have influenced our assessment. Cannabis has traditionally been viewed as a ‘soft’ drug by a significant proportion of the community, although there is evidence that this is changing. The traditional view fails to recognise the high level of criminality involved in the supply side of the market. There is evidence that organised criminal groups are increasingly viewing cannabis as a reliable and consistent source of income. In some cases this provides a financial base for a range of other criminal enterprises, including the production and supply of Schedule 1 drugs. Criminal groups are therefore able to effectively diversify their operations and their criminal risk. Furthermore, the illicit income generated encourages money laundering. This in turn generates further criminal activity, such as corruption and fraud, and diverts money away from the legitimate economy.

Further growth in the level of hydroponic cannabis cultivation will increase the incidence and severity of a range of health and safety harms associated with hydroponic production. In addition, should there be a significant increase in the level of hydroponic production, the number of properties requiring remediation is likely to increase. The associated costs will be borne by the broader community in the form of higher insurance and rental costs.

Based on the size and entrenched nature of the cannabis market, the high level of profits and criminality, and the risks associated with further expansion of the hydroponic cannabis sector, we have upgraded our assessment of the level of HARM to HIGH. We recognise that the level of harm may be higher in remote Indigenous communities, particularly in Far North Queensland, where there are high levels of cannabis abuse.

- The RISK is therefore assessed as HIGH (on a statewide basis), as it is a function of THREAT (HIGH) and HARM (HIGH).

We predict that the risk associated with the cannabis market will remain STABLE in the short term (one to two years). There is potential for further expansion of the hydroponic cannabis market, particularly the syndication of hydroponic cannabis crops by organised criminal groups operating in Queensland, in the medium to longer term (three to five years).
**Strategies**

**Legislative review**

The QPS has identified difficulties in securing convictions against offenders on a commercial, rather than personal use, basis without clear evidence of commercial gain. This is likely to make Queensland an attractive operational base for organised criminal groups seeking to mitigate their risk. Legislative remedy appears necessary, possibly in the form of deeming provisions.

Queensland needs legislation and penalties comparable to those of other Australian jurisdictions to ensure that it does not become a more attractive operational environment for criminal groups, particularly for the cultivation of hydroponic cannabis. Furthermore, a recent shift in public opinion suggests that there is community support for stronger legislation and penalties, particularly to support law enforcement efforts against organised criminal involvement in cannabis cultivation and supply. In 2007 almost 60 per cent of Australians supported increasing the penalties for the sale and supply of cannabis (Matthew-Simmons, Love & Ritter 2008). This was up from 52 per cent in 2004. Support for the legalisation of cannabis for personal use has also declined, with 60 per cent of the community opposed to legalisation.

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**Regulation of specialist hydroponic equipment**

There has been significant growth in the number of hydroponic equipment retailers in Queensland over the past three years. The sale of hydroponic supplies in Queensland is completely unregulated and there is no doubt that this facilitates both small-scale and commercial hydroponic cannabis cultivation.

The CMC intends to write to the Queensland Attorney General seeking a review of the legislative and regulatory framework relating to cannabis cultivation and supply in Queensland. We believe the review should include an examination of options for regulating the hydroponics industry in Queensland.

**Distinguishing method of production on QPS systems**

It is currently not possible to track trends in seizures relating to hydroponically cultivated cannabis in Queensland because QPS recording systems (QPRIME) do not distinguish the method of production. This is a problem because there is a range of risks, including significant health and safety issues, associated with further expansion of the hydroponic sector of the cannabis market. Therefore it is important to be able to monitor trends in this sector.

In 2008 the QPS State Intelligence Group recommended the inclusion of a QPRIME marker to record the type and location (rural, residential or industrial) of cannabis crops. We support that recommendation and encourage the QPS to implement the proposal.

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96 The Drug Policy Modelling Program analysis is based on NDS household survey data.
Reducing cannabis-related harms in remote Indigenous communities in Queensland

As we discussed earlier in this chapter, the issue of most concern from a demand perspective is the fact that cannabis use by Indigenous Australians, particularly those in remote communities, is following the opposite trajectory to the decline observed in the general community. The QPS ‘Weed It Out’ program aims to reduce cannabis availability and use, and strategically address the prospect of amphetamine-type stimulants being introduced into Cape York and Torres Strait Island communities.

We commend the QPS, particularly Far Northern Region, for their commitment to the program. We also note the efforts of the Australian Customs and Border Protection Service, which has committed extensive resources to support the supply reduction strategies of the program. We also recognise the significant commitment of leaders, Elders and individuals within the communities participating in ‘Weed It Out’ who have taken ownership of the problem of cannabis abuse in their communities. They have embraced the program and worked constructively with the QPS and researchers to improve their capacity to manage the problem from within their own communities. We encourage the QPS to ensure that the ‘Weed It Out’ program continues to be appropriately resourced and the outcomes monitored.

Proceeds of crime

Criminal enterprises exist primarily to make money. The cannabis market is highly profitable and relatively low risk compared with some other drug markets. The restraint and forfeiture of assets is a powerful mechanism for increasing the risk associated with profiting from the cannabis market. Queensland has relatively strong proceeds of crime legislation, including a non-conviction-based scheme, which aims to remove the financial gain and increase the financial loss associated with illegal activity.

The QPS CDOU has increased the emphasis on proceeds of crime action against identified cannabis producers and traffickers, resulting in a significant increase in the number of referrals to the CMC and the Director of Public Prosecutions. We note the QPS efforts in this regard. However, there is significant scope for increasing proceeds action against organised criminal groups involved in the production of cannabis if greater levels of financial investigative resources were available to the QPS. The importance of proceeds of crime action in undermining organised criminal groups is discussed further in the final chapter of this assessment.
6: Cocaine

This chapter summarises and discusses a range of law enforcement, health and other data and information relating to the cocaine market in Queensland. Because we conducted a detailed assessment of the Queensland cocaine market in 2007, we have focused on changes in the market since that assessment.

Overview

Contrary to an overall decline in illicit drug use observed in the general community, the most recent National Drug Strategy (NDS) household survey found that recent cocaine use by Queensland residents doubled between 2004 and 2007. In fact, reported cocaine use in Australia and Queensland is now at its highest level on record. Despite this, overall cocaine use remains lower than use of other illicit drugs such as cannabis and ecstasy. In general the frequency of use remains low and sporadic and there is a low level of cocaine injection in Queensland.

User reports about sourcing cocaine and forensic testing of the purity of cocaine seized in Queensland indicate continuing instability in the Queensland market, particularly compared with the more established markets in New South Wales and Victoria. Consequently, we would characterise the Queensland market as supply driven. The most prevalent areas for cocaine activity remain South-East Queensland (including the North Coast area) and, to a lesser extent, Cairns. However, there are indications of an expanding market in other areas of the state, confirming the need for continued monitoring. Consistent with our 2007 cocaine assessment, there is no evidence that ‘crack’ cocaine is readily available in Queensland.

We assess that the Queensland cocaine market will continue to expand over the short to medium term, although restrictions on consistent supply and high prices (particularly relative to synthetic stimulants) will limit significant expansion of the market. However, changes in international markets and cocaine trafficking routes are likely to improve the ability of a broader range of criminal groups to reliably source cocaine in the short to medium term.

The attractiveness of cocaine to social drug-users and continuing concerns about our understanding of the actual level of demand, and therefore the actual size of the market throughout Australia, indicate that the Queensland market requires continued close monitoring. We continue to assess the cocaine market in Queensland as a MEDIUM risk, but at the high end of the medium scale.

Previous findings

1999 organised crime markets assessment

The 1999 assessment of organised crime markets in Queensland noted increases in the use of cocaine in southern states and in the rates of injection of cocaine by users. At the time, the National Drug and Alcohol Research Centre (NDARC) warned of potentially significant harms associated with the possible emergence of a pattern of regular cocaine use in Australia. As a result the Queensland Crime Commission and the Queensland Police Service (QPS) assessed the level of risk associated with the cocaine market in Queensland as HIGH.

2004 organised crime markets assessment

In the 2004 organised crime markets assessment, the Crime and Misconduct Commission (CMC) assessed the cocaine market as a MEDIUM risk with the potential to increase over the next three years. This primarily reflected the fact that cocaine was not as readily available in Queensland as other illicit stimulants, that its popularity was limited by its relatively high price and that it had to be imported or obtained from a narrow range of interstate networks. We also noted key information gaps in our understanding of the cocaine market and cautioned that law enforcement agencies might be underestimating the level of cocaine use in Queensland.

2007 CMC assessment of the cocaine market in Queensland

In 2007, in response to the identified information gaps and concerns about the actual size of the market, the CMC conducted a strategic assessment of the cocaine market in Queensland. The methodology for the 2007 assessment was similar to that for the current illicit drug markets assessment. However, the assessment also drew on survey and interview research that the CMC conducted in 2006 with cocaine users in Brisbane and on the Gold Coast. In assessing the market in Queensland in 2007, we found:

- Although the actual level of demand was difficult to quantify, cocaine use was less prevalent than use of other illicit drugs, such as methamphetamine, cannabis and ecstasy.
- The cocaine market had expanded in Queensland over recent years, although minimally. The Queensland market was not as large or established as the markets in Sydney and Melbourne.
- Overall, the cocaine market remained small compared with other illicit drug markets and cocaine continued to be one of the least visible illicit drugs in Queensland.
• Cocaine could be obtained in Queensland through established networks, although it was not always readily available and was difficult to source without known contacts.
• The market appeared to be supply driven, with the level of cocaine supply apparently outstripped by the level of demand.
• Although much of the cocaine available in Queensland was sourced domestically from Sydney and Melbourne, Queensland had been targeted by organised criminal groups for large-scale importations.
• Organised criminal groups were increasingly being identified trafficking and supplying cocaine in Queensland.
• There appeared to be few indications of competition in the Queensland market.
• It was very unlikely that ‘crack’ cocaine was readily available in Queensland. (CMC 2007)

We identified a number of factors limiting further expansion of the market in Queensland, including the consistently high price of cocaine compared with most other drugs and sporadic supply levels. Drivers of future market expansion included the continuing trend towards poly drug use within the ecstasy/social drug-taking market and the potential for organised criminal groups to diversify their criminal activities into cocaine distribution.

In 2007 we assessed that the cocaine market in Queensland remained a MEDIUM risk, although we cautioned that the level of risk might increase in the next three to five years, requiring close monitoring of any change in the market.

The main change in the dimensions of the risk assessment between our 2004 and 2007 assessments was an increase in the assessed level of criminal intent from HIGH to VERY HIGH to reflect the the broad criminal environment’s intent to source and distribute cocaine in Queensland.

Demand indicators
Data available in relation to cocaine prevalence at the time of our 2007 assessment of the cocaine market in Queensland indicated a period of relative stability in cocaine use over the preceding five years or so. However, data available since that assessment indicate an increase in demand for cocaine in Queensland and nationally.

General population use
The NDS household survey indicates a significant increase in the use of cocaine in the general community in recent years. In 2007, 1.6 per cent of Australians reported using cocaine in the previous 12 months, while 6 per cent reported ever having used cocaine. This is a statistically significant increase in both lifetime and recent use compared with the 2004 survey. In fact, cocaine was one of only three drug categories for which there was a recorded increase in use between the 2004 and 2007 household surveys.97 The increase in reported recent use of cocaine was evident in all jurisdictions except the Australian Capital Territory (AIHW 2008a).

The rate of recent use of cocaine by Queensland residents doubled between 2004 and 2007 and is now the highest on record. However, overall the rate of recent cocaine use remains low (1.4 per cent) compared with other illicit drugs such as cannabis and ecstasy (AIHW 2008a). Figure 31 shows the trend in reported cocaine use in Queensland and nationally over the past 12 years.

In Australia as a whole, recent use of cocaine rose in the late 1990s and then steadily declined until the sharp increase in the most recent household survey. Contrary to the national trend, recent cocaine use in Queensland declined in 1998 and then remained stable until the spike in 2007.

The increase in recent cocaine use reflects a marked increase in use among 20–29 year olds, coupled with a more moderate increase among 30–39 year olds. Reported recent use among teenagers remained relatively stable between 2004 and 2007 (AIHW 2008c).

The United Nations Office on Drugs and Crime (UNODC 2009a, p. 80) reports that Oceania now has the second-highest rate of recent cocaine use in the world, behind North America.98 However, the actual size of the market, in terms of the number of users, remains small compared with the major international markets in North America and Western and Central Europe. The UN suggests that Australia’s established synthetic stimulants market may have helped drug users to experiment with cocaine (UNODC 2008a). The increase in cocaine use in the Oceania region is in contrast to a decline in use in North America and signs of stabilisation in Europe following a period of expansion (UNODC 2009a).

Cocaine use among specific populations
Because cocaine is generally used in a social context, the Ecstasy and Related Drugs Reporting System (EDRS) tends to provide a more accurate picture of cocaine use within the drug-using population than the Illicit Drug Reporting System (IDRS). However, it is also important to monitor cocaine use among injecting drug users, because of the specific nature and level of harms associated with injecting drug use.

97 There was also an increase in the reported use of ecstasy and the use of tranquillisers and sleeping pills for non-medical purposes.
98 The United Nations defines Oceania as Australia, New Zealand and Norfolk Island; Fiji, New Caledonia, Papua New Guinea, the Solomon Islands and Vanuatu; and the Pacific island states and territories in Micronesia and Polynesia (source: <http://unstats.un.org/unsd/methods/m49/m49regin.htm>).
Figure 32 tracks the use of cocaine within the past six months by injecting drug users and regular ecstasy users (REUs) nationally and within Queensland. It is evident that before 2004 the level of cocaine use by Queensland REUs was lower than the national average. However, between 2004 and 2005 the rate of cocaine use by Queensland REUs doubled to 41 per cent, and then tracked roughly in line with the national rate until a dip in 2008, followed by a sharp increase in 2009. However, the IDRS and EDRS data should be interpreted with some caution due to the small sample size (100 respondents in Queensland).

Figure 31: Cocaine use — proportion of persons aged 14 years and older, Queensland and Australia, 1995 to 2007


Figure 32: Recent cocaine use — proportion of IDRS and EDRS sample, Queensland and Australia, 2003 to 2009

Source: Illicit Drug Reporting System and Ecstasy and Related Drugs Reporting System (annual national and Queensland reports) (NDARC 2005a, b; 2006a, b; 2007a, b; 2008a, b, d, e; 2009a, b; QADREC 2005a, b; 2006a, b; 2007a, b; 2008a, b; 2009a, b).

99 Data on the number of Queensland residents who had ever used cocaine in 2007 were not reported in the 2007 National Drug Strategy household survey: state and territory supplement.
The rate of recent cocaine use by injecting drug users in Queensland has consistently remained below the national average since 2004. Recent cocaine use by Queensland injecting drug users increased markedly between 2006 and 2007, and has remained relatively stable since then (NDARC 2009b, QADREC 2008a).

The Australian Institute of Criminology’s Drug Use Monitoring in Australia (DUMA) program tracks drug use by people recently detained by police. The number of detainees at the Brisbane City and Southport watch-houses testing positive for cocaine has remained consistently low (0.7% to 2.0%) over the past four years. Figure 33 tracks self-reported cocaine use in the past 30 days, as an annual moving average, by Queensland DUMA respondents over the past five years. It is evident that recent self-reported use increased in 2006 and 2007, dipped again in the latter part of 2007 and then kicked up again in 2008. However, the underlying quarterly data are indicative of continuing fluctuation in reported cocaine use. In general, detainees at the Southport watch-house report a higher level of cocaine use than detainees at the Brisbane City watch-house. Furthermore, although the Queensland trend is generally consistent with the national trend, there appears to be a greater level of variability in reported use by Queensland respondents.

Patterns of cocaine use

Patterns of use are important in assessing the level of harms associated with cocaine use. This includes frequency of use, route of administration and the type of cocaine user. In particular, it is important to monitor the level of injecting drug use because of the specific harms associated with injecting drug users.

The frequency of cocaine use generally remains low and sporadic among users. The 2007 NDS household survey found that most people (57.8%) only use cocaine once or twice a year. However, in 2007 there was an increase in the proportion of people reporting that they used cocaine either once a month or more (18.9%), or every few months (23.5%) compared with 2004 (AIHW 2007c). Around half of recent users had two or fewer hits/lines per session.

The 2008 IDRS and EDRS surveys are also consistent with infrequent cocaine use among Queensland injecting drug users and regular ecstasy users. Median days of use by Queensland REUs (2–2.5 days in the previous six months) has been relatively stable since 2006 and is consistent with the pattern of REU cocaine use in other Australian jurisdictions (NDARC 2009b). Most users report using 0.5 g of cocaine on a typical use occasion.

National Drug Strategy Household Survey data indicate that snorting remains the most common method of use, with 95 per cent of respondents in 2007 favouring this method.

100 Recent use in the IDRS and EDRS surveys refers to use in the previous six months. It should be noted that the national average for cocaine use is skewed to a significant extent by a large cocaine-injecting population in New South Wales (mainly in Sydney).

101 Each data point in the moving average represents the simple average of the previous four quarters. For example, the data point for the fourth quarter in 2008 is actually the average of each quarter in 2008. A moving average is used to smooth short-term fluctuations in the time series.

102 The range reported by Queensland REUs in 2008 was very broad: 1–180 days. The range over the previous seven years was between 1–24 days and 1–90 days in the previous six months.

103 Each data point represents the average of the previous four quarters. See footnote 101 for an explanation of the moving average.

Figure 33: Self-reported cocaine use in previous 30 days (annual moving average) — proportion of police detainees, Queensland DUMA data, 2003 to 2008

Source: Australian Institute of Criminology — unpublished DUMA data, analysis conducted by CMC.
Only 8 per cent of respondents nationally reported injecting cocaine (AIHW 2008bc). The rate of cocaine injection by Queensland injecting drug users is consistent with the national average (8% in 2008) and has remained relatively stable over the past three years (QADREC 2009a). No Queensland IDRS or EDRS respondents in 2008 reported smoking cocaine.

Quantitative data relating specifically to cocaine injection were not available in the Queensland Minimum Data Set for Needle and Syringe Programs.\(^\text{104}\) However, we met with Queensland Health Alcohol, Tobacco and Other Drugs Services (ATODS) and Needle and Syringe Program (NSP) staff in Brisbane, the Gold Coast and several regional centres throughout Queensland between September and November 2008. Our consultations indicated very low levels of cocaine injection by NSP clients.

We provided more detailed information on the demographic characteristics of cocaine users in Queensland in our 2007 cocaine assessment. There has been no significant change in demographic patterns since that assessment. In short, males are more likely than females to use cocaine. People aged 20–29 years are more likely than those in other age groups to use cocaine (CMC 2007). We also noted that cocaine is not only used by affluent individuals, and is more widely used than long-held stereotypes have suggested. Research and law enforcement data indicate that this continues to be the case in Queensland.

The 2007 cocaine assessment (CMC 2007, pp. 24, 28) also noted that cocaine maintains a position within poly drug use culture and is often used in a suite of drug-taking, particularly in social drug markets in nightclubs and at other entertainment venues. This is consistent with information provided by police in our consultations in 2008.

### Treatment for cocaine use

Queensland Health treatment data give a useful insight into the level of health-related harms associated with cocaine use in Queensland. Hospital admissions where the principal diagnosis is cocaine abuse or dependence remain low in Queensland, with 11 admissions in 2007–08. Although this represents an increase over 2006–07 (4 admissions), it remains lower than the peak of 19 admissions in 2003–04.\(^\text{105}\) Overall, cocaine-related admissions represent well under 1 per cent of drug-related hospital admissions in Queensland.

However, there has been a sharp increase in the number of cocaine-related ‘closed’ treatment episodes by publicly funded alcohol and drug treatment services in Queensland over the past four years (see Figure 34).\(^\text{106}\) Nevertheless, cocaine-related episodes represent only 1 per cent of alcohol- and drug-related treatment episodes overall.

The most significant increase over the period is in treatment episodes involving cocaine use as a secondary substance rather than the primary drug of concern. This drove the threefold increase in total treatment episodes involving cocaine between 2004–05 and 2007–08. The rate of increase in Queensland treatment episodes is much steeper than the increase observed at a national level.

### Supply indicators

We used a range of quantitative data sources to provide an indication of the level of cocaine supply nationally and within Queensland. Quantitative indicators of supply include the price of cocaine, law enforcement seizures, the purity of cocaine seized and the number of offenders detected. The available quantitative data have been supplemented by anecdotal and other qualitative information and intelligence from law enforcement and community sources. More qualitative indicators of supply include user perceptions of cocaine availability and ease of sourcing, and user perceptions of cocaine quality and purity. Intelligence obtained from law enforcement operations, target development activities and human sources provides more current information about the state and dynamics of the market.

### Availability

Our 2007 cocaine assessment identified that cocaine was not always readily available in Queensland and that it was difficult to source without known contacts. More recent data indicate continuing fluctuations in supply, although user reports indicate that cocaine has been more readily available over the past three years.

Reports by regular drug users of their ability to source cocaine are a useful indicator of the level of supply. Figure 35 identifies the proportion of regular ecstasy users over the past five years reporting that cocaine is either ‘very easy’ or ‘easy’ to source. The New South Wales market provides a useful comparison for two reasons: it has a more established and entrenched cocaine market, and it is in close geographical proximity to Queensland.

Regular ecstasy user reports on the ease of sourcing cocaine indicate that the Queensland market has fluctuated more than either the New South Wales or the national market.

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\(^\text{104}\) Unpublished data collected by Queensland Health's Alcohol, Tobacco and Other Drugs Services and provided to the CMC.

\(^\text{105}\) Queensland Hospital Admitted Patient Data Collection, unpublished data provided by Queensland Health Client Services. Data for 2007–08 are preliminary and are subject to change. Also note that poly drug use involving cocaine may not be captured in the available hospitalisation data as there is a separate category ‘multiple drugs and other psychoactive substances’. The multiple drug category is used when two or more substances are used by a patient and it is not clear which is contributing to the disorder requiring hospitalisation.

\(^\text{106}\) ‘Closed’ means completed treatment episodes. See the further explanation of Queensland Health treatment data in Chapter 2.
However, Queensland REUs have found it easier to source cocaine in the past three years than previously. REU reports in New South Wales and Victoria are indicative of a more stable supply in those states (NDARC 2008c).

Reports of Queensland injecting drug users as part of the IDRS surveys over the past five years are also indicative of greater instability of cocaine in supply in Queensland, particularly compared with the more established markets in New South Wales and Victoria.

Figure 34: Treatment episodes by alcohol and other drug treatment services for cocaine use, Queensland, 2002–03 to 2007–08

Source: Queensland Health Alcohol, Tobacco and Other Drugs Services — unpublished data collected for the Alcohol and Other Drug Treatment Services National Minimum Data Set, analysis conducted by CMC.

Figure 35: Proportion of regular ecstasy users reporting that cocaine is ‘very easy’ or ‘easy’ to source, EDRS, 2004 to 2009


107 Treatment refers to ‘closed’ (or completed) treatment episodes by publicly funded alcohol and other drug treatment services in Queensland. See the further explanation of Queensland Health treatment data in Chapter 2.
The National Drug Strategy household survey also indicated an increase in the number of respondents reporting they had been offered cocaine or had the opportunity to use cocaine in the last 12 months. In 2007, almost 11 per cent of 20–29 year old Australians had the offer of, or opportunity to use, cocaine in the previous year, compared with 8.4 per cent in the 2004 survey. Similar data for Queensland respondents were not available. The household survey data are interesting because of the focus on access to drugs within the broader community rather than access for regular drug users.

Consistent with the 2007 cocaine assessment, there is no evidence that ‘crack’ cocaine is readily available in Queensland. However, respondents in the most recent Drug Use Monitoring Australia (DUMA) survey reported that smokable cocaine is available on the Queensland market and this needs to be monitored. Further information on the process of converting cocaine to ‘crack’ and the necessary preconditions for the emergence of ‘crack’ is provided in our 2007 cocaine assessment.

108 ‘Crack’ is a type of freebase cocaine that is particularly pure. It is generally sold in the form of small crystals or rocks and is usually smoked.

109 Australian Institute of Criminology, DUMA New and re-emerging drugs, Brisbane (Quarter 3, 2009), unpublished data, 1 October 2009.

Detections of cocaine at the border

In 2007–08 there was a 72 per cent increase in the number of Customs and Border Protection cocaine seizures at the Australian border (629 seizures), but only a slight increase in the weight of seizures (649 kg), compared with the previous year (ACS 2008). There are several points of interest in the 2007–08 data:

- there was a decrease in the number of detections in all major drug categories except cocaine
- cocaine seizures represented 23 per cent of all drug-related detections by weight
- the increase in the number of detections was mainly the result of a substantial increase in the number of detections in the postal stream, continuing the trend to smaller, more frequent detections
- there were also several sizeable detections in sea cargo (ACS 2008).

Figure 36 illustrates the trend in the number and weight of cocaine seizures by Customs and Border Protection over the past 10 years. The shift from a low number of high-weight seizures in the earlier part of the decade is particularly evident. The middle part of the decade was characterised by a high number of low-weight detections. However, there has been an increase in both the number and weight of cocaine detections at the border since 2006–07.

110 The Australian Customs Service became the Australian Customs and Border Protection Service in December 2008. When referencing publications we refer to the name of the organisation at the time the document was published.
QPS arrests and seizures

The total number of arrests for cocaine-related offences has more than doubled in the past five years, peaking at 154 arrests in 2008–09. Not surprisingly, the most significant increase has been in consumption-type offences, with the number of arrests climbing steadily since 2003–04 (see Figure 37).

Despite increases in cocaine-related arrests in recent years, it is important to remember that cocaine offenders accounted for less than 1 per cent of all drug offenders charged by the QPS in 2008–09.

Cocaine purity/quality

The 2007 cocaine assessment found that the quality of cocaine in Queensland varied, with a perception by users that it was of poor quality (particularly compared with southern markets). In addition, the purity of cocaine seized by law enforcement agencies has fluctuated over the years, although a general upward trend had been observed since 2003–04.

Overall, the general upward trend in the median level purity of cocaine seized by the QPS and the CMC has continued (see Figure 38). This is despite a decline in median purity in 2007–08 (33 per cent), compared with the previous financial year (40 per cent).

Regular ecstasy user reports of cocaine purity as part of the EDRS survey are inconclusive. In 2008, the most recent published data, Queensland REUs indicated that cocaine purity was of a medium level and had been relatively stable in the preceding six months. This suggests that the purity of cocaine has been more stable over the past two years. Key experts interviewed for the EDRS survey reported that cocaine has become more available in Queensland.

Price

Regular ecstasy user reports indicate that the median price of a gram of cocaine in Queensland has been relatively stable over the past four years, although a wide range of prices have been reported over the period (NDARC 2008c; QADREC 2008b). Regular ecstasy user reports in 2008 indicated a median price of $300 per gram of cocaine in Queensland, which is consistent with the price reported by REUs in New South Wales and Victoria. The range of prices paid in Queensland in 2008 was $250 to $800 for a gram.

The median price of a gram of cocaine remains more expensive than for other stimulants, particularly methamphetamine. However, the median cost of a gram of cocaine is generally around $50–100 cheaper than heroin.

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111 The data represent only those seizures forwarded to Queensland Health Forensic and Scientific Services for testing. QHFSS financial year data reflect the date of testing and not the date the sample was received by QHFSS or seized by the QPS. In most cases the difference between these dates is only a few months.

112 When all seizures analysed by QHFSS in 2007–08 were included in the sample, the median purity was 35 per cent. QHFSS also tests some samples from the Australian Crime Commission and the Australian Customs and Border Protection Service. See footnote 114.

113 Also see the 2004 to 2006 reports on the Queensland findings of the EDRS survey.

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Figure 37: Number of QPS cocaine-related arrests, Queensland, 1998–99 to 2008–09

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Source: QPS Statistical Services — unpublished police data, analysis conducted by CMC.
Changes in international markets

The level of global coca plant cultivation remained relatively stable between 2003 and 2006, before an increase in 2007 and then a decrease in 2008. The decrease in 2008 was due mainly to an 18 per cent decrease in cultivation in Colombia (UN 2009, p. 63). The global area under coca cultivation remains well below the levels reached in the 1990s. Furthermore, with less coca being grown in high-yielding regions, global potential cocaine production has remained stable for several years. Colombia continues to be the largest producer of cocaine (51%), followed by Peru (36%) and Bolivia (13%) (UN 2009, p. 65).

Although North America remains the world’s largest cocaine market, the size of the market has contracted over the past decade. The supply to and consumption of cocaine by North Americans has declined since the peak in the 1990s. Law enforcement agencies reported a cocaine shortage in the United States in 2007 and 2008, with falling levels of purity and rising prices (UNODC 2008a, 2009a). The shortage was attributed to successful control efforts in source and transit countries and escalating conflict among competing Mexican drug cartels and a shift in the trafficking of cocaine to other regions, especially Europe. The UNODC (2008a) has suggested that increasing difficulties in shipping cocaine into North America and higher cocaine prices elsewhere, including Australia, make other markets more attractive to criminal groups.

The European cocaine market expanded rapidly earlier this decade. The United Kingdom (UK) Serious Organised Crime Agency (SOCA) (2009, p. 29) recently reported that about one-third of global cocaine production is now destined for the European markets. The increasing trend is expected to continue due to increased demand and the higher prices that traffickers can charge relative to some other markets (particularly North America). There are conflicting reports about trends in the prevalence of cocaine use in Europe. According to UNODC (2009a), there are signs of stabilising demand in much of Europe, including the UK, which is the largest European market. On the other hand, SOCA (2009) has reported that cocaine use in the European Union, including the UK, continues to rise. There is apparently a two-tier market in the UK at both the wholesale and street levels, with dealers selling cheaper and more heavily cut cocaine to some customers and higher purity cocaine to those willing to pay more. The wholesale price of cocaine rose in the UK throughout 2008 and into 2009, while street level purity declined (SOCA 2009).

It is also worth noting that the United Nations has suggested that reduction of discretionary spending as a result of the global economic recession may lessen the demand for cocaine in the short term (Fletcher 2008).
Market participants

The UK Serious Organised Crime Agency (2009) reports that it is usual for the bulk price of cocaine to be set in Colombia with European organised criminal groups typically expecting to pay a deposit of up to 30 per cent of the agreed wholesale price. Consequently, it is necessary for some groups to collaborate in order to raise the necessary capital. This underscores the importance of established cultural connections and capital to fund bulk importations of cocaine into Australia. Consequently, organised criminal groups are likely to continue to dominate the market at the higher levels of importation and supply.

Queensland

Our 2007 cocaine assessment observed that organised criminal groups are increasingly being identified trafficking and supplying cocaine in Queensland. Although most cocaine in Queensland still appears to be domestically sourced from Sydney and Melbourne, there is evidence of attempts to import cocaine directly into Queensland.

Social networks are important in the distribution of cocaine, particularly at the lower retail level. Nicholas (2008, p. 17) suggests that social networks are responsible for a large proportion of the cocaine market, with the gifting of cocaine continuing to be an important dynamic. This has important implications for law enforcement, as the distribution of cocaine within closed social networks is much less likely to come to the attention of law enforcement than open market transactions.

Market assessment

Market drivers

A more detailed discussion of drivers of the cocaine market in Queensland is provided in our 2007 cocaine assessment. A number of key drivers are continuing to affect the Queensland cocaine market.

Social drug-taking and poly drug use have continued to become normalised (discussed further in Chapters 3 and 9). Furthermore, cocaine continues to be perceived as a ‘glamorous’ drug and as a ‘cleaner’ drug than some others. As we noted in 2007 (p. 22), ‘cocaine holds and will maintain a distinctive position in the overall drug market that is unlikely to be threatened by substitute products’. These factors will continue to drive demand for cocaine.

Continued growth in demand for cocaine obviously makes the market attractive for criminal networks. Law enforcement agencies in Queensland report increased intelligence on cocaine distribution and supply in Queensland, indicating a strong level of interest among criminal networks in the market. However, the ability of individuals and groups to source and import cocaine remains a restriction on market expansion. The need to import cocaine, coupled with the closed nature of the cocaine market, requires criminal groups to have access to significant financial resources and strong international links with source or key transit countries.

Ongoing fluctuations in the supply of quality cocaine in Queensland and consistently high prices (particularly relative to synthetic stimulants) will continue to restrict expansion of the market, especially at the retail level. The possible effect of the global economic recession on discretionary spending also has the potential to dampen demand for cocaine by some social drug-users (Fletcher 2008). Conversely, any increase in supply and an associated reduction in price would most likely fuel demand for cocaine, resulting in further expansion of the user base.

Assessment of the market

The national and Queensland cocaine markets have expanded since our last assessments. In our 2007 cocaine assessment we identified a series of indicators of an expanding cocaine market in Queensland. When assessing the market against those indicators, it is evident that since 2007 there has been an increase in:

- cocaine-related arrests and seizures in Queensland
- border detections of cocaine, nationally and in Queensland
- the prevalence of cocaine use in research and study data
- intelligence relating to cocaine supply and distribution in Queensland from law enforcement operations and human sources
- treatment episodes relating to cocaine use (although the overall number of treatment episodes remains low).

On the other hand, over the past two years:

- the price of cocaine has remained stable
- the purity of cocaine seized by the QPS has continued to fluctuate (with a general upward trend since 2004)
- regular ecstasy user perceptions of cocaine purity indicate relative stability
- regular ecstasy users report continuing fluctuation in their ability to source cocaine easily.

The most recent drug monitoring surveys and other research continue to indicate that most cocaine is purchased in private settings and supplied through social networks, with a high degree of gifting. This has important implications for law enforcement strategies aimed at detecting and disrupting cocaine supply networks.
Cocaine use continues to be most prevalent in South-East Queensland, the North Coast area and, to a lesser extent the entertainment and tourist areas in and around Cairns. However, there are some indications of possible expansion of the market in other parts of north Queensland. Continued monitoring is necessary to confirm this.

It is not just large-scale importations that are required to support the increase in cocaine use reported in the official prevalence data to date. Although there has been a significant increase in the level of consumer demand for cocaine, household survey data indicates that most users still report using the drug infrequently (only once or twice a year). Even regular ecstasy users generally only report using cocaine 2–2.5 days (median) in a six-month period. Based on this pattern of use, it is feasible that regular small importations could support a substantial proportion of cocaine users. However, more substantial increases in consumer demand, in terms of both the number of users and the frequency of use, would need to be supported by large-scale importations. This requires significant organised criminal involvement in the market.

Changes in international cocaine markets are also likely to affect Australia and flow through to the Queensland market. The US cocaine market has contracted and there are signs that parts of the European market may be stabilising. The criminal groups traditionally supplying the US, are seeking new markets to target. As noted previously, intelligence suggests that Canadian traffickers are specifically targeting the Australian market due to the high profit ratio and perceived low risk of detection. Furthermore, the range of international cocaine trafficking routes has expanded, opening the market to criminal networks with a broader range of ethnic and cultural connections. Emerging trafficking routes, such as East and South-East Asia in particular, need to be monitored given Australia’s long-standing and growing cultural ties to these regions.

On the basis of official prevalence data, the cocaine market remains smaller than the cannabis, ecstasy-group substances and methamphetamine markets, but larger than the heroin market. It is worth noting, however, that most law enforcement agencies believe that official prevalence data continue to underestimate the actual level of demand and therefore the current size of the cocaine market in Australia. Most agencies also agree that the cocaine market is continuing to expand.

Overall, the level of harms from cocaine use in Queensland remains relatively low, particularly compared with the health and other social harms associated with the methamphetamine and heroin markets. The pattern of cocaine use by many users (infrequent use in social environments, by nasal injection or swallowing) appears to produce minimal health problems. There is a low level of cocaine injection in Queensland, particularly compared with New South Wales, and ‘crack’ cocaine is not readily available. Our 2007 cocaine assessment provides a more detailed discussion of the health effects associated with cocaine use.

Risk assessment

The level of risk currently posed by the cocaine market is assessed as MEDIUM. This is consistent with the rating in our 2007 assessment.

- We maintain our assessment that the broad criminal environment’s INTENT to source and distribute cocaine in Queensland is VERY HIGH. Intent relates to the desire and confidence of organised criminal networks. The desire of organised criminal groups to profit from increasing demand for cocaine is evident. Law enforcement intelligence and operations also confirm that networks operating in Queensland have confidence that they can readily source cocaine from interstate and possibly overseas.

- We continue to rate the current CAPABILITY of groups to successfully source sufficient cocaine to meet demand as MEDIUM (particularly relative to the cannabis, methamphetamine and ecstasy-group substances markets). The Queensland cocaine market remains largely supply driven, with continuing fluctuations in supply and in the purity of cocaine seized. However, recent changes in international markets, particularly the expansion of trafficking routes, are likely to increase the capability of criminal groups to reliably source cocaine in the medium to longer term.

- The THREAT is therefore assessed as HIGH, given that it is a function of INTENT (VERY HIGH) and CAPABILITY (MEDIUM).

- The current assessed level of HARM remains as MEDIUM because there continues to be an absence of the core problems associated with cocaine harm in other countries. This is largely because the overall level of cocaine use in Queensland remains low. Importantly, there is a low level of injection and smoking of cocaine among users and a low number of marginalised cocaine users. The fact that ‘crack’ cocaine is not readily available is also a significant factor in the assessment of harm. However, if the market continues to expand there is likely to be an increase in the harms associated with cocaine use in Queensland.

- The RISK is therefore assessed as MEDIUM, as it is a function of THREAT (HIGH) and HARM (MEDIUM), but is considered to be at the high end of the medium scale.

115 A more detailed discussion of the effects and harms associated with cocaine use is provided in our 2007 assessment of the Queensland cocaine market.
The major factor that would affect the current level of risk is an increase in the level of capability of organised criminal groups to consistently source high-quality cocaine. Intelligence suggests that some transnational criminal groups are seeking to target the Australian market as the returns in the US market decline and the level of risk increases. However, the small size of the Australian market overall, particularly relative to other regions, may mitigate the likelihood of a significant shift in the focus of transnational groups.

The cocaine market is likely to continue to expand over the short to medium term, although restrictions on consistent supply will limit significant expansion of the market. Furthermore, the cocaine market will remain smaller than other illicit drug markets such as ecstasy-group substances and cannabis. However, the attractiveness of cocaine to social drug-users, and continuing concerns about our understanding of the actual level of demand and therefore the actual size of the cocaine market throughout Australia, indicate that the Queensland market requires continued close monitoring.
7: Heroin

This chapter summarises and discusses a range of law enforcement, health and other data and information relating to the heroin market in Queensland. The principal consideration is whether the heroin market is on the edge of change, as the market has changed minimally since 2004.

Overview

The heroin market in Australia has remained relatively stable during the past five years. There have been no shortages in supply to parallel the heroin ‘drought’ that occurred in Australia in 2000–01. The market is substantial enough to attract organised criminal networks and opportunists to seek profit through international supply. Since 2004, temporary increases in heroin availability have been reported nationally in the media and by law enforcement agencies. Media reporting regarding heroin supply growth has increased significantly in 2008 and in early 2009. This reporting has not been consistent with a range of market indicators.

The Queensland market is supply driven and there have been intermittent periods of short-term increases in supply. These periods have been highlighted by overdoses and an increase in the provision of intelligence to law enforcement agencies. Generally, however, the market has remained constant. It is important that major events such as multiple overdoses are kept in context and rigorously analysed to ensure measured and relevant findings. These events have in some cases been prematurely heralded as indicating major increases in heroin supply.

There are currently no data to substantiate any return to the pre-2000 heroin market. Analysis of price, purity, prevalence, treatment and seizure data collated by research organisations and law enforcement agencies since 2004 illustrates a consistent market that has changed little in recent times.

The most significant market change has been the supply shift from the traditional source of South-East Asian heroin to the South-West Asian heroin. This change has been more evident in the southern states, but the nature of the supply system makes it likely that there will be a flow-on effect to the Queensland market.

In 2007 and 2008, international organisations such as the United Nations Office on Drugs and Crime (UNODC) have reported record levels of production of heroin in Afghanistan and marginal increased production in Myanmar. The increased levels of production during this period, coupled with a receptive domestic market, may have contributed to the temporary supply increase in 2008. It is unlikely that this translated into market growth — it manifested more as an increase in short-term availability. Recent findings by the UNODC have predicted a decrease in heroin production in Afghanistan in 2009 and minimal change to opium yield in Myanmar. These findings do not indicate any short-term market growth in the near future.

Traditionally, the Australian heroin market has been supplied with South-East Asian heroin. However, the national growth of African and Middle Eastern organised crime networks may assist the influx of higher-quality South-West Asian heroin. Any reaction to this situation by South-East Asian organised crime groups may define future markets.

Limiting factors for growth in the Australian heroin market are attitudes among the Australian user group and potential new users of the drug. The social perception of heroin as a ‘dirty drug’ may impede the uptake of heroin, but there is some opinion that heroin may regain a foothold through smoking of the drug.

Existing users in the heroin market are older in comparison with those in other drug markets. Potential new users of the drug are likely to be members of the group commonly classified as ‘Generation Y’ or ‘Generation Z’. Robert Ali, Chairman of the Australian National Council on Drugs Asia Pacific Committee, noted concerns that a new generation may be lured into believing it is safe to try heroin by smoking as it does not involve injection. The perception may be that smoking averts the risks associated with the use of needles. However, these groups are likely to have a cultural connection to phenylamines, cocaine and amphetamine-type substances and may not be as vulnerable to attempts to entice new users to heroin.

In Queensland, morphine use should be acknowledged as a problem and consideration should be given to whether a shift from opioid pharmaceuticals to heroin could occur should heroin supply increase. This would be more likely should the quality of heroin improve.

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116 The market in the pre-2000 period is widely considered the strongest heroin market in Australian drug history, where price was low and availability and purity levels were high.


118 See <www.abc.net.au/lateline/content/2007/s2182672.htm>.
The Queensland heroin market has customarily been supplied through interstate trafficking of the commodity from Sydney and Melbourne. There have been detections of heroin importations in Queensland, but the commodity may have been destined for interstate markets despite the port of entry. New South Wales remains clearly the predominant point of entry into Australia. Heroin for the Queensland market is more likely to be domestically transported from interstate. Historically, the heroin market in Queensland has not been as strong as the markets in New South Wales and Victoria.

**Previous findings**

**1999 organised crime markets assessment**

In our 1999 assessment, we rated the risk posed by heroin as VERY HIGH. This report was drafted at a time when heroin use in Australia was considered to be at record levels. It noted that the estimated number of heroin users in Queensland was 10,500.

We also assessed that:
- the smoking of heroin was increasing, but injection was the most popular method of use
- heroin use by younger people appeared to be increasing
- the purity of heroin being imported into Australia had increased significantly
- 80 per cent of heroin imported into Australia was sourced from the ‘Golden Triangle’ region
- South-East Asian nationals were the primary importers and distributors of heroin in Australia, and
- Vietnamese and Romanian crime groups were the primary groups distributing heroin in Queensland, but the market was highly entrepreneurial.

**2004 organised crime markets assessment**

In 2004, we assessed that the heroin market was a HIGH risk despite fluctuations since the heroin ‘drought’ in 2000–01. The report stated that the market in Queensland had not recovered fully since the ‘drought’. It was also identified that Queensland had a large number of injecting users and high levels of associated crime.

We also assessed that:
- the key to supplying the heroin market in Queensland was links to reliable supply from Sydney and Melbourne
- overseas and interstate market dynamics, more than local trends, would define the heroin market in Queensland, and
- the heroin market was influenced by supply rather than demand.

**Demand indicators**

**General population use**

The National Drug Strategy household survey, which collects and collates data every three years, found that those people who have had an offer of or an opportunity to use heroin during the past 12 months made up 0.9 per cent of those surveyed in 2007. The figure decreased from 2.4 per cent in 1999 to 1.5 per cent in 2001 and to 0.9 per cent in both 2004 and 2007. The 2007 household survey also found that the prevalence of people over 14 who had used in the past 12 months remained low at 0.2 per cent. This represents a substantial change since 1998, when the prevalence rate reached a peak of 0.8 per cent. Nationally, the number of arrests for heroin possession or trafficking has decreased by 12,062 since 1998.

The report also stated that people in the 30–39 year age group were most likely to have used heroin in their lifetime (less than 3 per cent), while people in the 20–29 year age group were most likely to have used heroin in the last 12 months (less than 1 per cent). This indicates an older group associated with heroin use and a decline in uptake by younger people over the past decade.

The Australian Institute of Criminology’s Drug Use Monitoring in Australia (DUMA) program seeks to measure drug use among people recently apprehended by police. DUMA currently collects quarterly drug use information from police detainees at nine sites across Australia. As shown in Figure 40, despite some fluctuations there has been a general downward trend in the proportion of detainees in both Queensland DUMA sites testing positive to heroin since 2004.
Treatment

Data obtained from Queensland hospitals recording patient admission for opioid abuse and dependence have remained relatively constant since 2001–02. In 2007–08, 644 individuals were admitted to public and private hospitals for treatment. Treatment of dependence during the period accounted for 79 per cent of patient admissions. These figures are almost identical to those recorded in 2005–06 and 2006–07 and indicate no significant change in opioid abuse and dependence. In 2004–05, the number of patients admitted peaked at 728. It is important to note that these data are indicative of all opioid-based substances, including pharmaceuticals.

Figure 40: Positive tests for heroin use (annual moving average)\textsuperscript{119} — proportion of police detainees, Queensland DUMA data, 1999 to 2008

![Graph showing positive tests for heroin use](image)

Source: Australian Institute of Criminology — unpublished DUMA data, analysis conducted by CMC.

Figure 41: Hospital admissions for opioid abuse and dependence, Queensland, 1999–2000 to 2007–08

![Graph showing hospital admissions](image)

Source: Queensland Health, Health Statistics Centre — Queensland Hospital Admitted Patient Data Collection, unpublished data, analysis conducted by CMC.

\textsuperscript{119} Each data point in the moving average represents the simple average of the previous four quarters. For example, the data point for the fourth quarter in 2008 is actually the average of each quarter in 2008. A moving average is used to smooth short-term fluctuations in the time series.
In 2008, the CMC, the Queensland Alcohol and Drug Research and Education Centre and the Australian Centre for Prehospital Research undertook a research study named Prevalence of Alcohol and Drugs in Emergency Part II (PADIE II). PADIE II involved the interviewing of patients (aged 16 to 79) attending the Emergency Department at the Gold Coast Hospital with respect to their use of drugs. The sample of 1202 eligible patients revealed that 65 respondents (5.4%) had used heroin at some stage in their life, but only 11 respondents (0.9%) stated that they had used heroin in the past 12 months.

There was a 31 per cent increase in the total number of treatment episodes for heroin dependence or abuse by publicly funded alcohol and drug counselling services in Queensland in 2007–08 compared with the previous year. In 2007–08 there were 785 ‘closed’ treatment episodes for heroin as the primary drug of concern compared with 570 in 2006–07.120 The increase observed in 2007–08 follows three consecutive years of decline suggesting that ongoing monitoring is required. Nevertheless, heroin-related episodes represented only 5 per cent of alcohol- and drug-related treatment episodes overall in 2007–08. The proportion of heroin-related treatment episodes in Queensland also remains lower than the national average.

Data obtained from the Queensland Ambulance Service for the period July 2007 to June 2008 did not indicate an increased prevalence of heroin overdose. However, the data have a number of limitations and may not be a reliable indicator of whether or not there has been any increase in availability or purity.

Opioid pharmaceuticals versus heroin

Needle and Syringe Program services (NSPs) have advised that morphine has emerged as a major drug of choice for injecting opioid users. Nearly one-third (32%) of all opioid-related occasions were for morphine use, and there was a 23 per cent growth in morphine occasions during the eight months from April 2007. In the Northern Area, morphine use comprised the majority of opioid-related service occasions (72%), while heroin accounted for less than 15 per cent of these service occasions.

Anecdotal information supplied by the QPS suggests that buprenorphine and oxycodone have become popular among injecting users (see further discussion in Chapter 8). Users are able to dissect the tablets to obtain multiple doses, which makes them an attractive injection substitute for heroin.

In summary, the data collected during PADIE II and by Queensland hospitals and NSPs provided limited evidence to suggest increased heroin use in Queensland. Recent anecdotal information suggests an increase in the number of people who indicated that they needed syringes for the injection of heroin. This information primarily related to South-East Queensland but other information suggested a similar trend in capital cities nationally. This has not been further substantiated.

Supply indicators

Availability

In 2008, the Illicit Drug Reporting System (IDRS) found that heroin is more difficult to obtain in Queensland than in New South Wales, but this is to be expected, given that New South Wales is the primary source of heroin supply to Queensland. Injecting drug user responses also indicated that heroin was more difficult to obtain in Queensland than it is nationally. Based on these responses, Victoria was the easiest state in which to obtain heroin.

Analysis of data from the 2007 National Drug Strategy household survey indicates that injection (89%)121 is the preferred method of use, followed by smoking (57.7%). Injection is clearly the most popular method of use and response levels have fluctuated minimally since 2001. The smoking of heroin increased from 28.6 per cent to 64.6 per cent in the period 1998 to 2004, but this figure decreased to 57.7 per cent in 2007. If the heroin market is to expand in Australia, it is considered that the attraction of potential drug users to the smoking of heroin is likely to be the cause.

Heroin is readily available to people who know how to source the commodity. Long-term users have established lines of supply. The supply can be inconsistent and sporadic but users are generally able to source heroin if they are prepared to wait or occasionally compromise on the quality of the product.

Price

The price of heroin in Queensland has remained constant since 2003 at about $400 per gram. Similarly, the price in New South Wales has remained constant at around $300 per gram since 2002. The cost of a ‘cap’ or street deal has been about $50 since 2003. The ACC Illicit drug data report (IDDR) and the IDRS substantiate these prices. Anecdotal information from law enforcement agencies supports the observation that heroin prices have fluctuated minimally in recent times.

120 ‘Closed’ means completed treatment episodes. See further explanation of Queensland Health treatment data in Chapter 2.

121 Represents the percentage of respondents who used this method.
Purity

The ACC’s illicit drug data report shows that the median purity of heroin decreased in Australia between 2003–04 and 2006–07, before increasing marginally in 2007–08 (ACC 2009b). Throughout this period there have been occasional increases in purity levels, but these can be a result of level of wholesale supply. The purity level at import can be as high as 85 per cent. Purity levels of street-based heroin are usually around 20 per cent. The shift by users to opioid pharmaceuticals may be a result of inconsistent heroin purity levels and quality. The opioid pharmaceuticals provide a more reliable and consistent user experience.

Market change

In early 2008, the media consistently reported a rise in availability of Afghan heroin in Australia and particularly in Victoria. These reports were consistent with statements made by the UNODC, which indicated that during 2007 and 2008 an increased quantity of opium was produced in Afghanistan. The Australian Customs and Border Protection Service (Customs and Border Protection) reported an increase in the number of aircraft linking Australia to the Middle East, which could create greater opportunities for the import of heroin by passenger courier and air cargo.

Signature testing conducted as part of the Australian Federal Police’s Australian Illicit Drug Intelligence Program between 2005 and 2008 indicated an increase in the proportion of heroin seized at the border which originated in South-West Asia (ACC 2009b). However, the data do not necessarily indicate that South-West Asian heroin is increasingly supplying the Australian market as seizures in the first half of 2009 indicated a shift back to South-East Asia as the predominant source of heroin in Australia. Data for the second half of 2009 were not available at the time of publication.

The UNODC’s Afghanistan Winter Assessment, which was released in January 2009, suggests that opium supply from Afghanistan is likely to decrease in 2009. It further proposes that none of the Afghani provinces are likely to show an increase in opium cultivation in 2009. This is partly the result of the poppy eradication measures implemented in a number of regions. This trend is further substantiated by the 2009 UNODC Afghan Opium Survey (summary findings) which was released in September 2009. The survey stated that opium cultivation has decreased by 22 per cent and production has decreased by 10 per cent. This was attributed to operational activity conducted by Afghan and NATO forces.

The UNODC assessment of poppy cultivation in South-East Asia quantifies a reduction in production of 94 per cent between 1998 and 2008 (UNODC 2008c). Despite marginal increases in 2008 of around 3 per cent, production is not expected to increase significantly in the near future. Levels of production in both Thailand and Laos PRD are now alleged to be so low that these countries no longer produce opium for the world market. The ‘Golden Triangle’ region is now responsible for an opium yield that equates to only 5 per cent of world production.

The levels of opium production in Afghanistan and Myanmar will define future supply of heroin to Australia. Production in these countries and crime group influences may determine the balance of heroin type and purity available to the market.

Market participants

Since our last assessment in 2004, the involvement of organised crime groups in the heroin market has changed minimally. In Queensland, Vietnamese and Romanian criminal groups continue to be the dominant distributors of heroin.

In the period from July 2007 to June 2008, heroin seizures at the border represented 6 per cent of all drug detections by number and 4 per cent of drug detections by weight. The weight of heroin detections by Customs and Border Protection has increased marginally in the period 2005 to 2008. The quantity of heroin detected at the border in the past three years is still significantly below the level seized by Customs and Border Protection in 2001–02. Seizure data are not a reliable indicator, however, of the availability of heroin.

QPS arrests and seizures

The total number of arrests for heroin-related offences has decreased consistently during the past five years. This trend is consistent for both offences relating to possession and supply of heroin. In Queensland in 2003–04, 349 offences were recorded for possession and supply of heroin, compared with 237 offences in 2008–09.

Other issues

The extraction of codeine from pharmaceuticals for the production of ‘home bake’ heroin (monoacetylmorphine) has been the subject of isolated reports nationally. The threat posed by the incidence of ‘home bake’ heroin laboratories is considered negligible. It is likely that these activities are undertaken to support personal use.
Market assessment

Heroin continues to be assessed as a high-risk market partly because of the associated harms. The market is stable, but it continues to experience short surges in supply. There are likely to be minor fluctuations in overseas supply, with a possible shift to a greater market presence of South-West Asian heroin. The heroin market remains influenced by supply.

The market will experience difficulty in attracting new users because of the unfavourable perceptions associated with injection of the drug. It faces extreme competition from the ecstasy, cocaine and methylamphetamine markets. The heroin user is consistently older than other drug user groups.

It is possible that supply of heroin may increase in the future but it is unclear whether this will be matched by demand. The demand factor will determine the future heroin market in Australia.

Opioid pharmaceuticals continue to be a favourable substitute for heroin users and these substances are gaining a stronger position in the market.

Despite apparent stability in the heroin market, vigilance is needed to ensure that warning indicators are monitored to avoid the implications of a significant increase in the market. It is unlikely that the heroin market will ever return to the pre-2000 environment and supply levels. It is important for government to adopt a systematic approach to the monitoring of this issue to avoid the costly impacts of new or re-emerging drug markets.

Risk assessment

The level of risk currently posed by the heroin market is assessed as HIGH. This is consistent with the rating in the 2004 organised crime markets assessment.

- There remains an established user group in Queensland and demand remains constant. These users have established associations to ensure supply. According to the IDRS, in 2008, 81 per cent of 70 intravenous drug users stated that heroin was either easy or very easy to obtain. The desire and confidence of organised criminal groups to be involved in this market remain high, so INTENT is assessed as HIGH.

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**Figure 42: Heroin seizures at the Australian border by number and weight, 1998–99 to 2007–08**

![Heroin seizures chart]

Source: Australian Customs Service annual reports, 1998–99 to 2007–08. 122

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122 The Australian Customs Service became the Australian Customs and Border Protection Service in December 2008. When referencing publications we refer to the name of the organisation at the time the document was published.
Heroin supply in Queensland is facilitated by interstate trafficking networks. There may be occasional short-term supply increases in the Queensland heroin market and fluctuations in the type and purity of heroin, but most of the heroin imported into Australia is destined for the markets of the southern states. The level of supply in Queensland is not consistent as it is a secondary market to Sydney and Melbourne. CAPABILITY is assessed as MEDIUM.

Based on the assessment level of intent and capability, THREAT is assessed as MEDIUM.

The HARM associated with heroin is assessed as VERY HIGH because of the medical harms associated with injection (the primary method of use) and the harms associated with the drug itself.

The RISK is therefore assessed as HIGH, as it is a function of THREAT (MEDIUM) and HARM (VERY HIGH).

Figure 43: Risk assessment for the heroin market in Queensland
8: Other illicit drug markets

In this chapter we briefly discuss a number of smaller illicit drug markets: analogue stimulants; GHB (or fantasy), GBL and 1,4-B; hallucinogens, including LSD; and the diversion of pharmaceutical drugs. However, we do not consider these markets in detail because the drugs have not been detected in significant quantities. In the case of pharmaceutical drugs, there is no evidence of significant organised crime involvement in the market and therefore it does not warrant detailed examination in an organised crime markets assessment. Risk ratings have not been applied to the drug markets in this chapter.

Analogue stimulants

Analogue stimulants are manufactured drugs that are perceived by some users as ‘legal’ alternatives to illicit drugs circulating in the market.123

Demand and supply

The majority of analogue stimulants are available in tablet form. Much like analogues of ecstasy (such as MDA and PMA), the chemical composition and pharmacological effect of analogue stimulants are very similar to the controlled drugs they are intended to mimic.

A better understanding of analogue stimulants can be achieved through comparison to the stimulants they attempt to replicate. In Australia, there have been seizures of analogues to ecstasy (MDMA), methylamphetamine, methcathinone and cathinone. Generally, the chemical structure of an analogue stimulant will only slightly differ from the drug it aims to mimic.

The emergence of the analogue stimulant market has most likely occurred as a direct result of the expansion in Queensland’s ecstasy market. Both demand and supply factors are considered to contribute to market growth in analogue stimulants. From a demand perspective, consumer curiosity is a key factor in this growth, and this curiosity is evident on harm minimisation websites.124 Many threads on these sites relate to users seeking information on effects and availability of various analogue stimulants.

In 2008, seizures of analogue stimulants occurred in a number of Australian jurisdictions. Some of the offenders were marketing analogue stimulant capsules as ‘Herbal Ecstasy’ to consumers. Products may also be marketed to customers without stipulating their contents, which poses health risks.

To combat the increasing trend towards trafficking of analogue drugs, an amendment to Queensland’s Drugs Misuse Regulation 1987 (section 4 — definitions) was introduced in June 2008. This means that analogues of scheduled controlled drugs are now legally viewed as though they are the controlled drug they aim to replicate. Analogue legislation has also been introduced in New South Wales.

Conclusion

Although the addition of analogue legislation to Queensland law provides capacity for law enforcement to investigate offences involving analogue stimulants, it is unclear whether this regulation will prevent expansion of this market. The potential for growth in the analogue market is quite significant, with new psychoactive drugs expected to be developed over time. Therefore, taking into account this potential expansion and the fact that criminal groups will identify opportunities in the market, analogue stimulants deserve continuing monitoring by law enforcement.

GHB (fantasy), GBL and 1,4-B

Overview

The gamma-hydroxybutyrate (GHB) or ‘fantasy’ market is assessed to remain as a low-risk market in Queensland. A combination of low demand and increasing supply reduction initiatives supports this risk rating.

Supply and demand

GHB/fantasy is a central nervous system depressant that is commonly available in liquid, capsule or crystalline powder form. Historically, fantasy has been associated with drug-facilitated rape (by drink-spiking) and overdose. GHB is a chemical that naturally occurs in the body and was first manufactured in the 1960s for use as a surgery anaesthetic, but it has no medical use today (ACC 2007). GHB is chemically related to gamma-butyrolactone (GBL) and 1,4-butanediol (1,4-B).

As with findings in the previous assessment, GHB availability is limited within Queensland. Most QPS regions report no significant problems with GHB and no evidentiary basis for its availability.

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123 There are three categories of drug analogues: analogues possessing chemical and pharmacological similarities (direct analogues); those possessing structural similarities only (structural analogues); and chemically different compounds displaying similar pharmacological properties (functional analogues). Source: CG Wermuth, ‘Similarity in drugs: reflections on analogue design’, Drug Discovery Today, vol. 11, issues 7–8 (April 2006), pp. 348–54, accessed online at <www.sciencedirect.com/science>.

124 See <www.bluelight.ru/vb/home.php>, then click on Australian Drug Discussion.
Sources of prevalence data support the finding of limited use of GHB within Queensland. Between 2003 and 2008, the proportion of Queensland regular ecstasy users (REUs) reporting recent use of GHB has remained low (range 3–13%) and in 2008 no Queensland REUs reported GHB as a drug of choice (QADREC 2005b, 2006b, 2007b, 2008b, 2009b). Recent use of GHB by Queensland’s general population has remained negligible and mirrors national prevalence rates (< 0.1%, AIHW 2005a, 2008a).

With respect to seizures at Australia’s border, sporadic detections of GBL were noted between 2006 and 2008. Low volumes (0.5 L – 40 L) of GBL intercepted in the postal stream (predominantly from Europe) appeared to be a common importation method across several jurisdictions. Only one of these detections occurred in Queensland. A notable exception was the attempted importation of 3000 L of GBL to New South Wales in July 2008 from China.

Conclusion
Despite the significant adverse effects that misuse of GHB can cause, we assess that Queensland’s GHB market will remain a low-risk market because of its continued limited use. Importation is expected to continue to be a source of supply. We assess that QAS overdose data for GHB will serve as a readily accessible and ongoing information source for monitoring any changes within Queensland’s GHB market.

Hallucinogens
The use of hallucinogens in Australia is relatively low, although the market is larger than the more familiar heroin market. According to the 2007 National Drug Strategy household survey, less than 1 per cent (0.6%) of Australians reported using hallucinogens in the previous year (AIHW 2008c), while around 7 per cent reported ever having used hallucinogens. The Queensland prevalence rate is consistent with the national average. Those who did use hallucinogens did so infrequently, with well over half (65.8%) reporting use once or twice a year (AIHW 2008c). The most commonly used types of hallucinogen were lysergic acid diethylamide (LSD), which was used by over 80 per cent of recent hallucinogen users, and ‘magic mushrooms’ (70% of recent users) (AIHW 2008c).

LSD is generally used in a social drug-taking context and is considered by police and health workers to be a niche market. Our consultations with law enforcement and health agencies indicated that LSD is available, generally in entertainment precincts, although the supply is sporadic.

The number of persons arrested for LSD-related offences remains low. Over the past two financial years (2006–07 to 2007–08) there were 188 user-type arrests and 33 supplier-type arrests.

Prescription drugs
Opioids and benzodiazepines are the most commonly misused pharmaceutical drugs (Neilsen 2008). Prescribed stimulants, such as Ritalin®, are also increasingly being used illicitly. Health professionals we consulted were particularly concerned about the widespread illicit diversion and misuse of benzodiazepines.

There is no evidence of any significant organised criminal involvement in the illicit diversion of prescription drugs in Queensland, or in other parts of Australia. Therefore, we have not included a detailed discussion of the issue in this assessment because of its focus on organised criminal involvement in illicit drug markets. However, we do recognise the significant health and policing problems associated with the illicit prescription drug market. We understand that the National Drug Law Enforcement Research Fund’s forthcoming environmental scan of alcohol and other drug issues facing policing in Australia will include a detailed discussion of the market.

Prescription opioids
Some researchers have argued that the opioid abuse market may be in the process of shifting from heroin to a wide variety of prescription opioids in a number of countries, including Australia (Fischer & Rehm 2007). If this is indeed the case, it has implications for supply management, treatment, research and monitoring efforts.

Health agencies report that opiate analgesics containing morphine (primarily MS Contin® and OxyContin®) are widely available and generally sell for between 50c and $1 per milligram ($50–$100 per 100 mg tablet).

New South Wales police recently reported that oxycodone is increasingly being targeted in armed robberies of pharmacies (White 2009). In response to the growing prescription opiate blackmarket, the New South Wales Police Force and Medicare have developed a draft memorandum of understanding which will enable the sharing of information in order to track oxycodone use. Police will provide Medicare with information on people suspected of abusing oxycodone so that their requests for prescriptions could be monitored (White 2009). However, there is also concern that restricting access to prescription opiates may push some users back to the heroin market, exposing them to a broader...
range of harms. This highlights the complexity of the law enforcement and health policy environment in relation to regulating the prescription drug market.

**Subutex® and Seboxone®**

There is also a sizeable illicit market for methadone and buprenorphine. Buprenorphine (marketed as Subutex®) and buprenorphine-naloxone (Seboxone®) sublingual tablets are used as an alternative to methadone for the treatment of opioid dependence, because they reduce the potential for dependence and can be prescribed as a take-away dose, which makes them a more flexible and convenient maintenance treatment option for users. Police and health agencies report that both Subutex® and Seboxone® are subject to illicit diversion.

**Fentanyl**

Pharmaceutical fentanyl is a potent synthetically produced opioid used in the treatment of strong chronic pain, such as cancer pain. The trafficking of illicitly synthesised or ‘designer’ fentanyls, sometimes referred to as non-pharmaceutical fentanyls, has been linked to a significant number of deaths in the United States, Canada and Europe over the past three years. Some of these deaths have been caused by the use of heroin laced with fentanyl, or with one of the more potent illicit fentanyl analogues.

In response to the overseas deaths and law enforcement reports of increasingly sophisticated clandestine production of fentanyl, in 2007 the National Drug and Alcohol Research Centre (NDARC) conducted an assessment of the likelihood of fentanyl misuse by Australian injecting drug users. NDARC found that there was no evidence of clandestinely produced fentanyl in Australia or of significant fentanyl misuse. Consultation with NDARC in May 2009 confirmed that fentanyl was not identified by respondents or key experts interviewed for the 2008 Illicit Drug Reporting System (IDRS) or Ecstasy and Related Drugs Reporting System (EDRS) surveys.

**Counterfeit drugs**

Organised criminal groups overseas are increasingly moving into the production and trafficking of counterfeit pharmaceuticals and medicines (Ridley 2009). Although the incidence of counterfeit drugs in well-regulated developed countries is generally low (less than 1%), much higher rates (10–30%) have been reported by the Organisation for Economic Cooperation and Development in developing countries (Lal 2008). In Indonesia, a 2006 industry survey estimated that counterfeit drugs made up to 25 per cent of the domestic pharmaceutical market (Ridley 2009). Furthermore, the Organisation for Economic Cooperation and Development has reported that a significant proportion of drugs sold internationally through unregulated internet sites are counterfeit. China, India and the United Arab Emirates appear to be the principal source countries (Ridley 2009).

Australia has a highly regulated pharmaceutical and drug industry and it is unlikely that organised criminal groups in Australia would seek to produce counterfeit pharmaceutical medicines here or to import them in significant quantities. However, the Australian Federal Police note that small amounts of counterfeit drugs may become available on the Australian domestic illicit drug market, mostly through internet transactions.

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127 Consultation with the Queensland Health Needle and Syringe Program, 15 September 2009.

128 Consultation with AFP Strategic Intelligence Services, 31 July 2008.
9: General developments

The focus of the preceding chapters has been on specific illicit drug markets and organised criminal involvement in those markets. A number of general developments or issues that are common to some or all of the markets discussed in previous chapters emerged during our assessment. In this chapter we briefly discuss those developments and issues.

There appears to be a general shift in the market towards social drug-taking — primarily pills and to a lesser extent cocaine.

The Queensland market for ecstasy-group substances (including pills marketed as ecstasy) has had the most significant growth since our last organised crime markets assessment. The cocaine market has also expanded. Furthermore, the analogue drug market is developing, driven by continuing experimentation and the promotion of analogues as safe and legal alternatives to traditional illicit drugs. These classes of drugs are primarily taken in a social context and are associated with having a ‘good time’ with friends and associates. They are also most commonly traded in closed markets among social networks (see the further discussion below).

On the other hand, the methylamphetamine market appears to have peaked and is in the initial phase of a sustained period of contraction, while the heroin market remains largely stable (and relatively small). These drugs are associated with a higher level of dependence and addiction.

Social drug-taking has become normalised.

Drug-taking in an infrequent social context, such as with friends and associates at nightclubs and parties, is broadly accepted by those who do it as a typical or normal practice. Furthermore, it has become socially acceptable within a broad section of the community. An important facet of the normalisation of social drug-taking is the fact that it is far less likely to be perceived as unlawful or delinquent behaviour by those who do it. For example, many ecstasy users, particularly young people, have no real understanding of the possible legal consequences of their drug-taking behaviour (Fowler, Kinner & Krenske 2007; Nicholas 2008). This has important implications for intervention strategies. The role of social networks in the supply of drugs such as ecstasy and cocaine is also a factor in the normalisation of social drug-taking, as discussed below.

Drug dealing within social networks has become normalised and is frequently not associated with criminality.

There appears to be a ‘dichotomy of perception between friends who sell or supply drugs, and “proper dealers”’ (Nicholas 2008, p. 5). Many ecstasy-related transactions, in particular, are conducted on a not-for-profit (or ‘petrol money’ profit) basis and are driven by social factors. This appears to mitigate the illegality of the activity in the minds of both the suppliers and the purchasers.

The suppliers do not see themselves as drug dealers. As Nicholas (2008, p. 3) notes, ‘they simply see their role as socially facilitative, or as assisting friends and acquaintances’. During our consultations, police noted the low level of awareness that many young offenders have about the criminality associated with their dealing and the severity of penalties that could apply. Furthermore, this is consistent with broader research about drug dealing in social networks in Australia and the United Kingdom (Fowler, Kinner & Krenske 2007; Nicholas 2008).

From the purchaser’s perspective, the act of buying drugs from friends or associates insulates the purchaser from some of the more unsavoury aspects of illicit drug markets, allowing them to maintain their self-perceptions of being responsible and respectable (Nicholas 2008, p. 5).

Social networks are important in the supply of illicit drugs.

A recent National Drug Law Enforcement Research Fund discussion paper highlighted the important role of social networks and not-for-profit illicit drug dealing at the retail level of illicit drug markets, and the implications of this for the law enforcement and health agencies. The report identified that, at the lower level of drug retailing, social networks appear to:

- account for the majority of ecstasy-related transactions, many of which are carried out on a ‘not-for-profit’ basis
- make up a large proportion of the cocaine, cannabis and methylamphetamine markets
- be an important conduit for the distribution of LSD, ketamine and GHB (Nicholas 2008, p. 3).

129 Nicholas also notes the positive harm minimisation aspects of the separation of many end-users from criminal organisations.
Although social networks have always been important in the supply of drugs, we now understand more about the extent to which they underpin particular markets. Coupled with the greater shift to social drug-taking, this has important implications for law enforcement and health responses to illicit drug markets.

As we noted earlier in this chapter, the supply of drugs within social networks is associated with closed markets, whereby many transactions occur in private settings or are prearranged with known persons if occurring in public locations (Fowler, Kinner & Krenske 2007; Nicholas 2008). This makes drug transactions more difficult to detect. Furthermore, organised criminal groups dealing at the importation or production and wholesale levels of the market can exploit social networks while remaining substantially insulated from law enforcement detection at the retail level. The use of alternative methods of communication by ‘technologically savvy’ young people, evidenced by the rapid expansion of social networking sites such as MySpace, Facebook and Twitter, also enables relatively efficient and anonymous communication within social networks to facilitate illicit drug transactions. Despite this, we recognise that these sites may provide an excellent medium for law enforcement to warn consumers about the legal ramifications of supply activity.

The general shift towards social drug-taking and the role of social networks in the supply of those drugs also have implications for the monitoring of trends in illicit drug use and for opportunities to reduce the harms associated with drug use through early intervention. There tend to be fewer overt signs of drug use (such as drug-taking paraphernalia) and users are less likely to present to health agencies for treatment. Law enforcement and health agencies may need to identify and implement different strategies for collecting valid indicator data.

**The supply-base for illicit drugs appears to have broadened.**

QPS officers reported a broadening of the supply-base for illicit drugs in Queensland. To some extent this is reflected in an increase in the number of so-called ‘cleanskins’ being charged with supply-type drug offences, particularly those relating to ecstasy-group substances. It is also likely to be associated with the expansion of the social drug-taking markets, the role of social networks in supplying those markets, and the normalisation of drug ‘dealing’ within those networks.

Law enforcement agencies have also observed an increase in the level of ‘poly drug trafficking’ by organised criminal groups in general and by individuals dealing at the wholesale and retail levels of the market. Although some groups and individuals continue to specialise in particular illicit drug commodities, many have diversified their range to supply to a broader client base. This is not surprising, given the entrepreneurial nature of organised criminal groups and the desire to maximise opportunities for profit.

**Australia continues to be one of the most expensive illicit drug markets in the world.**

The Oceania region continues to be one of the most expensive markets in the world across all illicit drug categories (UNODC 2009a). The United Nations Office on Drugs and Crime (2008b) found that retail methylamphetamine prices in Oceania (corrected for purity) were almost ten times those of neighbouring South-East Asia, while the retail price of ecstasy pills was the highest in the world. Even cannabis is substantially more expensive in Australia than most other countries (UNODC 2009a). Consequently, some consumers have resorted to using social networking websites to compare prices and shop around (Schliebs 2009).

The potential profit margins for relatively small quantities of illicit drugs in the Australian market provide a substantial financial incentive for organised criminal groups, particularly those with strong international connections, to supply the market. On the other hand the Australian market is small relative to most overseas markets and strong border control policies are a disincentive for some groups. However, while there continues to be significant price disparity (for any commodity) in the Oceania region, the motivation for organised criminal groups to exploit it remains.

**New telecommunications interception powers will assist Queensland law enforcement agencies to disrupt organised criminal groups producing and trafficking illicit drugs in Queensland.**

The absence of telecommunications interception (TI) powers has severely impeded the efforts of Queensland law enforcement agencies to effectively target organised criminal groups producing and trafficking illicit drugs in Queensland. In the past the Queensland Police Service (QPS) and the Crime and Misconduct Commission (CMC) have been reliant on joint operations with federal and interstate law enforcement agencies to access information obtained through TI, and this has restricted their ability to effectively target groups and individuals based within Queensland. The introduction of TI powers for Queensland law enforcement agencies in mid-2009 will rectify this situation and enable the QPS and the CMC to prioritise organised crime targeting opportunities more independently and effectively.
Proceeds of crime legislation is increasingly being used by Queensland agencies to reduce the resilience of organised criminal groups to law enforcement targeting.

Criminal enterprises exist primarily to make money. The restraint and forfeiture of assets is a powerful mechanism for increasing the risk associated with involvement in illicit drug markets. QPS and CMC criminal and financial investigators have noted that, for some offenders, the restraint and forfeiture of assets is a more significant punishment than arrest and imprisonment. Some drug traffickers are willing to risk time in prison for a million-dollar profit, providing they know they can keep the assets they acquired with that profit. Investigators routinely witness the disbelief and anger of offenders when they are served with a restraining order. Furthermore, disrupting the financial security of offenders significantly disrupts their ability to finance further illicit activities.

Queensland has relatively strong proceeds of crime legislation, including a non-conviction-based scheme, which aims to remove the financial gain and increase the financial loss associated with illegal activity. The QPS reports that it has increased the emphasis on proceeds of crime action against identified illicit drug producers and traffickers, resulting in a significant increase in the number of referrals to the CMC and the Director of Public Prosecutions. We note the QPS efforts in this regard. However, there is significant scope for an increase in proceeds action against organised criminal groups involved in the production and trafficking of illicit drugs if greater levels of financial investigative resources are available to the QPS, particularly at the regional level.
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Appendix 2: Risk assessment methodology

The risk assessment process applied to criminal markets and networks follows the methodology used by the Crime and Misconduct Commission (CMC). This provides consistency in strategic assessment processes and allows comparison with previous risk levels.

<table>
<thead>
<tr>
<th>THE RISK ASSESSMENT MATRIX IS ESSENTIALLY A SERIES OF FORMULAE TO DETERMINE LEVEL OF RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire × confidence = intent</td>
</tr>
<tr>
<td>Resources × knowledge = capability</td>
</tr>
<tr>
<td>Intent × capability = likelihood of threat</td>
</tr>
<tr>
<td>Likelihood of threat × harm/consequences = RISK</td>
</tr>
</tbody>
</table>

**Threat** is effectively a measure of how likely it is that a person or group will succeed in carrying out some activity that may cause harm; and the likelihood of success depends on their intent and capability. **Intent** is the desire (motives and wishes) of the subject to engage in activities and their confidence that the activities will be successful. **Capability** is the availability or possession of the necessary resources as well as sufficient knowledge to engage in the activities.

The measurement of intent is essentially qualitative and relies on the analyst’s judgment. The measurement of capability, in contrast, lends itself more readily to quantitative assessment: the number and mix of people with the relevant skills and knowledge, and with access to the prerequisites for a particular type of criminal activity.

**Harm** refers to the magnitude and type of impact that would occur should a threat be realised. Such impact includes physical, psychological (including perception of harm), economic and political damage.

Harm is a factor that stakeholders are involved in determining because it refers not only to fact but also to perceptions. This is particularly relevant to the psychological, economic and political components of harm. Depending on the crime market, stakeholders may include politicians, law enforcement agencies, government departments and agencies, the health and financial sectors, private industry, professional groups and members of the general public. It is now recognised that law enforcement needs to engage more frequently and intensively with external stakeholders to counter organised crime; the views and perceptions of those stakeholders are therefore crucial to any assessment of harm.

It is also important that governments and law enforcement agencies acquire detailed knowledge of harm levels, both direct and indirect, to help them design policies to combat the causes and effects of organised crime. For example, although a threat may be significant, it may not be worthwhile allocating resources to reduce the threat if the harm it might cause would be slight.

The importance attributed to the various components of harm varies according to the category of criminal activity being considered. Despite any assessment of threat, some issues will still be given prominence (or lack of it) by political and public perceptions.

Risk is a function of the threat of activity occurring and the harmful consequences of that activity. Risk is commonly given a probability rating that is expressed in qualitative terms.

<table>
<thead>
<tr>
<th>Risk</th>
<th>Negligible</th>
<th>Very low</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
<th>Very high</th>
<th>Certain</th>
</tr>
</thead>
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Appendix 3: Limitations associated with specific data sources and datasets

In Chapter 2 we described how we conducted our assessment and identified the statistical datasets other agencies provided to us for analysis, as well as the other significant published quantitative data sources we used. We described some of the caveats and limitations of the datasets provided to us in Chapter 2. In this section, we provide further detail (where necessary) and explain some of the limitations of the published quantitative data we relied on.

**ACC Illicit Drug Data Report (IDDR)**
The illicit drug data report is an annual report produced by the Australian Crime Commission (ACC). It compiles data from national, state and territory police and law enforcement agencies in relation to illicit drug arrests, detections, seizures, purity levels and prices. The data reported in the IDDR are subject to a number of caveats and limitations and these are detailed in each report. They include a lack of uniformity across all states and territories in the recording and storing of data on illicit drug arrests and seizures, differences in applying a uniform counting methodology, differences in the way drugs and offences may be coded, differences in definitions of consumer and provider offences across all jurisdictions over time, and differences in the way agencies collect illicit drug pricing information. The seizure data only include those seizures for which a drug weight was recorded.

**QPS drug offender data**
The QPS provided us with data relating to persons charged with offences relating to illicit drugs which are consistent with the data they provide annually to the ACC for the IDDR. This means that the data are based on the counting rules established for the IDDR. Further information on the counting rules is provided in the IDDR. General issues to note include:

- Offences have been classified as ‘consumer’ offences or ‘provider’ offences. The consumer offences those associated with use of illicit drugs: possess and/or use dangerous drugs; possess drug things for use, or used in the administration, consumption, smoking of a dangerous drug; and drug offences (other). The provider offences are those associated with the supply of illicit drugs: import/export dangerous drugs; supply dangerous drugs; trafficking in dangerous drugs; produce dangerous drugs; and permit premises to be used.
- We generally refer to the data in terms of ‘QPS arrests’, which is consistent with the terminology used in the IDDR. However, the term ‘arrest’ incorporates all recorded law enforcement action against a person for suspected unlawful involvement in illicit drugs, including arrest, summons, diversion program and notice to appear.

**National Drug Strategy household survey**

We used data from the National Drug Strategy (NDS) household survey from the mid-1990s. The survey has been conducted every two to three years since 1985. The sample for the most recent survey in 2007 comprised more than 23,000 people aged 12 years or older. A limitation of the survey is that it is based on households and therefore excludes homeless and institutionalised people. As a result the survey is highly likely to underestimate the actual levels of drug use in the community.

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

We used data from the national and Queensland IDRS and EDRS surveys for at least the period 2003 to 2008. The IDRS and EDRS are designed to monitor drug trends in illicit drug markets in Australia through a triangulation of three data sources:

- a quantitative survey of drug users — the IDRS surveys injecting drug users, while the EDRS surveys regular ecstasy users
- a semi-structured interview with ‘key experts’ — professionals from a broad range of agencies who have regular contact with illicit drug users through their work, including health agencies, law enforcement agencies, drug treatment and community outreach agencies, emergency services and criminal justice services
- analysis of indicator data sources related to illicit drug use.

The IDRS and EDRS are sentinel data collection systems designed to monitor drug use trends among a specific group of drug users. Consequently the data are not representative of illicit drug use in the general community or by illicit drug users in general. The surveys serve as a strategic early warning system by identifying emerging trends of local and national concern. The surveys are conducted in all Australian states and territories.

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In the interest of security, offences detected or under investigation involving covert drug operations may not be geographically classified until after the completion of all inquiries. Therefore, regional totals for offences may not sum to Queensland totals.

Queensland Health hospital admissions data
Queensland Health provided us with data from the Queensland hospital admitted patient data collection on admitted patient episodes where the principal diagnosis is drug dependence or abuse. The data relate to usual residents of Queensland admitted to public and private acute hospitals in Queensland. The data, extracted on 28 October 2008, were preliminary data for 2007–08 and are subject to change.

It is possible for an individual to be admitted a number of times over a period for the same drug problem, with the result that the number of drug presentations may be greater than the actual number of individuals presenting. Although the data are coded according to the drug category, there is also a multiple drug category. The multiple drug category is used when two or more substances are used by the patient and it is not clear which is contributing to the disorder requiring hospitalisation. Information is not collated for subcategories to identify the substances used. Therefore, polydrug use involving any particular type of drug may not be captured in the data for each specific drug category.

Queensland Ambulance Service
The Queensland Ambulance Service (QAS) provided us with data on the number of cases attended by the QAS statewide relating to a drug overdose (January 2007 to June 2008). A range of limitations are associated with the QAS data:

- In general, because of the urgent nature of their contact with overdose cases, and the on-scene environment in which they are operating, paramedics may be unable to establish or record whether additional drugs have been ingested. These data are therefore conservative, and cannot be considered a definitive record of the number of overdoses attended by QAS during the specified time period.

- The diagnosis is not a formal diagnosis. A formal diagnosis is determined when a patient receives treatment at a Queensland Health Emergency Department.

- QAS data and Queensland Health data are not routinely linked. It is therefore possible that QAS-attended overdoses may not have been coded as overdoses and therefore are not included in the data.

- ‘Drug type’ is an optional field. That is, it is possible for a paramedic to record an overdose but not to specify the drug type.

- The data only relate to cases where the primary presentation was coded as an overdose. Therefore, any overdose cases where the overdose was coded as secondary to the primary problem are not included in these data (for example, cardiac arrest due to drug overdose; trauma; psychiatric cases).
Appendix 4: Has the potency of cannabis increased?

There is a widespread belief among cannabis users and in the general community that the potency of cannabis has increased significantly. Media reports in Australia and overseas have suggested a 20–30-fold increase in potency over the past 25 years (NDARC c. 2008d).

The cannabis plant contains almost 500 compounds, including 70 cannabinoids that provide the psychoactive effect. Delta-9-tetrahydrocannabinol (THC) is the cannabinoid that provides the strongest psychoactive effect. However, the level and ratio of different cannabinoids in a sample influence the psychoactive effect. For example, cannabidiol (CBD) acts as an antagonist for some of the effects of THC and may have antipsychotic and anti-anxiety effects (McLaren, Swift, Dillon & Allsop 2008).

A range of factors affect the potency of cannabis:
- the plant variety (or the genetics of the seed)
- the part of the plant used
- the way it is prepared for administration
- storage
- cultivation techniques.

Cross-breeding and genetic modification have produced hybrid strains of cannabis with high levels of THC. Seeds for these strains can be readily bought over the internet.

The highest concentrations of THC are found in the flowering tops of the plant (the buds or heads), followed by the leaves. The stem and seeds contain the lowest concentrations of THC (McLaren, Swift, Dillon & Allsop 2008).

Hash oil is the most potent cannabis preparation, with THC levels ranging from 15 to 30 per cent. Compressed cannabis resin (hashish or hash) contains 10–20 per cent THC. The concentration of THC in marijuana itself varies significantly, with a general range of 0.5–20 per cent (McLaren & Mattick 2006).

Storage also affects potency as THC degrades over time, even when stored in the dark and in an airtight container. One research study found that, even in optimal storage conditions, the half-life of THC was often less than one year and in some cases the THC had disappeared almost completely within two years (King, Carpentier & Griffiths 2004).

Finally, cultivation techniques, such as growing female plants in isolation so they are seedless (‘sinsimilla’), also affect the level of THC (McLaren, Swift, Dillon & Allsop 2008). There have been claims that hydroponic or other means of intensive indoor cultivation produce higher concentrations of THC.

Indoor cultivation techniques allow greater control over environmental conditions, enabling a more consistent crop. Some experts also believe that indoor cultivation maximises the ability of plants to reach their full genetic potential. However, there is currently no clear evidence that indoor cultivation techniques produce more potent cannabis than is possible with outdoor cultivation using the same plant variety.

A recent Australian review examined a range of studies that analysed the potency of marijuana or hash over time in nine countries (McLaren, Swift, Dillon & Allsop 2008). The United States Department of Justice has been monitoring the average percentage of THC in samples of cannabis seized by law enforcement agencies since the mid-1980s. The average THC concentration in confiscated cannabis increased from 2 per cent in 1980 to 5 per cent in 1997 and 9.6 per cent in 2007 (United States Department of Justice 2008, p. 18).

In the United Kingdom the average THC concentration increased from 8 per cent in 1998 to 13 per cent in 2004. Several studies failed to find a significant increase over time in the potency of cannabis in Europe, apart from in the Netherlands.

However, there were a number of methodological issues associated with some of the studies cited which complicate the picture. For example, it was not always clear which parts of the plant were analysed; different types of samples were used in various studies; the samples in earlier studies were not necessarily stored correctly; and the sampling methodology in one of the Dutch studies was likely to skew the results. Furthermore, law enforcement agencies report a general increase in the proportion of cannabis head seized and this is likely to be reflected in the higher levels of THC found in testing. In short, there has not been sufficient systematic monitoring of cannabis potency over time to draw any definitive conclusions about whether potency has increased (McLaren & Mattick 2006).

130 Personal communication with Dr Wendy Swift, NDARC, on 2 April 2009. This information is based on as-yet unpublished research by Dr Swift involving interviews with a range of key experts.
131 The US Department of Justice sponsors the University of Mississippi Potency Monitoring Project. The results are reported annually in the National Drug Intelligence Centre’s National drug threat assessment.
132 In the relevant Dutch study, coffee shop staff were asked to provide samples of their most popular products, which were likely to be the more potent products.
In summary, research currently available suggests that an escalation in people seeking treatment for cannabis-related problems in Australia may be related to an increase in the use of the more potent parts of the plant (the head) rather than an increase in the potency of the plant itself (McLaren & Mattick 2006; McLaren, Swift, Dillon & Allsop 2008). However, further research is clearly necessary.

**Cannabis contamination**

Cannabis users have also expressed concern about cannabis contamination and possible associated health effects. McLaren, Swift, Dillon & Allsop (2008) identify three possible sources of contamination:

- naturally occurring contaminants such as fungi, mould and bacteria
- chemicals associated with growth enhancement and pest control
- substances added for marketing purposes to ‘bulk up’ the weight of cannabis or make it appear more potent.

At present there is little available research on the extent of cannabis contamination, whether indoor cultivated cannabis is likely to be exposed to more chemical contamination than naturally grown cannabis, or the possible health effects of some specific contaminants.

**User experiences**

Our consultations with Queensland Health Alcohol, Tobacco and Other Drugs Services (ATODS) and Needle and Syringe Program (NSP) staff indicated that many of their clients prefer bush cannabis to hydroponic cannabis. This is because some clients believe that hydroponic cannabis is generally more potent than bush cannabis and that this can result in a less pleasant experience of use. Some regular users have complained of feeling physically sick after using some hydroponic cannabis.

The Illicit Drug Reporting System (IDRS) and the Ecstasy and Related Drugs Reporting System (EDRS) confirm that most cannabis users perceive hydroponic cannabis to be more potent than bush cannabis (QADREC 2009a). Interestingly, over the past four years there has been an increase in the proportion of injecting drug users rating the potency of bush cannabis as high. Key experts interviewed for the IDRS noted that young people, particularly younger males, prefer hydroponic cannabis because it is perceived to be more potent.

**Current Australian research on cannabis potency and contamination**

In Australia, there have been several small independent studies but no systematic research on cannabis potency. Furthermore, there is currently no uniform program for the ongoing testing of cannabis THC content. However, several research agencies are now collaborating in a demonstration project to develop a methodology to assess the potency (THC and CBD) and contamination of cannabis seizures in Western Australia. An initial report is expected by early 2010. The methodology could be expanded to other jurisdictions for routine monitoring and to measure changes in potency and the levels of contaminants over time.

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133 ‘The characteristics of cannabis in Australia’ is a collaborative project involving the National Drug and Alcohol Research Centre (University of New South Wales), the National Cannabis Prevention and Information Centre (University of New South Wales), the National Drug Research Institute (Curtin University of Technology) and the Chemistry Centre of WA.
References

ACC — see Australian Crime Commission.

ACS — see Australian Customs Service (in December 2008 the ACS became the Australian Customs and Border Protection Service).

AIC — see Australian Institute of Criminology.

AIHW — see Australian Institute of Health and Welfare.


—— 2009b, Illicit drug data report, 2007–08, ACC, Canberra, June.

Australian Customs Service 2008, Annual report 2007–08, ACS, Canberra, October.


—— 2005b, 2004 National Drug Strategy household survey: detailed findings, Cat. no. PHE 66, AIHW, Canberra, October.


—— 2008b, Alcohol and other drug treatment services in Australia 2006–08: report on the National Minimum Data Set, AIHW, Canberra, October.


CMC — see Crime and Misconduct Commission.


King, LA, Carpentier, C & Griffiths, P 2004, An overview of cannabis potency in Europe, EMCDDA Insights, European Monitoring Centre for Drugs and Addiction, Luxembourg.


Moore, T 2007, Working estimates of the social costs per gram and per user for cannabis, cocaine, opiates and amphetamines, DPMP Monograph Series no. 14, National Drug and Alcohol Research Centre, Sydney.

National Collaborating Centre for Environmental Health 2009, Recommendations for safe re-occupancy of marijuana grow operations, NCCEH, British Columbia Centre for Disease Control, Vancouver.


—— 2007b, Australian trends in ecstasy and related drug markets 2006: findings from the Ectasy and Related Drugs Reporting System (EDRS), NDARC Monograph no. 61, University of New South Wales, Sydney.


—— c. 2008d, Cannabis potency, NDARC Fact Sheet, University of New South Wales, Sydney.


NDARC — see National Drug and Alcohol Research Centre.


Nicholas, R & Shoobridge, J 2006, The health and social impacts of cannabis use, Australasian Centre for Policing Research.

QADREC — see Queensland Alcohol and Drug Research and Education Centre.


Willis, K 2008, Cannabis supply into and within Australia, Criminal Justice Bulletin series 2 (July), National Cannabis Prevention and Information Centre and the Australian Institute of Criminology.
UNODC — see United Nations Office on Drugs and Crime.


—— 2008c, Opium poppy cultivation in South East Asia: Lao PDR, Myanmar, Thailand, United Nations, Vienna, December.


**Legislation cited in this assessment**

Controlled Substances Act 1984 (SA)

Crime and Misconduct Act 2001 (Qld)

Drugs Misuse Act 1986 (Qld)

Drug Misuse and Trafficking Act 1985 (NSW)

Drug Misuse and Trafficking Regulation 2006 (NSW)

Drugs Misuse Regulation 1987 (Qld)

Health (Drugs and Poisons) Regulation 1996 (Qld)

Hydroponics Industry Control Bill 2009 (SA)

Tobacco and Other Smoking Products Act 1998 (Qld)
About the Crime Bulletin

The CMC publishes Crime Bulletins to heighten community awareness of organised crime issues and trends of concern to the Queensland community.

Previous issues in the Crime Bulletin series are:


- Crime Bulletin no. 5, June 2003, *Amphetamine: still Queensland's no. 1 drug threat*, which provides a strategic assessment of the illicit amphetamine market in Queensland, based on an analysis of a diverse range of sources including information from law enforcement, government, industry and members of the community.

- Crime Bulletin no. 4, April 2002, *The illicit market for ADHD prescription drugs in Queensland*, which discusses the problem of illicit diversion and abuse of ADHD prescription drugs in Queensland.

- Crime Bulletin no. 3, August 2001, *The 'ecstasy' market in Queensland*, which assesses the level of risk posed to the Queensland community by the market for MDMA or ecstasy.

- Crime Bulletin no. 2, November 2000, *The amphetamine market in Queensland*, which assesses the level of risk posed to the Queensland community by the illicit amphetamine market.

- Crime Bulletin no. 1, June 1999, *Organised crime in Queensland*, which describes the nature, extent and impact of organised crime activity in Queensland, and generally explains the law enforcement strategies developed to tackle the problem.

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